THE

ECLECTIC MEDICAL JOURNAL.

CONDUCTED BY

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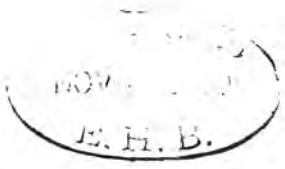

THE ECLECTIC MEDICAL JOURNAL.

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PART I.—ORIGINAL COMMUNICATIONS.

CLINICAL REPORTS,

AT NEWTON'S CLINICAL INSTITUTE. SERVICE OF PROFESSOR NEWTON.

REPORTED BY PROF. Z. FREEMAN.

REMARKS.

Gentlemen,—I propose to illustrate the practice I teach you this winter, by cases which will be treated before the clinic; and I hope thereby to be able to convince you that our system of practice possesses many advantages over the old school, as it is based upon a different pathological principle. I do not promise that the wards of our infant institution will afford as great a number of patients or the same variety that are to be met with in some older and richly endowed institutions; but I will promise to give you a course of instruction in clinical practice, and demonstrate that which will prove to you that so great a percentage of cures are not, or will not be found in any similar institution.

The enterprise of establishing this institution for the benefit of the Eclectic Medical Institute, may be considered a hazardous one; and so it is; yet Dr. O. E. Newton and myself have unde taken it, and will carry it out; and we are grateful, Gentlemen, to know that so many of you do really appreciate the benefit which you are to enjoy from it. It is encouraging to us, and we will do every thing in our power to give you instruction, and afford facilities which are not to be enjoyed elsewhere.

FIRST CLINIC, NOVEMBER 4, 1853.

CASE I.—Mrs. L. *Disease*—Cancer of the face, located in front and near the ear. Presented as cured by three applications of the Zinc Plaster, etc. Also; Poultice Ulmus Fulva, to assist suppuration. The case has been under treatment for three weeks, and is now well.

CASE II.—John Barnett, Illinois. Age 45.—*Disease*—Fungous Cancer of the right temple, extending to the eyebrow and over the malar bone; was as large as a hen's egg. Has been treated five months; is nearly well.

Treatment—℞. Zinc Powder, alternated with Sesq. Carb. Potass.; using poultices of Ulmus Fulva to favor suppuration, Meyer's and the Zinc Oint. to assist in healing; propose using straps to contract the sore.

CASE III.—Jacob Jennings, Tiffin, Ohio. Age 61. *Disease*—Cancerous Ulcer of the scalp, and necrosis of the external table of the skull. The ulcer was nearly circular, and about six inches in diameter, with elevated and spongy edges; in the center of the ulcer, the internal plate of the skull had disappeared, and the brain could be seen pulsating. Patient much debilitated and low-spirited.

Treatment—℞. Zinc Powder, applied every

day for four days; then use Elm poultice to favor suppuration. The sore presented a healthy appearance; the sequestrium commenced coming off; proposed strapping with adhesive plaster.

Case iv.—John Simmons, Ashbyburgh, Hopkins co., Ky. Age 56. *Disease*—Herpetic Ophthalmia, Herpes of the nose and upper part of the face, Pterygium of both eyes, and some opacity of the cornea—more of the right than left. Turgidity of the blood vessels leading over the cornea, left most congested; can not tell a black from a white man 30 yards off.

Con. Treatment—℞. Comp. Syr. Stil. ʒ j., three times a day.

Local Treat.—℞. Hydrastis grs. xx; Tinc. Aconite ʒ j.; water ʒ ij. Apply to the eye six times a day. Cut the blood vessels passing over the cornea; cut off the Pterygium; cut the blood vessels once in three days. Herpes—Used Oint. of White Oxide of Zinc.

Case v.—Thomas J. Gould, Cincinnati. Age 10. *Disease*—Intermittent Fever. When seven months of age fell into the fire and burned his face. The eye is much distorted. Has intermittent fever; treated by Dr. O. E. Newton; got better; went into the country, and it returned.—October 10—Prescribed, ℞. Tinc. Ferri. Mur. Result, chill every third day, instead of two per day. November 4—Prescribed Tinc. Gelseminum xv gtts., three times a day until it produces its specific effects, (numbness of the eyelids, etc.)

Case vi.—Patrick Norman, Cincinnati. Age 68. *Disease*—Incipient Varicose Ulcers of the right leg, near its middle and anterior portion. Also, subacute phlebitis of the internal Saphenic vein. Health feeble and delicate; part congested uneven and morbidly sensitive; feet edematous and cold; congested part red and inclined to ulcerate. This species of old sore legs belongs to broken-down constitutions.

Treatment—Local wet roller, stim. liniment, warm foot bath, etc. If the liniment produces vesication, use warm water. If the patient had a good constitution, I would use cold water. These ulcers are apt to involve the periosteum and induce exostosis. And here, gentlemen, you will have an opportunity of seeing the effect of a treatment which aims only to help nature throw from the system a cause which will, if not removed, destroy by disorganizing more or less of the healthy tissues of the body.

Case vii.—John B. Hix, Cincinnati. Age 18. *Disease*—Chronic Periostitis and Ostitis with caries. Cause—January, 1850, fell and bruised the knee and thigh-bone. Inflammation and much swelling was induced. June, '50, an abscess formed, and was lanced; it discharged much pus; other openings formed by ulceration, and discharged pus and pieces of bone. Not much pain now. The thigh is twice as large as its normal size, indurated and dense; the bone and periosteum are much enlarged, and the diseased bone discharges now one quart a day from three orifices. Patient rather feeble.

Local Treatment—Hot lard-oil applied alternately with stim. liniment. Inject into the sinuses Sesq. Carb. Potass. ʒ ij. to ʒ ij. water.

Con. Treatment—℞. Comp. Syr. Stil. ʒ iv.; Iod. Potass. ʒ j.; mix; give ʒ j three times a day.

Case viii.—John J. Wilson, Crittenden, Ky. Age 28. *Disease*—Ascites. Has been sick for several months; can not assign any cause for the attack. His abdomen is much distended; he is very feeble; has vomiting frequently; bowels rather constipated.

Treatment—℞. Comp. Powder of Jalap ʒ ij.; Tart. Potass. ʒ ij.; mix; and give one-half three times a day until free catharsis is produced; vapor bath morning and evening to keep up perspiration.

SECOND CLINIC, Tuesday, Nov. 8.

Case ix.—Robert Baskerville. Age 39. *Disease*—Indurated and swelled testicle, Testicle much swollen, inflamed, and painful. Scrotum very red; testicle four inches in diameter. Was hurt by a blow from a windlass. The spermatic chord is also swollen and inflamed; it fills the external inguinal ring; is very sensitive. Scrotum was punctured and discharged a little serum and blood. Patient can scarcely walk from pain of the part.

Treatment—Warm fomentations of hops and tansy at night, and ammoniated liniment by day. Cath. of Comp. Powder of Jalap in one drachm doses, until free catharsis is induced.

Mechanical—Suspensory bag worn in the day time; use low diet, and avoid much exercise.

Case x.—John Reed, Cincinnati. Age 11.—*Disease*—Curved Spine. Commenced by a pain in the left side, and then in the right. Has curvature, right lateral below, and left lateral above.

Treatment—Commenced October 8, by using an irritating plaster over the lower curvature in the lumbar region. Vesication was induced; then the sore dressed with Meyer's Ointment.

Con. Treatment—℞. Comp. Syr. Stillingia ʒ vj.; Iod. Potass. ʒ j. Dose, one drachm three times a day. Stop if nausea is induced. Is improving; not so much pain as before.

Mechanical Treatment—Uses Dr. Daniel's curvature brace. Had spasms at first, but none now.

Case xi.—L. D. *Disease*—Secondary Syphilis and follicular ulceration of the larynx and fauces; enlargement and inflammation of the tonsils.—Commenced February, 1853. Vegetations on the penis. No buboes from absorption of the pus; sensation of rawness and soreness of the mucous membrane of the throat. Local disease of the penis cured previous to seeing him. Blotches of a yellow color upon the neck, face, and body.

Con. Treatment—Comp. Syr. Stil. ʒ jv; Iod. Potass. ʒ i.; m. Dose, one drachm three times a day. Iod. Potassium destroys the fibrine of the blood in large doses, but in the above quantity does not injure the stomach; yet it may increase the existing headache.

Treatment of Throat—℞. Argent Nit. ʒ j.; water ʒ j.; use with a probang once a day. Also, Hydrastis Canadensis ʒ j.; water ʒ vj. Gargle frequently through the day.

Case xii.—John Cassily. *Disease*—Had chills in August, 1853. Vomited daily; swelling and tumefaction of the præcordia; food causes pain; breathing short and oppressed; lies best on the left side; headache all the time; acid stomach; some spinal irritation opposite the eighth dorsal vertebra; has been subject to a cough the last twelve months; sputa white and frothy, alternately white and yellow. No particular time for coughing; spleen not enlarged; some soreness of the lungs. But the disease is in the stomach.

Treatment—℞. Pulv. Hydrastis Canad., Prinos Verticillatus, aa. ʒj.; m. Make three powders; add one to half-pint of hot water; let it cool, and use this amount daily. Repeat next day. Use Alk. bath, with friction, twice a day. Diet—Avoid coffee, grease, and meats; use black tea, crackers, etc.

Case iii.—Jennings. Cancer. Improving.—Sequestrum sieve-like and sloughing. Dressed before the class. Used the adhesive straps to favor normal granulations; may have to use caustic.

Case iv.—Simmons. Herpetic Ophthalmia.—Much better. Can distinguish a black from a white man 30 yards off. Herpes better. Previous treatment continued.

Case v.—Gould. Intermittent Fever. Slight chill to-day, but a little better.

Case vi.—Patrick Norma. Varicose ulcers.—Better; skin clearer; one spot in the center of the inflamed part disposed to ulcerate; sensitive; foot warmer; edema of the foot less. Continued the treatment.

Case vii.—Hix. Periostitis, Caries, and Hypertrophy of the femur. Improving. Continue the previous treatment.

Case viii.—Wilson. Ascites. Improving slowly. Paracentisis has been performed, and two gallons of water have been drawn off; is now using Alk. bath once a day. ℞. Juniper berries ʒ j.; eupatorium purpureum ʒ j.; Holland Gin ℥ j.; digest. Dose, two ounces once in three hours. Diet—Mild soup, and crackers. Continue the Hydragogue Cathartic; hot cloth to the abdomen to alleviate the pain, which is periodical, coming on at night.

Case xiii.—Michael McDonald. *Disease*—Indolent ulcers of the shin, three in number—left leg, one near the external malleolus; caused by being cut with a board, was swelled and very painful; it nearly healed, and then fungus presented itself.

Treatment—By Dr. P. Kirby. First, by cold water and bandage; used Pulv. Zinc Sulphas two days, then Sesq. Carb. Potass. until the fungus was disorganized, then applied Meyer's Ointment. Four last days doing nothing for it; is doing well. Sores covered with a thick scab. Each sore was three-fourths of an inch in diameter.

Treatment—Continue the previous application of Meyer's Ointment.

Case xiv.—Templeton Gaines, Ky. *Disease*—Chronic inflammation and thickening of the ligaments of the ankle and tarsal joints.

Treatment—Counter irritation; liniment, low diet, and avoid exercise.

Case xv.—Timothy Mano, Cincinnati. *Disease*—Disunited fracture of the middle of the radius. It was adjusted; the bandage kept on for ten days, when he presented himself; took off the splints and roller; arm painful and much swollen.

Treatment—Re-apply splints and roller, and use cold water dressing.

Case xvi.—A. L. *Disease*—Sore finger; caused by injury which split up the back of the first phalange of the index finger; it nearly healed; some fragments of the bone were sloughed off; fungous growth followed, protruding at the end of the finger.

Treatment—Caustic of Zinc Sulp. to disorganize the fungus.

THIRD CLINIC, NOVEMBER 11, 1853.

CASE XVII.—Anthony Kane. Age 60. *Disease*—Chronic Conjunctivitis. Been sore for five weeks; caused by a cold; pain across the eye-ball; eyes very watery; conjunctiva thickened and congested. Had no fever, except in the eyes; sleeps until midnight, then awakes from pain. I use stimulants in such cases.

Treatment—℞. Hydrastis grs. xx; Tinc. Capsicum ʒ ss.; water ʒ iij. Apply six times a day. At night, use a cold Elm poultice. The cornea is disposed to ulcerate; must be arrested soon, if possible.

CASE XVIII.—Absalom Leaper, Henry county, Io. Age 50. *Disease*—Cancer of the ear and side of the face; the lower part of the ear had sloughed off, and the rim of the ear contained two fistulous pipes, one three inches long and the other two; the sore on the opposite side of the face was over the parotid gland. He had been treated by physicians in Iowa, but became worse. Has been under treatment by Prof. Newton.

Treatment—Zinc Powder to disorganize the morbid growth; alternated the Zinc with Sesq. Carb. Potassa; use poultice of Ulmus Fulva to favor suppuration and reduce the inflammation. Split open the fistulous pipes, and insert Sesq. Carb. Potassa and cotton, to disorganize the same. Incision healed; not sound; inserted seatons; induced more sloughing; inflammation subsided; doing well; used warm water to the inflamed cartilage of the ear, to reduce inflammation.

CASE XIX.—Michael Courtney. Age 8. *Disease*—Scrofulous ulceration and enlargement of the lymphatic glands, and ulcer of the hand. It came like a boil. The ligaments of the carpus are involved; it gives no pain. Has been sore for two years; was healed for a week and returned.

Treatment—℞. Comp. Syr. Stillingia ʒ j., three times a day.

Local Treatment—Inject Sesq. Carb. Potass. x grs. to ʒ j. water, daily.

CASE XX.—*Disease*—Strabismus of the left eye. Operation by Prof. Freeman; patient under the influence of chloroform; no pain; operation successful; normal parallism of the eye restored.

CASE XXI.—Richard Hooper. *Disease*—Inflammation and tenderness of the ligaments of the ankle joint, the sequel to a dislocation which occurred eight weeks since, (November 11.) Still improving.

Treatment—Continue the stim. liniment during the day, and shower the ankle in the morning.

CASE IV.—Simmons. Herpetic Ophthalmia. Improving. Cut the engorged blood-vessels leading toward the center of the cornea.

CASE IX.—Robert Baskerville. Indurated and swelled testicle. Improving. Prescribed, ℞.—Hunn's Life Drops ʒ ij.; Olive Oil ʒ j.; Tinc. Capsicum ʒ ij.; m.; use as a liniment. Continue the fomentations

CASE VI.—Patrick Norman. *Disease*—Varicose veins. No soreness except at a small point where the previous disposition to ulceration existed; redness disappeared. Continue the roller, as before.

CASE VII.—John B. Hix. *Disease*—Periostitis and Ostitis. Improving; continued the previous treatment.

FOURTH CLINIC, NOVEMBER 15, 1853.

CASE XI.—*Disease*—Secondary Syphilis. Headache to-day; supposed to be aggravated by the Iod. Potassa. Used the probang (with sol. Argent Nitre ʒ j. to water ʒ j.;) before the class; not much change; continue the previous treatment.

CASE X.—A. Leaper. Cancer of the ear. Discharged cured.

CASE XIX.—Michael Courtney. *Disease*—Scrofulous ulcer of the hands. Ulcer improving; continue the treatment.

CASE XVII.—Anthony Kane. *Disease*—Chronic Conjunctivitis. Better; not so much pain. Continue the previous treatment.

FIFTH CLINIC, NOVEMBER 18, 1853.

CASE IX.—Robert Baskerville. Swelled testicle. Much better; testicle softer, smaller, and not painful; scrotum white; no pain on pressure; discharges a little serous pus at the sore.

Treatment—Continue the former treatment.

CASE III.—Jennings. Cancer. Still improving. Sequestrum was taken off during the week; the granulations are healthy. Dressed before the class.

Treatment—Continue the strapping.

CASE V.—Gould. Intermittent fever. Had no

chills or fever since using ℞. Sulph. Quinine grs. iij.; Tinc. Gelseminum gtts. xx. Give five times per day.

Treatment—Continue ℞. Tinc. Gelseminum xv; Sulp. Quinine, grs. ij.; give three times a day.

Case xx.—*Disease*—Strabismus. Restoration of the ocular paralysis and visual axis complete; no inflammation; doing well.

Case xvii.—Anthony Kane. Chronic Conjunctivitis. Better; not much pain in the eyes. Conjunctiva not so much engorged; medicine pained but few minutes.

Treatment—Continue the former treatment.

Diet—Avoid grease, stimulating food, coffee, tea, and spirits.

Remarks—This disease is the result of torpid action; thus bleeding, leeches, cupping, and calomel would be injurious, and stimulants are required. In opacity of the cornea, I use Tinc. Capsicum, Hydrastin, and Sweet Oil stronger than in Conjunctivitis.

Case xxii.—John O. Donaldson. Age 29.—*Disease*—Weakness of the lower extremities. Was hurt, in 1850, in the lower part of the spinal column, by a fall which caused paralysis of the lower extremities, involuntary fecal and urinary discharges. Was confined to bed for twelve months, in the Commercial Hospital. Bowels very costive during that time. Has been out of the Hospital two years. His legs are resuming their natural sensibility; for the last six months still improving a little. Was blistered and issue used over the spine while in the Hospital. Legs are now rather numb and feet cold.

Treatment—Seaton or irritating plaster over the loins; electricity, and small doses of strychnine.

Case xxiii.—Daniel Sullivan. *Disease*—Follicular symptoms—Cough, pain and soreness in the chest. Since August 1st, 1853, had fever and a lump in the left side. Had no chills; lies on the right side, to lie on the left makes him cough, coughs as soon as he turns on the other; expectorates blood and pus; was treated four weeks in the Commercial Hospital; better since *he left;* uvula elongated; throat presenting a dark and purulent appearance; follicular disease of the throat and posterior nares. Suppose the disease commenced in the throat. Had no cough, or inflammation, or irritation of the throat until the fever spoken of. Disease may commence in the throat and pass into the lungs. Has some adhesion and hepatization of the lungs.

SIXTH CLINIC, November 22, 1853.

Case xi.—Secondary Syphilis. Pain in the head; the same kept up by Iod. Potass.; tonsils the same, but skin better; blotches less; throat better; may have to excise the tonsils.

Treatment—Continue the previous treatment.

Case xxiii.—Daniel Sullivan. *Disease*—Follicular disease of the pharynx post-nares larynx and fauces; has had no prescription yet.

Treatment—℞. Tincture Aconite ʒ j.; Syrup Ginger ʒ jv.; m. Dose one drachm three times a day; this is for the cough. *Tonic*—℞. Precip. Carb. Iron ʒ j.; common salt ʒ ij.; make three powders; give one three times a day. The therapeutical action of every thing used should be to increase the quality and quantity of the blood. ℞. Sol. Argent Nit.; use once a day with a probang. Alk. bath used night and morning.

Case xxiv.—Barney Tracey. Age 23. *Disease*—Irritation and hepatization of the left lung. Been sick one year; the cough was so severe as to confine him to bed for seven weeks; mother's brother died of disease of the lungs; no pain now; used to have pain; vomits after breakfast ever since attacked; has alternating diarrhœa and costiveness. The last nine months has had pain and sensation of weight on the stomach; vomiting relieves; expectorates sometimes yellow fluid, sometimes white mucus. Pneumogastric nerve slightly affected; left lung badly diseased; hepatization of left lung; only a small part of it emits sound on percussion. Right lung weak; pus comes from the left lung; there is danger of softening and ulceration. Young physicians might treat this for dyspepsia. The primary disease is in the lungs. Observe whether the extremity or middle of a nerve is involved. Be cautious of your diagnosis.

Case xxv.—John Given. Age 27. *Disease*—Inflamed and ulcerated finger. Bitten by a man five weeks since; the ungual phalange was bitten through; it was much swollen and very painful. The finger was three times its normal size, with communicating fistulous pipes. Dr. Kirby took him from the old school physicians, who wished to amputate it. The former physician punctured it, which caused much pain; they also used twenty leeches on it.

Treatment—First, Zinc Sulphate in solution; inject for two days, then use Sesq. Carb. Potass.; keeping down the inflammation and soreness with Elm poultice.

Case III.—Mr. J. Jennings. Cancer of the scalp. Improving; sore dressed before the class.

Treatment—Continue the former treatment.

Case VIII.—Simmons. Herpetic Ophthalmia.—Discharged cured; could see as well as ever with the right eye; left eye clear, excepting one small spot; this is gradually disappearing. Ordered to continue the application to the left eye.

Case VIII.—J. J. Wilson. Ascites. Changed prescription; improving under the former; water diminishing.

Treatment—℞. Quinine xx grs.; Hydrastin. xx grs.; Prus. Iron xv grs.; Morphine grs. ij.; m. Make 8 powders; take one every three hours.—Pulse stronger; no pain, and slept better last night. Some symptoms of Jaundice.

Treatment—Continue the prescription; stop the wine tonic and the diuretic tincture.

Case V.—Thomas J. Gould. Intermittent fever. Discharged cured!

SEVENTH CLINIC, November 25.

Case XVII.—Anthony Kane. Ophthalmia. Eyes better. Exposed his eyes to the sun; more pain to-day. Has been free from pain for three days previous.

Treatment—Keep the house, and dilute the collyrium one-half. Use poultice of Elm at night.

Case VII.—Hix. Periostitis and Ostitis. A little pain at times; tumefaction less; better; showed some pieces of bone half inch in length, and wedge-shaped.

Treatment—Continue previous treatment.

Case XXVI.—Larkin. Age 26. *Disease*—Syphilis. Contracted the disease last August; had no treatment for six weeks. Eruption on the face for nine days; glands of groin much enlarged after the chancres healed. Nine days after the chancres healed the bubo made its appearance.

Treatment—Cathartics and alteratives. ℞.—Comp. Syr. Stil. ℥ jv.; Iod. Potass. ℥ j.; m.; give one drachm three times a day; Alk. bath.

Case XXVIII.—Mrs. Margery. *Disease*—Icterus: Commenced October 19th. Premonitory Symptoms—vomiting, pressure and sensation of weight on the stomach; pain in the left side and back; left side much enlarged. Diarrhœa alternating with costiveness; the whole surface presenting a very icterode appearance; a little fever; tongue coated. Primary cause is in the liver; probably subacute hepatitis.

Treatment—℞. Hydrastis Canad. ℥ j.; Ferri Phosp. ℥ j.; Syrup Ginger ℥ viii.; m. Take two table-spoonfulls three times per day. Counter irritation over the stomach. Diet—Light, and easy of digestion.

Case XX.—Strabismus. Discharged cured.

Case XXIX.—Edward King. Age 24. *Disease*—Cataract, of nine years standing. Caused by being struck in the eye with a nail, which produced in the course of four hours some conjunctivitis and pain in the eye; from this period vision became gradually affected, until the cataract was matured and total blindness of the affected eye is the result.

Treatment—Let it alone while the opposite eye is good. If the other eye fail, then I would advise couching.

Case XXX.—John Baskerville; age 12. Tape-worm. When four years of age he passed seven yards of the tape-worm, and three weeks after passed five yards more; since then he has passed more or less of the worm at different periods; when he had passed a part of the worm, he caught hold of it and broke it; he should have coiled it on a stick and used, but slight traction. If the head only is left, it will reproduce.

Treatment—Pomegranate prepared as directed by the Eclectic Dispensatory.

EIGHTH CLINIC, November 29.

Case XXXI.—N. Wooland; age 30. Chronic Ophthalmia of both eyes, caused by cold; commenced three years since; the right eye is better than the left; is affected with double pterygium, which extends across the cornea, making him see several objects at the same time. The cornea of the left eye is partially opaque; incipient ulceration of the cornea developing itself. The eyes are very painful, and the patient has to be led. Has been treated for three years.

Treatment—The pterygium was removed, and then the following was prescribed: ℞. Hydrastin. grs. xx.; Tinc. Aconite ℥ ss.; water ℥ ij. Apply five times a day; apply a cold poultice of Ulmus Fulva at night. I think the right eye can be saved by this treatment, and cutting the vessels which pass through the cornea.

Case XXXII.—N. L.; age 18. Hypertropy of both tonsils. Disease commenced when seven years of age; has had quinsy frequently; both are much indurated; the right is larger than the left;

the left contains a little pus; they obstruct respiration, and laboring under chronic inflammation, keep up continuous irritation with its unpleasant symptoms.

Treatment—Excised with the guillotine by Prof. Newton. Directed an application of ℞. Argent Nit. 3 j.; water ʒ j.; m.; apply with a probang three times per week. Gargle the throat with ℞. Hydrastis Canadensis ʒ j. to water ʒ iv.

Con. Treatment—℞. Iod. Pot. ʒ j.; water ʒ iv.; m.; take one drachm three times a day.

Case xxxiii.—Cunningham; age 12. Laceration of the thumb, and compound fracture of the ungual phalange. Caught on a wheel; supposed it would have to be amputated, but it has healed; the bone was split, and only part of it remains. Treated with adhesive straps by Dr. O. E. Newton; it is healing rapidly.

Case xxxiv.—Thomas Gallagher; age 33.—Varicose veins of both legs, and accompanying ulcers; commenced in July last by itching and swelling of the veins; much pain all the time; legs hot and ulcers soft.

Treatment—Wet roller applied and kept cold; diet low; feet and legs elevated.

Case xxv.—Barney Tracey. Disease of the lungs. No better.

Treatment—Continue as before. Also, apply mustard sinapism at the precordia every night; pustulation would not improve this case. Adhesion and ulceration of the lungs are very extensive. Pneumogastric nerve is irritated from passing through the ulcerated mass. Prognosis unfavorable.

Case xxiv.—Anthony Riley; age 55. Jaundice. Has been affected ten months with intermittent fever, having a paroxysm once a week. Has had jaundice for the last four months. His physician gave him "Blue Pills," "to touch his gums." Mouth a little sore; gums ulcerated; no appetite; fresh meat and grease nauseates him; stomach acid at times.

Treatment—℞. Hydrastis Canadensis ʒ j.; Prussiate Iron ʒ j.; m. Give one drachm added to eight ounces water, at intervals through the day. Diet—Avoid fats and meats.

NINTH CLINIC, December 2.

Case xxiv.—A. Riley. Jaundice. Appetite improved; symptoms improved; urine clearer; more the color of brandy; is always that color when the disease is subsiding. Continue the treatment.

Case xxii.—Wooland. Ophthalmia and Pterygium. Not time for much improvement; vision improved a little; eyes not so painful.

Treatment—Continue the collyrium; bathe the eyes in cold water four times a day; use cold poultice of ulmus at night.

Case vii.—Hix. Ostitis and Periostitis. Leg not exhibited; improving. Continue the same treatment.

Case iii.—Jennings. Cancer of the head.—Improving; healing rapidly; granulations a little exuberant.

Treatment—Applied a small quantity of Sesq. Carb. Pot.; continued the adhesive straps.

Case ix. . Baskerville. Indurated and inflamed testicle. Much improved. Continue the treatment. Testicle nearly of its normal size; scrotum loose and normal.

Case xxxii.—N. L. Hypertrophied Tonsils.—Excised; improving; have applied Argent Nit. Sol. three times. Continue the treatment.

Case xxxiii.—Cunningham. Lacerated thumb. Improving; continue treatment.

Case xxxiv.—Gallagher. Varicose ulcers. Improving; skin of the legs white.

Case xiv.—B. Tracey. Affection of the lungs. No better. Continue the treatment.

INTERMITTENT FEVER, or FEVER AND AGUE.

BY WILLIAM R. THOMPSON, M. D.

Intermittent Fever is so universally known that it is deemed unnecessary to say anything here in regard to its general character and symptoms.—What I have to say shall be in regard to its pathology and treatment.

The cold stage of ague is essentially one of congestion; the blood during this period rapidly recedes from the capillaries of the surface of the body to the deep-seated large vessels, by means of which they become severely engorged; the head, chest, and abdomen, by this accumulation of blood, are distressingly shocked, and the spleen, liver, lungs, and other vascular, spongy organs, if previously inclined to disease, are now liable to suffer; and when the ague is allowed to run on for any considerable length of time, these organs

become subject to enlargement, especially the spleen and liver.

The hot or fever stage of ague, which is always subsequent to the cold one, is the period in which high arterial excitement ensues. The nervous system, during this stage, becomes deeply involved in irritation, and the capillaries engorged with blood. "The reaction is the effect of excessive innervation, which gives rise to an excessive amount of tonicity and contraction in the muscular fibres of the vascular system. These two forces or functions of this fibre are the forces which circulate the blood, and if they are excessive they uniformly produce that state of the system called fever. The excessive innervations produce excessive tonicity and contraction in the heart and capillaries, and the excessive tonicity and contraction produce increased, rapid, violent circulation of the blood, which necessarily favors combustion in the capillaries; for the diminution of their calibers brings the red corpuscles, the carriers of oxygen, into the closest contact with the carbonaceous particles of the blood, and gives rise to what is already experienced—an increase of heat."

It is an axiom in physiology, that excessive excitement is always followed by corresponding exhaustion. The sweating stage of intermittents follow the reacting or fever stage, and is therefore the result of exhaustion and general relaxation of the capillary vessels, and the effect of vital reaction.

TREATMENT.

A very plain method of cure, and one that has seldom failed in my hands, is to cleanse the stomach with an emetic, the bowels with a cathartic, and tone the system with tonics and strengthening bitters. An emetic should be administered just before the commencement of the cold stage, which should be followed the same day with a cathartic. The following is a good prescription: ℞. Ipecac grs. x.; Lobelia grs. v. to x.; to be made into an infusion and given in divided doses; say, from 3 to 5, at intervals of from ten to fifteen minutes, till vomiting takes place. Then, ℞.—Podophyllin gr. ss.; Leptandrin grs. ij.; Pulverized Gum Camphor gr. j., to be administered every three or four hours, till the loitering accumulations are removed from the bowels. After which any of the simple tonics and pure stimulants, as Hydrastis, Capsicum, etc., combined with from 1 to 5 grains of the sulphate of quinine, cures the disease promptly. I usually direct the following prescription, after having cleansed the stomach and bowels: ℞. Sulphate Quinine grs. ij.; Hydrastis grs. ij.; Capsicum gr. j., to be repeated every two hours during *freedom from either chill* or *fever*, till eight or ten doses are administered. In cases accompanied with much gastric irritation, the following tonic preparation is one of the best I have ever used: ℞. Decoction of Red Peruvian Bark, Infusion of Valerian, of each a pint; Elixir of Vitriol two teaspoonfulls; Sulphate of Quinine grs. xx. All to be put together in a bottle. Dose—For a grown person, from two to four tablespoonfulls every two hours during the intermission; children, in proportion to their age. This preparation was introduced to the medical profession by Dr. Curran, who reports to have succeeded with it when the sulphate of quinine had failed in every possible mode of exhibition. It is a pleasant tonic and is more likely to be tolerated by the stomach than quinine, a quality which renders it invaluable in the treatment of agues. It should be administered during the first intermission that occurs after the stomach and bowels have been evacuated.

The decoction of Peruvian Bark is prepared by the following process: Peruvian Bark, in coarse powder, one ounce; Sulphuric Acid, one teaspoonfull; Water, one pint; put together in a covered earthen vessel, and boil in a water-bath for ten minutes; strain the liquor while hot. The infusion of Valerian is prepared by putting half an ounce of Valerian, in coarse powder, into an earthen vessel, and adding a pint of boiling water. Digest for an hour, and strain the liquor when cold.

But should any peculiarity of temperament, or constitutional enfeeblement of the patient forbid the employment of an emetic, it should be omitted, and in its stead diaphoretic drinks should be used, as, an infusion or tea of boneset, pennyroyal, Virginia snakeroot, or catnip. But a mild cathartic, to cleanse the alimentary canal, should never be dispensed with where the emetic has been omitted. When agues attack persons of broken constitutions, and those laboring under chronic inflammation of some internal function, it will generally be found necessary to employ artificial warmth during the cold stage; as, heated bricks placed to the feet, or a warm foot-bath; dry heat applied to the entire surface of the body and extremities, or any other means that will tend to promote perspiration. Also, stimulating and warm teas may be freely administered at the same time; as, pennyroyal, Virginia snakeroot, etc. In the cold stage of ague, heat applied externally is the most available agent known to stimulate and re-excite the superficial nervous sensibility, and sequentially the capillary circulation, by means of which an equilibrium of the nervous and vascular systems are restored.—

Anthelmintics often produce the most happy effect when given in conjunction with anti-periodics, in juvenile patients, as it is common for the ague in such cases, to be aggravated by worms.

But there is probably no disease that assumes so many different forms as intermittent fever, and certainly none that require a more profound knowledge of pathology as regards its proper treatment; though in a very considerable number of cases it presents the ordinary form which is not portentious of danger; this simple form being well understood, so far at least as to its proper treatment; yet in its complications, and manifold shapes and types, I apprehend that its proper treatment is not generally understood even by those who practice the pursuit of medicine. In many cases, the vital forces of the system are made to "bite the dust" in the lapse of a few hours from the excessive malignancy of its attack. Where the brain becomes the principal seat of congestion, the ague, owing to excessive irritability, runs its course rapidly—sinking the system into a hopeless collapse, unless full and efficient remedial means are urged with promptitude. In this fatal form of intermittent fever, the symptoms are those that characterize cerebral congestion; beginning with stupor and ending in a profoundly comatosed state, with entire unconsciousness. In the cure of this form of ague, three indications are to be attended to: the first is to allay nervous irritation; the second, to unloose the circulation and excite it to the surface and extremities; the third, to fortify the system against a returning paroxysm. To meet the first indication, cups, with scarification to the nape of the neck, should be employed to reduce the *vis-a-tergo*, (that is, the force communicated from the ventricles of the heart to the blood in the arteries, capillaries, and veins;) cold water should be freely applied to the head of the patient; its action will be to abate the exalted nervous sensibility by means of its great capacity for heat. To fulfill the second indication, we should employ relaxants and derivants. Of these, our chief reliance should be in the acid tincture of Lobelia, (made by digesting the lobelia herb or pulverized seed in cider vinegar,) and sinapism, (composed of ground mustard and flour made into a heavy paste,) the grand indication being to unloose the circulation and excite it to the extremities so as to promote an equilibrium. No material of medicine is superior to the acid tincture of lobelia, in which the indication desired is relaxation; alone, it certainly surpasses any other I have ever used. This tincture should be administered in tablespoonfull doses, every ten or fifteen minutes, till consciousness returns. Sinapisms, or other stimulating applications, should be made to the spine, stomach, and extremities. To meet the third indication, anti-periodics should be freely administered as soon as the patient becomes conscious, to prevent the return of another paroxysm. In such cases, the following formula will be found to be a good one.

℞. Sulphate Quinine, grs. ij.
Ipecacuanha, gr. ss. Mix.

This powder should be repeated every two and a half hours, or so as to maintain a mild perspiration. The ipecac directs its action to the surface, by means of which it guards the system against any local determination of blood. During convalescency the patient should cautiously guard against exposure to cold and damp. It is a good practice to take one or two grains of quinine every morning, for several days after the ague has been checked, to prevent a relapse.

Huntsville, Ky., Dec., 1853.

EPIDEMIC TRAUMATIC TETANUS.

BY J. THOMPSON, M. D., OF MISSOURI.

During the months of April, May, and June, 1853, this disease raged to a fearful extent in this portion of Missouri. The first case that came under my notice was on the 10th of April. I was summoned in great haste to the residence of Col. Charles Sumpter, and found his youngest son, a lad of fifteen years, prostrated with well marked symptoms of Traumatic Tetanus. The masseter and other masticatory muscles, were greatly contracted, and jaws firmly closed—growing more severe. In fifteen minutes after I arrived, severe spasms came on, returning every five minutes, combined with opisthotonos. I ordered sulphate of morphine one-third of a grain, and quinine two-thirds of a grain, every fifteen minutes.

10 o'clock A. M.—Have given seven grains of morphine and quinine, but patient growing worse; pulse 112; skin warm. I then gave an infusion of tobacco, but to no purpose; I then ordered a teaspoonfull of the following combination, every four minutes:

℞. Scutellaria Lateriflora, ℥ j.
Cypripedium Pubescens,
Semi Lobelia Inflata, aa. ℥ ij.
Caulophyllum Thalictroides, ℥ j.
Alcohol, oct, ss. M.

12 o'clock A. M.—Pulse thready, and 114; spasms worse; I found upon examination that the spasms had extended to the respiratory muscles, and to the heart; the treatment which before had

been successful in my hands now failed; friends greatly excited, and parents crying, "Doctor, can't you save my Johnny!"

Circumstances threw me upon my "wits end"—thinking what to do; and, at fifteen minutes past twelve, death relieved the sufferer. I mounted my horse, and sighed—retreat! retreat! Upon learning the history prior to the attack, I found the lad had been plowing the day previous, hearty and well as usual; did not complain through the night, but slept well; eat a hearty breakfast and started to the field to work again; shortly after he arrived at his place of labor, the father, being near by, observed him sitting down, and calling to him wished to know if anything was the matter; but receiving no reply, went to him and found him speechless; immediately conveyed him home, and sent in haste for me, one mile off. I examined him well, and could find no marks of injury—not even a scratch. I contended he *had* received some injury, but the patient and family said not. On the 20th of April I was again called to the same family. The son was attacked in a similar manner. I gave the combination of morphine and quinine every ten minutes; but this failed as before. I then determined to try something else. Fortunately I had with me a vial of camphorated chloroform, of which I immediately gave 20 drops internally, and saturated portions of cotton with it, and placed upon the patient's upper lip. They were repeated during the spasms.

The pulse sank from 112 to 60; all excitement of the muscles ceased, and in twenty minutes after the inhalations the patient experienced refreshing sleep. The spasms did not return; the patient gradually recovered. There were no marks of injury in this case visible. During these three months I attended some thirty cases, and but two out of that number showed marks of injury; one was a wound on the foot of a little girl, aged five years, caused by letting a knife fall from her hand, while washing dishes; the other was caused by running a thorn into the sole of the right foot; the latter of which was somewhat aggravated. The thorn was extracted by the parent, and in eight hours tetanic spasms came on. All antidotes failed except chloroform. The patient recovered. As a general thing, all that survived the third day recovered; but the majority proved fatal. Patients that came under my care, the tetanic symptoms were usually acute, and ensued in the following order: trismus, cramp in the muscles of the face, back, neck, and those proving fatal, in the respiratory muscles and the heart. Not a single death occurred from loss of power in the brain, or spinal chord, or from exhaustion. It is passing strange that the treatment by opiates, etc. invariably appeared to aggravate the general symptoms, instead of producing convalescence. One of my neighboring practitioners stated that he used chloroform in combination with Tinc. Opii, and afterwards gave them separately; the chloroform producing relaxation, while the opium rather aggravated the paroxysms, proving satisfactorily that chloroform was the only reliable remedy. Old practitioners of good standing have told me that the treatment failing in the present cases was never known to fail in Tetanus, in all its types, before, in this same section of Missouri; and that it generally arose from wounds or some local injuries. But the Tetanus which has been epidemic here the past season exhibited the following peculiarities: First, generally arising from *no* wounds or local injuries; second, being invariably confined to the muscles of the upper extremities—no lower down than the region of the heart; third, after the third day, prognosis being favorable, no deaths after that time; fourth, being confined to a locality of about four miles square; fifth, being confined to the young alone, the oldest being 18 years; from that to 18 months. The situation of this four miles square is a low, black-oak, swampy land, which the farmers have been compelled to ditch, in order to make it tillable. There was not a single case on dry, elevated land. There has been no cases since the last of June.

MILLERSBURG, Callaway co., Mo., Oct. 3, '53.

DYSPEPSIA TREATED WITHOUT DRUGS.

BY ANSON R. BRUEN, M. D.

The following treatment for Dyspepsia, as far as I know, is original with myself, although the agents employed have been recommended for other diseases, etc.

My treatment is: First, the patient must eat his or her meal without drink, and chew or masticate the food long enough for the saliva to flow so as to make the food moist enough to be swallowed without the need of drinks.

The patient must avoid eating indigestible substances, or those hard of digestion; e. g. cabbage, pickles, raw onions, fatty substances, etc. One hour must elapse after meal-time, before drinking, and then the drink must be pure water. Each morning, the first thing after rising from bed, the patient should drink a tumbler of pure cold water fresh from the well. The alkaline hand-bath, the water tepid, should be used three days, alternated

with clear water, rubbing the whole body thoroughly with the bare hand, and then gone over with the alkaline bath, for the same time again, etc., until the disease is cured. The patient should eat regularly, and never eat between meals or within at least two hours before retiring to rest. I prefer to have the bathing done at night, in a warm room, where no chills can be produced, and this last must not be overlooked, by any means, or the consequences will be serious. The patient should take exercise each day, in the open air; if accustomed to much reading, etc., should read but little. Go early to bed and arise early in the morning.

During three years practice, since I left Cincinnati, I have treated a greater number of persons that were dyspeptics, and in all cases of chronic or acute gastritics. I have observed many bad effects from the administration of drugs.

In cases where considerable gastric inflammation exists, I recommend the free use of cold elm or flaxseed mucilage. The gastric fluid being none too strong for the digestion of the food, if diluted by drinking two or three cups of tea, coffee, or water (water is by far the best) is so reduced as not to readily dissolve the food; the food is thus left upon the stomach until the acetic fermentation takes place, and the stomach becomes burdened and debilitated. Can healthy chyle be secreted from such a mass? When the food is thoroughly masticated and united with saliva, it will be readily digested, and the appetite will become satisfied before the stomach is burdened with too much food.

Two ounces of food, properly digested, is of more importance than a pound half-digested, By the alkaline bathing, the surface is relieved from all obstructing matter, and the cutaneous absorbents take up and convey into the system the alkali, of which the system is deficient. Regarding the eating of indigestibles, it is fully as acceptable to the stomach to take unnatural drugs as to eat unnatural food.

The other articles constituting my treatment will readily suggest themselves. I consider the treatment complete. During the last four or five months, I have treated over twenty that were confirmed dyspeptics, and some of the worst stamp; over half of them are now discharged as well, and the rest are all improving.

I observed that the animal creation—cattle, etc. were governed by the law of eating and drinking separately, which first led me to the conclusion that such was in accordance with nature's laws.—The ox eats his food, and then waits until it is digested, before drinking.

Cincinnati, Nov., 1853.

N. B.—To eat without drinking at the same time, in dyspepsia, with bathing, etc., has been taught by Prof. J. King for many years. N.

PART II.—MISCELLANEOUS SELECTIONS.

CHLORIC ETHER IN PUERPURAL CONVULSIONS.

Sir.—The narration of the following case may be of little interest to your numerous readers, and my object in reporting it is to elicit, through the pages of your Journal, their experience with ether in the same disease

Mrs. ———, aged 26, of light complexion, and nervo-sanguine temperament, was attended in her first confinement by Dr. G. D. Peck, December 29th, 1852. Her labor, which was perfectly normal and comparatively easy, terminated in eight hours by the delivery of a healthy male child of medium size. Two or three hours prior to the termination of the labor, she made mention of pain in the supra-orbital region, but of so slight a nature as not to attract the attention of the medical attendant.

Three hours after delivery, viz., 7 o'clock P.M., during which interval the patient remained every way comfortable, she was seized suddenly with an epileptiform convulsion. Her accoucheur was soon present, when her pulse was found but little augmented in frequency, and herself conscious during the intervals of the convulsions, of which she had three during the first hour, lasting some five minutes each. The feet were placed in warm water, iced water was applied to the head, which was above normal temperature, and of jalap gr. xxx. were administered, being the most active medicine at hand.

At 8 o'clock I was invited to see the patient with her attendant. She still answered, but hesitatingly; exhibited some agitation, but could not remember anything that had happened; had a wild and brilliant, but not injected eye; pulse 120 per minute, pretty firm and quick. Twenty ounces of blood were taken from the arm, in the erect position, causing pallor and partial syncope. More cathartic medicine was given, and cold still applied to the head. Thenceforward the paroxysms, augmenting in severity, occurred at pretty regular intervals of an hour and a half each, until 2 o'clock A.M., December 30th. Meanwhile the bowels had been freely moved, aided by stimulating enemata.

At this time the convulsions occurred in such rapid succession as to merge into each other; the face full and livid; respiration deep and laborious; deglutition suspended, and pulse at the wrist almost imperceptible and very rapid. It now seemed evident, after employing these active measures without avail, that life must soon terminate; and at this critical juncture it was resolved to try the influence of anæsthesia.

The concentrated chloric ether was accordingly administered upon a napkin—slowly at first, but constantly, until the patient was brought under its influence, when the convulsions ceased entirely, and there only remained a lateral motion of the head upon the pillow, and some irregular movements of the limbs whenever allowed to escape from under its influence. The use of the ether was continued for an hour and a half, during which time all the more formidable symptoms had abated, and the patient apparently slept at intervals.

During the succeeding day she was delirious, attempting at times to rise from the bed, when the inhalation of a little ether would quiet her agitation and cause rest. In two days reason was fully restored, she having remembered nothing after the first spasm. Her convalescence has been as rapid and complete as in ordinary labors.

JAMES DUNLAP, M.D.

NORTHAMPTON, March 12, 1853.—*Boston Med. and Surg. Journal.*

THE MILK TRADE OF NEW YORK.

Mr. John Mullay, of New York, has had the courage to expose the whole system of iniquity practised by milk dealers in and about that great city. But it will not deter the consumers from giving their patronage to the same men who have imposed upon them with impunity, nor frighten the milk merchants from an established scheme of cheating. There is a degree of recklessness and determination on the part of those concerned in the milk trade, that defies the press, the physicians and even the law. This grows out of the immense demand for milk, and the impossibility of proving who are the real rascals at the bottom of the business. In the hurly-burly of swallowing a cup of coffee at an over-crowded hotel, any white fluid that looks like milk may pass for that beverage, or at least escape a chemical analysis, though considered excessively bad in the estimation of a stranger. The poor suffer severely in consequence of the vile stuff sold them for milk. Their children are made sickly, and positive disease is often developed in them. In drinking a supposed nourishment, what multitudes take into their stomachs diluted corruption derived from animals enfeebled by improper food and by being housed perpetually in narrow places, where they inhale an atmosphere laden with exhalations from decomposing matter. There is some good milk retailed in New York, and there may be, also, many very honest retailers. But to dilute with water, and then introduce mixtures to give the characteristic consistency, flavor, and degree of richness peculiar to the unadulterated article, is admitted to be a common practice in London, and has been imitated extensively in New York. Whether we have anything besides water in Boston milk, remains to be ascertained. The demand does not apparently warrant any extra efforts at imitation. When our population has doubled, the materials for cheating may come cheaper than country milk, and then ingenious deceptions may be expected.

We have visited the vast milk establishments of London, and retain a distinct recollection of the poor imprisoned animals (in one stable four hundred in number) that furnish milk for the multitude. Ulcerations of the liver and a diseased state of the lungs are common, where many cows are kept together in stables. Milk from animals fed on the miserable slops of a brew-house, or distillery, must be of a wretchedly poor quality to begin with—and when it passes to the retailers, it is impossible to conjecture the processes it undergoes to increase the quantity, with a view to a profit on the materials intermingled. The fresh brains of calves, sheep, pigs, etc., beaten up in a small quantity of milk and then poured into a number of gallons of the vilest combination of milk, water, etc., make a factitious fluid that actually passes for genuine milk! What the effect must be on the public health, and especially on that of children, who are by far the largest class of consumers, may be readily conjectured. Under all circumstances, it is best to dispense with city milk as much as possible, if it is the product of cows kept in town; and in the next place, when from the country, continue to purchase of those whose honesty is a guarantee of its purity. There is no stopping place in detailing the mischief that accrues from the habitual use of poor milk. Cheating in every department of trade is certainly rife throughout the world. Either honesty does not meet with encouragement, or the heart of man is inclined to evil perpetually.—*Boston Med. and Surg. Journal.*

DISPLACEMENTS OF THE NON-GRAVID UTERUS.

J. F. Peebles, M.D., of Petersburg, Va., was the successful candidate for the Fiske Fund Prize of the Medical Society of Rhode Island, the last season. His essay was on "Displacements of the non-gravid Uterus—their local and constitutional effects." It has been published in a pamphlet of forty-seven octavo pages, and makes a very respectable appearance in its typographical arrangements, independently of its literary merit. Dr. Peebles proceeds systematically in considering the subject under three natural divisions: 1st. The natural history, diagnosis, and local symptoms of different forms of displacement; 2dly, The general symptoms, or constitutional effects common to all forms of uterine displacement; and 3dly, The treatment. He then takes up the consideration of a catalogue of uterine maladies, each of which is separately and fully described, showing a familiarity with every fact essential to the practitioner. For example, *prolapsus* is explained; and the curious circumstance that civilization is multiplying sufferers, has not escaped the author's critical pen. The nature of the difficulty, its mechanism and causes, etc., form an important and instructive article.—Then follows a similar analysis of *retroversion* and *anteversion*, with minute practical instructions how to proceed with the patient. This, too, is an admirable survey of the anatomical relations of parts,

illustrated by two outline drawings. Flexions of the uterus, ovarian irritation, dysmenorrhœa, etc., occupy several pages, in which the whole ground is carefully considered. Finally, Dr. Peebles exhibits his strength most advantageously in the plan of treatment. He favors the pessary—of a peculiar construction, however; while some of the leading practitioners here at the North are now wholly discarding them. But though medical gentlemen may differ in opinion respecting the value of general constitutional treatment, they will generally agree in this, we apprehend, that mechanical assistance of some kind must be resorted to, for temporary relief, if nothing more; since medicine can be of but little or no more utility in a purely mechanical disarrangement of the uterus than in a dislocated limb. A majority of physicians view the subject precisely in this light; and consequently apparatus will continue to be devised by ingenious artisans, at the suggestion of this class of practitioners, notwithstanding the objections to such contrivances by others, eminent for position and scientific influence This production is one of the best of the Fiske Prize Essays, and is a judicious, instructive guide for a practitioner. It is worth a hundred theoretical speculations upon controverted points, which serve to puzzle men's brains, without furnishing a single practical idea worth remembering.—*Boston Med. and Surg. Journal.*

GALVANIC SUPPORTERS.

A physician in New Hampshire writes to the editor in regard to these new instruments as follows:

Sir,—I wish to add my mite in calling the attention of the profession to Seymour's Galvanic Supporters, which I have been using some months past for the cure of prolapsus uteri, leucorrhœa, amenorrhœa, hysteria, etc. When this instrument was presented to me for the first time, I was disposed to class it with the many abdominal and spino-abdominal supporters which have been in use for a series of years past, and felt but little or no inclination to make trial of any new instrument of the kind, such had been my disappointment in almost every instance when I had applied the old ones. But on a mature examination, it occurred to me that galvanism applied in union with mechanical support might be worth trying, and accordingly I purchased one half-dozen to give them a fair trial, as I had at that time under treatment several patients afflicted with different forms of uterine derangement.

In no one instance, as yet, have I been disappointed in the effects produced by the application. One single case I will briefly mention here. I was called, some six weeks since, to visit a married lady who had had leucorrhœa, as she said, for the last two years, with scarce a day's cessation. I found her nervous system very much deranged, with debility consequent upon the continual drain, loss of appetite, and considerable emaciation, and of course unable to perform much of any kind of labor. Without presenting any internal medicine, (except a simple tonic,) I resolved to apply the supporter, which I immediately did. I adjusted it as nicely as possible, and directed her to wear it day and night for one week, when I would call and see her again. On my second visit I found her much relieved, and the surface of the skin under the front pad (if I may so term it) thickly studded with pustulous eruptions, and discharging considerable quantities of semi-transparent pus. I advised her to discontinue it a day or two, and then apply it again, which she did by placing a very thin muslin between the skin and zinc. The pustules healed in a short time, and she continued to wear the supporter for three weeks constantly, at the end of which time she was cured of the leucorrhœa, her strength improved, she ate well, and in fine called herself *well*. She now does much hard household labor, and, so far as my knowledge goes, has not had a recurrence of any of her former trouble.

We cannot expect such happy results in every case; but that Seymour's instrument is a valuable application in a majority of like cases, I have no doubt, and would invite physicians generally to make trial of it when occasion requires, and hope to hear the result through your valuable Journal.—*Boston Med. and Surg. Journal.*

PENALTIES TO WHICH MEDICAL MEN ARE EXPOSED *in the discharge of their Duties, as seen in the Case of Rough v. Rough, Lyell, and others.*

Judges, including Justices of the Peace, are protected in the discharge of their duties; counsel are not responsible for the opinions they deliver, or for the proceedings they advise, and jurymen incur no penalty by returning verdicts contrary to evidence. But the medical profession enjoys no such immunity. Medical men, for acts done in the discharge of their duty, are exposed to legal penalties, and may be subjected to vexatious lawsuits on the weakest and most unfounded allegations. Of this a remarkable illustration is afforded by the case of Rough *v.* Rough, Lyell, and others, tried before the Lord-Justice Clerk and a jury on the 9th of August last.

The circumstances of that case are briefly these:

The pursuer, Rough, was brought from a distance to her mother's house in a state of insanity, in February, 1847. Dr. Lyell, of Dundee, at the request of her relatives, had several interviews with her, for the purpose of examining into her state of mind; and thereby, and also from inquiries of her relatives and others and correspondence with the medical man who attended her previously, satisfied himself of her insanity. Accordingly he granted a certificate, on a petition to the Sheriff of Edinburgh, for warrant to confine her, and this certificate was subsequently signed by Drs Moir and Scott, of Musselburgh, after they had carefully examined the patient. A warrant was thereafter obtained for her confinement in an Asylum, near Musselburgh, where she was in consequence placed. She remained and was treated there, down till about August, 1850. By that time she had improved in health, and was, in consequence, permitted to remove and board with a family in the vil age of Ormiston.

Having afterwards recovered, or at least alleging that she was sane, and had never been insane, she brought an action against her relatives and others, and also against the medical men, to recover dam-

ages from the former for having wrongly confined, or caused to be confined, and wrongly detained, or caused her to be detained, in the asylum; and from the latter for granting their certificates without due inquiry and examination.

Drs Lyell and Scott. (Moir being dead) were compelled to defend this action, and after a costly record had been made up, issues were adjusted and the cause set down for trial. Much trouble and great expense were incurred in getting up evidence and preparing. The day of trial came. A host of counsel appeared for the parties. A jury was impanelled and the trial commenced. But so utterly groundless was the pursuer's case found to be, that after two or three of her witnesses had been examined, her counsel gave it up altogether, and the Judge had to direct the jury to return a verdict for the defenders in respect there was no evidence to go to them.

The result of this triumphant refutation of the pursuer's accusation is, that Drs. Lyell and Scott, for conscientiously certifying what they believed to be true, are amerced in a heavy bill of costs. For, although the verdict entitles them to decree for expenses, that decree will, it is believed, be utterly worthless. Surely, for such a grievance a remedy should be provided.—*Edinburgh Monthly Journal of Medical Science.*

PROFESSIONAL SUCCESS.

There is a singular difference in medical men in respect to their ability to inspire confidence, which is the first step in obtaining business. Some, with an immensity of learning, have a cold exterior and a forbidding aspect that prevents them from having any hold upon the public regards. They cannot succeed, on account of the ungraciousness of their manners. Others, without any solid acquirements, attain a success that astonishes their superiors, who cannot forbear wondering that such superficial attainments should have a currency among the intelligent. The secret of all this, is, a kind way of saying and doing things. How true it is, that a spoonfull of honey will catch more flies than a barrel of vinegar. We have known many excellent worthy physicians, of unquestioned talents, who dragged through life in poverty and disappointment, without ever convincing the community of their claims. They frightened off those who might have patronized them in the beginning, by refusing to participate in neighborhood courtesies and civilities which are so necessary in becoming one of the people.

A ready tact in detecting the symptoms of a case gives eclat to a physician. Patients are not partial to a tedious examination by percussion, a stethoscope, and a pair of ears all over their bodies at every visit. Many a good and conscientious practitioner has lost some of his best business, by overacting in this manner.

A finished medical education is lost upon many practitioners, who abandon the medical ranks in disgust, ont of patience with the world, when the real cause of their poor progress is in themselves. A happy disposition, and a corresponding external deportment is a better inheritance than an estate. A sycophantic smile, or an obsequious deference to mental inferiors, just because they represent a monied influence that may be turned to profitable account, is despicable in all, but especially in a physician. A medical hypocrite soon finds his true level. A fair, open, cordial deportment should characterize a practitioner of medicine. He must be a man among men—entering into their interests, and sympathizing both in their prosperity and adversity.—*Boston Med. and Surg. Journal.*

SUSPENDED ANIMATION.

According to a Providence, R. I. paper, the following extraordinary case is now very much occupying the thoughts of the people of Coventry, The account proceeds thus—

"About three weeks ago the wife of Mr. Henry Colvin, of Coventry, rose in the morning, complaining of a pain in her side. She soon after fell asleep, and died, as supposed. When her friends came to attend the funeral, they were struck by the remarkably life like appearance of the corpse, and the funeral was deferred. Since then she has lain in the same condition, and many have visited Mr. Colvin's house, none of whom can discover any signs of decay. There had been no alteration on Friday, 21st, a period of about three weeks.

It is rather strange that in New England a person should have remained so long inanimate, and no one been found who was able to determine whether the body was a living or a dead one. A deputation of physiologists had better be invited from Providence, at the expense of Coventry, to settle the question before the frost sets in. A lancet, a thermometer, or half a dozen other simple agents, might have been employed the first day, instead of allowing so much precious time to have been lost. If it were catalepsy, or some other anomalous condition of the nervous system, and consciousness or the powers of volition simply suspended—the woman must have died before this of inanition. Perhaps some medical gentleman in that neighborhood will have the kindness to communicate the finale.

MEDICAL MEETINGS IN CINCINNATI.

From a variety of sources, detached accounts of the late wordy war of the faculty in the Queen City of the West, have reached the Atlantic border, as our readers have already been informed. The last number of Dr. Buchanan's Journal contains a full report of all the facts and circumstances relating to the matter. After following the details of each meeting, which bear a striking similarity to a police report, it is quite impossible to ascertain who was right. Certain it is, that all were wrong who participated in the vituperations recorded. A certain candidate for a prominent elective office, after reading what the papers asserted of his character, said that he had no idea that he was so bad till he saw it in print. Such will be the conclusion of some of the Cincinnati physicians as the weakness and failings of each were unsparingly portrayed by the speakers. There were some plain truths told, shackled and embarrassed by extravagant representations of individual ambition. Many appear to have agreed that the Hospital, the question concerning the possession of

which gave rise to the protracted and disgraceful controversy, was a badly-managed institution. It was a singular declaration to make, before a great assembly, that in one department there "*were only three old women, kept there for nest eggs!*" Some parts of the speeches of Dr. Tho. O. Edwards, a former member of Congress from Ohio, are without a parallel in medical discussions. If he can outlive the effects of his oratory, and especially of such stories as Pat and Murphy's whisky frolic, and Sally and Jacob, he is invulnerable Dr. M'Ilvaine seems to have exercised a keen vein of wit, to the terrible annoyance of his adversaries. On the whole, it will prove an unfortunate quarrel, by establishing personal animosities between gentlemen who ought to be on the best professional terms.—*Boston Med. and Surg. Journal.*

APHONIA OF TWENTY MONTHS STANDING, RELIEVED BY IODINE INHALATION.

BY EDWARD B STEVENS, M. D., LEBANON, O.

In a communication to the American Medical Association, in its volume of Transactions for 1850, Prof. Pancoast has given the record of two cases of loss of voice—the one of six, the other of seven months standing—both cured by inhalation of a dilut. cholorine vapor.

In connection with these cases, Dr. Pancoast remarked:—"The form of aphonia here alluded to, is that which practitioners must have met with, following an ordinary cold, without leaving any perceptible organic lesion in the pulmonary apparatus. The voice is reduced to a faint, hoarse whisper, distiugnishable only at the distance of a few feet, and at continued attemps to talk, though it gives no pain, becomes quickly attended with a feeling of fatigne, as though there was some obstruction to the passage of air through the larynx. In breathing merely, there is little or no difficulty, in these cases, as the individuals are capable of undergoing considerable exertion without very unusual signs of fatigue. The difficulty has appeared to me to be in the paralyzed condition of the muscles of the larynx, whose business it is to dilate the rima glottidis, during the act of articulation."

The conclusion of Dr. Pancoast is, that such agents as will excite a healthy and proper degree of stimulation in the affected structure ought rationally to restore the power of articulation. He consequently used the dilut. cholorine vapor, with entire success in the two cases referred to—at the same time suggested that iodine, or other similar agents, would doubtless produce a similar effect.

The following case of this kind lately occurred in my practice, chiefly remarkable from the long duration of absence of voice, being twenty months, in other respects similar to those related by Dr. Pancoast.

April 6, 1853.—Miss ——— applied for medical advice and treatment, in a case of loss of voice, of twenty months' standing, supervening upon a slight attack of influenza. Has been subject to brief attacks of hoarseness, lasting for a few days at a time, for several years. General health delicate. Since the present attack, has been subject to a great variety of treatment, including the application of nit. silv. in strong solution, within the larnyx, by means of the sponge probang. Nothing, however, produced any effect on the voice. I find, upon careful examination, no especial evidence of disease in the fauces; there is an entire inability to produce sound of any description with the proper vocal organs; all attempts at speaking are made with the lips—*whispering*. But not being able to divest myself of the idea that a follicular inflammation of the throat and bronchial tubes was the cause of the mischief in some way, I commenced the treatment by directing the inhalation of nit. silv. prepared with the lycopodium, as an impalpable powder, and inhaled by means of the apparatus introduced by Dr. Ira Warren. This treatment was faithfully persevered in for one month, with no better result than the previously-tried remedies.

May 7.—Acting upon the idea suggested by Prof. Pancoast, of paralysis of the muscles of the larynx, I now determined to try the iodine vapor. I accordingly selected an apparatus, consisting of a metalic vase or urn, with a close-fitting cover, flexible tube, and mouth-piece attached (used some years since for breathing medicated vapors in the treatment of consumption.) I directed my patient, after filling the vessel half full with hot water, to drop in twenty drops *tinct. iodine*, and inhale the vapor produced by the heated water. Inhalation to be repeated once to thrice daily, according to the irritation or effects, otherwise produced. The first inhalation produced great nausea for a short time, and copious bloody expectorations, but accompanied by an almost immediate, though partial restoration of voice. The dose of iodine was directed to be reduced to fifteen drops; and thereafter no unpleasant effects were produced. The voice continued to improve steadily under this treatment, until at the end of a week, it had acquired the natural fulness and distinctness of tone.

June 15.—More than a month has elapsed since the restoration of voice; it continues distinct and natural.—*Western Lancet.*

MEDICAL COLLEGES.

The first we notice of these, in the order of time, as claiming priority of existence, is the *Medical College of Ohio*, located on Sixth street. It is a state institute, and was first chartered by the Legislature, in 1819, but did not go fully into operation until the year 1825. The state furnished the means by which a college edifice was erected. This building stood for a period of about 25 years, and answered all the purposes for which it was designed, but the trustees and faculty of the institute, thinking it important to the progress of medicine to keep up with the improvements of the city, had the venerable old pile torn down, and a new and much more magnificent structure reared upon its ruins.—No institution, perhaps, of the kind in the United States can boast a better selected library, or a more complete anatomical, surgical, and botanical cabinet, embracing every necessary to illustrate the science; and no institution has had more able and experienced professors in its faculty from time to time; and yet with all these advantages, together with the patronage of the state and the exclusive control of the Commercial Hospital, no institution has had more numerous and frequent changes in

its faculty, and, in proportion to its faculties, so few a number of students. The Medical College of Ohio seems to have been an ill-fated concern, and the wonder of all its friends has been, why, in view of all the considerations of its age and standing, and the advantages which it enjoys, (being vastly superior to those of any other medical college in the Western country,) it has not accomplished more in the great work of medical education. There must be something wrong in its policy and management—something rotten in Denmark—and until that great enemy of her peace and prosperity is discovered and removed out of the way, its yearly rounds of cannonading from its port-holes upon the various reform systems of the day, will not save it from the encroachments of the bristling enemy.—Seriously, we have nothing against the Medical College of Ohio. We venerate her for age, and the service which she has rendered. We truly commiserate her condition, and now that she labors and groans under a heavy debt, incurred by her friends to clothe her in a new suit of brick and paint, and varnish, and there seems to be no way for her to shake off the incumbrance, having exhausted all her strength, we fear she must sink beneath her accumulated woes. After having been refitted at so much expense, and made ready for sea, to hear that she is not sea-worthy, is afflicting indeed.—She may be overhauled, and yet prove serviceable to the state and community, but to make her so we imagine that, like the "Old Constitution," all her timbers must be displaced by new ones. At present we say to the venerable old *mater—requiescat in pace.*

The next institution of this character we shall name, is that of the *Electic Medical Institute*, located on the corner of Court and Plum streets.—this institute was chartered by the Legislature of Ohio in 1845. The college edifice is of very plain exterior and humble pretensions, though sufficiently large and well arranged to answer all the purposes for which it was erected. Without the prestige of state patronage, without grants of money or land from companies, or private donations from individuals, without friends, without influence, and with an array of the Ohio Medical College and all the faculty (incorporated and unincorporated) of the city and all the old "regulars" of the surrounding country against it, this fatherless, motherless child found itself alone in this great city of the West. And yet not entirely alone. There were a few, who, though regularly trained in the Old School, were not disposed blindly to pursue the iron path of established practice, and let the patient die rather than depart from the prescriptions laid down in the books. They felt conscious that there must be progress in the science of medicine as well as in every other science, and that among the many efforts at reform there must have been evolved some principles that were good and worthy of adoption; at least that it was not the part of wisdom to renounce and eschew them until they were tried. That divine electicism which teaches, "prove all things, hold fast that which is good," taught them to examine every theory and every practice, and by bringing all to the test of experience, to retain in their materia medica and therapeutics that which was good, and to cast the worthless away, though it claimed a high antiquity, and was backed up by a long list of venerable names.

But this system must have a local habitation and a name, to effect which it is necessary to make sacrifices, and brave the contempt and scorn of those whose wisdom consists in following the tread-mill of their profession, and whose arrogance was equal to their brains. By private efforts a medical college was erected and a faculty organized, and ten years had not elapsed until the "feeble one became a thousand," and more students were enrolled in the catalogue of one session in the Electic Medical Institute than in all the Old School medical colleges in Ohio. How shall we account for this fact, unless we conclude that this school holds out inducements to students, greater than are found in any Western school? The nation is eclectic, and a few more years will find this same Eclectic Medical Institute of Ohio, which has had every disadvantage to contend with, not only the first school in the West, as it now really is, but the first in importance in America.

In connection with the Institute is a large and admirably furnished building, on Sixth street, denominated Newton's Clinical Institute. In its internal arrangements, particularly its wards—being separate rooms, all of which are furnished with every convenience, such as gas lights, hot and cold water, all of which are conveyed in pipes through the building—it is as superior to the Commercial Hospital as that institution is to the Pest House. The students of the Eclectic College have access to this Institute, and none are excluded, who seek to enjoy its advantages according to its rules and regulations.

There are two other medical colleges in Cincinnati, recently organized, viz: the Cincinnati College of Medicine and Surgery, and the Miami Medical College. Both of these institutions have able faculties and seem to bid fair for successful competition with the *old* Medical College of Ohio.—*Bickley's West American Review.*

BITE OF THE RATTLESNAKE.

BY THOMAS A. ATCHISON

I was summoned in haste on the evening of the 20th of September, 1852, to see Miss R———, a young lady aged 17, living five miles in the country, who (I was informed by the messenger) while taking a stroll in company with her mother, was bitten by a rattlesnake. I arrived about half past 7 o'clock, two hours and a half after the accident. I found my patient almost moribund, pulse wavy and scarcely perceptible at the wrist, surface cold and bathed in perspiration, face swollen, with a besotted expression, mind wandering, pupils dilated, could not see, declaring it was very dark, although candles were burning in the room, asked frequently if it was not raining hard, although the night was calm and clear. Upon examination, I found that the bite had been inflicted upon the instep of the left foot; two little punctures were very perceptible, around which there was a greenish areola, with some puffiness.

Having heard of the marvelous efficacy of "spirits" in the relief of similar cases, I at once determined to give the remedy a full and fair trial.—Reason and analogy sustained it. The nervous system was overwhelmed by a swift and deadly se-

dative poison, it must be supported by an equally powerful diffusible stimulant; accordingly I gave half a glass of whiskey, which was swallowed with avidity. Meanwhile the wound was freely scarified and cupped, and the extremities placed in a hot saline bath, twenty grains of carb. amonia was then given, which was immediately thrown up, together with the contents of the stomach, colored a bright grass green. A common sized glassful of whiskey was now given the patient draining with eagerness the last drop, and begging with the energy of instinct for more; thus a glass of whiskey and twenty grs. of ammonia were given alternately every half hour, until three pints of the former and eighty grains of the latter were taken, and what is remarkable, not the slightest intoxication ensued; on the contrary the urgent and alarming symptoms gave way, warmth was restored to the surface, the pulse returned to the wrist, the mind was called back from its wanderings, and she fell into a quiet sleep, from which she awoke at 5 o'clock, A. M., complaining of intense pain in the foot, shooting up the inside of the leg to the knee. Ordered morphia, fourth grain; fomentations of laudanum and camphor, followed by poultice of linum sem, with the effect of entire relief of pain. The following day, castor oil was given to move the bowels; from that hour she suffered no further inconvenience from the bite.

The instinctive avidity and impunity with which this delicately nurtured young lady took so large a quantity of spirits, sufficient under ordinary circumstances to have killed a regular *habitue*, would excite astonishment, if we did not reflect that it was antagonized by the depressing effects of the poison on the nervous system.

But the most interesting features in this case remains to be stated; Miss R——, at the time she was bitten, was the subject of a well-marked hooping cough, which was then epidemic in the neighborhood; she had had the disease about three weeks, consequently it was at its acme, but on recovering from the effects of the poison, to her great surprise and gratification, her cough had disappeared also, nor did it return; being essentially a spasmodic disease, it was swept away by the powerful impression made upon the nervous system.—*Southern Journal of the Medical and Physical Sciences.*

EXCISION OF THE TESTES.

Prof. S. D. Gross, in his report to the State Medical Society of Kentucky, on "Improvements in Surgery," gives the following account of a singular operation performed by himself:

A very novel case, justifying, in my opinion, excision of testes, came under my observation in 1849. So far as my information extends, there is no account of any operation for a similar object upon record. The patient, at the time I first saw her—she had always been regarded as a girl, and had been so pronounced by the accoucher—was three years of age, having been born on the 10th of July 1846. At the age of two, she began to evince the feelings and disposition of a boy; rejected dolls and similar articles of amusement; became fond of boyish sports. She was well grown, perfectly healthy, and quite fleshy; the hair was dark and long, the eyes black, and the expression very agreeable. Upon making a careful examination, found the external genitals in the following very singular condition. There was neither a penis nor a vagina; but instead of the former there was a small clitoris, and instead of the latter a cul-de-sac, covered with mucous membrane. The urethra occupied the usual situation; the nymphæ were naturally small; but the labia were well developed, and contained each a testis, quite as large, consistent and well shaped, as they ever are in boys at that age.

It being apparent from the facts of the case that it was one of monstrosity of the genital organs, usually denominated hermaphrodism, the question at once occurred whether anything ought to be done to deprive the poor child of that part of the genital apparatus, which, if permitted to remain until the age of puberty, would be sure to be followed by sexual desire, and which might thus conduce to the formation of an unfortunate matrimonial connection. Such an alliance, it was evident, would eventuate only in chagrin, disappointment, and probably, in disgrace. Certainly no impregnation could ever occur, and even copulation could be performed but imperfectly. I gave the subject all the consideration I was able to bestow upon it; I felt the responsibility of my position; a new question, involving the happiness of my little patient and the deepest interest of her parents, was presented to me.—I appealed to all the records of my profession, but in vain, for a precedent. Under the circumstances, I sought the advice of a medical friend, Professor Miller, in whose wisdom and integrity I had unwavering confidence. He saw the child, and examined her; he viewed the case, as I had done previously, in all its aspects, phisiological, legal, and surgical, and his conclusion was that excision of the testes would not only be justifiable, but highly proper; that it would be an act of kindness and humanity to the poor child to deprive it of an appendage of so useless a nature, one which might ultimately lead to the ruin of her happiness. The parents were already solicitous for an operation, and having imparted to them our decision, I no longer hesitated in regard to the course I ought to pursue.

I performed the operation of castration on the 20th of July, 1849, aided by my pupils, Dr. D. D. Thompson, of this city, Dr. Greenbury Henry, of Burlington, Iowa, and Dr. William H. Cobb, of Cincinnati. The little patient being put under the influence of chloroform, I made a perpendicular incision into each labium down to the testis, which was carefully separated from the surrounding parts, and detached by dividing the lower part of the spermatic cord. The arteries of the cord being secured with ligatures, the edges of the wound were brought together with twisted sutures, and the child put to bed. Hardly any blood was lost during the operation. About two hours afterwards the labium became greatly distended and discolored; and upon removing the suture, the source of mischief was found to be a small artery, which was immediately drawn out and tied. No unpleasant symptoms of any kind ensued after this, and in a week the little patient was able to be up, being quite well and happy. The testes were carefully examined after removal, and were found to be perfectly formed in every respect. The spermatic cords were natural.

I have seen this child repeatedly since the operation, as her parents live only a few squares from

my office, and have watched her mental and physical development. Her parents, who are persons of observation and intelligence, assure me that her disposition and habits are those of a girl; that she takes great delight in sewing and house-work, and that she no longer indulges in riding upon sticks and other boyish exercises. Her person is well developed, her mind uncommonly active for a child of her years.—*Proceedings Medical Society of Ky.*

CHOLERA AT SEA.

The records of cholera at sea are not confined to the papers on this side of the Atlantic. The English papers notice the return of several emigrant vessels, obliged to put back by the devastation of the disease. The Guiding Star, a vessel of 2000 tons burden, bound from Liverpool to the United States, put back after being nine days in the channel, with the Asiatic cholera, of a very fatal type, rife among her passengers. Thirteen of her passengers died, and a number of others were sick.—Another ship, the Kossuth bound from Liverpool, returned after being out fifteen days. There had been fifty persons attacked, and out of these, eighteen died. A number of the emigrants were Germans. The mortality at sea is becoming frightfully large. The ship Constellation, which arrived at New York, on the 25th inst., lost *one hundred* of her passengers.—*N. Y. Times.*

ANATOMICAL PREPARATIONS.

Formerly there was a general repugnance in this country to keeping parts of the human body on sale. It has been a regular business in France for a century, and England and the United States are still large purchasers from the French dealers. The best and rarest preparations in our school and private cabinets, with few exceptions, were procured in Paris. This repugnance to dealing in such articles, however, has been in a measure overcome. Within the last year, Dr. Codman, of Boston, has opened and kept on sale, a collection of all parts of the body, skeletons, etc., to the advantage certainly of the medical public, and he ought to be well sustained in the enterprise. His prices are reasonable, and being an obliging man, and knowing precisely what articles are needed, being medically educated, the utility and convenience of his establishment, connected as it is with a large collection of surgical instruments, are great, and we recommend the profession to visit it. Whatever may be ordered which does not happen to be in his collection, can be procured by him from Europe.

Messrs. Bullock and Crenshaw, corner of Arch and Sixth streets, Philad., have also a bazaar of anatomical preparations, where medical gentlemen at the South and South-west may procure excellent specimens, models, skeletons, single bones, and also skeleton heads of many animals. We notice the price of a human skull disarticulated, and mounted, so that the bones are separated by short spaces, is fifty dollars; a complete osteological history of dentition, from the fœtal condition to extreme old age, one hundred and fifty dollars.

Many medical students who feel themselves cramped for means to procure their education, might pursue the business of preparing skeletons; both of men and animals, in endless variety, and put up sections, wet and dry, of the viscera. They could also multiply injections, and depots for anatomical preparations might thus be fully supplied in half a dozen of our commercial cities, to the certain advantage of all parties concerned. Comparative anatomy, particularly, is neglected, and yet the skeleton of every dead horse decaying in the fields, carefully cleansed, would bring a good price. So of oxen, swine, sheep, reptiles, etc.—They are all coveted in cabinets, and must be had. There is no reason why all these articles should not be manufactured here, and thus lessen the prices, besides giving employment to those who are admirably fitted by their course of reading and dissections, to accomplish all that is proposed in these remarks.—*Boston Med. and Surg. Journal.*

OPIUM AND ALCOHOL—THEIR COMPARATIVE EFFECTS ON THE SYSTEM. *Described by One who Experienced them in his own Case.*

[The writer of the following article, who describes so graphically the effects of both opium and alcohol in his own case, was received into the New York Hospital in 1849, suffering from a slight attack of dysentery. It was soon noticed that unusual symptoms complicated his case. On inquiry he was found to be an opium-eater; and after his recovery, and during the period when he was allowed to remain in the house, to enable him to recover, somewhat at least, from the pernicious effects of the habit which he had contracted, he furnished the Editor (then on duty there,) by his request, with a history of his case, which is thought of sufficient interest to entitle it to publication. It has been somewhat abridged; but the language is, with but trifling exceptions, that of the writer himself.—*Editor N. Y. Medical Times.*]

The difference between opium and alcohol in their effects on body and mind, is (judging from my own experience) very great. Alcohol, pushed to a certain extent, overthrows the balance of the faculties, and brings out some one or more into undue prominence and activity; and (sad indeed) *these* are most commonly our *inferior*, and perhaps *lowest* faculties. A man who, *sober*, is a demi-god, is, when drunk, below even a beast. With opium (*me judice*) it is the reverse. Opium takes a man's mind *where it finds it*, and lifts it *en masse* on to a far higher platform of existence, the faculties all retaining their former relative positions—that is, taking the mind as it is, it intensifies and exalts all its capacities of thought and susceptibilities of emotion; not even this, however, extravagant as it may sound, conveys the whole truth. Opium weakens or utterly paralyzes the lower propensities, while it invigorates and elevates the superior faculties, both intellectual and affectional. The opium-eater is without sexual appetite; anger, envy, malice, and the entire hell-brood claiming kin to these, seem dead within him, or at least asleep; while gentleness, kindness, benevolence, together with a sort of sentimental

religionism, constitute his habitual frame of mind. If a man has a poetical gift, opium almost irresistibly stirs it into utterance. If his vocation be to write, it matters not how profound, how difficult, how knotty the theme to be handled, opium imparts a *before unknown* power of dealing with such a theme; and after completing his task, a man reads his own composition with utter amazement at its depth, its grasp, its beauty, and force of expression, and wonders *whence came* the thoughts that stand on the page before him. If called to speak in public, opium gives him a copiousness of thought, a fluency of utterance, a fruitfulness of illustration, and a penetrating, thrilling eloquence, which often astounds and over-masters himself, not less than it kindles, melts and sways the audience he addresses. I might dilate largely on this topic, but space and strength are alike lacking.

Let no one, however, fancy from these remarks that the opium-eater *is blessed*. There is another side of the picture, dark, gloomy, and fraught with doom, to which I will allude bye-and-bye.

How became I an opium-eater? A lengthened train of causes (as I judge) led to this result. I can but just touch on a few of them.

Exhausted nervous energy was the *fountain-head*. But whence this exhaustion?

1st. The accursed habit of nervous abuse, which *little* innocent school boys are taught by their depraved elders in school, and which, with no thought of its physical and moral harmfulness, is usually continued till unfolding reason and conscience open the victim's eyes to the real nature of his habit. It is usually, however, long enough protracted to have wrought no slight degree of nervous exhaustion.

2d. Tobacco chewing. In my sophomore year at Cambridge (being then 16 years old,) a pipe-smoking grandam gave me a piece of tobacco to put in my mouth for a raging tooth-ache. It quelled the pain, and from that moment I chewed nine or ten years without cessation. I chewed, too, immoderately, and spat incessantly, throwing out saliva in quantities perfectly suicidal.

Close application to study, with neglect of the rules of health, during my collegiate life, and during three subsequent years while pursuing my studies at a theological school, where I pursued the same tobacco-chewing, unexercising life as at college, and still later, when settled as a clergyman, brought on a severe attack of dyspepsia, attended with great languor of body and depression of mind, especially during the warm weather.

In consequence of these feelings, I occasionally took a glass of wine, or brandy and water, to supply the lacking *physical* basis for mental action. Thus passed three and a half years; and by this time some portion of alcoholic stimulus had become almost a daily necessity, in order that the mind might execute its appointed tasks. If I omitted such stimulation, not only did I suffer languor and pain of body, but my thinking powers were inert and impotent. But I found, after a time, that alcohol was perilous to me, since I could not always calculate on its effects, so as to avoid being partially mastered by it. I abandoned alcohol, and substituted laudanum in its place. I cannot recall the precise quantity I at first used, though I think it was some twenty drops, taken two or three times a day, or often enough to keep up the same level of sensation. The first feeling on swallowing the laudanum was a compound of pleasure and pain. The *pleasure* consisted in an agreeable warmth pervading the system, and a pleasant, gentle thrill passing along the nerves. The *pain* was a sort of *constriction*, or corrugation, by which the stomach seemed to be *drawn together* or *strongly compressed*, while a similar sensation ran along the nervous threads. However, both these species of sensations were of short duration, and then there remained only a painless, comfortable state of body, together with a clear, calm mood of mind, especially apt for all required mental tasks. When a propensity to gape and a sensation of languor indicated the *expenditure* of the stimulus, the dose was renewed; and so the days went by. After a considerable time, I substituted the opium pill for the laudanum. I think the pill, while producing all the *desirable* effects of the laudanum, produced less of the *pinching, unpleasant* sensation above mentioned, than did the laudanum. In other respects, there is a little difference in their actions. I cannot tell precisely how long I was in reaching half an ounce per week, but that point I did finally attain. And at that point I for the most part remained during the three years I used opium in this vicinity. But I became greatly disordered in body, not *merely* through the opium, but also through the baleful habits connected therewith. I took no exercise; I sat at my books and papers, day after day, from breakfast time till 12 and 2 o'clock at night, in a hot study filled with smoke from a cigar kept perpetually alight. I took a *hot bath once a fortnight* instead of a *cold* bath *every morning;* in a word, *all* my habits (as I have since learned to understand) were the worst in the world for corporeal health. I suffered martyrdom from *costiveness*, often going a week, or nearly that, without a passage. Sometimes, too, I got into a physical state which opium *would not* stimulate, and then I was compelled to employ alcohol. But alcohol acting on opium-drugged nerves, is exceedingly apt to produce maniacal intoxication.

After some ineffectual attempts, I determined to achieve freedom, were it possible, be the cost or the consequences what they might. I cast everything aside, and laid down upon my rack. And a rack it indeed was! For ten days and nights I had not, to my knowledge, one instant of sleep or suspended consciousness. I was, for several days, half delirious; the blood in my veins felt, like boiling water, and it rushed to my head in torrents, which seemed, every moment, as if they *must* burst asunder its bony enclosure. In a word, I believe that I was in a raging brain fever. In four weeks I was out, but I was shattered to pieces; and for a whole year I was feeble as a child, and one walking repository of aches and distressing sensations. At the close of that year, I relinquished my profession, went to a brother's in the country in search of health, and at first, simply for occupation, commenced in his office the study of law. For some time I remained weak, and to complete the case, was finally attacked with neuralgia in the face and head. After bearing this as long as seemed possible, I consulted two physicians, and both ordered me *morphine* and quinine. Need I state the result? I was again brought under the power of opium, and the *habit* became fixed firmly as

ever! For two years, while remaining there, I made no strenuous attempt to get free again; but using morphine regularly, and feeling well, I gave myself laboriously up to my legal studies. At the end of that period, I came to New York, and went voluntarily into Bloomingdale Asylum for thirteen weeks, for the purpose of gaining my freedom. They were awful weeks, for, although, *per force*, I used no opium during such intervals, and so, *after a sort*, was rescued from the habit, yet I suffered inexpressibly from all kinds of ailments while there, and on leaving was extremely debilitated, and never for an instant free from pains and uneasiness.

I then completed my law studies, and opened a law office, at the same time assuming the editorship of a newspaper of extensive circulation, being put up for Congress, &c. &c. During these thirteen or fourteen months, I was almost entirely a stranger to opium; but I never felt well, free from pain; vigorous with my pristine strength, for one remembered day. It was with but a portion of my original self that I went through these *preparatory* processes. But when, through a series of events, in which I was rather passive than active, I found myself with the responsibilities of lawyer, justice, editor, and Congressional candidate, lying upon me all at once; at the same time that from being a husband and the father of three fair and noble boys I was, by a sudden stroke, left a *solitary*, *homeless* being, my debilitated frame and unstrung nerves gave way, and I felt that, *as I was*, I *could not* sustain the burdens pressing upon me. I resumed morphine again; and by its upholding and calming power, I managed to fulfil my multifarious tasks; all of them passably, and some of them with no small measure of success. So passed about two years, in the latter portion of which time I had reached a quarter-ounce bottle of sulphate of morphine per week.

I was then living with friends who were hydropathists and vegetable livers, and was influenced by them to leave off the use of tobacco, opium, tea, coffee, and meat all at once, and to submit to the routine of cold-water drenching. At the end of twenty-seven days, I got abroad, freed from opium, exempt from pain, but yet with the debilitated feeling of an invalid rising from a long and prostrating malady, and needing rest, good nursing, and a generous diet, (and *only* these) to regain my full original strength; but these I could not command.

The time came at last when I *must* work, be the consequences what they would, and work, too, with my *brain*, my only implement; and that time found my brain *impotent* from a yet unenvigorated nervous system. If I *would work*, I *must stimulate*, and morphine, bad as it was, was better than alcohol. I took morphine once more, and lectured on literary topics for some months with triumphant success. While so lecturing in a country town, I was solicited to take a parish in the neighborhood. I did so, and there continued two years and a quarter, performing in that time as much literary labor as ever in three times the interval in any prior period of my life. In short, I had three happy, intellectually vigorous, outpouring years, with bodily health uniformly sound and complete, with the exceptions hereafter to be mentioned. And yet, through those years I never used less than a quarter of an ounce of morphine per week, and sometimes more. I attribute my retaining so much health, in spite of the morphine, to the rigorous salubrity of my habits, bodily and mental, in *other respects*. Once, and often twice a day, the year round, I laved my whole person in cold water with soap; I slept with open window, the year through, excepting *stormy* winter nights; I lay upon a hard bed, guiltless of feathers; I used a simple diet; and, finally, I cherished all *gentle* and *kindly*, while rigidly excluding from my mind all bitter and perturbing feelings. But, not to dilate further on mere *narrative*, let me say that I have continued to use opium, for the most part *habitually*, from my last assumption of it up to the period of my admission into this Hospital. A year since, however, I dropped morphine, and have since used the opium pill in its stead, sometimes taking an ounce per week, but generally not overpassing a half ounce per week.

And here I may make the general remark, proved true from my own experience, that, for all the *desirable* effects sought from this species of stimulus, a half ounce of gum opium is about the same as an ounce or any larger quantity of said gum, and nearly the same as a quarter ounce of morphine or more—that is, half an ounce of opium stimulates and braces *me*, at least, *nearly* if not *entirely* as much as I *can* be stimulated and braced by this drug. All that is taken over this, tends rather to clog, to stupify, to nauseate, than to stimulate.

Another point in my own experience is, that in a few weeks only after commencing or recommencing the use of opium, I always reached the full amount which, as a *habit*, I *ever* used, that *is*, either a half ounce of opium or a quarter ounce of morphine; I never went on increasing the dose in order to get the required amount of stimulation but at one or the other of these two points I would remain for years successively. A third remark I would make is, that it is only for the first few weeks after commencing the use of opium, that one feels *palpably* and *distinctly* the thrilling of the nerves, the sensation of being stimulated and raised above the *previously existing* physical tone, for which the drug was first taken. All the effects produced *after that* by the opium, are to keep the body *at that level* of sensation in which one feels *positively alive* and *capable* to *act*, without being impeded or weighed down by physical languor and impotence. Such languor and impotence one feels from abstaining merely a few hours beyond the wonted time of taking the dose. It is not *pleasure*, then, that drives onward the confirmed opium-eater, but a *necessity* scarce less resistible than that Fate to which the pagan mythology subjected gods not less than men.

Let me now, before closing, attempt briefly to describe the effects of opium upon the body and mind of the user, as also the principal sensations accompanying the breaking of the habit.

The opium-eater is prevailingly *disinclined* to, and in some sort, *incapacitated* for, bodily exertion or locomotion. A considerable part of the time he feels something like a sense, not very distinctly defined, of bodily fatigue; and to sit continuously in a rocking or an easy chair, or to recline on a sofa or bed, is his preference above all modes of disposing of himself. To walk up a

flight of stairs often palpably tires the legs, and makes him pant almost as much as a well person does after pretty rapid motion. His lungs manifestly are some how *obstructed*, and do not play with perfect freedom. His liver, too, is torpid, or else but partially active; for if using laudanum or the opium pill, he is constantly more or less costive, the fæces being hard and painful to expel; and if using morphine, though he may have a daily movement, yet the fæces are dry and harder than in health. One other morbid physical symptom I remember to have experienced for a considerable time, while using a quarter of an ounce of morphine per week—and this was an annoying palpitation of the heart. I was once told, too, by a keen observer, who knew my habit, that my color was apt to change frequently from red to pale.

These are substantially all the physical peculiarities I experienced during my opium-using years. It is still true, however, that the years of my using opium (or, in perfect strictness, *morphine*) were as healthy as any, if not the very healthiest of the years of my life.

But what of the effects of opium-eating on the *mind?* The one great *injury* it works, is (I think) to the *will*, that force whereby a man executes the *work* he was sent here to do, and *breasts and overcomes* the *obstacles and difficulties* he is appointed to encounter, and bears himself unflinchingly amid the tempests of calamity and sorrow which pertain to the mortal lot. Hardihood, manliness, resolution, enterprise, ambition, whatever the original degree of these qualities, become grievously debilitated, if not wholly extinct. Reverie, the perusal of poetry and fiction, become the darling occupation of the opium-user; and he hates every call that summons him from it. *Give* him an intellectual task to accomplish; *place* him in a position where a mental effort is to be made; and, most probably, he will acquit him with unusual brilliancy and power, supposing his native ability to be good. But he *cannot*, or will *not seek and find* for himself such work and such position. He feels helpless, and incompetent to stir about and hold himself upright amid the jostling, competitive throngs that crowd the world's paths, and *there* seek life's prizes by performing life's duties, and executing its requisitions. Solitude, with his books, his dreams and imaginings, and the excited sensibilities that lead to no external action, constitute his chosen world and favorite life. In one word, he is a *species* of maniac; since, I believe, his views, his feelings, and his desires in relation to most things, are peculiar, eccentric, and unlike those of other men, or of himself in a state of soundness. There is, however, as complete a "method in his madness," as in the *sanity* of other men. He is in a *different sphere* from other men, and *in that* sphere he is sane.

The first symptoms attendant on breaking off the habit, coming on some hours after omitting the wonted dose, are a constant propensity to yawn, gape and stretch, together with somewhat of languor, and a general uneasiness. Time passes, and there follows a sensation as if the stomach was drawn together or compressed, as if with a slight degree of cramp, coupled with a total extinction of appetite, the mouth and throat become dry and irritated; and there is an incessant disposition to clear the throat by "hemming" and swallowing; and there is a tickling in the nose which necessitates frequent sneezing, sometimes a dozen, or even twenty times in succession. As the hours go on, shudders run through the frame, with alternate fever heats and icy chills, hot sweats and cold, clammy sweats; while a dull, incessant ache pervades the bones, especially at the joints, alternated by an occasional sharp, intolerable pang, like tic doulereux. Then follows a host of indescribable sensations, as of burning, tinglings, and twitchings, seeming to run along just beneath the surface of the skin over the whole body; and so strange are these sensations, that one is prompted to scream, and strike the wall, the bed, or himself, to vary them. By this time the liver commences a most energetic action, and a violent diarrhœa sets in. The discharges are not watery or mucous, but, save in *thinness*, not very unlike healthy stools for the most part. Not long, however, after the commencement of the diarrhœa, so copious is the effusion of bile from the liver, that one will sometimes pass, for a dozen stools in succession, what seems to be merely a *blackish bile*, without a particle of fæces mingled with it. But this lasts not many days, and is followed by the thin, not altogether unhealthy-looking discharges above mentioned, repeated often an incredible number of times per day. Whether from the quality of these discharges, or from whatever cause, the interior surface of the bowels feels intolerably hot, as though excoriated; and it seems as if boiling water or aquafortis running through the intestines would scarce torture one more than these stools. In fact, all the internal surfaces of the body are in this same burning, raw-feeling state. The brain, too, is in a highly excited, irritable condition; the head sometimes aches and throbbing, as though it *must* burst into fragments, and a humming, washing, simmering noise going on incessantly for days together. Of course, there can be no sleep, and one will go on for ten days and nights consecutively, without one moment's loss of intensest consciousness, so far as he can judge! Strange to say, notwithstanding this excessive irritation of the entire system, one feels so feeble and strengthless that he can scarce drag one foot after the other; and to walk a few rods, or up a flight of stairs, is so terribly fatiguing that one must needs sit down and *pant*. (Let it be noted, that these symptoms belong to the case where one is simply deprived at once and wholly of opium, without any medical help, unless the use of cold water be considered such.) These symptoms (unaided by medicine) last, with gradual abatements of virulence, from twenty to thirty days, and then mostly die away. Not well and right, however, does one feel even then. Though, for the most part, free from pain, he is yet physically weak, and all corporeal exertion is a distressing effort.—He must needs sleep, too, enormously, going to bed often at sunset in a July day, and sleeping log-like until six or seven next morning, and then sleeping with like soundness two or three hours after dinner. How long it would be before the recovery of his complete original strength and natural physical tone, personal experience does not enable me to say. His condition, both in itself and as relates to others, is, meanwhile, most strange and anomalous. He *looks*, probably, better than ever in his life before. In sufficiently full flesh, with ruddy cheeks, and skin clear as a healthy child's, the beholder

would pronounce him in the height of health and vigor, and would glow with indignation at seeing him loitering about day after day, doing little save sleep, in a world where so much work needs to be done. And yet he feels all but impotent for enterprise, or any active physical efforts; for there is scarce enough nervous force in him to move his frame to a lingering walk, and sometimes it seems as if the nervous fibres were actually *pulled out*, and he must move, if at all, by pure *force* of *volition*.

Most singular, too, the while, is the state of his *mind*. His power of thought is keen, bright, and *fertile* beyond example and his imagination swarms with pictures of beauty, while his sensitiveness to impressions and emotions of every kind is so excessively keen that the tears spring to his eyes on the slightest occasion. He is a child in sensibility, while a youth in the *vividness*, and a man in the *grasp*, the *piercingness*, and the *copiousness* of his thoughts. He cannot *write down* his thoughts, for his arm and hand are *unnerved;* but in conversation or before an audience he can utter himself, as if filled with the breath of inspiration itself.—*New York Medical Times.*

OFFICINAL PREPARATIONS OF THE *U. S. ECLECTIC DISPENSATORY.*

PILLS.

Pilulæ Ferri Carbonatis. *Pills of Carbonate of Iron. Vallet's Ferruginous Pills.*

Dissolve Sulphate of Iron, *four ounces*, and Carbonate of Soda, *five ounces*, each separately, in Boiling Water *a pint;* and to each solution add Syrup *a fluid ounce*. Then mix the two solutions in a bottle just large enough to contain them, close it accurately with a stopper, and set it by, that the Carbonate of Iron may subside. Pour off the supernatant liquid, and having washed the precipitate with warm water sweetened with Syrup, in the proportion of a fluidounce of the latter to a pint of the former, until the washings no longer have a saline taste, place it upon a flannel cloth, and express as much of the water as possible; then immediately mix it with Clarified Honey, *two ounces and a half*. Lastly, heat the mixture by means of a water-bath, until it attains a pilular consistence.

When properly prepared is in the form of a soft, pilular mass, of an uniform black color, strong ferruginous taste, and wholly and readily soluble in acids. Tonic. Useful in cholorosis, amenorrhea, and other female complaints. Given in divided doses to the extent of from ten to thirty grains a day, and continued for four or six weeks, if improvement takes place. It may be made into pills, varying from three to five grains each.

Pilulæ Ferri Compositæ. *Compound Pills of Iron. Emmenagogue Pills.*

Take of Carbonate of Iron, *one drachm*; Podophyllin, *half a drachm*; White Turpentine *half a drachm*. Mix well together, and divide into thirty pills.

Used as an emmenagogue. Dose, one pill every two or three hours.

Pilulæ Podophyllini Compositæ. *Compound Pills of Podophyllin.*

Take of Podophyllin, Scammony, Gamboge, of each, in powder, *one drachm;* triturate well together for half an hour; then add *half a drachm* of Castile Soap. Mix and beat the whole together, till they are thoroughly incorporated. Divide into one hundred and twenty pills.

This is a most valuable pill for all diseases where cathartics are required, and has cured many cases of hepatic affections by a continued use of them.—The dose is one or two pills every night. They have no tendency towards producing constipation, but rather the reverse, and after using them for several days in succession, they will generally be found so active that it will be necessary to omit them for a number of days, before resuming their administration. They may be safely used in all ordinary cases where purgation is desired: they operate freely and thoroughly, and usually without causing nausea, griping, or debility.

Pilulæ Quiniæ Compositæ. *Compound Pills of Quinine.*

Take of Sulphate of Quinine, Piperine, and Citric Acid, of each, in powder, *one drachm*; Extract of Cornus Florida, *a sufficient quantity*. Mix together, and divide into four grain pills.

Used in intermittents, and periodic affections.—Dose, one pill every one, two, or three hours.

Pilulæ Taraxaci Compositæ. *Compound Pills of Dandelion.*

Take Extract of Dandelion, and Mandrake and Bloodroot in powder, of each, *equal parts*. Mix together, add a few drops of Oil of Spearmint, and divide into four grain pills.

Used in jaundice, liver complaint, and affections of the kidneys. Dose, two or three pills twice a day.

Pilulæ Valerianæ Compositæ. *Compound Pills of Valerian.*

Take of Extracts of Valerian, Scullcap, and Camomile, of each, *two parts;* Extract of boneset, *one part*; Sulphate of Quinine, *one part;* Capsicum, *one-fourth part*. Mix together, and divide into four grain pills. As the virtue of Valerian resides in its oil, it is probable the extract is nearly useless; and *one-half part* of the Oil of Valerian, or *a drachm* of Valerianic Acid, would be a good substitute for the extract, in this pill.

Tonic and nervine. Used wherever required.—Dose, one pill, every two or three hours. In cases where it is desirable to omit the Quinine, substitute the Extract of Cornus Florida.

POWDERS.

Pulvis Ipecacuanhæ et Opii. *Powder of Ipecacuanha and Opium. Diaphoretic powder.*

Take of Opium, in powder, *half a drachm*; Camphor, in powder, *two drachms;* Ipecacuanha, in powder, *one drachm;* Cream of Tartar, *one ounce*. Mix them.

A valuable anodyne, and diaphoretic. Used in all febrile and inflammatory diseases, diarrhea, dysentery, cholera morbus, rheumatism, gout, after pains, all cases of nervous irritability or excitement, and wherever an anodyne combined with a diaphoretic is required. It promotes perspiration without increasing the heat of the body. The above is the original formula, but practitioners vary in preparing it according to their favorite views; thus some

omit the cream of tartar and substitute nitrate of potassa, or bicarbonate of soda, while others omit the opium, substituting in its place lactucarium, or twice the quantity of cypripedin. Dose, three to five grains every three or four hours in febrile or inflammatory diseases; and in some cases, ten grains, three times a day.

PULVIS PODOPHYLLINI COMPOSITUS. *Compound Powders of Podophyllin.*

Take of Podophyllin, *four grains*; Cream of Tartar, *three drachms*. Mix intimately.

Used in dropsy, obstructed menstruation, and whe ever an active hydragogue is indicated. (It is employed in place of the former *Compound Powder of Mandrake*, made of equal parts of Powdered Mandrake Roots, Cream of Tartar, and Spearmint, and which was given in doses of a drachm.) Dose, one scruple; administer one every two hours, until they operate sufficiently. The addition of about one or two grains of Capsicum to each dose, will render it much more speedy in its operation.

PULVIS RHEI COMPOSITUS. *Compound powder of Rhubarb. Neutralizine Powder.*

Take of Rhubarb, Bicarbonate of Potassa, and Peppermint Leaves, of each, in powder, *one ounce*. Mix.

Laxative antiacid and tonic. An invaluable remedy in diarrhœa, cholera-morbus, dysentery, summer complaint of children, acidity of stomach, heart-burn, and as a mild cathartic during pregnancy. Dose, from half a drachm to two drachms, every one, two, or three hours, as may be required.

PULVIS STYPTICUS. *Styptic Powder.*

Take of Sulphate of Iron, in powder, *two ounces*; Alum, in powder, *one ounce*. Mix, and submit the mixture to a red heat, in the same manner as when preparing the *Red Oxide of Iron*, by calcining the sulphate. When cold pulverise and bottle.

Styptic, and used in the treatment of external hemorrhages and piles, either alone, or in the form of an ointment. Internally, in doses of three grains, combined with Capsicum one grain, it has proved effectual in passive hemorrhages from the lungs and uterus.

SYRUPS.

SYRUPUS IPECACUANHÆ. *Syrup of Ipecacuanha.*

Macerate Ipecacuanha, in course powder, *one ounce*, in Diluted Alcohol, *a pint*, for fourteen days, and filter. Evaporate the filtered liquor to six Fluidounces, again filter, and then add sufficient water to make the liquid measure a pint. Lastly, add Sugar *two pounds and a half*, and disolve with the aid of heat, removing any scum which may form, and strain the solution while hot.

Used principally in cases of children. Dose, as an emetic for an adult, from one to two fluidounces; for a child a year or two old, from one to two fluidrachms—to be repeated every fifteen or twenty minutes till it operates. As an expectorant, the dose for an adult is one or two fluidrachms, for a child, five to twenty minims.

SYRUPUS PHYTOLACCÆ COMPOSITUS. *Compound Syrup of Poke.*

Take of Poke Root and Root of Fiveleaf (*Ampelopsis Quinq.*) each coarsely bruised, *one pound*; Black Cohosh Root coarsely bruised, and Sheep Laurel Leaves, each, *half a pound*.

Proceed to make into a syrup, similar to the directions given for the Compound Syrup of Sarsaparilla, reserving one pint and a half of the strongest tincture, using twelve pounds of Sugar, and making one gallon and a half of Syrup. It may be flavored with some aromatic essence.

Used in syphilis, scrofula, and rheumatism.—Dose, a table-spoonful three or four times a day.

SYRUPUS SCILLÆ. *Syrup of Squills.*

To *one pint* of Vinegar of Squill add *two pounds* of Refined Sugar; dissolved with the aid of heat, removing any scum which may form, and strain the solution while hot.

Used as an expectorant in coughs and catarrhs; also as an emetic in infantile cases of catarrh, and other pectoral complaints. The dose is about a fluidrachm.

SYRUPUS STILLINGIÆ. *Syrup of Queen's Root.*

Take of Queen's Root, *three pounds*; Prickley Ash berries, *one pound and a half*.

Proceed to make into a Syrup, similar to the directions given for the Compound Syrup of Sarsaparilla, reserving two pints of the strongest tincture, using eight pounds of Sugar, and making one gallon of Syrup. This is double the strength of Syrups, as usually made, and has been found highly beneficial in bronchial and laryngeal affections. Dose, from ten to thirty drops, three, four, or five times a day, according to the urgency of the symptoms.

SYRUPUS STILLINGIÆ COMPOSITUS. Compound Syrup of Queen's Root.

Take of Queen's Root, two pounds; Root of Turkey Pea, and Pipsissewa Leaves, each, one pound; Blue Flag Root, two; Prickley Ash Berries, Cordamon Seeds, each, half a pound.

Proceed to make into a Syrup, similar to the directions given for the Compound Syrup of Sarsaparilla, reserving two and a half pints of the strongest tincture, using twenty pounds of Sugar, and making two and a half gallons of Syrup.

A most powerful and effective alterative, and used in all syphilitic, scrofulous, osseous, mercurial, hepatic, glandular diseases. Dose, half a tablespoonful to a tablespoonful, three times a day.—Some practitioners add one ounce of Hydriodate of Potassa to each pint of the Syrup, in which case the dose is a fluidrachm, three or four times a day, in half a gill of water.

SYRUPUS ZINGIBERIS. Syrup of Ginger.

Preparation.—Rub Tincture of Ginger, two fluidounces, with Carbonate of Magnesia two drachms, and White Sugar, in powder, two ounces, gradually add Water twelve fluidounces, and filter. Dissolve White Sugar twenty-two ounces, avoirdupois, in the filtered liquid by means of a gentle heat.

Properties and uses.—Used as a warm stomachic additon to purgative, tonic, or other infusions or mixtures, and to impart flavor. Dose, half a drachm, to two, three, or four drachms.

TINCTURES.

TINCTURA ACONITI. Tincture of aconite.

Take of Aconite, dried leaves, four ounces; Diluted Alcohol, two pints. Macerate for fourteen days, express, and filter through paper.

This tincture may also be prepared by thorough-

ly moistening the Aconite, in powder, with Diluted Alcohol, allowing it to stand for twenty-four hours, then transferring it to an apparatus for displacement, and gradually pouring upon it Diluted Alcohol until two pints of filtered liquor are obtained.

For its properties, see Aconitum. Dose, ten to thirty drops.

A saturated tincture is made from the dried and powdered root, by macerating sixteen ounces with a pint of alcohol for four days, then placing the mixture in a percolator, and adding alcohol until twenty-four fluidounces of tincture are obtained.—Of these five minims may be given three times a day, and gradually increased until its effects become obvious; few patients will bear more than ten minims. Care should always be taken to distinguish between the officinal tincture prepared from the leaves, and the saturated tincture just referred to.

Tinctura Aralliæ Spinosæ. Tincture of Prickly Elder.

Take of Prickly Elder, or Southern Prickly Ash, in powder, three ounces; Diluted Alcohol, one pint. Macerate for fourteen days, express and filter. This tincture may also be prepared by percolation similar to the tincture of Aconite.

Tonic, stimulant, and alterative. Useful in chronic rheumatism, pulmonary affections, colic, flatulence, and cholera. Added to emetic and purgative remedies given during the prevalence of cholera, to prevent any tendency towards excessive discharges from the bowels. Dose, from ten to sixty drops, three or four times a day. Said to be useful in syphilis, in combination with the tincture of Corydallis.

Tinctura Arnicæ. Tincture of Arnica.

Take of Arnica flowers, an ounce and a half; Alcohol at 0.900, one pound. Macerate for two weeks, express, and filter through paper.

Properties the same as Arnica. Dose ten to sixty drops.

Tinctura Belladonnæ. Tincture of Belladona.

Take of recently dried Belladona leaves, four ounces; Diluted Alcohol, two pints. Macerate for fourteen days, express, and filter through paper.

This tincture may also be obtained by percolation, similar to that mentioned under the Tincture of Aconite. Its properties the same as Belladona. Dose, ten to thirty drops.

Tinctura Guaiaci Aromatica. Aromatic Tincture of Guaiacum. Greenhow's Cholera mixture.

Take of Guaiacum, Cloves, and Cinnamon in powder, of each, one ounce; Brandy, two pints.—Macerate for fourteen days, and filter.

This tincture was extensively used in Cincinnati, by the Eclectics during the cholera of 1849-50-51, and with excellent effect. Prof. T.V. Morrow considered it among our best agents in the treatment of that disease.

It is an excellent stimulant and astringent. Dose, from a teaspoonful to a tablespoonful, in sweetened water, every fifteen or twenty minutes until relief is obtained.

Tinctura Hydrastis. Tincture of Golden Seal.

Take of Golden Seal Root, in powder, three ounces; Diluted Alcohol, one pint. Macerate for fourteen days, express, and filter.

This Tincture may also be prepared by percolation, similar to the tincture of Aconite.

Tonic; beneficial in the chronic gastric affections, hepatic diseases, chronic diarrhœa, and general debility. Externally, when diluted, a good local application in leucorrhea, and ophthalmia. Dose, ten to sixty drops, two or three times a day.

Tinctura Hydrastis Composita. Compound Tincture of Golden Seal.

Take of Golden Seal Root, in powder two ounces; Lobelia Herb, two ounces; Diluted Alcohol, one pint. Macerate for fourteen days, express, and filter through paper.

Used as a local application to diseased mucous surfaces. It is highly recommended by Prof. Freeman in chronic catarrh, to be snuffed up into the nostrils, or applied by means of a camel's hair pencil, also useful in ophthalmic diseases, diluted with water.

This tincture may be prepared by adding together equal parts of the Tinctures of Lobelia, and Golden Seal.

Tinctura Lobeliæ. Tincture of Lobelia.

Take of Lobelia, (the herb,) four ounces; Diluted Alcohol, two pints. Macerate for fourteen days, express, and filter through paper.

Properties same as Lobelia. Dose thirty to sixty drops as a nauseant; half a fluidounce as an emetic. Externally, it is beneficial as a local application in tetter, and similar cutaneous eruptions, and also in the poison of Rhus. A much better tincture is made of equal parts of vinegar and alcohol, in the place of diluted alcohol.

Tinctura Lobeliæ Composita. Compound Tincture of Lobelia. Dr. J. King's Expectorant Tincture.

Take of Lobelia, (herb.) Bloodroot, Skunk Cabbage Root, Asarabacca, and Pleurisy Root, each, coarsly powdered, one ounce. Place them in a vessel, cover with Boiling Water, or Vinegar, one pint, and cover tightly. When cold, transfer to the bottle in which it is to be kept, and add Alcohol, three pints. Macerate for fourteen days, express, and filter through paper.

This forms an excellent emetic for children and infants, and may be safely used in croup, whooping cough, bronchitis, asthma, convulsions, and in all cases where an emetic is required. Also useful as an expectorant, or nauseant in coughs, pleurisy, asthma, whooping cough, and whenever expectorants are indicated. It is one of the regular Eclectic remedies.

In croup, for children one year old, give half a tablespoonful in a tablespoonful of molassee, and repeat it every fifteen minutes, until it vomits; after which, a teaspoonful may be given every hour or two, as required—the vomit to be repeated two or three times a day. A child from two to six months old, may take from half to a teaspoonful for a dose; less than two months old, from fifteen to twenty-five drops, to be repeated every ten minutes, if vomiting is required. Children from three to six years old, may take a tablespoonful in molasses or warm water, every ten minutes, until it vomits. Warm boneset or thoroughwort tea, ought always to be given in order to facilitate its operation as an emetic.

For cough, asthma, etc., to promote expectoration and remove tightness across the chest; and in all ordinary cases where an expectorant is required, adults may take one or two teaspoonfuls in half a wineglassful of slippery

elm tea, three to five times a day, or as often as required. Children from one year old to ten, may take from half to a teaspoonful in the same manner; and for those less than one year, from ten to thirty drops. Should the above doses vomit, they should be lessened, except when vomiting is desired. The stomach and bowels must be kept regular in all cases, by gentle medicines.

TINCTURA LOBELIÆ ET CAPSICI. Tincture of Lobelia and Capsicum. Antispasmodic Tincture.

Take of Lobelia, Capsicum, and Skunk Cabbage Root, each in powder, two ounces; Diluted Alcohol, one pint. Macerate for fourteen days, express, and filter through paper.

This tincture may also be made by combining together, equal parts of the saturated tinctures of Lobelia, Capsicum, and Skunk Cabbage Root.

Useful in cramps, spasms, convulsions, tetanus, etc. Dose, half to a teaspoonful, every ten, or twenty minutes, or as often as required. In convulsions and tetanus, it may be poured into the corner of the mouth, and repeated as often as necessary; generally, the effect is almost instantaneous. This valuable preparation should always be in the possession of every physician.

TINCTURA MYRRHÆ COMPOSITA. Compound Tincture of Myrrh. Hot Drops.

Take of Myrrh, bruised, eight ounces; Capsicum, two ounces; Alcohol, one gallon. Macerate for fourteen days, and filter.

This preparation is seldom employed internally by Eclectics; occasionally it is administered in cases of nausea, gastric distress, especially after a hearty meal, flatulence, etc. Its use is contra-indicated when inflammation is present. Externally it forms an excellent application for rheumatism, sprains, bruises, fresh wounds, cuts, offensive ulcers, etc.

Dose, half a fluidrachm to two fluidrachms, in some sweetened water.

TINCTURA NUCIS VOMICÆ. Tincture of Nux Vomica.

Take of Nux Vomica, rasped, three ounces; Rectified Spirit, eight ounces. Macerate for fourteen days, and filter.

This forms a saturated Tincture, and is used in combination with equal parts of Blue-flag, and Mandrake, in doses of twelve or fifteen drops, three times a day, in obstinate constipation, gleet, stricture of the urethra, impotency from masturbation, and recent disease of the prostrate.

Dose of the Tincture of Nux Vomica, five to twenty drops.

TINCTURA OPII CAMPHORATA. Compound Tincture of Opium. Paregoric Elixir.

Take of Opium one drachm, reduce it to an emulsion in Boiling Water one fluidounce, then add Benzoic Acid a drachm; Oil of Anise, a fluidrachm; Clarified Honey, two ounces; Camphor, two scruples; Alcohol, 76 per ct., twenty-two fluidounces; Distilled Water, nine fluidounces. Macerate for fourteen days, and filter through paper.

A pleasant anodyne and antispasmodic; used to allay cough, in asthma, pertussis, chronic catarrh, and consumption; to relieve nausea and slight pains in the stomach and bowels; to check diarrhea, and to procure sleep.

Dose, for an adult, one to two fluidrachms; for an infant, five, to ten or twenty drops.

TINCTURA QUINIÆ COMPOSITA. Compound Tincture of Quinine. Ague Bitters.

Take of Quinine, thirty grains; Cream of Tartar, one ounce; Cloves, in powder, one ounce; Whisky, one pint. Macerate for twenty-four hours, and filter.

Used in intermittent and remittent fevers, and other diseases of periodicity. Dose, for an adult, half a fluidounce every hour, during the intermission, until two or three hours previous to the time for the return of the chill, when it should be given every half hour. Dose for children, from one to two fluidrachms.

TINCTURA SANGUINARIÆ ACETATA. Acetated Tincture of Bloodroot. Acetous Emetic Tincture.

Take of Bloodroot, Lobelia Seed, Skunk Cabbage Root, of each, in powder, two ounces; Distilled Vinegar, two pints. Macerate in a close glass vessel for fourteen days; then express, filter, and to the filtered liquid add Alcohol, one fluidounce.

Used in all cases where an emetic is required; likewise useful as an external application to erysipelas, tetter, and other forms of cutaneous disease. Dose, one to four fluidrachms, in some sweetened aromatic infusion, and the dose repeated every ten or fifteen minutes, until vomiting is produced.

TINCTURA SANGUINARIÆ COMPOSITA. Compound Tincture of Bloodroot. Emetic Tincture.

Take of Bloodroot, Lobelia Seed, Skunk Cabbage Root, of each, in powder, two ounces; Diluted Alcohol, two pints; Macerate in a close glass vessel for fourteen days, express, and filter.

Emetic, in doses of one to four fluidrachms, in some sweetened aromatic infusion, and the dose repeated every ten or fifteen minutes, until vomiting is produced.

TINCTURA SERPENTARIÆ COMPOSITA. Compound Tincture of Virginia Snakeroot. Sudorific Tincture.

Take of Virginia Snakeroot, in powder, Ipecacuanha, Saffron, Camphor, and Opium, in powder, of each two ounces; Holland Gin, or Diluted Alcohol, six pints. Macerate for fourteen days, express, and filter through paper.

The above is the original, and probably the best form of preparing this tincture, yet many Eclectics are opposed to the Opium, and substitute in its place Ladies' Slipper Root, eight ounces.

A powerful sudorific. Used in all cases where a copious perspiration is required, or where it is desired to lessen pain, allay nervous excitability, procure sleep, and keep up a determination to the skin. One teaspoonful in some warm herb tea, repeated every hour, aided by warm infusions and bathing the feet, will soon produce copious diaphoresis. In pleurisy, a much larger dose may be given.

In other cases it may be given in doses of from ten to sixty drops.

Tinctura Xanthoxylon. Tincture of Prickly Ash.

Take of Prickly Ash Berries, eight ounces; Diluted Alcohol, two pints. Macerate for fourteen days, express and filter.

Properties same as mentioned under Xanthoxylon. In cholera, dose from one to four ounces, repeated as often as required; in ordinary cases, from one to four fluidrachms.

LOTIONS.

Lotio Boracis cum Morphia. Borax Lotion, with Morphia. Take of powdered Borax, half an ounce; Sulphate of Morphia, six grains; Decoction of Hydrastis, eight fluidounces.

Used in pruritis valvæ.

Lotio Hydrastii Composita. Compound Collyrium of Golden Seal.

To a strong decoction of Green Tea, and Golden Seal, of each, one pint, add Sulphate of Zinc, Gunpowder, and dried Sulphate of Iron, of each, two drachms. Let them dissolve, and after decomposition has ceased, and the precipitate has subsided, pour off the supernatant liquid.

Used in chronic ophthalmic diseases. Applied three or four times a day.

MIXTURES.

Mistura Camphoræ Composita. Compound Mixture of Camphor. Antiemeticus.

Take of Camphor Water, Peppermint Water, and Spearmint Water, of each, one fluidounce; Camphorated Tincture of Opium, two fluidrachms. Mix together.

This mixture was introduced to the profession, in the treatment of cholera, by Dr. O. E. Newton, and was extensively and successfully employed by the Eclectics in that scourge. It is of superior efficacy in allaying the nausea and vomiting, which are two distressing symptoms accompanying cholera, and possesses all the virtues of the different articles entering into its composition, without the stimulating influence, of the alcohol which enters into their tinctures, upon already partially inflamed mucous surfaces. Dose, a teaspoonful to a tablespoonful every five minutes, if the patient be vomiting; every ten minutes, if he be only nauseated.

Mistura Cajuputi Composita. Compound Cajuput Mixture. Hunn's Drops.

Dissolve Oils of Cajuput, Cloves, Peppermint, and Anise, of each, one ounce, in Rectified Alcohol, four ounces.

Used in cholic, cramp of the stomach or elsewhere, flatulence, pains in the stomach or bowels, painful diarrhea, cholera-morbus, Asiatic cholera, and in all cases where a stimulant and antispasmodic is required. Dose, from one to two drachms, in hot brandy and water, sweetened, or in simple syrup, or mucilage of slippery elm. In Asiatic cholera, from two drachms to two ounces, every ten or fifteen minutes, in cases of violent spasm; it relieved the pains when all other means failed, and was extensively used for that purpose, by the Eclectics, during the cholera of 1849-50-51. It is an invaluable remedy, and should always be kept by every physician and druggist.

OINTMENTS.

Unguentum Piperis Nigri. Ointment of Black Pepper.

Take of Prepared Lard, a pound; Soot, four ounces; Tar, one pint; Black Pepper, in powder, four ounces. Make an Ointment.

This is used as a remedy in tinea-capitis.

Unguentum Plumbi Compositum. Compound Lead Ointment. Mayer's Ointment.

Preparation.—To Olive Oil, two pounds and a half, add White Turpentine, half a pound; Beeswax, Unsalted Butter, of each, four ounces; melt them together, and heat to nearly the boiling point. Then add gradually, Red Lead, one pound, and stir constantly until the mixture becomes black or brown; then remove from the fire, and when it has become somewhat cool, add to it a mixture of Honey, twelve ounces, Powdered Camphor, half a pound.

This forms a superior Salve, and is useful for all ulcers, cuts, wounds, etc. It has been kept a great secret for a length of time among the foreign population of our country, and is highly prized by those who have used it.

We are indebted to Mr. Jos. P. Mayer, of Cincinnati, for the above formula.

Unguentum Stramonii Compositum. Compound Ointment of Stramonium. Discutient Ointment.

Prep.—Take of the Bark of the Root of Bittersweet, Stramonium Leaves, Cicuta Leaves, Deadly Nightshade, Yellow Dock Root, of each, two oz. Bruise the Roots and Leaves, and simmer them in Spirits; then add Lard, one pound, and gently simmer till the leaves are crisped. Then express through linen, and add Venice Turpentine, two ounces.

This ointment is exceedingly valuable in discussing scrofulous, indolent, and all glandular tumors or swellings. It should be rubbed on the parts, about thirty minutes at each application; after which cover the part with cotton, and secure it by a proper bandage.

Unguentum Zinci Oxidi. Ointment of Oxide of Zinc.

Preparation.—Take of Oxide of Zinc, an ounce; Lard, six ounces. Mix them.

A mild astringent application in chronic opthalmia, with a relaxed state of the vessels, in various cutaneous eruptions, and in sore nipples, and other instances of excoriation or ulceration.

Unguentum Zinci Sulphatis. Ointment of Sulphate of Zinc.

Preparation.—Triturate Sulphate of Zinc, one scruple, with Fresh Butter, two drachms.

Used in eruptions of the skin, fungous growths, gangrenous and indolent ulcers, fistula, etc.

THE FIBRINOUS CONSTITUENT OF THE BLOOD IN RELATION TO DISEASE.

BY B. W. RICHARDSON.

The commencement of this paper is occupied by the restatement of the views which the author had previously announced as to the formation of fibrinous concretions in the heart and bloodvessels during life, and much stress is laid upon the opinion, that in many of these diseases which are known to be attended with an abnormal amount of fibrin in the blood, and which terminate in what is called "the sinking state," the mere formation of a fibrinous clot in the circulating system is often the chief and only cause of the sinking symptoms. By reference to numerous cases, the author endeavors to prove that fibrinous concretions were capable of being formed whilst the processes of life were going on, and then passed on to consider the question: What is the source of a fibrinous concretion; is it an exudation from the inner membrane of the vascular machinery, or is it a direct deposit from the blood? The discussion of this question involved many points of argument, the final answer being, that fibrinous concretions of large size are never the absolute result of an exudation from the lining membrane, and that they are, therefore, direct and true deposits from the blood. Under the next head the author spoke of fibrin as it exists in the blood, and on the chemical nature of a fibrinous concretion. There could be no doubt, he said, that fibrin existed in the blood as *bona fide* fibrin; and he introduced a variety of arguments in opposition to the opinion of Mulder and Horn on this subject. Fibrinous masses removed from the body after death varied in chemical properties; sometimes they were simple fibrin; at other times fibrin was combined with the binoxides and tritoxides of protein. The cause of fibrinous deposits during life was then noticed. It was necessary in entering on this inquiry, to consider what were the agencies which prevented the coagulation of fibrin during life. Several theories had been proposed in reply to this question. The nervous influence had been assigned as the cause of the fluidity of fibrin in the circulating blood by some writers, the vital principle by others, and the solvent power of the blood by others. The first two hypotheses were untenable altogether, inasmuch as they were removed from the influence of the reasoning faculties; the last (a theory) was incorrect in fact. The author had tried the influence of saline solutions on fibrin in the most careful manner, and had found that all saline substances, when perfect in the matter of chemical combination, had no solvent power over fibrin. He believed that the discrepancies which were to be found amongst writers on this matter had arisen from the circumstance that different experimentalists had employed salts varying slightly in their chemical nature. The one, employing a salt containing a little excess of acid or of alkali, had found fibrin partially soluble in a solution of that salt; whilst another, employing a perfectly neutral salt, had found fibrin insoluble in a solution of it. The author himself was of opinion that, in normal conditions of the blood, the fibrin was in a mere state of suspension; and the agents requisite to secure this suspension were a proper amount of motion, a proper degree of temperature, and the continual and rapid development of the three processes—reproduction, dissolution, and elimination. A combination of simple, and yet striking evidences, added peculiar force to this supposition. Thus the idea of its suspension in the blood was quite in accordance with the ultimate application of fibrin; being suspended merely, it entered the more readily into the composition of muscle, undergoing, in fact, a mere process of deposition. Suspension, moreover, implied removal from chemical influences and stability in the matter of quantity—a property which fibrin really possessed. But the most striking proof was the fact, that fibrin in the circulating blood obeyed the same laws as did other dense fluids when mechanically suspended in liquids lighter than themselves. Thus if the motion of the blood was arrested in any part of the vascular system, as by passing through a dilated artery, over a roughened surface, or past an obstructing barrier, the result was retardation of the current, and a deposit of fibrin consequent on the retardation. In normal states, then, fibrin was merely suspended in the blood, and existed there in a certain proportion. But, in other states, it underwent various changes; it might be diminished in quantity, or be almost wanting altogether; or secondly, it might be increased in quantity; so increased that its mechanical suspension was rendered impossible, and then there was nothing for it, but that the superfluous portion obey the laws which lead to deposition, and become formed at some favoring point into a fibrinous concretion. But why should increase of fibrin take place? some one might inquire. This question was most important, and in answering it the author would direct the attention of the Society to one or two facts with reference to the formation of fibrin. There could now be no doubt that the presence of oxygen in a certain proportion in the body, and the presence of a moderate degree of temperature, were both necessary to secure the formation of fibrin. Dr. Gardiner had shown that if an animal were made to breathe pure oxygen for a little time, the fibrin of its blood was increased in amount. He (Mr Richardson) had carried Dr. Gardiner's experiments farther, and had found that if an animal were made to breathe for a great length of time an atmosphere containing an excess of oxygen it sank and died at last, its heart loaded almost to bursting, with fibrinous concretions. Thus, then, the mere inhalation of a super-oxidized atmosphere was sufficient to produce an overplus of fibrin. The author was not yet certain whether a condition of atmosphere capable of giving rise to such results ever existed; the subject required further investigation. There were other circumstances capable of causing the increase in question: 1st. Fibrin might be relatively increased from the deficiency of some of the other blood constituents. 2d. It was evident that if respiration could be rendered too quick, a larger amount of blood than was normal would be exposed to the atmospheric influence, and then would the fibrin be increased.—This was, however, rarely a primary condition, and there remained, the author opined, a much more common cause for excessive oxidation of the blood in general, and of fibrin in particular. The mention of this idea led him (the author) to introduce incidentally a new theory as to the cause of in-

flammatory fever and inflammation. It was a law in the animal economy, that all the elements which entered into its composition should pass off from the body by the various eliminatory processes, just in proportion to their introduction into, and distribution through the body; thus oxygen, carbon, hydrogen, nitrogen were, in health, ever being eliminated by the skin, by the lungs, by the kidneys, and so on. Now, if from any external physical cause one or other of these eliminatory functions were arrested, as the function of the skin, the results were these: Either some other eliminating organ performed additional duty until the balance was restored, and the system saved, or else the suppressed elements, viz., the grand supporter of combustion, oxygen, and the combustible bodies, hydrogen and carbon, were carried a second time round the system, were reburned, and made to go through a 2d series of metamorphic changes, thus giving rise, in the first instance, to that heated, excited state of system called inflammatory fever, producing an abnormal increase in the fibrin, the salts, and some other of the blood constituents, and eventually leading, if a counter-agent were not forthcoming, to the concentration of this superactivity in some favorable structure or organ, and to the process called inflammation—a process which is, in fact, nothing more than the too rapid development in some special organ of the three successive acts—reproduction, dissolution, and elimination. From these readings of the subject, it would easily be seen, the author thought, how it was that super-fibrination of the blood attended inflammatory diseases; and why fibrin exuded from serous membranes in some such diseases; and why it was deposited in masses in the circulating system. He was particularly anxious to dwell on the opinion that suppression of one or the other of the eliminatory processes gave rise to the results he had described; and he illustrated the question by the analogical observation, that the system, under the circumstances named, was made for the time "to consume its own smoke," an act quite incompatible with health. Mr. Richardson, at this point, proceeded to show the practical nature of the subject he had chosen; he confined his attention to the effects of fibrinous deposits—these deposits might take place in any part of the circulating machinery, and the symptoms they produced varied consequently; forming in the heart, they produce their special effects in at least five different ways. 1st. They may be developed in the course of almost any acute inflammatory complaint. 2d. They may be developed suddenly, and produce the most alarming symptoms, the patient having shown but few previous indications of acute disease. 3d. They may give rise to symptoms peculiar to themselves, throughout long periods of time, no other disease being present. 4th. They may give rise to sudden death, without having previously produced any special symptoms. 5th. They may follow in the course of some exhausting disease, and in a secondary manner hasten a fatal termination. After the statement of these general rules, a minute description of the various symptoms which fibrinous concretions produce was given, and at the conclusion of the paper a few illustrative pathological specimens were shown, from one of which it was demonstrated that these concretions, when occurring in arteries, are cylindrical like the vessel itself. —*Medical Times and Gazette.*

THE RADICAL CURE OF RUPTURE—A NEW AND BEAUTIFUL DEVICE.

If there be a single subject more interesting than another to the benevolent surgeon and the friend of humanity, it surely must be the discovery of a simple and beautiful contrivance that will insure efficient support, and a gradual and almost certain cure of rupture. It is well known to surgeons, as well as those who require the use of a truss, that a simple instrument that will keep its position, and retain the bowel during all the movements of the body, has always been a desideratum. Every pad hitherto devised is liable to displacement; there is no difficulty in adjusting the pressure by means of the spring, but the thing most to be desired is *the immobility of the pad.* Strange, indeed, that the device of a ring of sufficient surface to lie firmly and easily over the entire breadth of the canal through which the intestine descends, should not have occurred to the artizan, even with the aid of the practical surgeon. The immobility of the ring pad is at once apparent; for the skin rising by its natural power of resistance, above the inner as well as the outer circumference of the ring, embeds the pad, and shuts up the canal by two separate pressures, by segments of the oval ring—going directly across the place through which the bowel must pass out of the abdomen. So much for this simple and inimitable truss as a supporter, and nothing can be more reliable; the heaviest pressure brought to bear upon the bowels by the muscles of the abdomen, in any of the operations of rural or mechanical life, and the descent of the diaphragm upon them in the largest breather, cannot force the bowel to pass this immovable pad.

But this is only the beginning of its excellence; no one who realises his value as a perfect man, can fail to look upon the best truss in any other light than a necessary nuisance; in our American summers especially, is its necessity to be deprecated; and we look upon that man as a benefactor to his race, and worthy of our highest esteem, who will save the laboring man from any distress additional to that of his daily toil in this enervating climate. A rupture can only be cured by natural and slow adhesions of the canal, or the inner opening into it, while the bowel is completely supported by a truss; or by injecting some stimulating substance to hasten that process, as lately practiced by several surgeons, as well as ourself; a method now extensively known to the public, but one unquestionably highly desirable to avoid by every humane and scientific surgeon. Inflammation, be it remembered, is the agent that is to cause the adhesion; and mechanical pressure, we presume it will be admitted by every intelligent surgeon, is the most manageable and the safest manner of producing it. To all who doubt the precise action of pressure in inflaming and thickening the membranes under the skin, we would simply say, examine an old stager of a corn on your little toe, and we think you will be convinced of its power; we have seen the skin under the outer part of the corn consolidated with the bone. But pressure

has been applied to rupture, and that successfully, as is well known, in effecting cures. The difficulty has hitherto been to keep the rupthre from descending, even for a second of time, for that would effectually break up the tender commencement of the adhesion in the canal; the patient himself, at all times, should have absolute command over the pressure, and graduate it to his capacity of endurance at the time, whatever the nature of his occupation may be.

This has been most perfectly attained by Mr. Marsh, by an ovoid pad attached to a separate spring, and pressing directly on the canal, *within the circumference of the ring pad;* the pressure is graduated with any degree of nicety, from an ounce to several pounds, by means of a screw, merely requiring two fingers to turn it, without the least necessity of loosening the garments.—Nothing can be more perfect or reliable in its action, and the most critical surgeon can desire nothing better. We believe that a perseverance in the use of this instrument for a year, will cure nine cases out of ten of every reducible rupture; and when we consider that ten per cent. of the male human family are ruptured, the value of Mr. Marsh's invention can hardly be appreciated. For excellence of workmanship the instrument cannot be surpassed. They are to be had of the inventor, 2½ Maiden Lane; his amiability and gentlemanly deportment, and immense assortment of apparatus, will insure satisfaction to all who may call upon him.—*The Scalpel.*

See editorial notice. N.

ON THE QUESTION OF RELATION BETWEEN PHTHISIS AND HYSTERIA.

BY DR. THEOPHILUS THOMPSON.

The object of this paper was to show, first, that hysteria often simulates phthisis. Secondly, that it tends to aggravate certain symptoms of incipient consumption. Thirdly, that as phthisis becomes established, hysterical symptoms usually become less characteristic and various, and finally disappear. Fourthly, that when the two diatheses coexist, the prognosis and the treatment must be modified. The author suggested some points of distinction between the true and the simulated phthisis, especially in the latter the peculiar character of the cough, the relative disproportionateness of the local and the general symptoms, the inconsistency of loquacious complaints with the sprightly or indifferent countenance, the pain under the left mamma, sensitiveness of skin, especially over the sternum and between the shoulders, and sometimes a sense of suffocation when these two points are simultaneously compressed. Hemoptysis was mentioned as often aggravated in the early period of phthisis, and even induced by hysteria in non-phthisical subjects, and under such circumstances sometimes recurring at fixed periods of the day or the night. The occasional profuseness of such hemoptysis might be due partly to sudden congestion, partly to deficient crasamentum in the blood. Dr. Thompson expressed an opinion that hysterical congestion sometimes occurred to such an extent in the lungs as to occasion marked dulness on percussion, but when so induced the seat of dulness was apt to vary from one side to the other. He suggested that hypertrophy of the breasts and the proneness to the more transient swellings, by the German authors designated anathymiasis, might depend on analogous conditions, and argued that fixing the attention of such patients on the lungs might tend to disturb their functions, since direction of the consciousness may thus influence an organ unfavorably, and an expectancy of a morbid action (as instance of cramp) tend to its renewal. Dr. Thompson related several cases in defence of his positions. One in which pseudo-phthisis was induced by mental disquietude and rapidly benefitted by change of scene. A second, in which cough for some days and nights almost incessant, and profuse hemoptysis occurring at stated periods of the night, long resisting treatment, occurred with very slight grounds for suspecting consumption. A third, in which respirations accelerated to seventy a minute, with difficult and painful inspiration, soon yielded to remedies adapted to invigorate the nervous system, and relieve spinal irritation, although certain local signs, the appearance of the gums, and the family history, naturally excited some apprehension as to the ultimate result. And a fourth instance, in which a young woman for nearly five years subject to varied hysterical symptoms, especially gastrodynia, palpitation, and cough, became the subject of dull percussion, alternating from one side to the other; gradually, however, the hysterical symptoms had disappeared, and the indications of pulmonary affection were fixed to one side, although considerable advantage was derived from the administration of cod-liver oil and other treatment. Dr. Thompson concluded his communication by remarking, first, that when phthisis commences in hysterical subjects, the symptoms are often aggravated to an extent disproportioned to the amount of organic change. Secondly, that hysteria and phthisis, although not incompatible, are uncongenial, so that as the latter disease advances the former usually retreats; and that the coexistence of hysterical symptoms, especially if severe, may encourage a somewhat hopeful prognosis, even when phthisis is established. Thirdly, that when these two disorders are concurrent, a more "hardening system" may commonly be employed than is expedient in cases of unmodified consumption.—*The Lancet.*

CINCINNATI MEDICAL DOINGS.

From various sources, accounts of the disgraceful quarrels among the physicians of Cincinnati, reach the East, some of which have already been given in the Journal. Unless greatly exaggerated, the profession of the Queen City of the West are extremely given to belligerant demonstrations. It seems that the control of the Commercial Hospital, now in the hands of the Ohio Medical College, is the source of much uneasiness, and the exciting cause of the notoriety given to their public proceedings of late. Hospitals are too often made the instrumentalities for individual advancement.—Those at the West who are so fortunate as to be of the number of medical and surgical officers, have great influence, and consequently a growing private practice. Whether ability, learning or moral qualifications have any weight in securing the appoint-

ment to these posts of honor, remains for others to decide. In the New York *Daily Times* is a graphic description of the manner of conducting one of the meetings of the faculty of the city, in which the subject of the Hospital was discussed. The most bitter personalities were indulged in, and one or more personal collisions were with difficulty prevented. It is quite impossible to conceal from the public such undignified scenes, which greatly injure the medical character of the country, and must operate unfavorably for the reputation of the Ohio Medical College and the faculty generally of the city of Cincinnati.—*Boston Medical and Surgical Journal.*

ON THE CHARACTERS OF THE PREVALENT PLEURO-PNEUMONIA.

BY DR. RISDON BENNETT.

Apart from differences in what is called the epidemic constitution, there are important differences in the same disease, dependent perhaps on climate, national constitution, habits, modes of life, etc., as well as differences dependent on varieties of individual constitution, and that this, although known, is not always remembered in practice. This difference was shown by the treatment of erysipelas, of which Dr. Bennett saw some cases last summer at the Hotel Dieu, and, on inquiring into the treatment, was told that rest, and some simple dietetic rules, were all that were required, it being a very slight disease, and never fatal, unless associated with some visceral disease or cachectic habit, the reverse being the case in the London hospitals, and even in private practice in these kingdoms. Dr. Bennett, however, did not consider it right to discard altogether the results of former experience, because bleeding, antimony, etc., are not now found so serviceable in the treatment of pneumonia as we were led to believe, or as they formerly were. They are not to be rejected altogether as fallacious, for they will warrant our confidence, if judiciously employed, in the treatment of the same type of disease as that for which they were recommended. The author then went on to assert, that true sthenic pneumonia of the croupous variety, that is, inflammation attacking the air-cells, characterized by the effusion of plastic matter by which they are obliterated, leading to solidification of the lung, has become a comparatively rare disease of late. The ordinary descriptions of this disease are true to nature, and the attendant pleuritis, itself a subsidiary or secondary disease, merely induces an effusion of plastic lymph upon the serous membrane, unaccompanied by much liquid; but the inflammatory disease which has prevailed latterly differs from it in its pathology and treatment. Neither is it exactly the typhoid pneumonia; and certainly not associated with typhus or typhoid fever. The pleuritis has frequently preceded the pneumonia, and has often been the more severe and prominent complaint. The disease has occasionally commenced with catarrh, passing subsequently into the pleuro-pneumonia. The pain is usually very severe, and effusion takes place with great rapidity and to a considerable extent, soon becoming purulent; cough not troublesome; the sputa copious, and more or less tenacious and glairy; sometimes streaked with blood, at others resembling prune juice, or of a dirty green-yellow color. It does not always present the same characters in the same cases but may vary daily; dyspnœa not urgent generally, nor the respirations much increased in frequency. The skin and tongue usually moist; the former clammy, and the latter covered with a dirty creamy fur. Pulse rapid but soft, and often feeble; urine sometimes high-colored and scanty, at others copious and of a pale straw-color. The physical signs indicate the rapid spread of inflammation over a great extent of surface, usually confined to one side. The subsequent solidification of lung is not very great, however, nor very complete, being checked by the pleuritic effusion, which compresses the organs, and prevents its solidification. When the effusion has not been great, instead of extensive solidification there is usually suppurative infiltration of the lung, showing a tendency to gangrenous destruction, the chief points of interest in the autopsies being the small amount of solidification notwithstanding the extent of lung involved, it being greatest in the immediate vicinity of the gangrenous cavities. The tendency to suppuration was more marked in the pleural cavity. In one case detailed, Dr. Bennett thought the principal accumulation of pus was interlobular, and that, as the acute stage passed away, the effusion into the cavity of the pleura was absorbed, while a considerable quantity remained between the lobules of the lung and its base, so that when it had its exit the outlet was very direct, opening immediately, or nearly so, into the larger bronchial trunks, thus effecting the more speedy and complete evacuation of the cavity, and its consequent obliteration. These signs and symptoms the author thought sufficient to show that this form of inflammation differs materially from the ordinary pleuro-pneumonia This difference, he said, was not owing to mere peculiarities of individual constitution, for he has met with it in persons of various constitutions, and moving in different social spheres. Neither has it any necessary connection with continued fever; but he is inclined to refer it to a form of erysipelas, although it is not generally associated with its external manifestations. The pneumonia of fever, erysipelas, and cachexia is usually asthenic; but this variety Dr. Bennett regards as itself a form of erysipelatous inflammation, chiefly because it has prevailed contemporaneously with external erysipelas, and because an erysipelatous form of cynanche has been very common, and in many cases has been an attendant on the thoracic inflammation, sore throat having been frequently complained of in the beginning, and, as this has subsided, bronchial symptoms have occurred, to which the pleuro-pneumonia has succeeded. With respect to treatment, general bleeding is inadmissible; the local loss of blood in the beginning is useful, if to a limited extent. Counter-irritation may be employed safely, more early than in the sthenic form of inflammation; blisters have yielded markedly beneficial results. Calomel and antimony, if given at all, must be used most sparingly, and with the utmost caution. Five grains of Dover's powder, with one grain of calomel, three or four times a day, have appeared to be very useful, the calomel not being given so as to affect the mouth. Ammonia is the best expectorant, and is given by Dr.

Bennett, combined with its acetate, and camphor mixture, or sometimes with serpentaria or senega. Beef-tea always, and wine frequently are necessary. Under any form of treatment, the affection is attended with great danger, and, in its worst forms is very fatal. In some cases, so rapid is the prostration, that Dr. Bennett has thought stimulants necessary from the first. An ample and efficient blister, with wine, beef-tea, and ammonia, are, he believes, the remedies on which most reliance should be placed, in the most aggravated and most characteristic examples of the disease.—*Medical Times and Gazette.*

CHLOROFORM IN RHEUMATISM.

BY J. KIRBY, LL.D, L.C.D.,

The following case is selected from some others of the same kind, as illustrating a kind of practice that we have seen carried out in several instances with marked benefit:

On the 3d instant, I was called to visit Mrs. K., who is about forty, mother of several children, and now six months advanced in pregnancy. At the commencement of last summer she was affected with a scrofulous abscess above Poupart's ligament at the left side, which was opened and discharged matter in a large quantity peculiar to that disease. By a residence in the country, sea-bathing, a suitable exercise, and tonic remedies, the abscess grew less, and in time it cicatriced altogether. On her return to town, she again complained of abdominal uneasiness, the tumor formed anew, and it broke spontaneously, she in the mean time having no advice on the subject.

For the last fortnight she has been confined to her bed, except when moved for purpose of convenience or comfort. She lies wholly on her right side, in consequence of pain induced whenever she turns on the left. During this time she had "scarcely any sleep." At night she suffers "most excruciating and constant pains in her loins, over the sacrum, the coccyx, and the hips." These pains compel her to loud exclamations of distress, disturbing the whole house by her vociferations, so that her husband and attendants make many complaints of the want of repose. The appetite is wholly gone. She takes whey and tea principally, and she loathes wine, porter, ale, and beer. She sweats profusely at night; the bowels are regular; the urine scanty and lateritious; the pulse is very frequent and weak; she is much emaciated, and looks in fact like a person far advanced in hectic fever. The movements of her child are quick, lively, and natural. The abscess discharges about a tablespoonfull of rather healthy matter.

From the success which attended the administration of chloroform in other cases; I was induced to make a trial of its remedial agency in the present instance, and I accordingly prescribed it in the following way:

℞. Chloroform, min. octo.
Aquæ ℥j;
Syrup. croci ℥j;
Ft. haustus. Mitte tres haustus tales. St. unum quartis horis.
℞. Chloroform. drach. tres.
Aquæ unc. tres. M.
Sig. for external use.

A sixth part of the mixture was desired to be sprinkled on a folded handkerchief and laid on the parts severely affected, and these to be covered with a large sheet of gutta percha paper to prevent evaporation. Visiting her the next day, I was agreeably surprised to learn from her that all her torments had wholly disappeared after she had taken the first draught, and that the others had procured a good night's sleep.

The first application of the mixture was awkwardly applied, and she said it gave her much pain, and therefore she would not permit it to be used again. In consequence of a good night, she had some appetite, and enjoyed a glass of Calcavella wine. Two chloroform draughts were to be taken at night if the pains returned.

The husband has informed me that she was moved to the sofa at four o'clock yesterday, where she remained till twelve, and slept as she was free from uneasiness. On he return to her bed, she was seized violently in the back and hips, but these pains were much alleviated by the two chloroform draughts.

She was now ordered to remain in her bed, to have the local application made once, and to take two draughts at night unconditionally; and a mixture composed of infusion of roses, with dilute sulphuric acid, was ordered with a view to restrain the nightly perspiration, to which she attributes much of her debility.

To-day, the 7th of the month, she reports that she used no medicines, feeling that she required none; however, she is mistaken, for her health is in a very precarious state, in consequence of the discharge of matter from her groin and her pregnancy. To-day she goes two miles from town, and her case devolves on Dr. O'Brien, who met me in consultation, and who is to attend her in her confinement.—*Dublin Medical Press.*

ON A MEANS OF ARRESTING INSTANTANEOUSLY CHOLERA CRAMPS IN THE LIMBS.

BY M. GUYON.

In a recent communication to the Academie des Sciences at Paris, M. Guyon states that these spasms may be immediately arrested by firm and steady extension of the cramped muscles. In the case of the leg he directs the heel to be held in one hand and the foot bent toward the shin; in that of the arm, the fingers are to be straightened, and the hand carried toward the dorsum of the wrist.—*Nouvelle Encyclopedia.*

ON THE TREATMENT OF FEVER BY LARGE DOSES OF SULPHATE OF QUINIA *at St. George's Hospital.*

BY (1) A. WHITE BARCLAY, M.D.; and (2) DR. DUNDAS.

The cases treated by quinia, writes Dr. Barclay, may be divided into three classes. 1. Those in which its exhibition was followed by marked depression. 2. Those in which the pulse became slower, without

general prostration or sickness. 3. Those in which no decided effect was produced which could be noted at the time.

1. Including all the cases together in which this effect was produced, the number is five. Two have been already mentioned as fatal, one of apparent typhus, one of tubercular inflammation of the brain, to which a third may be added, complicated with albuminuria, which was not detected until the subsidence of the fever, and ultimately proving fatal. The physiological effect of the remedy was produced by very different quantities in different instances, given at varying intervals. One patient took twenty grains every three hours for nine times; another took ten grains every two hours for ten times; while a third took twenty grains every six hours for only three times; the other two had twenty grains every four and every six hours respectively for eight times.

Of the 3 uncomplicated cases, 1 died, 1 was ill ten days before admission, and remained under treatment forty-five days before recovery was complete; the other had been ill a week, and was discharged cured at the end of twenty-four days.

2. In 2 instances only did the pulse become remarkably slower without any depression; one took ten grains every three hours, the other fifteen grains every four hours for about two days, after which the dose was gradually diminished. The first had been ill five days, and was discharged cured in eleven days, having been kept under observation longer than was perhaps absolutely needed to ascertain that recovery was really complete; the second had been ill only two days, and got well in three weeks.

The first case was not severe, and had no spots; the second was delirious for the first two or three nights, and had a faint, rather indistinct rash on the abdomen; he had also pretty severe diarrhœa, but no evidence of ulceration of the bowels. The pulse fell in each below 50, but it is necessary to state here, that in another instance it fell still lower, in which no quinia was given. He made a very rapid recovery, being ill only five days before admission, and leaving the hospital cured in eight days.

3. In 11 cases there was no distinct physiological effect produced by the quinia; and it remains to inquire whether recovery was more rapid under this mode of treatment than any other; and this may be best accomplished by instituting a comparison between them and the whole of the other fever patients admitted during the same time. Twelve examples of a very mild form, which might be justly called febricula, are omitted, and there then remain 51 instances of well-marked fever which were not treated by quinia.

Among these, 20 exhibited fever spots on the chest or abdomen, and 6 with and 5 without spots gave unequivocal evidence of ulceration of the bowels. By this is not meant merely the occurrence of thin watery motions, which have been observed in the majority of the patients, but the persistence of diarrhœa, with a patchy, shining, or fissured tongue. We have, therefore, as the basis of our analysis, 26 cases which neither had fever spots nor distinct evidence of ulceration, 14 with spots, but not certain ulceration, and 11 in which the presumptive evidence of ulceration was strong.

The average duration of these cases was—of the 26 cases, 10 days before admission and 21 days under treatment; of the 14 cases, 8 days before admission, and 22 under treatment; of the 11 cases, 7 days before admission, and 33 under treatment.

Turning to those in which the quinia treatment was adopted, and almost invariably in 10-grain doses every four hours, they include 5 cases in which there was pretty conclusive evidence of ulceration of the bowels, 3 of which were also spotted; 4 cases with spots, where ulceration was not proved, and only 2 in which neither condition was exhibited. With the last cases it may be best to classify the two already referred to under the second division, because they are not marked by any very broad line of distinction separating them from the present series, and they exhibit the quinia treatment under its most favorable view.

There are, therefore, 4 cases without spots or decided ulceration, of which the average duration was eight days before admission, and twenty-three under treatment 4 cases with spots only, of which the average duration was ten days before admission, and twenty-six under treatment; 5 cases with ulcerated bowels, of which 3 had also spots, and their average is fifteen days before admission, thirty-seven under treatment.

I must here distinctly state, that when I commenced this report I had no idea what the result would be, and, so far from believing it unfavorable, had hoped that excluding some unfortunate cases, the treatment of fever with quinia would prove rather more speedy, safe, and effectual than by the ordinary modes. I am sorry to be convinced that it has no advantages.

It may be well to state in conclusion, that the prevalent type of fever has been what would be called "typhoid," not true "typhus." One or two had the aspect of congestive typhus, but wanted the purple, mottled rash.

One patient had this rash very well marked, mixed with ecchymosed spots, at the same time had distinct ulceration of the bowels, with a chapped and glazed tongue. Some had a very abundant crop of florid, slightly-elevated spots disappearing on pressure; some had only one or two of this character. Occasionally the spots are characterised as large, sometimes as small; and individual instances occur exhibiting various degrees of persistency, and various shades of color, from a pale rose to a deep crimson. Spots existed without ulceration, and ulceration without spots, apparently without any definite rule; and some of the most severe and tedious cases were unaccompanied by either one or the other.

4. [In commenting upon these marks, Dr. Dundas thinks] that, instead of contravening, they go far to substantiate the doctrine in question; at least in so far as relates to the two only cases of fever in which "cinchonism" appears to have been *early* adopted. As regards the cases with "ulceration of the bowels," who expects, or who ever proposes, to *cure* such cases by cinchonism? I well know that cinchonism will not *arrest* such complications; but I equally well know that, resorted to in time, it will commonly prevent them.

Of three fatal cases in which cinchonism was resorted to (though I cannot clearly make out if they are included in Dr. Barclay's Analysis,) one was "*apparent* typhus," another "tubercular inflammation of the brain," and the third was "complicated with albuminuria," (nephritis?) Surely none of these cases can be adduced as affording any evidence on the present question.

It would seem that, in some of the cases, purgatives had been administered; these, in my experience, prove almost invariably hurtful in fever. Were emetics given? The amount of support and stimulants—another important consideration—afforded to the patients under quinia, does not appear.

Dr. Barclay admits the effect of cinchonism to be "something strange,"—that is, new to him; but, "in one or two cases which got well very speedily under its employment," he questions "special effect." or, "if any," that such effect "was limited to lowering the general circulation;" that "when pushed to its full extent," it prostrates "the vital powers." On these points my experience is totally at variance with that of Dr. Barclay.

I have myself administered quinia to cinchonism in many hundred cases, and seen it largely given by others; yet, in no one instance have I ever observed it cause "prostration of the vital powers," though often vomiting.

That the physiological effect of the remedy is not, as Dr. Barclay avows, "limited to lowering the general circulation," is proved by the fact, that commonly the general symptoms improve, not only *pari passu* with the change in the circulation, but that sometimes one, sometimes another, and occasionally *all* of the following changes will occur; namely, the tongue will become moist, and the thirst abated, the skin cooler, and the headache and general uneasiness diminished, *before* any decided change in the frequency or character of the pulse can be detected. Also, in the more favorable cases, the physiological effect of the remedy is displayed solely in the rapid and *simultaneous* subsidence of all the urgent symptoms; there will be no tinnitus aurium, no headache, no dizziness, no deafness, and no vomiting.

The perusal of Dr. Barclay's interesting paper, as well as what I constantly hear and witness, proves to me the necessity of once more placing briefly before the profession some of those points in the treatment of continued fever by cinchonism on which I have already urgently insisted—orally, and in my several publications—during the last three years. As these points are in nothing modified by subsequent experience, I shall give the precise words in which I originally stated them, under the impression that this mode of recalling the subject may be more advantageous than any new or more lengthened statement:

I would here beg to recall, briefly, a few of those principles on which I have elsewhere strongly insisted, namely, that the value of cinchonism in typhus will be in proportion to its early induction; that adopted early, it arrests with certainty, in the vast majority of cases, the course of all continued fevers, and thus prevents the complications which prolong the disease and peril life; that we cannot arrest all cases of typhus fever by cinchonism, nor can we all cases of ague; serious visceral disease, in either case, will interrupt the specific power of the remedy; also, idiosyncrasy in some, and a broken-down state of the constitution in others, will prevent its success; that a vital organ already seriously damaged, or the vital fluids already seriously vitiated, will necessarily render the success of cinchonism doubtful; but that in none of the foregoing conditions idiosyncrasy excepted, should the remedy be altogether suspended, for even in these its administration will prove commonly useful, and *always* safe; that after the first impression has been made on the disease by

cinchonism, the patient should be constantly and *well supported*—no slops. Wine will be often necessary, and (especially with hospital patients) brandy. To the purely medical measures I need not refer, but there is one point on which I am anxious to fix the attention of the profession, namely, that in estimating the specific power of cinchonism over typhus fever the practitioner *must carefully distinguish those cases of visceral disease, attended with low inflammation and typhoid symptoms*, which are continually admitted into hospitals as 'typhus' or 'typhoid' fevers. In these cases the failure of cinchonism attaches, not to the remedy, but to the physician."

I may, perhaps, be permitted to add, that the dose I first adopted, namely 10 or 12 grains every two hours to an adult, is that which I still find to be the most uniformly advantageous, and attended with the fewest inconveniences to the patient.— *Medical Times and Gazette.*

FOREIGN CORRESPONDENCE.

PARIS, October 28, 1853.

SIR:—From the influx of students and medical strangers, the *quartier latin* is beginning once more to put on its scholastic appearance. The lectures of the Faculty will soon announce their commencement of the winter session; and although during the *vacance* the lectures have been suspended, yet dissections and private instruction have been going on without much interruption.

For several months I have followed, with very much satisfaction, the cliniques of MM. Sichel and Desmarres upon diseases of the eye. Besides their immense private practice, these gentlemen hold cliniques for the benefit of indigent persons—the former twice a week, and the latter three times. Generally from 150 to 200 patients present themselves at each session, which, of course, furnishes many operations of every character practiced upon the visual organs. In persons over 40, the operation for cataract by extraction is generally performed, and the success is truly gratifying—a very large majority of cases having sight restored without accident. The flap operation of the upper half of the cornea is always selected, from the fact that there is not so much liability of the escape of the aqueous humor, neither of prolapsus iridis, as the upper lid keeps the flap in a more exact position; and, above all, should the flap unite and leave a depression in it, instead of its globular appearance, it would alter the axis of vision, so that the patient would be obliged to incline the head forward to bring the rays of light to a proper focus, which is far more advisable than to raise the head for the same purpose, which would be the result in a majority of cases, if the same depression occurred, in flaps made from the lower half of the cornea. I have seen an Italian oculist of distinction perform the latter, giving, as a reason, that if there should be any effusion within the chambers, it would more readily escape. In operations for artificial pupil, as a general thing, the inferior and internal portion of the iris is the part removed. This rule is subject to some variation, according to the opacity of the cornea, &c. In obstructions of the lachrymal ducts, the style is nearly abandoned, as a barbarous practice, and one liable to many grave accidents. Sometimes M. Desmarres practices dilatation by introducing small *sondes*; sometimes *cathetérisme*; but there is always danger of a relapse in a few months. In most of these cases, if of long standing, the lachrymal sac becomes inflamed, implicating the eye, and finally a fistula lachrymalis is the result. Such has been the course in a very large number of the cases which I have observed. In such patients, M. Desmarres cures *radically* by destroying the lachrymal sac. He makes a somewhat circular incision down upon the sac, dissecting laterally, so that it may be fully exposed, then applies the actual cautery, which completely destroys the sac, the wound healing without any very noticeable deformity; and in twenty to forty days the patient is cured of an affection that may have lasted him many years. I have seen some patients who have been operated upon two or three times by other methods, but to no effect; while the destruction of the sac rendered the cure complete.

But it may be asked, what becomes of the tears, if the *sac*, and perhaps the lachrymal canal, is destroyed? Anatomy establishes that the lachrymal gland is the source of the tears; and it is also true that there is a secretion from the mucous membrane of the eye, and that there is an absorption and an evaporation of these liquids going on at the same time. Now the secretion of the gland is not absolutely necessary to lubricate the eye when in health; but when a foreign body invades the eye, the lachrymal secretion becomes so abundant, to wash out the intruder, that it overflows the margins of the palpebræ and of the lucus lachrymalis upon the cheek. We see the same result from mental emotions, showing that when these accidents occur, the ducts are not sufficient to carry away this hyper-secretion.

This state of things will occur, of course, after the destruction of the sac, when the eye is inflamed from any cause, but when the eye is free from inflammation, and not influenced by mental emotion, notwithstanding the complete *annihilation* of the lachrymal sac, the eye will be as free from a superabundance of tears as though it had always been in a state of healthy action; and there will be no watering of the eye. But there will be left a lacrymal tumor—a fistula lachrymalis—or a chronic thickening of the membrane which lines the sac, without an *effectual* remedy, and the consequences can be easily foretold.

The Lessons given at the College of France, during the summer session of 1853, by M. Claude Bernard, *suppleant* of M. Magendie, were exceedingly interesting. I will give you some of his remarks upon gaseous absorption.

All animate beings are in affinity with the gas of the atmosphere. The latter contains two principles: oxygen, which is in proportion of 79 to the 100, and azote 21 to the 100; there are also some traces of carbonic acid.

I. *Importance of oxygen; and the conditions in which it is formed.* In gaseous absorption, oxygen plays the greatest and most important character; it is this which maintains the phenomena of combustion. Its importance has been known since its discovery, and has been called *air vital*. All animals absorb it; it is the same with all the green parts of vegetation; germination has want of it, and the spawn itself could not be developed without it. If the egg or spawn of a frog or a bird is put in contact with any other gas than that of oxygen, their evolution is arrested. Here is the proof of the absorption of oxygen; put a spawn into a bell-glass filled with oxygen; the glass may be in connection with a *manometre* containing some water or mercury. Upon examining afterwards what passes, the absorption of oxygen will be recognized by the elevation of liquid in the *manometre*. Under this influence the spawn will develope itself. But if, instead of the oxygen, another gas is introduced, the development will be arrested. This law is applicable to all beings. For respiration, the oxygen could not be replaced; while *azote* can be. We can make some artificial mixtures respirable, provided there be some oxygen. Once absorbed, is the oxygen dissolved in the blood? Introduced into this liquid, it can circulate there, under the form of globules, but it ends by being dissolved. This is what happens when we inject oxygen into an artery by means of a fine tube; the blood attracts it, and at the end of a certain time it appears dissolved. Spallanzani is said to have seen some globules with his microscope; and also Burdaach, but neither of them observing what may have been the normal state in the individual classes elevated in the animal scale.

If the injection was too abundant, grave accidents would sometimes result, and even death. Gases, in effect, according to M. Magendie, pass only with difficulty by the capillaries of the lungs; introduced briskly into the jugular vein, they go into the right auricle and ventricle of the heart, then into the pulmonary artery, where they form a froth, or foam, which is impelled with the blood. In the parts of the lung where this foam arrives, an obstruction results; and if this is general, death supervenes rapidly. It is thus that death happens by the introduction of gases into the blood. One should be acquainted with the solubility of oxygen. A *litre* (which is a little more than a pint) of water dissolves 46 *centimetres cubes* (a little more than an ounce) under a similar pressure and temperature. But blood absorbs more oxygen than water. Magnus has made some experiments upon this subject. One thousand volumes of blood, agitated in the air, absorbed 130 volumes of oxygen; whilst 1000 volumes of water only absorbed 9½; a difference immense.

The penetration of oxygen, when the air is put in contact with the lungs to traverse their fine membranes, manifests itself actively and abundantly. This is not so with water, and is owing to the different properties of the blood, whose composition is complex. The globules absorb the most. Liebig himself had thought that they alone absorbed oxygen; but the serum absorbs also, as is seen when gas is taken by some animals whose blood is without globules. Some have wished also to bring into account, in this connection, the iron of the globules. But is oxygen only dissolved in the blood? Could it not be retained there by a combination? When we add certain saline substances to liquids, we augment the facility of the former for gaseous absorption; some salts of iron make water absorb more readily certain gases. Liebig thought that the saline parts of the blood, as that of the phosphate of soda, had an action to retain the oxygen. Yet, if the mixture of oxygen with the blood took place only by a kind of dissolution, the former ought to augment under the influence of compression, as takes place with carbonic acid, a very great quantity of which we can make penetrate, by this means, in water. We know even that this compression, carried to one or two at-

mospheres, augments the absorption from two to four, &c., in doubling. But the augmentation of absorption does not take place with blood as with water. During life, this absorption varies not sensibly. One can submit it to a strong atmospheric pressure without there being any very sensible modification in the phenomena of life. This even has constituted one means of treatment, and some have seen patients supported sufficiently long without being incommoded. Let us add, on the other side, that if oxygen was in a chemical combination with the blood, we could not detect it as easily as if it was only mixed. We see this question of dissolution, or of combination, of oxygen in the blood, can still be debated, and is far from being settled.

Can atmospheric oxygen undergo any modification, whether within or without the economy? In certain momente, in certain combinations, it appears to be able to acquire a greater energy. Some researches have been made in this respect. A great noise has been made about *osone*, which is oxygen having been submitted to the contact of electricity. M. Schonbein, who discovered this electricized oxygen and its properties, has made it play an important *role*. In his first memoir, he announces, that under the influence of electricity, oxygen acquired a special odor, and that it blued starched paper. *L'air osonise*, by electricity, as that in contact with phosphorus, becomes very irritant; animals which respire it are taken with intense and prolonged bronchitis. These affections, if the osone existed in the atmosphere, could even become epidemic. In his second memoir, he has considered otherwise of osone. This irritant and energetic body produced many similar effects upon miasms. Under the influence of lightning, he formed some osone, which purified the air and destroyed some miasms. The author of this discovery having put into air *osonise*, a morsel of meat in a state of putrefaction, it made the odor disappear, and he saw the putrefaction arrested; this meat, withdrawn afterwards from its influence, continued to putrefy. It will be possible, then, that these properties of oxygen, acquired from without the economy, may come to act upon it. M. Dumas, without yet furnishing direct proofs, has developed the opinion that oxygen, introduced into the lungs, acquires there certain special properties.

II. *Circumstances which have some influence upon the absorption of oxygen.*—As soon as oxygen is in contact with the blood, it passes into the liquid, in virtue of a kind of imbibition, and disappears. This incessant absorption carries into the economy the necessary oxygen for all the organs. The *quantity* of oxygen which is absorbed is considerable. According to Lavoisier and Seguin, who have made the calculation for each inspiration, 1000 grammes, or 20,000 grains, can enter in 24 hours. But this quantity is subject to some grand variations, as we shall see by the researches which follow. It has been observed that, during *abstinence*, there was a relative absorption of oxygen greater than during *digestion*. M. Bernard explains this difference by saying that during digestion the vena porta conducts the alimentary intestinal blood with the sugary secretion of the liver, which is very active. The blood of the sub-hepatic veins, in mixing itself then with the blood of the vena cava, gives to it the sugared quality, so that some blood highly *sucre* goes into the lungs, and there comes in contact with oxygen. It is from this circumstance that a much less quantity of oxygen is absorbed, whilst a greater proportion of gas disappears. But during abstinence, the blood which goes to the lungs is less sugared, or none at all.

In some diseases, the blood ought to be less fit to absorb oxygen; this, according to all appearance, takes place in *diabetes*. We know that M. Rayer has observed that in cholera the blood becomes less *scarlet* when in contact with air. We have seen that oxygen is absorbed, even during the incubation of the spawn. However, in mammiferous tribes, the fœtus not being in contact with the air, there it appears to have an exception. The lung, which has not yet taken on its formation, is replaced by the placenta, which is the means of communication between the fœtus and the mother. In the fœtus, the arterial and venous blood have the same color, but a color intermediate between these two kinds of blood. Fourcroy had remarked, that during intra-uterine life *the blood of the fœtus* was not *always equally susceptible of becoming scarlet by the contact of oxygen*, consequently not always in a suitable state to absorb this gas.

We can place by the side of these facts the researches of M. Bernard, who has found that the blood of the fœtus which contains sugar up to its birth, ceases entirely to contain it when it has begun to absorb oxygen.

M. Bernard has also verified by some experiments that the sugar in the blood diminishes the absorption of oxygen. He exhibits two tubes, or syphons, with various divisions, each filled with the same quantity of blood, that he has taken away from the jugular vein of a dog, with the precaution to draw this blood with a syringe, and to introduce it

under mercury in order to avoid the contact of air. In one of these tubes he has put a small fragment of grape sugar not dissolved; he then agitates, in order to mix the blood with oxygen, and to see if there should be a difference in the absorption. In the tube not sugared, there were, at the moment of the agitation, 14 divisions of the oxygen absorbed; in the tube sugared, the absorption was less, 12 divisions only were absorbed. When the sugar had subsided, it was agitated again, and then 11 divisions were absorbed in the tube not sugared, whilst there were only 8 in the tube sweetened. M. Bernard, in order to vary his experiments, took some blood from the vena porta, which is not, and some from the sub-hepatic veins, which always is, sugared. The result was the same; the blood of the hepatic veins absorbed less oxygen. These experiments, so well conducted, confirm the other observations.

MM Regnaul and Reze have made some experiments in another point of view. M. Bernard examined those which concerned the question with which he has been occupied. In the work which these *savans* have published, they state that rabbits, nourished with their ordinary aliments, which are very sweet, offer, from 100 parts of oxygen absorbed, 91.9 expelled carbonic acid, and that 8.1 remain in the animals; these 8.1 parts which are kept, constituting only a very feeble proportion. If, on the contrary, the rabbits were fasting, from 100 parts of oxygen absorbed, 69,0 appear in the carbonic acid, while 31 remain in the animals. The cause of this difference is attributable only to the fact that in the first case the blood was charged with sugar. The same experimenters have continued their researches with animals submitted to an *aliment containing no sugar*, which constitutes a kind of counter proof. Some dogs were put upon the use of meat only, and during their digestion they were placed in an appropriate apparatus. From 100 parts of oxygen absorbed, 75.2 have re-appeared in the carbonic acid; 24.8 have been kept by the animal. If the dog was nourished with bread, 91.2 re-appeared in the carbonic acid; 8.8 remained in the body. If the dog was fasting, we find the same condition as with the rabbits fasting. But here is another case: it is that in which *an alimentation diminished the production of sugar*. For M. Bernard has shown that alimentation by *fat* hinders this production. A dog, having been nourished with fat, or grease, and placed in an apparatus, rendered only, from 100 parts of oxygen absorbed, 69.4 in the carbonic acid; 30.6 remained in the body. This animal was found, then, in the condition of the rabbits submitted to abstinence. The more there is of sugar in the blood, therefore, the less there is of absorbed oxygen, and the more oxygen appears under the form of carbonic acid.

It remains to ascertain why there is relatively more oxygen during abstinence and less during digestion. During the latter, there seems to be formed a kind of *emmagasinement*, which renders, perhaps, the oxygen less necessary. Some have observed, moreover, many varieties of secreting phenomena; for example, in certain animals that can take a great quantity of food, the urine, during digestion, is troubled, alkaline, and contains an abundance of carbonates; whilst during abstinence it is clear, and urea is in greater quantity. There is another substance which is found normally in the blood, which acts in an inverse sense to the sugar, and which augments the absorption of oxygen; it is the *chloride of sodium*. In order to demonstrate it, M. Bernard has made the following experiment. He took some blood from the jugular vein by means of a syringe, and put it into two gauges. In the one, he had some pure oxygen introduced under mercury; in the other, some oxygen, with a feeble solution of chloride of sodium. In agitating the two mixtures, the first absorbed 32 parts from the 100 oxygen, and the second absorbed only 20.

But with animals submitted to a saline alimentation, if we suppose that, in their respiration, there is a greater proportion of oxygen absorbed, can we confirm it by any experiments, as has been done with sugar? Some researches have been made by M. Boussingault upon saline nourishment; others by M. Barral; more recently, MM. Magendie and Rayer, in a commission instituted by the Minister of War, have administered to horses some strong potions of salt. But these studies have not been undertaken with reference to ascertaining the quantity of oxygen absorbed in respiration. We are therefore left to invoke *analogy* and *reasoning*. When a notable quantity of chloride of sodium is taken, the appetite is augmented, and animals find themselves, probably, under the *rapport* of the absorption of oxygen, in the condition of those who are fasting; this state ought to be only temporary; the salt traverses only the blood, and is evacuated by the urine. We have seen, on the other hand, that the *urea*, during abstinence, shows itself in greater proportion in the urine, and we know that it is a result of nutrition; as in giving salt to an animal, we augment the production of urea; being in an analagous condition to that of absti-

nence, it absorbs a greater quantity of oxygen. M. Boussingault has examined the question under the connection of *engraisement*. He believes that in augmenting the appetite by salt, we ought to fatten animals. But good forage sufficiently augments the appetite; the salt is only necessary to induce them to eat that which is damaged. The appetite comes when the blood has the property to absorb more oxygen. If a determined ration is salted, the animal will consume more oxygen; he will respire more strongly, his assimilation will be more active and more complete; but the nutritive want will be augmented, and he will then become emaciated, because his food is destroyed with too much action, and it will end by using its proper substance. It is thus that an *herbivorous* animal fasting, in using his blood, becomes, in some sort, *carnivorous*.

Why is oxygen absorbed in a greater quantity by salted blood than by sugared blood? Do the red globules play a *rôle*, in this respect? All that we can say is, that under the influence of salt these globules become smaller and flatter. We see, with regard to sugar and salt, some phenomena connected with *obesity* and *emaciation*. In effect, sugar, in diminishing the assimilation, ought to be favorable to obesity; and it is certain that feculent substances fatten. The chloride of sodium produces an inverse result; if one takes very much, he emaciates, too much oxygen enters into the blood. In making animals eat greasy substances, they do not fatten, but they emaciate, as M. Magendie has said, which proves that, in order to produce *obesity*, it does not suffice to introduce into the economy substances identical with those which we wish to accumulate there. It is necessary that these substances should act in a certain manner. There exists, without doubt, in the blood, some *other substances* less important than the sugar and the salt, and which, moreover, doubtless perform some part in absorption. Medical substances which serve the medical art are not probably without having some influence upon the absorption of oxygen by the blood. The continuation of similar studies cannot fail to have its application in medicine; for if, in the normal state, it is necessary to have certain qualities in the blood, in order to absorb oxygen and sustain life, we shall see that when these conditions cease to exist in the blood, this absorption is troubled, and life can be compromised. But more anon.—*Boston Med. and Surg. Journal.*

RESEARCHES AND OBSERVATIONS ON SCROFULOUS DISEASE *of the external Lymphatic Glands. With cases, showing its Connexion with Pulmonary Consumption and other Diseases.*

BY THOMAS BALMAN, M.D., M.R.C.S., ETC.

"Very nearly three years ago," Dr. Balman observes, "I suggested to one of my colleagues, that each of the honorary surgeons to the Dispensary should be at liberty to select some particular group or class of diseases as his speciality, and that the cases belonging to such group occurring in the practice of the other surgeons should, as far as might be agreeable, be transferred to the care of the surgeon who had adopted this particular speciality. In this request all my colleagues readily acquiesced: hence the origin of this inquiry." Dr. Balman was thus enabled to note the particulars of 141 cases of scrofulous enlargement of the external cervical glands, which he did according to a fixed form; and the results are presented numerically and generally in the volume before us.

The first chapter is headed "Histology of Scrofulous Affections of the External Glands," and inquiries into the temperament most commonly prevailing in the scrofulous constitution; the ages of the patients; the regions of the body most frequently affected; the probable causes; the connexion between scrofula and phthisis; and "the diseases occurring in the parents and relations, some of which have been supposed to be sometimes associated with the strumous habit." This chapter contains, therefore, the etiology and pathological relations of the disease; consequently, we are puzzled as to what can have induced Dr. Balman to head it with the title "histology," unless he has thought that term and "history" synonymous. That he does not know the meaning of the word is obvious, however, or he would never have used it so misappropriately. We will give a brief summary of the facts arrived at: There were 90 males and 51 females: 34 per cent. of these had dark hair and complexion; 73.76 per cent. were aged from 2 to 15 years, and only 2-84 per cent. above 30. But about one-tenth of the whole were obtained from different charitable institutions or schools; and all those (comprising a greater number of adults than of children) who could not give the necessary information as regards their family history were excluded. This appears to us to have been a mistake on the part of Dr. Balman. The mere fact of occurrence at a certain age has no necessary connexion with the family

history or with hereditary predisposition;—we therefore think that he has restricted his numerical inquiries on the *general* points of age, sex, temperament, &c., very unnecessarily, by taking in the additional element of family predisposition. It is obvious, at a glance, how this circumstance wholly vitiates the general conclusions which might have been otherwise deducible from Dr. Balman's tables. As to the region affected in the 141, by far the greater proportion (83.69 per cent.) had disease of the *cervical* glands alone. The axillary glands were diseased (as well as the cervical) in 6.30 per cent.. the inguinal in 4.20, and the glands above the elbow in 4.97 per cent. As to the causes; in 55.45 per cent. they were not evident; infantile fevers were assigned in 23.40 per cent.; exposure to cold and damp in 14.18 per cent. Dr. Balman "purposely omits many of the external causes which are well known to act most injuriously in persons predisposed or otherwise to scrofula—such as bad air, deficient or unwholesome articles of food, defective ventilation, or deprivation of exercise, because "they have already been so ably discussed by Mr. Phillips, as to preclude the possibility of my adding any thing to what he has already recorded"—just as if the play of "Hamlet" were to be played with the Prince left out, because the character had been already so admirably represented by Kemble.

The hereditary connexion between scrofula and phthisis pulmonalis, is, in fact, the chief object of Dr. Balman's inquiries. This is shown in Table 5, from which it appears that in 9 cases (of 141) the father had died of phthisis, in 11 the mother; in 11 the paternal grandfather, in 17 the paternal grandmother; in 9 the maternal grandfather, in 20 the maternal grandmother, and in 99, uncles and aunts (on both sides) had died of phthisis. This table is interesting as far as it goes, but it is doubtful whether it shows the full extent of hereditary predisposition derived from the parents and collateral branches. The large proportion of *young* cases points to the probable circumstance, that the parents of *some* had still to become the victims of phthisis. Dr. Balman would have increased the value of his table very considerably, if he had had columns showing the numbers of *cousins* affected with struma or dying of phthisis. From inquiries as to the liability to phthisis (or "consumption") of persons born of phthisical parents, Dr. Balman found that in 20 instances in which the grandfather died of phthisis, it was transmitted in 13; and in 37 instances of the grandmother so dying, it was transmitted in 14. This result corroborates in some degree those arrived at from inquiries at the Brompton Hospital. As to consumption occurring in families as a companion-disease to scrofula, Dr. Balman found, of the 141 cases he investigated, that in 30 there were no ascertained family deaths from phthisis; in 60, in one branch only; 40, in two branches; 9, in three; 1, in four; and 1, in five branches. The general infirmity of constitution renders the scrofulous liable to other diseases of a grave character. Thus in 27 there were 18 deaths of father or grandfather from apoplexy, paralysis, or epilepsy; out of 27 on both sides, 6 grandfathers and 1 grandmother died of insanity, 5 of the latter of cancer, 3 of the former of stone; in all instances, a much larger ratio than occurs in the general population.

We pass from Dr. Balman's not very satisfactory statistics, to his more satisfactory pathology. On this head, his views are those of Phillips, Glover, &c. He has submitted *blood* taken from strumous persons to microscopic examination, and the only deviation from the healthy condition which he has been able to make out, is an unusual increase in the number of the normal colorless corpuscles. He has "very frequently counted as many as sixty and eighty in the field with a fourth-of-an-inch object-glass, whilst ordinarily only five or six are observable. They appeared very variable in size, some being less than half the size of the colored corpuscles, whilst the majority exceeded the blood-discs in diameter." He has found the *urine* of the strumous to average about, sp. gr., 1.012, and "it had often a strong odor of cod-liver oil in cases where this medicine had been taken for any length of time." In 19 (of the 32 cases in which the urine was examined,) he found octohedral crystals of the oxalate of lime, the average specific gravity being 1.020. Of the 13 remaining cases, 4 showed the phosphates in excess; 2 of these had very large glandular swellings excited by syphilis; in the other 2 these glands had suppurated. With the laudable view of testing the value of the oxalate-urine as a pathological indication, Dr. Balman examined the urine in various other diseases. In 117 instances of this kind, the oxalates were present in 16, unmixed with any other deposit, in 26 mixed with lithates, in 3 with phosphates: 21 cases of phthisis gave 10 with oxalates; 12 "affections of the skin" gave 8, of these 4 were cases of *impetigo*. Dr. Balman did not find any unusual frequency of the oxalates in dyspeptic cases. From these researches it would appear that the oxalate of lime occurs more frequently in the urine of the strumous, than

of those affected with other diseases. Dr. Balman makes the proportion to be 74 per cent. to 38 per cent.; but it is manifest that if phthisis and impetigo be deducted from the instances of general disease and added to the strumous, we should have a somewhat different ratio—namely, 64 to 32 per cent. Dr. Balman found the oxalate deposit showing itself in strumous cases, "for weeks or more, commonly for months, uninfluenced by diet or medicines of any kind." This he ascertained by careful and repeated experiment and observation. He also found the oxalates more abundant in the urine passed at night, than in that of the morning. As the health became more and more deteriorated, and the powers of the system reduced, the earthly phosphates appeared, the oxalate of lime being then seldom met with. On the other hand, as the health became re-established, the urine ceased to exhibit traces of the oxalates.

Dr. Balman devotes his third chapter to the consideration of the "Symptoms, Progress, Duration, and Varieties of Scrofulous Tumors." His familiarity with the disease is well manifested by the truthfulness of his delineations. We make some practical *excerpta:*

"One peculiarity in these tumors, which I have repeatedly noticed, is the almost sudden variations in size which they appear sometimes to undergo. Thus, after excitement or exercise of any kind, as running or walking fast, they sometimes become distended to twice or thrice their usual size. The same thing, in a less degree, is observable in the morning on getting out of bed, (arising, probably, from some temporary impediment to the return of venous blood from the head and face,) which gradually subsides during the forenoon. One may sometimes notice, too, another feature of interest—that is, the reciprocal influence between it and the healthy and regular performance of the digestive and blood-making process, on the one hand, and the partial arrest or temporary derangement of these functions on the other. Thus, suspend, vitiate, or impair by neglect of hygienic means, unwholesome or insufficient food, the process of digestion, and the disease either increases or remains stationary; remove the person from an unhealthy locality, and supply him with good and nutritious food, and the swelling will in all probability diminish, and the general health corresponding improve." (p. 97.)

It has been remarked by various practical writers, that an external deposit of tubercular or scrofulous matter is apparently prophylactic, in its influence on the system, against the more serious deposit internally in the lungs or other viscera. In a clinical lecture, published a few years ago, (1846,) Dr. Laycock mentions this general fact as probable, from various circumstances. Referring to a case under the notice of his class, he observes:—"She is thin, meagre, and has enlarged glands in the axillæ and neck; and it is well for her that they are there, for I am inclined to think they will be her defence against the tubercular deposit in the lungs; at all events, they will much delay the fatal termination. I have witnessed three or four cases of tubercular phthisis of this kind with the peculiar complexion—(a muddy grey)—the enlarged scrofulous glands in the neck and axillæ, and tubercular deposit in the lungs going on, but very slowly indeed, the patient lingering on from day to day in really a wonderful manner. I see that Dr. Glover, of Newcastle, in his recently published work on Scrofula—a work containing the result of original investigations—states it to be a popular belief that scrofulous cervical glands prevent the internal disease becoming manifest; and he quotes an observation by Sydenham, somewhat like that I have just made. I certainly cannot say I have seen phthisical persons *cured* concurrently with these scrofulous glands; but I am sure their presence in good large masses (and if suppurating, so much the better,) is the guarantee for a prolonged existence to your patient. I have such an example under my care at this moment. How this happens can only be theorized on, but it is not unreasonable to suppose that there is a derivation from the lungs to the glands; that what tubercular matter is deposited in the glands would have been deposited in the lungs had there not been glandular irritation to attract it there. With the humoral pathology the old terms of that pathology will come into use, and we may say, with regard to scrofulous diseases and deposits, *ubi irritatio ibi fluxus*. The old methods of treatment adopted by the old humoral pathologists will come again into vogue; and I cannot doubt that in the gouty and scrofulous cachexies, *derivants*, such as issues, setons, and perpetual blisters, may be, and are, of advantage." (Dr. Laycock's Clinical Lecture on Scrofula, London Medical Gazette, Nov., 1846.)

We have given this quotation at length, because it very accurately expresses the results of Dr. Balman's experience; active scrofulous tumors in the neck or elsewhere, serving, in his opinion, as a safety-valve to the lungs. He details one or two cases illustrative of the prophylactic efficacy of the external deposit, in cases of tubercular

phthisis, and has found a seton below one of the clavicles attended with beneficial results, as regards both the local and general symptoms. Dr. Balman has a theory explanatory of the fact, which is based upon the probable functions of the lymphatic glands. Referring to the resemblance, on several points, between the latter and the thymus, he observes:

"If their function be, as is now very commonly entertained by physiologists, to elaborate and prepare nutritious matter to meet the additional requirements of the system during the active period of growth, when nature is employed in building up the structures, appears in my mind [*sic in orig.*] to go some way in explaining the reason why these glands should be more liable to be affected with strumous disease previous to the age of puberty and manhood, than at any subsequent period of life. The growth of the body being now perfected, the functions of these organs would be simply limited to the maintenance and support of the animal body; and those morbid and heterogeneous products which would otherwise be attracted to the surface in growth, have now a greater tendency to fix themselves in some internal organ, especially the lungs, causing pulmonary consumption. This view is, I conceive, strengthened by some of the remarkable phenomena before alluded to, as regards a certain amount of antagonism between two diseases: for example, external glandular swellings, either whilst gradually increasing in size, or in a state of suppuration, seem to protect the lungs from being invaded with tubercles; and, on the other hand, the presence of tubercles in the lungs is seldom followed by the deposition of a similar product in the external glands." (pp. 109, 110.)

Dr. Balman illustrates the causal relation between syphilis and scrofula by detailed cases, and then points out the influence of other circumstances on the progress of the disease. We do not here find, however, any thing worthy of special notice; and we therefore pass on to Dr. Balman's chapter on the *treatment* of strumous glandular swellings, where we again find nothing novel. The tumors in the early stage should be "dispersed," if possible; and to this end, Dr. Balman recommends "penciling the part lightly with the solid nitrate of silver a few times, at intervals of a week or ten days." When suppuration has taken place, an early incision is recommended, &c. We think Dr. Balman would find constant endermic medication of the tumors useful in an early stage, combined with constitutional treatment. We apply a lotion of the iodide of potassium to the tumors, taking care to keep the pledget well covered with a piece of gutta-percha sheeting or oiled silk, so as to retain the moisture.

Dr. Balman adds what he terms an "Appendix," which is simply the republication of some cases of cystirrhœa, &c., from the "Medical Gazette."

As a whole, we cannot express any decided approval of this work, and we are inclined to think, that as the greater portion had been so very recently published in the "London Medical Gazette," there the few new facts Dr. Balman has brought forward might very properly have found a place. We have no doubt of the zeal and industry of the author, but we think it is obvious that the execution falls far short of the plan laid down, and that the results will hardly bear examination, after the very recent works of Mr Phillips and Dr. Glover, to which he called attention in late numbers of one of our predecessors. (British Foreign and Medical Review, vols. xxii. & xxiii.)—*Medico-Chirurgical Review.*

ANATOMY—CINCINNATI.

The statements published on Monday, in reference to the mode in which the study of anatomy is pursued in Cincinnati, and the extent to which graveyards are invaded for the purpose of obtaining anatomical subjects, are pronounced positively untrue by those who have the best opportunities for information, and we are glad to learn that statements affecting so seriously the character of our medical faculty, have no just foundation.

So far from prompting the outrages alluded to, we learn that the Medical Colleges of this city have for many years been governed by the strictest regulations, designed to prevent any improper disturbance of graveyards or violation of the rights and feelings of the sorrowing friends of the deceased. There are no "gangs" of any kind employed in selling anatomical material, or watching funeral processions from the city; on the contrary, if any individual should bring and offer to a Medical College in this city, bodies obtained in this manner, contrary to their express regulations, he would be regarded as a violator of their rules, and instead of being rewarded or paid, would be punished to the extent of their power.

There are four chartered schools in this city; the Medical College of Ohio, the oldest institution in the city, the Faculties of which have for thirty years or more enjoyed the esteem and confidence of the community, as gentlemen of honorable deportment, and who have never yet been known to be guilty of any impropriety in reference to disturbing the remains of their fellow citizens. It is not possible that they would do anything to degrade a reputation so well established. The Eclectic Medical Institute, the next institution in point of age, has sustained an equally unimpeachable character, as to the deportment of its faculty and students, who, we believe, have never even

been suspected of violating the rights or the feelings of citizens, in the pursuit of anatomical material. Arrangements were instituted several years ago, between the Professors of these two Colleges, designed to prevent the possibility of any improper conduct on this subject. No student, nor any other person whatever, was allowed to engage in the business of bringing anatomical material to the Colleges, excepting the agents officially employed by the Professors in conjunction; the same individual serving both schools, and under a joint responsibility to them for orderly deportment, and obedience to their regulations. The rules for the agent of the Colleges were as stringent as possible; he was required never to disturb any remains interred by private citizens, but to confine himself strictly to bodies of unknown persons who had no friends to care for their remains, and who could not therefore furnish any occasion of anxiety, even if the fact of their bodies being used were publicly known. These rules have been adhered to, and are now in force The more recent institutions, the Cincinnati College of Medicine and Surgery, and the Miami Medical College, at once entered into the general compact, and conformed to the same regulations, and no one who knows the character of the gentlemen composing their faculties, would suppose them any more capable of violating the proprieties of life than the faculties of the other institutions which have established so unblemished a character in this respect.

Under these circumstances, every one will perceive that the remains of the dead (unless they are given up to public use by their friends) are as safe in Cincinnati as in any place in the world. The violation of graves, or the purchase of bodies obtained in any felonious manner, would be more earnestly reprobated by faculties of the colleges than even by private citizens, because they have a much deeper interest at stake; their professional standing, the character of their colleges, and the amount of capital and labor which they have expended in rearing these institutions, are all a guarantee to the public that they would not knowingly tolerate any course of conduct that would have a disastrous and disgraceful effect upon their cherished institutions. In adopting the strictest regulations, they are merely obeying the dictates of prudence and obvious necessity.

All admit the indispensible necessity of the study of anatomy, and we do not see how this important pursuit could be guarded by stricter regulations than those which are now in force, to protect the community from any unpleasant circumstance.

It is exceedingly improper to circulate these Munchausen stories about the Doctors and their pursuits, which are calculated to give a false and needless alarm to many poor invalids, whose remains, in reality, are as safe in Cincinnati as they would be in Westminster Abbey.

If any one wishes to abolish entirely the profession of surgery, let him come out and avow it; but if we must have accomplished surgeons in the hour of danger, let him not decry the study of anatomy, upon which we depend for our surgeons, when that study is prosecuted in the most cautious and decorous manner, as it is in Cincinnati. Indeed, we are informed that the regulations of the schools on this subject are so strict, that it is very difficult for them to procure what they absolutely need for their purposes; and instead of having abundance of material, they are generally complaining of its scarcity. If they would employ resurrectionists to prowl about the country and bring in every unguarded body, they could soon have ten times as many as they need; but none of our established institutions would ever tolerate such a course; and if such offenses are ever committed, it can only be by outsiders who are beyond the control of the chartered schools, and whose conduct would be severely reprobated by the regular colleges.

The public owe a debt of gratitude to the medical profession, who have always stood by them in the hour of peril and pestilence; and if medical schools generally receive no endowment from the State, they ought not be embarrassed in the honorable pursuit of science. There are at this time in the schools of Cincinnati, over four hundred medical students, and a larger number annually, we believe, than in any other western city. The schools which bring this accession to the prosperity and reputation of the city, deserve to be cherished by every good citizen. Louisville gave a magnificent donation to her medical college; Cincinnati has done nothing to elevate the standard of medical education.—*Cincinnati Sun.*

COPPER *versus* CHOLERA.

It is stated that many of the citizens of New Orleans have provided themselves with pieces of copper, about six inches long and three wide, which they carry about them as a sort of protection against the cholera. They have been induced to this course by an alleged discovery by Dr. Burq, of Paris, who states that in certain streets of that capital, as well as in other cities, while the cholera prevailed in almost every other quarter, every coppersmith retained his usual health, and not a cholera case occurred among them. The copper foundries in Paris number thousands of workmen, scarcely any of whom fell victims to the cholera of 1832, or of 1849. But we cannoc do better than to transcribe from the original Memoir by Victor Meunier, an account of this wonderful discovery:

"Dr Burq, says the writer, commenced his inquiries on a vast scale and continued them during five months. In Paris alone, he visited four hundred houses, manufactories, foundries, and other establishments for the working of metals. He corresponded with the officers of various associations of workmen, and especially of blacksmiths, coppersmiths, locksmiths and farriers. He wrote to the heads of similar establishments in all the principal departments of France. Not satisfied with having accumulated a mass of evidence from upwards of 100,000 persons, he applied for further information to England, Sweden, and Russia; to the director of mines of Siberia, from whom he obtained information respecting 46;000 miners; to the cutleries of Sheffield; the iron works of Birmingham; the wire-works of Wales; mines of Sweden and Russia; and finally, having gathered the testimony of more than 300,000 individuals, he addressed a Memoir to the Academy, on the discovery of a means of preventing cholera."

The following are the conclusions deduced from Dr. Burq's observations:

"During the epidemic visitation of cholera in France, in 1832 and 1949, the metals exerted a beneficial influedce on every occupation in which they are habitually used. This influence, which is so palpable as to create surprise at its having been overlooked, is particularly remarkable in those trades in which bronze and brass are much employed. Next in importance are occupations requiring the handling of steel and iron. The protection afforded by metallic substances is twofold and distinct. First, preventive; second, curative. As a preventive, they act doubtless directly through contact, and in proportion to the quantity of metal, and indirectly by close proximity—somewhat like a lightning rod which protects individuals within its sphere of action. The preservative power exists in all the metals in proportion to their excellence as conductors of electricity. As a curative, the power seems vested in copper alone, which would appear to act upon the miasm of cholera, like sulphate of quinine on the miasm of intermittent fever. In one foundry in Paris, numbering 1360 persons, only eight died, and of these one was a drunkard, one an apprentice, two were sick at the period of the outbreak of the cholera, and one was taken on Sunday, while absent from the foundry. Dr Burq concludes from these facts that copper and its alloys, such as brass and bronze, steel and iron, applied directly to the skin, and worn permanently, are an invaluable preventive of cholera during an epidemic."

LIGHT FOR ANIMALS.

We are often impressed with the gross neglect of otherwise intelligent men, in not securing abundant light for animal life. To the animal and the plant alike, and to each and every human being, light as well as warmth is absolutely indispensable. Put a plant in a cellar and it will grow up colorless, flexible, healthless. Put it in a dark place, and yet give it air, and it will hardly do better. Yet people will attempt to bring up animals imprisoned and housed. In some public remarks we had occasion to make, we stated that a pig would not grow, if deprived of light. We soon after met an old gentleman, and he had lived sixty years without discovering the fact, and the first words he addressed to us were: "Well, you told me why my pigs would not grow. Two years ago I put, in a snug place under my barn, six pigs. It was warm but dark, and they were fed through the floor. In the spring I took them out, and they looked like rats. They had n't grown a pound." A farmer of our acquaintance was some time since driving a mare. We asked him how she became blind. He told us that he put her, and two other three-year old horses, into a perfectly dark stable in the fall, and in the spring, soon after they came to the light, they were stone blind. These illustrations show conclusively, that light is necessary to every living and growing thing Our barns are not light enough. Our houses, too many of them, are too destitute of light. Parents pursue a blind and benighted course, when they encourage their children in living housed and imprisoned, when they encourage them in enveloping their faces under impenetrable veils, lest their cheeks should blister. You cannot blister the cheek of a cherry or a peach. Better remember that the ruddy glow of priceless health, and the life and animation that irradiate beauty, can never exist in perfeceion, unless in full and free exposure to air and sunlight. —*Toledo Blade.*

PART III.—EDITORIAL.

ECLECTIC MEDICAL INSTITUTE.

SPRING SESSION, 1854.

FACULTY OF THE INSTITUTE.

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Professor of Medical Practice and Pathology.

JNO. KING, M.D.,
Professor of Obstetrics and Diseases of Women and Children.

Z. FREEMAN,
Professor of Surgery.

J. W. HOYT, M D.,
Prof. Chemistry, Pharmacy, Med. Jurisprudence.

The next spring session of the Institute commences on the first Monday of March, 1854, and continues fourteen weeks. The only fee required for attendance upon the collegiate lectures, and admission to the anatomical hall, is the fee of $20, paid on matriculating. The graduating fee is $20, and the hospital fee for the clinical course, (optional) is $5.

The Institute has, from the first, been more successful (as to the number of its pupils) than any medical college ever established in Cincinnati. Nevertheless, the philanthropic motives which prompted its establishment induced the Faculty, in 1852, to seek a still wider diffusion of its influence and instructions, by abolishing all fees for Professors, leaving only the entrance fee and the graduating fee to sustain the Institute.

In addition to this arrangement for reducing the

expense of medical education, the edifice of the Institute has been improved, and its halls sufficiently enlarged to receive about four hundred students, and a clinical amphitheatre erected, in which students may obtain a course of clinical instruction illustrating Eclectic practice, and giving a practical demonstration of its value.

☞The Text-books recommended are: *Practice*—Newton and Powell, Jones and Morrow, *Pathology*—Williams, Simon, or Allison. *Anatomy*—Harrison, Horner, or Wilson. *Surgery*—Hill's Eclectic Surgery. *Obstetrics*—Meigs, Ramsbotham, Churchill. *Physiology*—Carpenter, Kirkes & Paget, or Dunglison. *Materia Medica*—Eclectic Dispensatory, U. S. Dispensatory, Pereira.—*Botany*—Bickley's Botany. *Chemistry*—Fownes, Gardner, Turner, Gregory. *Dictionary*—Hooper, Gardner, Dunglison.

Graduates of the Institute, or of other respectable schools, are admitted to attend the lectures upon the payment of $5 for Matriculation and $5 to the Building Fund.

The fees must be paid in advance, in *all cases*. Students, on arriving in the city, will call at the office of Prof. R. S. Newton, Seventh street, between Vine and Race.

JOS. R. BUCHANAN, M.D., *Dean*.

The urgent demand for a spring session, to meet the wants of those preparing for the medical profession, has induced the Faculty of the Institute again to offer the usual facilities of the school for medical education, after the close of the present winter session.

The spring session of 1854 will commence on the first Monday of March, and continue fourteen weeks, terminating on the 10th of June. The course of lectures will correspond to that of the winter, in each department. The anatomical course will occupy a greater amount of time in the early portion of the session, so as to complete that subject before the warmth of the season becomes inconvenient. The opportunities in the anatomical hall will be fully equal to those of the winter session, while the smaller size of the spring class will enable each student to have all the facilities desired.

The clinical course will continue as it has been during the present session, and the number of interesting cases by which the pathology and treatment of various diseases have already been illustrated, gives assurance of the future value and interest of that department of instruction.

The prosperity of the Institute during the past session has fully realized the anticipations of its friends, and demonstrates in the most satisfactory manner the cordial approbation with which the liberal doctrines and the general policy of the Institute have been received by the more liberal portion of the medical profession. The number of matriculants at the present time (218) exceeds by about fifty the aggregate number of the matriculants in the three other chartered schools of the city, which are devoted to the old school system of medication, and which have been sustained by the moral influence of the majority of the profession, as well as the liberal patronage of the State to its oldest school.

The halls of the Institute, which have been refitted and enlarged during the past summer, are sufficient to contain about four hundred students, and are scientifically arranged for the purposes of ventilation and warmth. The lectures, which are full and thorough in each department, present distinctly the new remedies, the superior methods of treatment, and the numerous improvements in physiology, materia medica, general practice, surgery, and obstetric practice, which have constituted heretofore the especial attractions of the Institute.

Students who are not aware of the distinctive character of the doctrines of the Institute, or of the singular value of the new remedies and courses of treatment which it offers, are sometimes deceived by very erroneous representations upon these subjects, proceeding from prejudiced, interested, or misinformed persons. A full understanding of the eminently practical and valuable character of the courses of lectures can be obtained only by personal attendance. In view of the numerous misrepresentations which have been made, it may not be improper to refer to the fact that the lectures of the Institute have been attended by many of the students and graduates of other schools. The medical pupils of the University of Virginia, the University of Pennsylvania, the Jefferson Medical College, the Louisville Medical Institute, the Medical College of Charleston, S. C., the Medical College of Ohio, the Medical College at Cleveland, the University of New York, and a number of other highly respectable medical schools of the United States and Great Britain, have attended the lectures of the Eclectic Medical Institute, and in every instance, without exception, have expressed much gratification, and have adopted in their subsequent practice the improved resources thus acquired.

The method of instruction in the Institute does not consist in presenting any exclusive system gov-

erned by a single dominant idea, (such as Homœopathy and Hydropathy;) neither does it consist of a mere compilation and aggregation of doctrines of different schools. On the contrary, the course of instruction presents the entire mass of well-established, positive knowledge in the departments of anatomy, physiology, pathology, chemistry, materia medica, general practice, surgery and obstetrics, which constitutes the body of medical science, as taught in respectable schools. This knowledge is imparted in an efficient manner, by clear, practical lectures, with suitable illustrations, demonstrations, and experiments, enforced by regular examinations of the class. Hence, whatever may be the peculiar views of the student as to medical doctrines, it will be difficult for him to find a better opportunity for becoming acquainted with the extensive and intricate science of medicine, or for acquiring that intimate and thorough familiarity with its principles and practice, which is so necessary to enable the young practitioner to command the confidence of an intelligent community.

At the same time that these advantages are offered for the trivial expense of the matriculating fee, the Institute offers inducements of a far more attractive character to every liberal and philanthropic mind. The highest achievement of the physician, the great aim of the profession, is the successful treatment of disease; and at the present time, when the public confidence in the profession is manifestly reduced; when new medical theories, and even the prescriptions of the nostrum-dealer, encroach so much upon the province of the cautious physician, it is especially necessary that he should prove his superiority by practical success. The extensive improvements in the treatment of diseases, especially those which are usually considered of a formidable character—such as cholera, puerperal fever, scarlatina, bilious fever, croup, dysentery, chronic hepatitis, ulcers, cancer, etc.—and in the selection of remedies and employment of measures not yet generally known to the profession, have produced a remarkable contrast between the results of the practice of the graduates of the Institute and those of physicians who have not obtained possession of similar resources. The average mortality of all diseases among Eclectic practitioners, is less than two per cent., and the average mortality of their cholera patients is less than five per cent. The results of their practice in other prevalent and often fatal diseases, are so much more successful than the average results of medical treatment as to excite no little scepticism among those who are not familiar with the clinical demonstrations of Eclectic practice.

The great practical superiority of the American Eclectic system of medicine does not arise from discarding the old and well-established truths of medicine, to follow the guidance of any brilliant theorist or eccentric devotee to a single idea, but is the product of a close adherence to clinical experience by American physicians during the past thirty years, and the fruit of extensive observations upon the diseases of the United States in all climates, from Canada to Mexico. New remedies (especially from our indigenous plants) and new measures have been adopted to a very great extent, but only in consequence of the cautious and successful experience of numerous physicians, guided by their own observations in practice, instead of the dicta of European authors.

The Eclectic system recognizes a cautious and gradual reform of the healing art, not by rejecting important and necessary portions of the materia medica, but by introducing new remedies and laying aside old ones as obsolete, only when better resources have been obtained; not by rejecting all medicines to use water; not by adhering to a limited number of remedies; not by proscribing all minerals; not by rejecting the antipathic law of cure to adhere to the homœopathic; not by any species of exclusivism, but by adhering to old truths while cautiously and candidly adopting improvements which are sustained by experience; ever bearing in mind that the educated physician has an unquestionable right to form his own opinions of medical doctrines, and that no society or college has any right to prescribe a medical creed to the members of the profession, or to enforce conformity to any doctrine.

WAR AMONG THE OLD SCHOOL DOCTORS.

It will be seen from the extracts from several Journals, which are in this number, what the profession at large think of this matter. It really is a disastrous calamity to the profession, and one that has about "finished up" the Ohio Medical College, as the very few students who compose this class will show. We are informed that it now has the smallest class ever assembled since the year 1825. Gloomy, indeed, must appear the future. Yet, we doubt not that it has all the patronage it merits, and will continue the same unto *the end*.

This College can yet claim (in point of numbers) to be ahead of all the Old Schools (three in number) in this city, and that too without having one hundred students. If all the students attending the three schools were placed in one, the class would not then equal the daily attendance at the Eclectic Medical Institute. If the Ohio Medical

College could not equal our school, the three will be less likely to accomplish it.

The privileges of the Commercial Hospital are still enjoyed by the monopolists, and will be until the Legislature passes some act which will give to every medical student his right. And as we now have before the Legislature, as a part of the unfinished business of the last session, a petition signed by about twelve thousand of our fellow-citizens, it is to be hoped that some action upon this subject will be had; and we have no doubt but an act can be passed which will bear equally upon and benefit each school. This is all we ask, and this we have a right to expect; and no reasonable man can object to such an arrangement. N.

A NEW METHOD FOR OBTAINING PRACTICE.

One of our city physicians (?) who is ambitious to obtain a practice, and anxious to secure the former patrons of the late Prof. T. V. Morrow, has succeeded in obtaining through a *"certain spiritual medium"*—a *"real rapperess,"* a communication from Dr. Morrow, in the form of an address to his old friends, in which he recommends them, by all means, to intrust their lives to this physician (?) and him only, as he considers them entirely safe in his hands; and that if he, in his present spiritual situation, should require the attendance of any one of the profession, of all he knew in Cincinnati this identical one should be sent for, (this may be because he is more spiritual.) Our earthly embodiment was very much disappointed, when he presented this epistle to one who he supposed would at once adopt the advice of Dr. M. on seeing that the only surprise manifested was that he should suppose the one to whom he presented it, was like himself, verdant enough to be duped by any such gull-traps. As he has met with several such rebuffs lately, we are induced to think that he waked up the wrong spirit; or else they, like himself, have but little influence in this city. Now, Dr., try again and perhaps the next may possess a little more *potency*. N.

OBITUARY.

In the death of P. C. Dolley, M. D., his brethren of the medical profession, no less than the large circle of his personal friends, have sustained a severe loss. As a scholar he was thoroughly practical as well as scientific. As a physician, he was a true Eclectic; culling from the wide resources of medical erudition that only which proved by rigid experience to be useful.

Liberal in his sentiments, and ever willing to retract errors and learn the truth, he escaped that bigotry and blind adherence to dogmas which are so apt to fasten upon the minds of medical men. It is a high compliment to the principles of the Eclectic practice, that such a man as Dolley has faithfully adhered to them.

His practice was eminently successful, during the whole of his professional life; at the same time he was never accused of departing from those rules of practice by which he professed to be governed. As a man, a citizen, and a neighbor, his character was without reproach. He was truly a man without an enemy.

Professor Dolley died at his residence, in Elyria, O., on the 7th of September, 1853, at the early age of 32, after a lingering illness. He graduated at the Eclectic Medical Institute, of Cincinnati, at the close of the spring term of 1847. He then settled in Elyria, and devoted himself to a general practice till the winter of 1851–2, when he was called to fill the chair of Practice and the Institutes of Medicine, in the Medical School at Rochester, N. Y. This responsible post he filled with eminent success; but the arduous labors which he underwent, in preparing his first course of lectures, without previous warning, added perhaps to a consumptive predisposition, laid the foundation of the decline which has borne him from our midst.

In the first part of his illness, he was several times brought very low by alarming attacks of hæmoptysis; but these did not return during the last nine months. He spent the early part of last winter on a sugar plantation in Louisiana, for the purpose of inhaling the vapors arising from the boiling cane-juice during the rolling season.—While here, his health improved quite rapidly; and when the season was over he went to Tampa Bay, Florida, where he continued to do well till the hot weather set in, in the spring. Finding his health again failing, he made haste home to die.

A post-mortem examination showed extensive hepatization of the left lung, around the point where he suffered much pain during the hæmorrhage. Several small vomicæ were found in both lungs; the largest of which would probably contain half an ounce. This was near the apex of the left lung.

The whole structure of the lungs was filled with infiltrated tuberculous matter, in a soft state.—There was but very little hard, cheesy tubercle found; but there was not a cubic inch in any part of either lung that was not partly distended with the infiltration.

The bronchial and mesenteric glands were found enlarged and diseased. Wm. T. Parker, M.D.

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THE

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Part 1. Original Communications.

PARONYCHIA.

WHITLOW—FELON.

BY W. BYRD POWELL, M.D., COVINGTON, KY.

Dunglison's Dictionary says, that Whitlow is of "four kinds: 1. That seated between the epidermis and skin. 2. That seated in the subcutaneous areolar tissue. 3. That occupying the sheath of a tendon; and 4th. That considered to be seated between the periosteum and bone. The last three are only different degrees of the same disease. The inflammation generally commences in the subcutaneous areolar tissue, and spreads to other parts."

We cannot agree with this opinion; we think that each of the kinds begins originally in its own peculiar position. Dr. Miller says, in his Practice of Surgery, that there is reason to believe that the worst form of the disease originates in the periosteum, or immediately exterior to it.

Whitlow is a very common affection amongst cooks, nurses, washer-women and the cotton pickers of the South. We have seen able bodied men, disqualified for service for many weeks by Whitlow; and this calamity happens frequently amongst the cotton-pickers, in consequence of the constant exposure of the fingers to frost in this business.

All the forms of this disease are exceedingly painful—tooth-ache is perhaps the only other form of disease that can equal it in severity, and it never produces any thing like an equal amount of constitutional disturbance. The reason is to be sought in the extraordinary expansion of the sensitive nerves upon the extremities of the fingers, and the unyielding character of their integuments and facie. The patient, with a severe form of it suffers, for many days and nights without sleep, from painful tension and throbbing in the part. The attending inflammatory fever is sometimes severe, particularly after the formation of pus, which is always an early event in its history.

In those in whom the absorbing system is rather slow or dilatory, or the exhalent is active, the swelling extends to the back of the hand and sometimes the whole of the fore-arm, and attended with considerable heat and redness. The deep seated varieties of this disease are not only always attended with much suffering, but of much danger to the integrity of the affected member, more particularly in an inactive absorbing system; the bones of the articulations become carious, the tendons slough away, and amputation becomes indispensable. In more favorable constitutions the part may not be destroyed, but rendered deformed, anchylose and useless. In these remarks we suppose the malady to be neglected or maltreated, or to happen in very strumous constitutions.

TREATMENT.—Dr. Miller's Surgery teaches that, "At the out set, active antiphlogistics, locally and generally, are to be employed—copious leeching, fomentation and poultice, purging and antimony—with the hope of arresting suppuration. Failing these, there is no relief to suffering, and no means of arresting serious destruction of texture, but by early and free incision," which Prof. Dunglison's Dictionary says, should be carried to the bone if the disease be supposed to be seated about the periosteum.

The preceding, or its equivalent, is the only practice we have ever seen recommended for the cure of this painful affection; and a few words will show that it must be as it usually is, very ineffectual.

General or constitutional treatment can only effect the general consequences of the local affection, because of its distant removal from all of the great centers of constitutional action, and in consequence of the dense and unyielding character of all the

tissues that constitute the seat of the disease—as little can be expected from the local treatment recommended, as from the constitutional.

We do not remember to have ever tried this practice, but we have seen much of it that either was or had been in the hands of others, and the results were never such as to induce us to try it.

The fundamental principle of our treatment we obtained from Prof. Dudley, when a student in the University at Lexington, Ky., but our applicaton of it, which in twenty-eight years has been quite extensive, so far as we know is entirely our own. Our unfailing success with it has urged us to place it before the public.

In order to render our treatment the more perspicuous we shall divide the disease into three stages; the *incipient*, *advanced* and *suppurative*.

THE INCIPIENT STAGE—This comprises the first few hours, or even a day or so, depending upon the activity of the disease; the patient, however, complains of pain and soreness in the part—thinks it possible that he may have pricked it with a briar or a splinter. If at this time, or even shortly after its true character shall become suspected, our practice is, without any concern as to whether it is superficial or deep seated, to apply a roler of thin muslin, made wet with thin plain paste, and as the part is not at this time much swollen, we are careful not to apply it so tight as to be uncomfortable, because it will become so, in a short time after the bandage shall become dry and unyielding. When the capacity of the bandage shall become thoroughly filled by the advancing tumefaction, considerable pain will be experienced for an hour or more, or until reaction shall have commenced, and then there is no more pain, if the application have been properly made. We are now supposing the constitution to be an ordinarily active one, but when it is of a contrary character, the period of pain may be much extended. The bandage, however, is not to be removed until the cure is effected. To mitigate the violence of the pain, narcotics or stimulants, or both, may become requisite, at least, advisable.

As moisture will soften and relax the bandage, when prepared as above described, and thereby render it unequal in its pressure, and consequently mischievous in its application, it is far preferable for those whose obligations require that the afflicted part shall be exposed to wet and moisture, indeed it is indispensable that the character of the bandage shall be such as to resist the influence of water. In such cases we merely use a wet roler, and when it shall have become dry on the part, we saturate it with a thick alcoholic solution of gum shalac, which renders it not only water proof, but so hard and unyielding that no ordinary accident can hurt the part—it forms a complete protection. With a finger thus dressed, a negro can return to the cotton field, and the cook to her kitchen and slops, and continue their respective duties. In healthy constitutions this application will usually conquer the disease in twenty-four hours, but it is always best that the bandage should be worn for several days longer than the patient may think it necessary.

ADVANCED STAGE—The part is now so swollen and so excruciatingly painful that the patient can neither eat nor sleep, nor yet be still in any position. Suppuration may or may not have commenced—the fact cannot certainly be ascertained, and if it could, the treatment would not be modified. In this stage, the bandage being prepared as before stated, must be applied with considerable force, which can be readily done with very little pain, by taking the finger into the hand and gradually forcing the blood out of it, before applying the bandage. As it is now more difficult to establish reaction than it was in the first stage, the pain resulting from an arrestation of the pernicious action of the part, will be, possibly, more secure and protracted, but reaction is finally established—the pain ceases, and in twelve or fourteen hours the bandage will have become so loose as to require a readjustment, which may become necessary two or three times before a cure is effected. Suppuration had not commenced as the sequel demonstrates.

SUPPURATIVE STAGE.—When the physician first sees the patient, he discovers that the malady has been neglected, or that it had refused to yield to the treatment that had been adopted, for he discovers that the suppurative stage is unquestionably established. The bandage is applied as in the second stage, and as in that stage it may, in consequence of an absorption of effused serum, become loose and to require adjustment. In establishing a change of action in the part at this time, the pain will become as nearly insupportable as possible; but in several hours it ceases, and in a day or two the pus may be discharged by the point of a lancet or a needle, and in a few days more the part is well. After the escape of the pus, the bandage should be continued, but a little hole should be made into it, to admit the escape of the pus that may be produced.

That the reader may be prepared for what he may probably have to treat, in the course of much medical practice, we will introduce

the first case we ever treated in the third stage by our practice, and the worst case we ever saw:

Mr. E——, a jeweler, of rather a lax fibre, was attacked with Paronychia in the palmer aspect of the thumb joint of the right hand. In the advanced, and also in the earlier part of the suppurative stage, several of his medical friends advised him to have an incision made into it; he refused, and persisted in refusing, although he was assured that he would loose his thumb if he did not. His response to all their importunities was, "Dr. Powell can cure my thumb without an incision, and I will wait till he comes." (The writer was in a neighboring village, but daily expected to return.)

The thumb was swelled to about six inches in circumference—contained pus, and was exceedingly painful. We applied the bandage pretty tightly, the pain became so greatly increased, that we gave him during the night, (the dressing was applied after dark a little while,) four grains of opium, (morphine was not then known,) and a pint of French brandy, without producing either stupor or undue excitement. On the next morning he was clear of pain; by the evening of the next day the pus appeared near the surface and was discharged, and in a week more the thumb was well—without stiffness or deformity, and so continued twenty years to our knowledge.

In some instances the hand and fore-arm become much inflamed and swollen. We had one case of this kind in a lazy and scrofulous constitution, in which we had to bandage all the fingers, the hand and the arm to the elbow; under any other treatment we are persuaded that the finger would have been lost.

General Treatment.—It must now be remembered that the general treatment universally prescribed in this form of inflammation, consists of "purging and antimony." In all cases of the Phlegmasia, of a favorable character constipation of the bowels attends the inflammation, and when the contrary is the case the prognosis are unfavorable. Now is it proper for us to do that, under the circumstances, which the *vis medicatrix natura* would not do, if it had the power to do the best? If constipation pretty generally, in good constitutions, succeed to important injuries and to the fever consequent upon inflammation, should we infer that it is in obedience to a law which we should obey and not violate? We hold this to be a vital law, and one that demands of us the most strict obedience.

Obstruction or cause of disease has become lodged in a part, and the ordinary power of the part cannot remove it—a tax is levied upon the system, or parts of it that can least bear it—the power of their functions is reduced, and for what? To enable other parts to expel a cause of disease. In other words, no system can maintain two superior or major actions. When, therefore, it becomes necessary that the power or function of the arterial system should become increased, that of the bowels must be decreased. In purging, do we not diminish the action of the arterial system? This is not equalizing the circulation—it is drawing it to one particular part from another particular part. In giving antimony there is more good sense, because it diminishes arterial action and does not increase in any other one part, but enables the capilliaries to empty themselves. Is it not notorious that fractured bones are sometimes prevented from uniting by purging, bleeding, starving, &c? If a full habit and an empty one, or anemia, be both opposed to recuperative action, who can, who has discovered the desirable intermediate one point?

In view of these considerations we would suggest that unless there exists the most satisfactory evidence that the alvine contents are producing general irritation, it is the best to let them alone; and in the case before us, nauseants can do but little good. The patient has too much pain to eat, and hence the digestive system can spare some of its functional power to aid the arterial to remove the cause of disease out of the finger. We have never as yet discovered in this form of disease, any need of constitutional treatment, further than to lessen the animal sensibility for the time being.

Precautions—We have had to treat cases of this painful affection in both sexes, in almost all ages, and in all its stages and varieties, and yet we have not had necrosis, anchylosis or deformity to result in a single instance. But as simple as the treatment appears to be, and really is, it requires some practice and considerable care to apply, properly, the bandage, more particularly in the second and third stages; the pressure it makes must be equal at every point, and it should always be extended from the extremity of the finger to its junction with the hand. The greatest care should be observed to render the pressure unyielding about the extremity, otherwise, strangulation and sphacelation may be the result.

The physician will find it very difficult to secure obedience from that class of persons who are the most frequent sufferers—servants—those in whose calendar the *present tense* alone is to be found, more especially when the organ of animal sensibility is much developed. When reaction in the part

is being established, the pain is very considerable, and to obtain present relief they are very apt to remove the bandage, and thereby, as we have generally thought, render the case worse than it would have been if it had not been applied. The most obstinate cases we have met with, have been amongst the German and Irish servants; and yet we never had a case to continue to disqualify the patient for business as many weeks as we have known the usual treatment to require months, and then possibly a joint is amputated.

Modus Operandi.—We have never known a case of this disease to occur in those who possess a dense and active muscular fibre—those whose tissues, generally, are firm and resisting. When the cause of the disease is lodged upon such a tissue, whether by cold or mechanical violence, the surrounding resistance forces depuration and it is removed, and as this cannot be effected in lax tissues the bandage furnishes the necessary resistance—it does for the part in the first and second stages, what it could not do for itself. This reasoning satisfies us, but it may not others; nevertheless, it is certain, that no further capillary engorgement can be effected in the part, consequently there can be no further increase of congestion or swelling—the morbid process is arrested, and recovery must succeed.

The application of the bandage in the third stage is equally felicitous; it increases the pus-forming destruction of tissue, and thereby promotes incomparably more than poultices can an egress of the pus; and when this is effected, it forces the walls of the abcess into contact and thus effects adhesion, and consequently an avoidance of the tedious process of granulation.

We have said that the bandage promotes the pus-forming destruction of tissue, but this is only true in a qualified sense. Under the operation of the resistance, the distance to be broken down is short, and the work is effected in a direct manner; hence, in the abstract, the quantity of destruction under the usual treatment is probably fifty times greater before a cure is effected.

The usual treatment is not in harmony with what nature would do, but with what she is forced, by her weakness, to do. The capillary invasion, effusion, tumefaction and suppuration are all consequences of the defective resistance. Purging reduces, generally, the power of resistance, and poultices relax it locally, and consequently promote a more extensive and wide spread suppuration. The knife gives relief by a destruction of the resistance, whilst the bandage does it by so increasing it as to thoroughly arrest the invasion. The former procrastinates recovery, promotes a waste of structure, and finally hazards the safety of the part, while the latter abridges suffering, a waste of tissue, and the final hazard.

SCORBUTIC DIARRHEA.

BY E. WALKER, M.D.

The Eclectic Medical Journal is considered the chief repository of new matter, as well as a medium for the dissemination of knowledge and interchange of views and opinions relative to the different modes of practice adopted by Eclectic practitioners in different portions of the United States—a spirit so diametrically opposed to that manifested by editors in general, that I venture to transmit to you for your consideration, my experience in the treatment of a disease upon which I have never seen an essay, and in fact, concerning a disease of more general prevalence than most practitioners are aware of; and also not among the less formidable of diseases at the present time.

The plan of treatment here given, will be somewhat peculiar, though it has been in my hands entirely successful, and my experience has not been very trifling. As its name indicates somewhat of its nature, any one familiar at all with medical works will have no severe task in at once recognizing the principal cause of the malady, though, on examining a case, would be liable to confound it with another disease very common in this country, and which is sometimes very difficult to manage also, or would overlook this entirely, and treat a case of Scorbutic Diarrhea for one of Dysentery. One circumstance which renders this disease of more than usual interest now, is the fact not only of its resemblance to Dysentery, but that many return from California who have contracted it there, and but for the distinction made between the two, many would be very liable to overlook a very important point in the treatment of the Diarrhea which would not be of vital importance in the treatment of Dysentery—meet with serious disappointment—loose confidence in remedies which heretofore had been reliable, and not know the cause of such recreancy, and what is worse, very likely to loose their patients.

In well marked and uncomplicated Scorbutic Diarrhea, the following history of the case will be generally obtained, and the following symptoms be found present:

At the commencement there is Diarrhea, which of itself is not peculiar enough to arrest the attention of the patient—a mere looseness of the bowels, which, however, continues several days, or for three or four

weeks; but unlike the common summer complaint, for which it is mistaken, does not yield readily to common domestic remedies, and may continue for several days without materially affecting the patient's strength. Gradually, however, the discharges become tinged with blood, scarcely sufficient at first to attract the patient's attention, but increase when he applies for medical advice; after, perhaps three or more weeks have elapsed, and the patient has become very much emaciated, but yet has sufficient strength to walk about, and where he is very ambitious, follows his occupation.

On examining the case, if no mercurials have been taken, there will appear far back upon the tongue, a patch of fur pointing forwards, about three fourths of an inch broad at its base, and of a dark or yellowish brown color, which being not more than three fourths of an inch in length in some cases, is not noticed by them, and in fact, are apt to think, and even say, (for many of our eastern and southern men have an idea of the appearances of the tongue in these cases,) that they are "right enough otherwise." The skin is rough, harsh and dry—no appearance of perspiration upon the surface since the attack—urine increased in quantity, and no morbid appearance to them otherwise, but it has a kind of frothy appearance when voided, resembling that of a dropsical patient. In the locality where I saw this disease and treated it, typhoid fever prevailed at all seasons of the year, and some of the symptoms of typhoid were as distressing as I ever witnessed in cases purely typhoid, while the patient was yet able to walk about. The distress—a sense of weight, aggravated by pressure over the epigastric region. There was no augmentation of the suffering by pressure over the hypogastric or iliac regions, but a throbbing sensation in the region of the umbilicus and lower down, and a sense of weight or heaving which was often severe enough to awaken the patient out of sleep; the muscles of the abdomen were sunk in and very tense when felt—hard and inelastic. The appetite is not generally impaired, but the digestion is very imperfect. Sometimes there is a craving appetite, and patients say they crave every thing they should not have—pickles, fruit and every thing of an acid character—usually drink a great deal of water. The pulse somewhat feeble, though is not small—wiry as in typhoid fever, until more of the true typhoid symptoms make their appearance, which I have known supervene in numerous instances, and why they should not be developed more generally during the course of the Diarrhea is more of a query to me, since no better condition to its development could possibly exist, than is produced by a constant drain from any of the great emunctories of the system. But the only paradox existing, is the fact that these enormously large and long continued discharges before described, do not produce more prostration—make a greater impression upon the system than is found to exist. There are other complications, and indeed would suppose that any prevailing epidemic in any locality might supervene upon an attack of this disease. In a malignant case of Dysentery, even in this country, that would not yield to the ordinary Eclectic treatment, especially where the history of the case revealed any exposures to the causes of this disease, I should be inclined to suspect more or less of a Scorbutic tendency, which, in fact, was the manner of philosophising that led me to the true pathology of it in the first place, when I changed my course of treatment, and was successful. From the history of what was denominated "Mexican Diarrhea," a few years ago, and the circumstances which surrounded our soldiers while there, exposing them to the vicissitudes of weather incident to a climate different in almost all respects from the one they were all accustomed to, I am inclined to believe that was nothing more than Scorbutic Diarrhea, and certainly it was very fatal, as all, or nearly so are aware, many died there—many after returning; though, having never seen a case, do not know as the two should be considered identical, but there are certainly many points of analogy, both in history and the fatality which have accompanied both, if the "Mexican Diarrhea" has been reported correctly.

A gentleman related a case to me during the past summer, of a soldier who returned from the Mexican war in 1846. He was from Memphis, Tenn.—was discharged from the service in consequence of his inability to perform duty, and returned home. He was treated for several weeks by the ablest physicians there, without success. He made up his mind that he would soon die, though not from what his physicians told him, but probably from his own knowledge of the disease, in carrying off his fellow soldiers in Mexico. He became desperate and determined to "sell his life for more than it was worth," to him in this situation: ordered a servant girl to go to the corn-field and procure some corn, boil it with beans and make a soup. This he had craved from the time corn was large enough to boil or roast, but which was positively forbidden him. The girl made the soup after his directions, and he ate nearly a quart; his

friends remonstrated in vain. From this time he became his own physician, and a few more such prescriptions restored him to health!

I would not, however, recommend this in as large doses as he took it, but would certainly rely upon vegetable food exclusively, with a hope of restoring a patient, rather than upon remedies that are most commonly relied upon. A large majority of the inhabitants of California at present are miners, who from necessity partly, are compelled to adopt a course of living similar to that of the soldiers in the war, and which too in many instances, is very unwholesome, especially their meats, are tainted, and the culinary operations are conducted by themselves; the bread they eat is very heavy and indigestible. This much history would be sufficient for me to suspect a scorbutic tendency in the system, more especially where the symptoms were of an inveterate character, and resisted the ordinary means of treatment, for diarrhea or dysentery. First in the treatment is equalizing the circulation by means of the alkaline bath, alternated with the vinegar bath; or the latter may be used twice or more in the interval of bathing in the alkaline water, which should be resorted to at least twice a week, though its repetition would in all cases be indicated by the urgency of the symptoms present. This should be nearly simultaneous with the exhibition of the Podophyllin, in doses sufficiently large to purge freely. In the course of six or eight or ten hours, commence with about one grain with four or five parts of white sugar, and followed once in two or three hours, with about half the quantity. Given in this way it will excite emesis, and as soon as this is produced, the desire to go to stool will be overcome, and a marked change will take place in the condition of the pulse; as soon as the discharges from the bowels commence, and as long too as they continue the peculiar fetor of the diarrhea discharges is absent. I have known four or five operations of this remedy, followed by a nearly normal condition of the pulse, and the patients express themselves much relieved. There is generally a great desire for acids, which may be given freely with impunity, if not with actual benefit. Poultices over the region of the abdomen, as hot as can be borne, will relax the muscles, and the sense of weight complained of, will disappear, though the weight of the poultice in some cases, was perhaps two or three pounds. When large enough to not need changing through the night, cloths wet in cold water or cold water and vinegar over the epigastrium will allay that peculiar burning sensation in that region.

About the time the bloody or grumous discharges commence, patients complain of a difficulty in urinating, but which when voided seldom exhibits any signs of inflammation. For this, three or four drachm doses of the Spts. Nit. Dulc. was sufficient to overcome it.

If the disease has been of long standing, there will frequently be a passive state of the rectum, and patients will have great difficulty in retaining the contents of the bowels, especially in the night, or during sleep; they will pass off while they are unconscious of any desire to go to stool, for this I have used the vegetable caustic as an injection, and Nitrate Argentis, (when I could not get the Sesqi-carbonate of Potass,) with advantage. In weak solution, neither had any effect, but when made strong—ten grains of the Nitrate of Silver, or a drachm or common teaspoonful of the mild caustic to the ounce of water had the desired effect, to bring on tonicity of the bowels; a large quantity of offensive matter will be discharged, and patients rapidly recover from this starting point. But I do not apprehend this would have been the effect or result, if there had not previously been a pretty thorough constitutional course of bathing, and regulating the other secretions. I attribute my success, over other practitioners in the same region of country, more to the diet I prescribed, than to the effects of medicines, or in other words, do not believe that the same would have been the result if patients had continued to use the same diet that in my opinion was the cause of the disease, and this is proof satisfactory, that my view relative to the scorbutic taint is correct. Exclusive vegetable diet was prescribed without any salt, and followed out; but in some cases there were allowed fresh beef cooked without salt. Not much of this should be eaten, as it would not be very palatable cooked in this way; but enough to prove to my mind, that there was not the same putrescent tendancy that accompanies "flux" or dysentery. Notwithstanding the discharges resemble those of dysentery, (though if examined closely after standing for some length of time,) there is no disposition to coagulate, nor is there an appearance as if suspended in flocculi, but the blood is mixed as in bloody serum—the bloody portion is a part of the discharge itself.

In view of the universal use made of Opium, Calomel, Acetate of Lead, Kino, &c., by the "regulars," it is deemed proper to notice them in this place, as it also seems in my opinion to demonstrate the truth of a scorbutic disposition in the system. Notwithstanding it has been argued,

with some plausibility too, that the cause has been too slight in many cases to produce any thing like a constitutional affection.—That the deprivation of persons for three or four months of fresh food—meats, vegetables, &c., is entirely insufficient to produce these aggravated and inveterate symptoms, but in this case, how is a line of demarcation to be drawn? As to the exact amount of the exposure or excess necessary to give rise to these symptoms, or any boundary prescribed, any more than there can be between the different pathological conditions of irritation and inflammation. The latter often follows the former, but the precise time or stage, when the former loses its effect or where the inflammation sets in, has never been demonstrated, if indeed it ever can be.

Opiates and astringents are not to be relied upon at all, except opium or some of its preparations occasionally, to procure sleep. Astringents are of little or no use, but given in large quantities procure temporary torper of the secretions along the alimentary canal, but the flood is damed up as it were, and when the gates are opened, the discharges are more copious in proportion to the length of time they have been closed, or to the quantity of matter accumulated behind the constringed orifices, which will fiind an outlet in spite of the most constringing medicines.

The evidences of the administration of calomel, are so well marked, that a person seeing them once, could not be easily deceived in subsequent cases. In consultation with old school physicians, I have frequently been surprised to find patients in so enfeebled a condition—unable in the course of three or four days or less, to articulate a word, whereas in cases without any treatment whatever have presented themselves to me for treatment after two or three weeks and be in a better condition—more vigorous than in as many days after the administration of calomel, with no more favorable circumstances accompanying the one than the other. This drug has a remarkably sedative effect in these cases, as the patients will always say, "after taking the powders, I got weaker," and if any difference, the discharges are less, instead of larger or more frequent. Here, then, we have a peculiar condition of the system—saturated no doubt with saline material, or at least it is believed this element predominates in the blood, and this belief, has been sustained by an extensive experience in the treatment of it, as well as ample opportunity to witness the treatment by others. Upon this supposition, it is very easily conceived how calomel would produce much more marked deleterious consequences upon the system, than when it is administered without the predominance of chlorine—a constituent element of common salt, which is also a constituent element in one of the most deadly poisons—corrosive sublimate. This consists of two equivalents of chlorine, while calomel contains only one equivalent forming the sub muriate of mercury. Acquainted with the chemical composition of the two mercurials, and with the affinity existing between these substances, it is readily understood how this corrosive poison is formed in the human stomach, and why it exerts the influences noticed after its exhibition. It is most effectual in peopling the grave yards, and as inexorable as fate. No remedy with which I am acquainted, exerts so emphatic a destructive influence, without having some legal restriction upon it, and why is there not upon this? I pause for a reply.

Part 2. Miscellaneous Selections.

OBSERVATIONS ON A CASE OF FECAL OBSTRUCTION.

An Extract from a Lecture on Clinical Medicine, by ROBERT CHRISTISON, M. D., EDINBURGH, Delivered in April, 1853.

The occurrence of a singular case of obstruction of the intestines from accumulation of fæces, induces me to make a few remarks on a subject which, though it may appear trite to you, is really one of great importance, and deserving your early consideration as professional men.

When you enter presently on medical practice, you will be surprised, as I was in the same conjuncture, at the exceeding frequency of the habit of constipation among people of easy circumstances in this country. At what period this liability was first observed, and in what cause or causes it originates, are questions which at present I cannot pretend to discuss. But there can be no doubt of the fact, that the infirmity of constipation is extremely common; and likewise, that it often exists without any other constitutional infirmity of special diseases, except what is clearly referable to an undue neglect of the proper correctives. Accordingly, by due attention to the use of fit laxatives, thousands of persons of both sexes in the middle and upper walks of life contrive to live as long, as healthy, and, except for the plague of constantly taking physic, as happily as their more fortunate neighbors.

Prior to the publication of the treaties on purgative medicine by the late Dr. Hamilton, senior, of this city, there is much reason to believe that the use of laxatives was greatly

neglected in such circumstances. But after the appearance of that work in 1818, an important reformation took place in this respect. Indeed, as in all important reforms in medicine, physicians and their patients soon ran to the opposite extreme; and ere long as much harm was done by the abuse of aperient and purgative medicines as previously by the neglect of them. At present it may be confidently said that both errors have been materially corrected. No one denies the great importance and frequent necessity of catharties of all kinds, from the mildest laxatives up to the most drastic purgatives. And on the other hand, most physicians are now satisfied that gentle aperients are sufficient in numberless circumstances in which formerly powerful cathartics were the fashion. Among other observations, too, it has been found that the regular daily use, even of mild laxatives, is not so indispensable a precaution for preserving the health of those of a permanently costive habas had been supposed by many physicians, and especially by many people themselves who were afflicted by that habit. For example, there can be no doubt, that for most people, who, though otherwise healthy, require constantly to use aperients, it is better to open the bowels in this way once every other day only, than daily by a daily dose. But in general you will find an effectual aperient every other day amply sufficient for those who do not augment the bulk of the alvine discharges by superfluous nourishment; andby that system they are much more likely to escape the risk of an irritable or congested state of the intestines arising, which we know to be the frequent consequence of the habitual excessive use of carthartics even of a mild kind.

Some persons, however, have such a horror of aperient medicines, that they cannot persuade themselves to take one oftener than twice a week, or once a week. And, nevertheless, you will sometimes see them keep their health, and maintain their bodily comfort. But, for the most part, you will find it a sound general rule, to insist with such people on a more liberal use of aperients, will enable you to find some one suitable to the constitution of any body, and reconcilable with almost any prejudice.

There are others whose prejudices are unconquerable, and who will not take laxatives at all, though their bowels do not move of themselves above once a-week, if even so often. And it is right you should be aware that this apparently most unnatural and preposterous habit is not of necesssity, and in all cases a habit injurious to health. You will occasionally meet with men so singularly constituted, that they enjoy sound health upon a weekly stool. And, indeed, all perhaps that can be well said of them is, that they are rather to be envied by their fellow creatures, for an endowment which must be frequently found very convenient. But such people sometimes get into difficulties. About two years ago, a gentleman from Wigtonshire, a landed proprietor, attached to agricultural pursuits, and thereof never without free air and exercise, consulted me about a serious difference he had with his medical advisers in the country. Having recently recovered under their care from a severe pneumonia, they made the not unreasonable stipulation, when they ceased to attend him, that he should take a laxative every three days, to correct a constipated habit. To this he demurred, on the very natural ground, that until his late illness, he had enjoyed excellent health for sixty years, although his bowels had been habitually moved all his life only once a fortnight. This gentleman had made a journey of 120 miles for no other reason than to get the question between him and his physicians settled by some competent authority in therapeutics; and, in referring to me for the purpose, he mentioned, for my further guidance, that a neighboring gentleman of his acquaintance, of the age of 70, had told him, that he, too, had immemorially evacuated his bowels only every alternate Sunday, without being able to recollect having ever had an illness. It was scarcely to be wondered at their common experience half inclined them to think that their constitution was the natural and practical one.

Our hospital patient seems to have been of the same opinion with these elderly agagriculturists. Like them, he has had somo experience of his life, being now 74. Like them, too, he has enjoyed singularly good health, being a surprisingly fresh-looking man for his years, notwithstanding that he has passed through severe trials in early life. As a soldier in India he sustained, when very young, a spear wound of the leg, where he has almost ever since, a small open ulcer, which he ascribes to the spear having been poisoned. In the Spanish war he was wounded at the battle of Baossa, in 1811. There are now evident marks of the bullet having passed through him from the left groin, piercing the blade of the *os ilium* in its course. For 2 years he lay in hospital; and recovering with a shortened limb and stiff joint, he was invalided on a pension one and sixpence halfpenny, as a wounded serjeant and soldier of twenty-one years' service. This he has enjoyed for forty-one years. Nor has his wound much incapaciated him; because for many years, and down to his present illness, he had actually worked as a railway laborer. During this long period he lived on his pen-

sion and wages in great comfort and sound health, until, on lately leaving off work, he became liable to constipation. At first his bowels were moved every other day in general, and afterwards seldom oftener than once a week, unless he took physic, which he did seldom. At last the action of the bowels seemed to cease altogether, and he went for four weeks without any evacaution, even though he made occasional trial of a laxative. At the end of the fourth week, a strong dose brought away a great accumulation. After that he had no further evacuation, and it is now three weeks ago. He had again made a few gentle attempts to assist nature; but he did not much insist upon this, because his lodging-house had no convenience, as he said, for a man under physic. During the entire period of seven weeks, he assures us he had no pain or other suffering whatever. But at last his belly got very large, so that his trousers would not button over it; and on this account he applied here for relief.

On admission he had no appearance of any suffering. He seemed a fresh, vigorous, active, cheerful man. He took his food tolerably well; the pulse was natural: and the tongue was only a little furred. "The abdomen," to quote the Hospital journal, "is much distended, especially in the iliac regions, where there are two large prominent swellings projecting laterally, so that the crest of the ilium on each side is quite sunk, the tumors projecting much beyond the bones. There are different irregular swellings at different parts of the abdomen, especially in the tract of the colon. Over some of these points percussion is quite dull; over others it is tympanitic. The circumference of the abdomen, where largest, is 39½ inches."

As it was judged unsafe to give him active purgatives by the mouth at once, in case of the great gut being firmly obstructed with hardened fæces, a turpentine injection was properly administered by the clinical clerk in charge of him. The result was a "prodigious discharge of fecal matter of all degrees of consistence," much of it composed of very hard scybala. A dose of jalap and calomel given immediately after this forerunner, brought away also a great mass of feculent matter. Next day being quite well, but with the abdomen as large as ever, another similar dose occasioned only an ordinary discharge. On the third day, the swelling being equally great, though now quite uniform, and everywhere clear of percussion, I gave him what has always appeared to me the most effectual of all safe energetic purgatives in cases of simple fecal accumulation—two drachms of oil of turpentine with six drachms of castor oil in the form of emulsion. But he had only two scanty loose discharges, and the belly continued in the same state, presenting especially the singular enlargement and overlapping of the iliac regions.

It was now apparent that, owing to long continuous distentions of the bowels with fæces and gases, their muscular coat had lost its tone, in some regions at least, and especially in the cæcum and descending colon. It was then proposed by the clinical clerk to resort to galvanism for relief from this paralytic condition; which suggestion was at once adopted. It is more than 25 years since galvanism was recommended as a useful remedy in cases of obstinate constipation; and we can easily see that it may be useful, and upon what principle it acts. The first way of using it was by directing the galvanic current from the mouth to the arms; and in that way it seems to have been most effectual and prompt in some cases. But its action thus is rather painful; and ulterior observation has shown that passing the current in various directions through the abdomen itself may be sufficient. This remedy seemed even more applicable to the state of our patient after the bowels had been cleared out. And accordingly it acted with wonderful energy and success. After the current had been passed for some time from before backward, as well as from side to side, he had in an hour a copious evacuation, in three hours another, and next morning a third. Flatus was also discharged in abundance; and the abdomen fell greatly, but still not completely, above all in the iliac regions. The pain of the galvanic action, however, had been so great that the patient begged to have a day's respite. In fact, he declared his willingness, and confirmed it with an oath, that he would rather be shot again than submit to be galvanized a second time. On the second morning, however, the remedy was applied more gently, and on two mornings subsequently. He had a daily discharge from his bowels, and sometimes two. The abdomen had now become natural in size and form. Since then he has had a natural evacuation every morning, without aid from either laxative or galvanism. He was dismissed after being fourteen days in the Hospital.

This is a case a little out of the common run, but not without instruction; and I have therefore thought it well to bring the chief circumstances under your notice. It is an excellent illustration of the influence exerted by galvanism over the animal functions. It appears to me to hold out a probability that the same remedy may prove serviceable in restoring the tone of the intestinal muscles, in other forms of inconvenient chronic flatulent distentions of the abdomen.—*Edinburgh Monthly Journal of Medical Science.*

DELIRIUM TREMENS—MANIA A POTU.

BY W. BYRD POWELL, M.D.

EXTRACTED FROM NEWTON & POWELL'S ECLECTIC PRACTICE.

Dr. Watson treats of this disease in company with the inflammatory forms of cerebral disease. Drs. Wood and Eberle treat of it in association with the functional diseases of the brain; and we include it in the class of functional forms of disease of the vegetable or ganglionic system, and our motives for so doing will be discovered in the course of this treatise.

Delirium tremens, even now, is very imperfectly understood, and hence it becomes the duty of every investigator of it to make known his conclusions about it; for, although they may be erroneous, yet they may suggest to some one of his readers, a train of thought that may lead to the truth.

This is our apology for the novel views we shall present—novel, in regarding this form of disease as existing in close alliance with cholera in both its cause and character. Whether right or wrong, if we shall succeed in causing others to observe and think, we shall be amply rewarded for our labor.

All the writers whom we have consulted describe this form of disease much in the language of Prof. Eberle, as being "characterized by general inquietude, tremor, continued watchfulness, cool skin, perspiration, delirious loquacity, and sensorial illusions." It is said to occur only in habitual drunkards and inordinate opium-eaters; but as a fact, we dispute this, because we have known it to occur in those who never drank to intoxication, but only so far as to maintain a high state of excitement. Dr. Coates. Dr. Blake, and all others, so far as we have discovered, teach that delirium tremens does not result from the use of stimuli, but from the sudden disuse or abandonment of them; and hence its beginning is manifested by "lassitude, general indisposition, a feeling of distress in the epigastrium, anorexia, nausea and vomiting, giddiness, a sense of confusion in the head, want of sleep, an anxious expression of countenance, and tremor of the hands."—*Eberle*. Or, as taught by Dr. Blake, it commences with symptoms of general debility; the pulse is invariably slow, soft, and compressible, often feeble and unsteady; the hands and feet are cold and clammy.

To the preceding account of this disease, when abstractly applied to it, we most positively object; because we have witnessed the disease under very opposite circumstances. We shall therefore contend for the existence of two distinctly-marked varieties of the disease. In those who have so long indulged in drunkenness as to have greatly crippled or broken down their vital energies, it begins as above taught—with symptoms of general debility. The other variety, to which we have alluded, takes place in the strong and vigorous—those in whom the vital energies have not been prostrated by absolute drunkenness—those who drank enough to maintain a continuous high state of nervous and vascular excitement—finally, those who continued and increased this preternatural excitement, until it became merged or lost in delirium.—Of this kind of delirium, the writer has had two cases, and his friends, Prof. Knapp, and Dr. Major, of Covington, Ky., assure him that they have treated similar cases, and his co-laborer, Prof. R. S. Newton, informs him that he has had more cases of this kind than of the other.

So far as the writer has observed, however, it is not delirium tremens, for he has not witnessed any tremor in the hands of such patients;* nevertheless it is, in his opinion, the same disease manifested in a different class of constitutions—the difference is just that which obtains between passive and active apoplexy or congestion of the brain.

The approach of this variety of delirium is indicated by restlessness, a wildness of expression, or one of much apprehension; the face is flushed, and the pulse is full and strong. The patient is impatient of restraint and capable of manifesting more than his ordinary muscular strength. It is attended by no stage of lassitude, and the delirium, at this stage, can only be inferred from the improbability of the patient's statements, and the incompatibility of his premises and conclusions.

In dividing the disease, according to Dr. Blake, into three stages, we may say that there is but very little similarity between the two varieties in either of the stages; the subjects, respectively, differ organically, and they differ in all the manifestations.

It would appear, from some remarks of Dr. Carter, (Cy. Prac. Med.,) that the variety or modification of which we have been treating, had not entirely escaped had his notice. He says:

"In young and robust subjects, whose excesses have not been of long standing, the stage of reaction or excitement will come on much more rapidly than in persons advanced in years, and whose constitutions have been broken down by long intemperance. It is during this stage that the medical attendant is most liable to fall into error. The symptoms, many of them, are

* Since writing these lines, the writer has learned that some tremor has been observed.

so similar to those of inflammation of the brain or its membranes, that, if he is not especially upon his guard—if he allows the pathognomonic signs of the disease to escape him, his diagnosis will be incorrect and his practice unsuccessful."

Now, except for the description which he has given of the first stage, the preceding remarks might be a satisfactory explanation of the whole difficulty; but to tell us that in the first stage the patient's "countenance is dejected and anxious; his spirits are depressed; there is frequent sighing and oppression of the præcordia;" when not one of these symptoms attends the cases embraced by his qualification, it becomes conclusive that the two forms are not one and the same—that they are as far from it, as the two forms of apoplexy before named.

Since making the preceding extract, we have fallen upon another case, in Dr. Watson's Practice, that is more directly to our purpose. He says: "So frequently does the delirium manifest itself upon the cessation of the accustomed spree, that the continually recurring stimulus has been regarded as the *predisposing*, and the privation of that stimulus the *exciting* cause of the affection. Sometimes, however, it comes on in men who are perpetually fuddled, even although they have not intermitted their usual indulgence in drink."

This extract contains all that we contend for—and certainly no reasonable mind will conclude that both the use and disuse of an article—a poison, will produce the same variety of disease, after the contrary has been suggested.

Before proceeding to give the symptoms of the second and third stages, we feel called to settle upon a conclusion as to whether the disease is really and usefully divisible into two varieties or not. By a reference to our treatise upon apoplexy and rheumatism, respectively, it will be observed we have clearly shown that apoplexy may be, and has been, entirely of a passive character; and that those who are organically liable to it, are organically exempt from the active form—and we described the organizations that occasion, respectively, the two kinds of liability. In reference to rheumatism, we made it, we think, perfectly clear, that all organizations are not, indiscriminately, liable to either form, the acute or the chronic, under any possible combination of causes—that those who have the acute can never have the chronic form, and *vice versa*. Now, from what the writer has seen, and from what he has learned through his professional brethren, before named, he ventures to lay it down as a rule, that that variety of this disease, which commences with signs of debility or prostration, and in which the tongue and hands become tremulous, is confined to those of a more or less low order of vital force; or, according to Dr. Hall's Zoonomia, they possess a high dynamis—or, finally, they might have chronic rheumatism or passive apoplexy; and on the other hand, those who have the disease without a stage of prostration and without tremors, possess high vital force, or, according to Dr. Hall, high stimulus or low dynamis. The diagnosis between these two classes, organically, can be rendered obvious to the most ordinary observer. Those of the first class have thin necks, or feeble organs of muscular motion and animal sensibility; while those of the second are precisely the reverse in all respects. Those seen by the writer were fit subjects, under other circumstances, for acute rheumatism and active congestion of the brain.

If, in the preceding remarks, we are correct (and in accordance with the laws of analogy, they would seem to commend themselves to the careful observation of every physician), then it follows, that delirium tremens is as much and as obviously entitled to a division as rheumatism or cerebral congestion. For reasons that will appear when we come to treat of its pathology, we shall divide it into acute and chronic, and each of these into three stages—the incipient, delirious, and prostrated. The symptoms of the first stage, in both varieties, have been sufficiently indicated in the preceding remarks.

2. SYMPTOMS OF THE SECOND STAGE IN THE ACUTE VARIETY.—In this variety, there is none of the business, bustle, and anxiety which is so peculiar to this stage in the chronic variety. When the delirium becomes confirmed, which rapidly follows the incipient stage, all the manifestations are of a passionate character—that is, they indicate that all of the acting mental organs are powerfully excited; and, as it is common for the subjects of this variety to be strong men, they are restrained and managed with great difficulty. In one case the writer had, it was necessary to bind him with ropes. The most pathognomonic manifestation of this variety is a most tormenting dread of danger, and a disposition in some cases, to suicide to avoid it. This was particularly the case in the subject above alluded to. In another case, which the writer witnessed, the whole dread of the patient was of future torment—he, in wild and frantic calls for help, declared that the devil was dragging his soul out of him. The expression of the countenance is frightfully wild, and either desponding with pitiable lamentations, or of defiance and battle, depending entirely

upon the imagined character and power of the enemy.

The pulse is full and strong, but not remarkably frequent; the face is flushed; the voluntary muscles have more than their normal strength; the hands are steady, and sometimes an occasional moisture appears on the surface, particularly after muscular efforts. The patient recognizes his acquaintances, and will answer correctly in monosylables, any question that is asked him, except with reference to the subjects of his hallucinations.

From the beginning of the incipient stage, the patient sleeps none until he begins to mend, be the number of the days few or many—a morbid vigilance occupies his whole time. It is necessary to keep a constant watch upon such patients, for, under the impression that they are pursued by an enemy, they may quit the house and ramble off, or possibly commit suicide. The patient of the writer, before alluded to, escaped from his keeper or nurse and ran twenty-five miles in one night, without hat, coat, vest, or shoes, and when about to be arrested, he attempted suicide.

After one or two days this stage is terminated by a sound sleep and a return to health, or else in the stage of prostration.

The delirium of the last stage passe sinto incoherency—the vigilance into stupor—the pulse comes down—the skin is covered with a copious and clammy perspiration—the bowels became diarrheal, and the discharges are made involuntarily; coma succeeds, and then death, which is frequently of an apoplectic character.

3. Second stage of the chronic form of delirium tremens.—The second stage in this variety is introduced by an increase of the vertigo and mental confusion, or in other words, it may be said to commence with delirium, which is succeeded by a wild aspect of the patient's countenance, and distrust and suspicion of the nearest relatives and most sincere friends.

In this variety there is a constant disposition to be busy—to act as though he had business of pressing importance to require his constant attention, and this leading idea of business necessarily renders him exceedingly impatient under restraint. The most pathognomonic symptom of both forms of the disease is insomnia, but in this no time is squandered, for the patient is exceedingly busy—very restless, and considered it a great outrage to be prevented from discharging his obligations.

The character of his disposition and of his illusions depends upon the structure of his mental organization; in general, however, the patient is peaceful—not even disposed to fight for his liberty, and yet he will use his utmost strength to become free, urging important business as his motive. If caution be large, and this stage well established, he will manifest the utmost dread of assassins, robbers or other dangers, and if he be courageous, he will battle with them, otherwise he shows the utmost alarm. If marvelousness and hope are well developed, the peculiarity of his illusions will be whimsical and laughable—he is in the midst of a swarm of insects, or he is invaded by an army of mice, and he makes battle upon them with his feet, the tongs, or broom; or he is full of ribbons, and he draws them out of his mouth, nose, or fingers.

About this time some acceleration of his pulse may be observed—his body has become warmer, but his extremities are still cold. If no relief by this time is had, he passes into the third stage, which is indicated by a profuse and clammy perspiration, with an increase of all the other symptoms. The tremor of the hands and tongue has greatly increased; the tongue is still moist, but more furred; the pulse is swollen, but more frequent; the countenance expresses great anxiety; the urine is pale and scanty. Thus these symptoms progress until the patient expires in convulsions; or possibly, his delirium increases, with subsultus tendinum, and thence he becomes quiet, and dies without a struggle.

When the disease terminates favorably, the patient passes into a sound sleep during the incipient or delirous stage, and from the latter, he usually awakes between twelve and eighteen hours in a state of convalescence, but he is pale, exceedingly feeble and tremulous.

Cause.—The cause of the acute form of delirium tremens is the constant and unremitting use of some material stimulus upon a highly vital organization, or, according to Hall's Zoonomia, one of such high stimulus, that more cannot be borne without injury to the health. This stimulus usually consists of spirituous liquors, but it may be produced by the narcotic poisons, particularly by opium.

In the chronic form, the cause consists of a suspension of a stimulus to which the nervous system had become accustomed, in a constitution of low stimulus, and therefore one which is constantly seeking stimulus of some kind; and when the brain becomes accustomed to any one, it can not act normally without it. Every one who uses tobacco is a witness of the truth of this statement. But in this case, the stimulus is of the kind named, as directly producing the acute form of this disease.

We are aware that it is taught by some

that delirium tremens is not confined to tipplers and drunkards—that it may be produced in some constitutions by mental anxiety long continued. That a disease resembling the one under consideration may be thus produced, we admit to be probable, upon the authority of others, but we have some strong facts to induce us to believe that it is not and can not be the same disease.

The writer has probably examined critically more human crania than any other individual ever did, and in the course of his investigations he has seen the crania of many men who had been intemperate to the close of life. In those of high stimulus, intemperance in the use of ardent spirits produces a hypertrophy of the brain, atrophy of the cranium, and unmistakable marks of pericranial inflammation. He has the cranium of one unparalleled tippler and drunkard, which is remarkably thin, and in which even the temporal sutures are obliterated. Under the process of hypertrophy, the native angularity of the head is greatly rounded. He has the skull of an Indian which, by hypertrophy, wears the form of high civilization. In men of high stimulus, intemperance improves the beauty of the head, particularly in its social or coronal aspect; but it is certainly at the expense of the social and moral character.

In those of low stimulus, intemperance produces atrophy of the brain and hypertrophy of the skull—that is, the latter becomes more dense and thick.

The inference to be drawn from the preceding facts is, that the action of the brain, by stimulus of the kind alluded to, is increased with those of high stimulus, and decreased with those of low.

Having now stated the cerebral condition of the two kinds of subjects of this form of disease at the time of its invasion, no one can be surprised that we are unwilling to admit that merely mental anxiety can produce it.

Pathology of Delirium Tremens.—Dr. Armstrong, in his Lectures, supposes this disease principally depends upon some condition of the nervous system, and of this condition he acknowledges that he knows nothing. Dr. Gregory is of opinion, that it depends upon "exhaustion of the nervous power." Dr. Eberle regards it as "a morbid activity of the brain, from the sudden abstraction of a habitual stimulus, by which its excitability had been long repressed or blunted;" Dr. Coates considers it as consisting in "a heightened activity of the sensorium, from the generation, as it would seem, of an inordinate degree of vital activity in the brain." Dr. Klapp thinks it is seated in the stomach. Dr. Watson thinks that the essential nature of this disease consists in "*nervous irritation*," and Dr. Carter virtually confesses that he knows nothing about it, and Dr. Watson has in reality done the same.

It must now be remembered that the preceding opinions have reference alone to what we denominate chronic delirium tremens, because no other variety has become known to the profession. With this explanation, we have a few passing remarks to make upon some of these opinions. Dr. Eberle's opinion is, to us, exceedingly inconsistant. A morbid *activity* from an abstraction of stimulus! This is like making a very hot fire by abstracting its fuel. When men become drunk, and are noisy and troublesome, is it not because of a morbid activity of the brain from an excess of stimulus? If this interrogotory be answered affirmatively, then his opinion is erroneous—absolutely inconsistent with the most acceptable doctrines of phyosiology.

When a man has formed a habit of drinking, he can bear comparatively a large dose, but after having been habitually intemperate for many years, a wine-glass full inebriates him. Does this fact not prove that he has exhausted the resisting power of his system or brain? Is it not universally conceded that a habit of intemperance long indulged, breaks down and shatters the constitution? If this question be answered in the affirmative, then compare with it the opinion of Dr. Coates. Has drunkenness, to the extent of delerium tremens, ever been known to generate *vital* activity? We leave our readers to answer this question for *themselves*.

Of the preceeding opinions, those of Gregory, Klapp, and Watson, are entitled to respect—each of them contains a few grains of truth. There is, in the chronic form of the diseases, an "exhaustion of nervous power," an there is, also, "nervous irritability," but when admitted, what do they explain, with reference to the pathology of the diserses? They do very little more than indicate that it is not an inflammatory one. Klapp ingeniously supports the hypothesis that the disease is of the stomach, but still, upon this conclusion, the phenomena of disease can not be explained.

Before proceeding to advance our opinions upon this very puzzling subject, we beg leave to promise, by placing before our readers a few facts which wich we esteem as having a vital bearing upon the subject.

In commencing this ereaties, it will be remembered, that we remarked that delirium tremens bore a stronger similitude to cholera, than could possibly, at grst, be suspected.

In treating of the specfic cause of cholrea, weconsider it to consist of an abnormal quantity of carbon in the blood, which, acting like other foreign matter in the sanguiferous circulation produced emesis and other gastro-enteritic disturbances. Now, take into consideration two facts; ardent spirits consist of carbon as thir basis, and the subjects of this disease are constantly drinking them; and now for some other facts: It is well known that intemperate men are frequently afflicted with nausea and vomiting, and that more cases of cholera morbus occur among them than among any other classes of society. It is furthermore true, that when gastric disturbances are interrupted, wether spontaneously or by improper treatment, in drunkards, that delirium tremens is the result.

Do not these facts show a coincidence between it and cholera, of a character too remarkable for either of them to occur independently of the same cause? But we have not expressed the whole extent of the similitude. In all cases of cholera there is copious perspiration, and occasionally, in the absence of both puking and purging, the excess of this function alone runs the patient into fatal collapse; and one of the most marked symptoms of the delirium tremens is the copiousness of the prespiration. Again, in cholera, there is a violet or leaden-color of the skin. Is not this also the case in the last stage of delirium tremens?

We are now prepared to come to a conclusion as to the nature of delirium tremens.

In the acute form, the remote cause is a high state of cerebral action long mantained by the use of stimulating potations, and the exciting cause in such an accumulation of carbon, or what is equivalent, in this class of subjects, an interruption of the fat-producing process, whereby the carbon in the blood becomes excessive, and consequently acts as foreign matter.

In the chronic form of this disease, the remote cause consists in that shattered or enfeebled condition of the system which makes the use of an unnatural stimulus essential to the normal discharge of its functions. The exciting cause consists of an abstraction of this stimulus, in consequence of which the depurating functions are not properly nor sufficiently carried on. Moreover, carbon has already accumulated to an excess beyond the ability of the respiratory function, which is the most essential to life.

If an excess of carbon be the cause of delirium tremens, as it is of cholera, it may be asked why, instead of delirium, there is not cholera. We answer; this is sometimes the case, and when it is not, the condition of the brain determines otherwise. In the first class, the brain is preturnaturally active, and in the second, it is much enfeebled and preternaturally irritable. But in neither case is the assault made upon the organs of external relation, or those of animal life, as every writer has mantained it to be, except Dr. Klapp; but it is upon the ganglionic system —the organs or apparatuses of internal relation. The reflection of a moment will make this conclusion apparent.

When the organs of external relation become functionally deranged, vegetative life and health are, comparatively, but little disturbed; as for example, in mania, monomania, catalepsy, etc. But when the functions of vegetative or ganglionic system become derange, the citadel of life, in the abstract, becomes endangered, as in functional derangement of the heart, lungs, stomach, etc.

Now, inasmuch as delirium tremens is as fatal as most of the functional derangements of the vegetative system, and inasmuch as we think that we have absolutely shown that it originates in it, we must give it a place among them.

In the production of this disease, there are two causes in operation—the action of the stimulus upon, or its withdrawal from, the apparatus of animal life, and the accumulation of carbon in the sanguiferous system. Hence, the true seat of the disease is in the ganglionic system, and when the result is not delirium, in consequence of the breach made upon the nerves of animal life, it will be cholera, or some other gatsro-enteritic disturbance. therefore, is as much symptomatic as that of fever. Now, we have another question to solve—which portion of the nervous mass of animal life sympathizes with the vegetative? So far as concerns the mental manifestations, we believe that it is the mesocephalæ, and with reference to the spasms, it is the medulla and the cerebello-spinal system. For a further view of this subject, see pathology of insanity.

There is one circumstance that occurs to us as favorable to the doctrine, that long continued mental anxiety will produce delirium tremens, which is this: mental anxiety produces mental abstraction, and consequently some neglect of the pulmonary function. The liver, too, soon becomes deranged, and this partial failure in both the lungs and liver may possibly result in a defective depuration of the venous blood. But still, there is wanting those pre-exis ing conditions of the brain which we have described as constant attendants upon the intemperate.

Long-continued mental anxiety produces in the writer gastro-enteritic disturbences, which are attended with a pain in the head, that has, several times in his life, run into a

high state of delirium; and yet, every other symptom of delirium tremens was absent. These paroxysms with him have never continued longer than twenty-four hours.

Diagnosis.—Those who are not acquainted with the manifestations of cerebral derangment, may, possibly, without some special instruction, confound this disease with meningitis, mania, or febrile delirium. The resemblance between the acute form of this disease and meningitis, is sometimes very strong, so much so, as to render the diagnosis, in many cases, very difficult; but in the latter, there is more febrile disturbance and an abscence of imaginary dangers or enemies. Sometimes it is, however, conjoined with meningites, when, of course, there will be a complication of the symptoms. Indeed, we have sometimes suspected that this form is generally more or less meningitic; but our suspision has been produced by the marks of inflammation upon the crania of this class of patients, who lived intemperate to the close of life.

From the chronic form, mania may be distinguished by its greater incoherence, by its more gradual approach, by its less concern for business matters, and its being less tormented by imaginary enemies and dangers; tremor, too, is a much less frequent attendant upon it.

The presence of fever, in febrile delirium, will distinguish it from the chronic form of this, more particularly when considered in connection with a much greater independence of the fantastic hallucination of the latter. As febrile mania is without that wild and frantic dread of enemies, which distingnishes acute delirium tremens, they need not to be confounded.

But in all cases where there is a shadow of doubt, the previous habits of the patient should be ascertained if possible.

Prognosis.—The acute form of this disease is attended with much danger, and it consists in its strong liability to run into coma or apoplexy. Another danger that attends it is suicide; and yet, when properly met in the incipient or the earlier part of the delirious stage, it is quite manageable when simple or uncomplicated.

The chronic form of this, like the same form of other maladies, is not immediately dangerous; but ultimately it generally proves fatal—indirectly, at least, by producing great debility, or a preparation of the system for an attack of some other disease that suddenly proves fatal. Very few cases of this form have many returns of the disease without a great impairment of some important viscus, and the liver is the one that is most likely to suffer by the vicarious labor imposed upon it from a failure of the lungs in its depurating function.

Treatment.—When called in the early stage of the attack, there will usually be found delirium, or more or less spasmodic action. Should delirium only be present, administer a cathartic, place the patient in a recumbent position, and make cold applications to the head, with warmth and friction to the feet. If gastric derangement be present, treat it as heretofore referred to.

After the operation of the cathartic, agents must be administered to quiet the nervous system, produce a determination to the surface, and cause sleep. For this purpose antispasmodics and sedatives must be given, among which we have derived much benefit from equal parts of Tincture of Valerian, Tincture of Castor, Laudanum, and Spirits of Nitre, from one to two drachms of which may be given every hour, and continued until sleep is produced.

Should the attack commence with convulsions, give fifteen drops of the Tincture of Gelseminum every fifteen minutes or half hour, lengthening the intervals between each dose, and continue its use until spasmodic action begins to subside, when its use must be omitted, and resumed again only when the spasms re-appear or increase in severity. As soon as possible after the removal of the spasms, administer a cathartic, and subsequently pursue the same treatment as above.

In cases where patients, after having been for some time under the influence of sedatives, or even after having slept, strongly crave liquors, it will be prudent to cautiously allow them the moderate use of some stimulants to which they have been unaccustomed, at regular intervals, which should be lengthened as far as possible, or as the case will admit. After the more active symptoms have been overcome, the patient should be placed upon tonics, among which we prefer an infusion of Hydrastis.

It must be remembered that when sleep has been produced, the patient must, for no purpose whatever, be disturbed, unless it partake of the nature of coma, as indicated by heavy breathing, weak pulse, cold, clammy sweat, etc.; in which case he may be aroused for a few minutes at a time, and stimulants administered.

IMPALEMENT UPON A PITCHFORK-HANDLE ENTERING PER VAGINA; RECOVERY.

Dr. Sargent, of Worcester, reported the case, which had occurred in his practice nearly two years ago. A lady, of about 37 years of age, who had bourne several children, the last about three years previ-

ous to the injury about to be mentioned, and whose menstrual period had been about a week before, her bowels also being in good lax condition, in sliding down from a hay-loft, impaled herself upon the handle of a pitchfork, which passed in at her vagina to the length of twenty-two inches, when her feet struck the ground. The handle was immediately withdrawn, the patient carried into the house, and Dr. S., sent for. He found the patient, half an hour after the injury, lying on her back, with the thighs flexed, and the skin cool, pale, and moist (as if from fright), and the pulse not much accelerated. There was no external injury, and no physical evidence of effusion into abdomen or thorax, and no urine nor fæces on the garments, nor about the person, nor on the field of the accident, nor on the handle of the fork. There was some blood flowing from vagina. Patient passed water during the visit, and it was not stained with blood. She complained most of pain in the left thorax, on a line with the scapula. Dr. S. saw the handle of the fork, which was rounded, a little larger at the end than otherwhere, perfectfully smooth, two inches in diameter, and showed distinctly the stain of blood up to an abrupt line, twenty-two inches from the end.

Dr. S. theorized, in this case, that the instrument must have perforated the vagina at its upper part to the left, and gone between the uterus and rectum. [If it had gone to the right, it would have perforated the cæcum.] The form of the instrument would make it much easier for it to pass between than to perforate organs, and Dr. S. supposed that it had passed in front of the kidney, behind the spleen and between the diaphragm and false ribs, peeling up the costal pleura till it reached the scaleni muscles. The subsequent history of the case, which showed a fracture of the first rib, while, also, there was at no time any effusion into the chest, proved this diagnosis correct. Supposing that the greatest safety of the patient was in what might be called *forced* rest, Dr. S. gave her one grain of morphia (by estimate), and bound her chest firmly with a broad bandage of new flannel, placing a towel, wet in cold water, between this and the skin. The morphia was repeated in an hour, and one-third of a grain three hours after. Patient passed water repeatedly in first twenty-four hours, without trouble and without blood, and passed coagula from the vagina. The day following, there was emphysema above left clavicle; and the day following, crepitus in left axilla high up, as if from fracture of bone. There was at no time any evidence of pneumonia or pleurisy, though there was deficiency of respiratory murmur in left chest from the pain in its expansion, the percussion remaining good.

The pulse stood at 120 for several days, and the opiates were continued about as long.

The injury was inflicted the 7th of August, 1851, and Dr. S. was in daily attendance for nine days; and, occasionally, afterwards, for three weeks. The recovery was entirely favorable, the patient being left only with an ill-united fracture of the first rib, over which there was some painful swelling for several weeks, which ultimately subsided, leaving an oseous prominence in the supraclavicular region, in intimate relations with the scaleni muscles.—*Worcester Journal of Medicine.*

SUGAR OF MILK AS AN ARTICLE OF FOOD IN CONSUMPTION AND OTHER PULMONARY DISEASES.

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Those who are familiar with Liebig's works are aware that he established, several years ago, the fact that all the various substances used as food belong to one of two classes—the azotized, or plastic, which form the tissues of the body, and replace the worn-out tissues; and the non-azotized, or combustive, which furnish food for the lungs, supporting respiration and animal heat. Now, it is a curious fact, which he also established, that, though the fibrin, albumen, and casein, which constitute the chief of the first or azotized class of alimentary substances, exist in vegetable as well as animal food, animals have not the power of forming in their own bodies any of those azotized alimentary principles. They are primarily derived from the vegetable kingdom; and the digestive organs of animals have no power of producing them, but merely of assimilating what has been already formed by plants, or previously drawn from the vegetable kingdom by some other animal. These views met with considerable opposition when they were first advanced; but their correctness is now generally admitted, and there is no essential difference in the chemical composition of fibrine procured from vegetables and that obtained from the flesh or blood of an animal, or between vegetable and animal albumen or casein.

Of the other class of alimentary substances—the non-azotized—the chief use of which is to supply food for respiration and the support of animal heat, the principal are starch, sugar, oil or fat, and alcholic liquors. These unite with the oxygen absorbed at the lungs, and are the chief source

of the carbonic acid and watery vapor given off by these organs. They are, in fact, burnt by a process of slow combustion, which is the great source of the high temperature of animals.

It appeared to me that, as this function of the lungs must necessarily be more or less impeded in all pulmonary diseases, and as cod-liver oil had been found so beneficial in that particular disease, consumption, advantage would be gained by selecting from this, the non-azotized or combustive class of alimentary substances, such of them as would have the greatest tendency to unite readily with the oxygen absorbed at the lungs; and thus, in the disabled condition of these organs, to facilitate the performance of their functions.

I was thus led to enquire which of the non-azotized or combustive class of alimentary articles are most readily digested, and have the greatest affinity for oxygen. Sugar of milk is an article belonging to this class of aliments, which possess these properties in a high degree, and is deserving of more attention than it has yet received as an article of food. I shall therefore state a few facts respecting it, which seem to me sufficiently interesting to be worthy of being brought under the notice of the profession.

There are three principal varieties of sugar—cane sugar, milk sugar, and grape sugar. They are closely allied in composition, though they differ considerably in chemical properties. All kinds of milk contain sugar of milk; but it is worthy of notice that asses' milk, which has already had a greater reputation than any other kind, as an article of food in consumption and other pulmonary diseases, contains the largest proportion, relative to the caseous and oleaginous principles, of any kind of milk. Whey, which consists almost entirely of sugar of milk, has also been found a useful article of diet in consumptive cases.

When we inquire into the chemical properties of milk sugar, we also find that it has so strong an attraction for oxygen, that, when dissolved with an alkali, it has the power of reducing more or less completely some of the metalic oxides. It is readily absorbed into the blood, which, being an alkaline fluid containing oxide of iron, furnishes the necessary conditions for its oxygenation. Besides this, its composition is such, that it must be readily converted into carbonic acid and water. There is only one other point in relation to its fitness to supply material for respiration, which I shall at present notice. It is the fact, originally pointed out by Liebig, and now admitted by physiologists, that one of the great offices of the liver is the preparation of combustive material for the respiratory process. This is a point which has not been sufficiently kept in view by medical men; but it is one of great practical interest, when we consider that the function of the lungs and that of the liver are so intimately connected and mutually dependent, that derangement of the secreting function of the latter must necessarily interfere with the former, and may not improbably be one of the chief causes of a tubercular state of the blood. The liver prepares the combustive materials for respiration; and of this there are two sources, one being the worn-out tissues of the body, the hydrocarbonaceous part of which forms bile, and, being reabsorbed, is consumed at the lungs; the other is the saccharine and fatty matters of the food, which are consumed in a similar way. It would seem, however, that the liver has not only the power of preparing the latter, but also of forming saccharine at least, if not oleaginous matter, from the blood. A defect in this power may be one of the great causes of tubercular diseases; and if we can, by giving a ready-formed oil, which is stored up at certain times in the liver of the codfish, rectify to a great extent any defect in its action, so far at least as the oleaginous material for respiration is concerned, there is good reason to expect that still more may be gained by giving, in a ready-formed state, the other combustive material, the saccharine.

The facts I have brought forward have led me to use sugar of milk in the treatment of consumption; and, as I have seen benefit from its use, I wish to recommend it as an article of food deserving of more attention in the treatment of this disease than it has yet received. I believe also that they embrace an important principle, applicable to the dietetic treatment of other diseases.—*Assoc. Med. Jour.*, June 24, 1853.

OF THE USE OF THE EXTRACT OF HYOSCYAMUS AND OIL OF SASSAFRAS, IN SOME OF THE MISFORTUNES ATTENDANT IN PREGNANCY.

BY R. THOMPSON, M.D., OF MISS.

I have selected the above as the subject of my paper, because I imagine I can offer upon this subject something that is new, and what is of more importance, useful in practice. Very shortly after commencing the practice of medicine, by a favorable state of circumstances I got introduced into a pretty extensive practice in midwifery; and was soon led to regret the want of more efficient means for relieving many of the ills

which are often associated with the pregnant condition than the medical sciences at that time furnished. Opiates, it is true, afforded alleviation; but generally at the expense of some other form of suffering, or disadvantage; such as checking the natural secretions—disturbance of the head, etc. On one occasion, while waiting upon a tedious case of labor, I amused myself, along with the matrons present, in the enjoyment of the pipe rather freely; and suffered a good deal of vertigo as a consequence. In the course of the conversation which this incident gave rise to, one of the company observed, that the dry bark of sassafras combined with tobacco, would effectually prevent its unpleasant effects upon the head. I laid this up in my mind, and on the first opportunity made the experiment; and found it eminently true, the sassafras not only preventing the injurious effects of tobacco, but speedily removing them when produced. I tested this repeatedly, by smoking in a strong pipe until my head was very disagreeably impressed, and then reloading with a mixture of sassafras bark; a few puffs of which invariably dispelled all unpleasant sensations. I had now satisfied myself that sassafras was an anti-narcotic, so far as tobacco was concerned, and resolved to test its powers upon some other narcotic stimulant, and first selected the hyoscyamus. I added a drop of oil of sassafras to every two grains of extract of hyoscyamus, and made it into pills by the assistance of flour, and tested it first upon myself. Being very succeptible to the influence of nervous stimulants, I began by taking one common sized pill, and increased the dose until I took five at once, without producing any other effect than a most delightful sleep—such as I had not enjoyed since when a child I used to fall down under the shade of a tree when tired of play. I now believed I had obtained the desideratum for which I had been wishing; and experience fully verified my anticipations. It acted like a charm in soothing the excited nerves, and saved my parturient patients of nearly all suffering except the necessary throes of labor. For some time I was uncertain whether the narcotic property of the henbane was wholly counteracted, or only lessened, by the sassafras; but a mischievous little girl solved this question for me. Her mother being pregnant and suffering much from costiveness and erratic pains, I made a syrup of butternut, to which I added sixty grains of hyoscyamus and thirty drops of oil of sassafras to the half pint; and directed a tablespoonful to be taken often enough to keep her comfortable. Her little daughter, seeing her take it frequently supposed it was, of course, something good, and, in the absence of the rest of the family, managed to get hold of the bottle, and, finding it sweet, drank all that remained; which was over a gill, and contained at least thirty grains of hyoscyamus. Her mother was at first frightened, and sent to the field for a boy to go after me, but, seeing no immediate unpleasant effects from the medicine, concluded to wait awhile. The child after a little while got into a crib and fell asleep, and slept quietly and naturally for about three hours, when the cathartic effects of the butternut aroused her. No injurious effects followed. I was now fully convinced that the sassafras rendered the hyoscyamus entirely innocent, and have ever since given it in just such quantity as to secure an immunity from suffering. I never pushed it to the extent that the child did but on one occasion. In 1835, when the cholera was prevailing so fatally on Round Lick Creek, in Smith county, while at Mrs. Hearn's, where there were two corpses in the house, and one in the kitchen, and several more in a dying condition, a stout negro man while walking across the yard with a spade on his shoulder, intended to be used in preparing graves, was attacked with such violent cramps as to cause him to scream out. The spasm was of the colic kind, making his lower extremities and body as rigid as if frozen. I happened to have a bottle of the above syrup in my pocket, which I had prepared for a lady who had been confined the previous evening, and whom I intended visiting in my round; and immediately gave him about four ounces, containing a least forty grains of hyoscyamus. In a few minutes the spasm relaxed, and he assisted all day in burying the dead. I don't give this as a case of cholera; I did not consider it as such; and yet, it doubtless was produced by the joint influence of cholera influence and fear. I did give it though in genuine cases of cholera, and always with the effect of relieving the spasms, provided the stomach, retained it a few minutes: but unfortunately it was often rejected before it had time to produce any impression.

Having ascertained the controlling power which the remedy was capable of exerting over many forms of disease arising from morbid inervation, and looking upon most cases of abortion and premature labor, as originating from that cause; I expected it to prove valuable in their treatment, and was not disappointed when I brought it to the test of experience. I have now used it in all cases of this kind happening in a pretty large practice for about twenty-five years, and having more calls than usual in

the same amount of general practice, my success having given me some notoriety in that line; and I recollect of no case of failure, where I was called in previous to the occurrence of considerable expulsive uterine contraction. But as *cases* are more impressive than mere general observations, I will in a very concise manner give a few of the most prominent which have been treated with this remedy.

Case 1st.—1835, Smith county, Rev. Charles Ledbetter's negro woman, aged 30 commenced bearing children at 15—had five in quick succession, after which she aborted five times between the 6th and 7th month; commenced giving the medicine. viz: the hyoscyamus and sassafras, at the middle of the sixth and continued it six weeks. She went to the full period, but had a dead child, after which she had four living children.

Case 2d.—1840, S. Berdine's negro woman, aged 35, had two children when very young, and had aborted nearly every year since, between the third and fourth month—commenced giving the medicine as soon as she was known to be pregnant and gave it until the period of quickening. She went her full time—had a fine living child; a year after again became pregnant, gave the medicine with the same result, after which she ceased breeding.

Case 3d.—1843, Mrs. S.——, married at 15; had two living children, then three miscarriages in succession about the sixth month, commenced the medicine a while before the catastrophe was expected, continued it four weeks—did well and continued afterward to bear living children.

Case 4th.—Mrs. D——, Wilson county married young, had a living child, which died; after which she aborted every year. for seven or eight years, about the third month. Commenced the medicine as soon as pregnancy was known, and continued until after quickening—had a fine child at the full time. Three years after had another—both still living.

Case 5th.—Mrs. C——, married at 14—had two children, after which she had severe flooding about every six months for four or five years. She did not consider them abortions—said they came on a week or two after she ought to have been *unwell*.

I requested her in case of another attack. to save all that passed until I could be sent for; which she did. It presented the appearance of blood only, but upon putting it in a vessel of water, I discovered something like an organized mass, and placing this in a fresh basin of water I had presented the finest specimen of an embryo I ever saw.—It was about the size of the chick on the eighth or ninth day of incubation, and very much resembled one. There was an umbilical cord of about two inches in length, and the size of a wheat straw, and a placenta, perhaps two and a half inches across the disc, presenting on the maternal surface a most beautiful floculent appearance while floating in the water, Gestation in this case could not have existed more than thirty-five days. I gave her a supply of the medicine and directed to commence taking it immediately after missing a menstrual period. She did so, and next year had a living child.

Case 6th.—Thomas Edward's negro woman, aged about 25 years, commenced breeding quite young and had miscarried nearly every year since at about the fifth month.—Commenced giving the medicine as soon as she felt the child, and gave it regularly for a month, and afterward whenever she felt pain in her back. Went the full period and did well. Has since had another.

Case 7th.—A sister of the last, belonging to the minor heirs of E. Hearn, was similarly unfortunate; had had many miscarriages about the third month. Commenced giving her the medicine as soon as pregnancy was known and continued it until quickening. Did well,

Many other similar cases could be given, but these are deemed sufficient. It will be observed that in all the above cases child-bearing was commenced quite young; and my recollection is that all were of a lax fibre and nervous temperament. In the treatment of the above, and similar cases, the forms of the medicine are varied to suit the inclination of the patient, some preferring that of pills, and others a syrup; and the quantity was also proportioned to their susceptibilities. Other remedies were also added, to meet such indications as presented—usually nothing more however than a little blue mass when the liver was torpid. or butternut when there was slowness of the bowels. To sum up the purpose for which I give the above remedy—I use it in all cases of threatened abortion, when not caused by accidents or severe sickness. I use it for all the nameless pains, aches and disquietudes attendant on conception and gestation. I give it to prevent, and to remove when present, premature and erratic pains in the latter stage of pregnancy.—In fact, in all cases in which I am previously spoken to, I put the patient upon its use a week or more before the expected confinement, for the purpose of removing any excessive nervous excitement of the general system. especially of the os uteri—thus preparing it to yield kindly to uterine contraction—and after delivery, I give it to soothe

the excited system, and prevent those spasmodic contractions, called after pains. I know that many consider these pains to be necessary and salutary, but females with first children, when the tonic contraction of the uterus is good, don't have them; and I also know that in after labors, they have in my practice done very well without them.

I have, perhaps, already made this communication improperly long; but cannot well forbear giving one more very interesting case, of a different character from the above.

Jan. of 1849, I was called on by a Mr. B——, who had lately moved within six miles of me, and with whom I had no previous acquaintance, who wished me to cause his wife to abort. He informed me (which I afterward found to be correct from other sources,) that his wife had, the previous year, come to the full period of pregnancy, and that although he had the services of several experienced accouchers, they were unable to deliver her without literally taking the child to pieces, and that they informed him that his wife never could bring forth a living child. He also informed me that two of her married sisters had to have their children delivered in this manner.

I consented to visit his wife, telling him at the same time, that I did not expect to procure abortion. I found her a fine looking lady, rather short for her weight—large muscular developments, and flesh unusually firm. I made an examination per vaginum, and found, indeed, but very little space, owing principally to the fullness and firmness of the soft parts. But my conclusion was, that there was bony room sufficient to admit of the passage of a common sized head. I accordingly positively refused to procure abortion; but expressed myself confidently that I could put her upon a regimen that would enable her to have a living child. This was about the third month, and I requested him to visit me on the seventh for further instructions; for the present I recommended nothing more than a teaspoonful of epsom salts daily, to keep her system cool. He called at the time directed, and I sent tinc. of valerian, with vinous antimony sufficient to slightly nauseate the stomach, which, besides other benefits, would enable her more effectually to carry out my injunctions of low diet. The valerian being a good diuretic, would serve to keep up a drain from the kidneys, and I directed the salts to be taken daily in such quantity as would secure a moderate purgative effect on the bowels. I also sent a box of the pills of Hyoscyamus, to be taken freely during the last stage of gestation. At the full period I was sent for, and was pleased to find that my plan had worked well. There was still a good deal of embompoint, but the textures were all soft, and pliant; and on examination, I found a fine dilatable condition of the soft parts. In short, after a common labor, she was delivered of a sprightly common sized child. It was characteristic of the family to have large children; and my plan of treatment contemplated a retarding of the growth of the fetus, as well as a softening of the textures of the mother.

I had often witnessed this effect follow daily purgation when brought about for other purposes. This is the only instance in which I have availed myself of this means intentionally.—*Worcester Journal of Medicine.*

TRANSFUSION OF BLOOD.

In this memoir, Dr. Polli, collects twenty-three cases in which the operation has been practised in the ordinary way, that is, with human blood. In five of these death happened, either because the operation was too late, or because death was about to happen from some independent and inevitable cause; in all the rest life was saved—in many, from the very jaws of death. In no one case did the operation give rise to any serious inconvenience. The majority of the cases were those of parturient females, reduced to death's door by flooding; the rest, those of persons suffering from other kinds of hemorrhage, induced upon the hemorrhagic diathesis.

Dr. Polli also enumerates some cases in which the *blood of animals* was successfully substituted for that of man. Four of these are on the authority of M. Denis, who wrote his *Lettres sur la Transfusion* at Paris in 1667. Another is taken from an Italian work by Dr. Manfred, of Lucca (*De Nova et Inaudita Medico-Chir. Operatione*, &c., Romæ, 1668). Another, by MM. Lower and King, from the *Gaz. Medciale de Paris*, p. 65, 1848. The particulars of the last two experiments are not given, and we are only told that the blood of a lamb was employed in the one, and that of a calf in the other, and that the result was successful. The particulars of M. Denis's experiments are as follows:

Exp. 1. M. Denis took ten ounces of blood from the arm of a strong and healthy butcher, aged forty-five, and injected through the same opening twenty ounces of the arterial blood of a lamb, after which the butcher, without any alteration in his manners and feelings, proceeded to kill and dress the animal which had furnished the

blood, and then went to the public house to dispose of the gratuity which had been given him by the operator. The next day, according to his own account, he felt in better health than usual, and he underwent the same operation with the same results.

Exp. 2. Nine ounces of the arterial blood of a lamb were injected into the arm of a youth, aged sixteen, who had suffered during two months from fever, and who, from this cause, and from having been bled twenty times, lay in a moribund state, when he immediately calmed and slept, and this rallying eventuated in complete recovery.

Exp. 3. A madman of eight years' standing, whose madness showed itself in attacks of complete restlessness and wakefulness of eight or ten months' duration, was treated by transfusion in the fourth month of such an attack. Ten ounces of blood were abstracted, and six ounces of the arterial blood of a calf injected in their stead, with much relief to the symptoms. Afterwards, a pound of the same blood was injected. The immediate result of the second transfusion was vomiting, purging, and sweating. These ended in sound sleep, which brought about a favorable crisis, for from this time the patient continued to improve until he was quite well.

Exp. 4. The patient in this experiment was lethargic, convulsed, and almost pulseless, in consequence of a violent and protracted attack of vomiting and purging. M. Denis injected eight ounces of blood (of what animal is not stated), when the convulsions ceased, the pulse rose, the consciousness returned, the bystanders were recognized and spoken to, and some food was taken. This state continued for twenty-four hours. The transfusion was then repeated, but the vomiting and purging returned, and the patient sunk eleven hours afterwards. Serious intussusception of the small intestine was found after death.

The conclusion to which Dr. Polli arrives is, that the operation of transfusion is simple, efficacious, and safe. He recommends it not only in cases of excessive hemorrhage under ordinary circumstances, but in cases where there is a strong hemorrhage diathesis, as likely to produce a beneficial change in the crasis of the blood. He recommends it also in cases of extreme inanition, where there is not time to introduce food in the ordinary way, or strength to digest food. He suggests it as a possible means of inducing a beneficial change in the constitution of the blood in chlorosis, rachitis, scrofula, and insanity; and he thinks that defibrinized aerated arterial blood might prove to be a powerful means of resuscitation in cases of asphyxia and other kinds of apparent death.—*Half Yearly Abstract*, vol. xvii.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

ON SMALL POX AND VACCINATION.

BY J. F. MARSON,
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During the period comprised within this analysis, smallpox had been epidemic four times—in 1838, 1844, 1848, 1851; and rather more than half the patients admitted into the hospital had been previously vaccinated. Much anxiety about the degree of security afforded by vaccination had begun to be felt, and the author thought the profession would be interested, and much useful information perhaps might be elicited by classifying and arranging the patients admitted during the above-named period. The analysis referred principally to the following points:—

I. Natural smallpox.
II. Smallpox after smallpox.
  a. After natural smallpox.
  b. After inoculation.
III. Smallpox after vaccination.
  a. Number of cicatrices.
  b. Character of cicatrices.
  c. Vaccinated, but without cicatrices.
IV. Febrile eruptive diseases mistaken for smallpox.

A remarkable difference was observed between the vaccinated and unvaccinated patients, and also between the vaccinated cases themselves—some patients having the smallpox in a mild form, wholly devoid of danger, whilst others had it in great severity, scarcely if at all lessened by the previous vaccination. Under these circumstances the author thought that the causes of this remarkable difference might be sought for among the antecedents in respect to the vaccination of each individual admitted, with a view to explain the extreme mildness of some cases—the danger, unmitigated course, and even death of others. Smallpox in the unprotected remains to this day as virulent as it ever was. Vaccination, when performed in infancy, affords almost complete security against the fatality of smallpox up to the period of puberty; and the general experience of the Smallpox Hospital shows that smallpox did not usually occur after vaccination until several years had elapsed. The most trustworthy evidence of the perfection of vaccination was to be obtained from the cicatrices, and this evidence he would be able to show was a very good guide to the general amount of protection conferred by vaccination.

The analytical series consisted of six tables. The first table showed the number

of patients admitted at the hospital in each year, distinguishing males from females, whether vaccinated or otherwise, and gave the outline of the disease under which each was suffering; it included in 185 cases of febrile diseases, principally eruptive but not variolous, and it furnished the result of the whole, with the rate per cent. of the mortality. The second table gave an analysis of all the cases of smallpox, 5,797, classed under nine different headings, the form of the disease in each case, and the result, with the rate per cent. of mortality under each division. He there gave the ages of the unprotected patients, and the rate per cent. of mortality calculated at different periods of life, for every five years up to thirty, and even ten years afterwards. The fourth table exhibited, separately, the leading particulars of 3 094 cases of smallpox after vaccination, showing from a careful examination of each patient, the number and character of the vaccine cicatrices, the form of the variolous disease and the result, with the rate per cent. of the mortality from smallpox after deduc ing the cases of superadded disease. It also showed the rate of mortality from smallpox in patients having one vaccine cicatrix, particularizing whether good or indifferent, and the average. The fifth table showed, in quinquennial periods, the ages of the vaccinated patients when attacked by smallpox, when they were vaccinated, and the rate of mortality. The sixth tab'e stated, in periods of five years, the ages of the patients at the time they were vaccinated, who had subsequently been admitted with smallpox into the Smallpox Hospital. Observations on the results accompanied each table; and in relation to Tab'e IV, it appeared that 3,094 patients with smallpox reported themselves to have been vaccinated at some period of their lives. 1.357 had one vaccine cicatrix, and of these four and a quarter per cent. died with a good cicatix, and twelve per cent. with an indifferent cicatrix; mean, seven and a half per cent. 888 had two cicatrices; two and a half per cent. died with good cicatrices, seven and a quarter with indifferent cicatrices; mean mortality, four per cent. and a fraction. 274 patients had three cicatrices; average mortality, one and three-quarters. 268 patients had four cicatrices; and there died with good cicatrices under one per cent.; with indifferent cicatrices, none, the average being only three-fourths of one per cent. The author described a good vaccine cicatrix as distinct, foveated, dotted or indented, in some instances radiated, and having a well or tolerably well-defined edge. An indifferent cicatrix as indistinct, smooth, without indention, and with an irregular and well-defined edge. The author's opportunities of examining, with regard to previous vaccination, the foreigners admitted with smallpox at the hospital, and comparing them with each other, and with the same class of persons in this country, had led him to the conclusion that vaccination was performed in the best manner generally by the Danes, Swedes, Norwegians, and Germans, judging them by the standard shown in Table IV, to afford the most efficient security. Then came the Italians; and from the few he had seen, the Spaniards; then the Scotch; then the Irish, and, lastly, the English and French. He was most anxious to draw the attention of his professional brethren to the above fact. There must exist some grave and lamentable evils (more especially affecting the humbler classes) connected with the circumstances under which vaccination in country districts was performed. The details recorded in this paper should urge our provincial brethren, whose position and ability gave them influence, to lend their aid to trace the evil to its roots; for there could be no justifiable reason why the rural inhabitants of England and Wales should be far less well vaccinated than were the rural inhabitants of Denmark, Sweden, and Prussia. The mortality, severe as it was between the indifferently and the well vaccinated, was not the only evil result to be regretted of bad vaccination. Proportionate to the mortality was the severity of the disease, and to those who escaped death there was damaged health, disfigurement for life perhaps, and the discredit brought on vaccination, which was in no degree due to it intrinsically, but was owing solely to the want of proper knowledge of the subject, and of the necessary care with which the operation should be formed. Great judgment and caution should be exercised in the selection of vaccine lymph, for in this lay one of the principal causes of failure in vaccination. Lymph for use was in its best state on the seventh day of the progress of the vesicle, the day week from the vaccination; and the author described the character of the vesicle and the indications of the stage when it was most favorable for the collection of the lymph, and some very valuable and instructive observations followed on the mode of conveying lymph, the mode of vaccinating, the mode of preserving lymph, and on revaccination.

The author's conclusions from the foregoing facts and statements were:

1. The natural smallpox destroyed about one-third of all whom it attacked.

2. That smallpox after smallpox was comparatively of rare occurence; that a

second attack of natural smallpox was rare, but not often fatal, and that protection seemed to be the law. That after inoculated smallpox an attack of smallpox had more frequently led to fatal results; but there is reason to presume that the virus used for inoculation, like a great deal of the lymph used at the present day for vaccination, was often taken at too advanced a period of the disease, and thus did not afford the full measure of protection it was capable of affording if taken at a proper time.

3. That vaccination performed in infancy afforded almost complete protection against the fatality of smallpox to the period of puberty; that a variety of circumstances conspired to make it almost impossible to ascertain exactly in what proportion to the vaccinated, cases of smallpox subsequently occurred, or might occur, if all persons lived to an advanced age.

4. That as a matter of safety it would be well for all persons who were vaccinated in infancy to be revaccinated at puberty; this measure being more especially requisite for those who were either indifferently or doubtfully vaccinated in infancy, and still more necessary for those who, though vaccinated, had no cicatrix remaining. Finally, as a matter of precaution, it would be desirable that all persons should be revaccinated on smallpox existing in the house where they were residing—a precaution, however, that will cease to be necessary to advise when all persons have the benefit of proper and efficient vaccination.

Dr. Copland remarked that it would be interesting if any member could give an account of the causes and effects of the smallpox epidemic in Jamaica, where it had been most destructive.

Mr. Streeter would throw out one suggestion, and that was, the necessity of attending to the health of the skin before vaccination was performed. He believed that the exhausted state of the skin in tropical climates was one cause of imperfect vaccination which obtained in them. With respect to the unsatisfactory state of vaccination in the country districts, he might mention that, about thirty years ago, in the practice with which he was connected, out of more than a hundred children who had been vaccinated, not one half returned to show the arm and the effects of the operation. He might observe here, that he had only seen one fatal case of smallpox after vaccination, and this was on the fifth day. He alluded to one source of danger in cases of smallpox—namely, a profuse flow of the catamenia which occasionally occurred in the secondary fever.

Dr. Webster considered the paper just read as of great value, whether in respect of the numerous facts it contained or the deductions enunciated by the author. Besides which, the various tables compiled would enable others further to investigate the question, and so disabuse the public regarding some fallacies recently disseminated. He (Dr. Webster) entirely concurred with the opinion stated, respecting the great fatality of smallpox among young people, compared with those in more advanced life. For instance, during 1847, when upwards of 4,200 persons died by variola throughout England and Wales, more than three-fourths were under five years of age—the sexes being equally divided, while very few had passed their forty-fifth year. Again, the fact mentioned by Mr. Marson, that death very rarely occurred in cases where the individual had been properly vaccinated in three or four places at the same time, was likewise most important, and showed if the system was once properly imbued with true vaccine virus, little danger of subsequent smallpox need be apprehended. In his (Dr. Webster's) opinion, many of the deaths reported from variola, after cowpox, occurred where the party never had been correctly vaccinated, especially throughout rural districts and country towns; in which localities numbers even remain altogether unprotected, owing to the prejudices frequently prevailing in ignorant minds against vaccination, who obstinately object, it is reported, to the operation, "as an impious attempt to arrest the will of the Almighty." The Society's time being very limited, as announced from the chair, prevented any allusion to several points adverted to by the author; nevertheless, before sitting down, Dr. Webster remarked, that the statements now brought forward more than ever confirmed the protective efficacy of cowpox, when vaccination was carefully and judiciously performed.—*Proceedings of the Royal Med.-Chirurgical Soc.*

THE MEDICAL EDUCATION OF WOMEN.

[The following detached quotations relative to the study of medicine by females, are selected from the Introductory Lecture, by William M. Cornell, M.D., of this city, delivered to the class of the New England Female Medical College, November 2, 1853.]

So far as I am concerned, and so far as I know, the minds of the other lecturers in this School, there is no disposition to recommend any lady for the practice of the healing art, among women and children, until she shall have studied as long, and

attended as many and as full courses of lectures, as are required of young men, for graduation in the Medical Colleges of our land; and for one, I should be perfectly willing that the Councellors of the Massachusetts Medical Society, should be the Examining Committee of any applicant for graduation, and that their decision, upon the *medical qualifications* of such, should be final.

Nor do I apprehend that all the women in the land are about to study medicine. The course of three years' study is too long, and the expense too heavy, for many to undertake it; and the fact that those who do practice, shall be *thus* qualified, will have a salutary effect in preventing those who have a mere smattering of information, from attempting to dabble with medicine. If any suppose that we wish, or intend to encourage any females to practice, who have not qualified themselves as above stated, they have mistaken our motives or not comprehended our plans.

The following opinions of eminent physicians, directly or impliedly, show the demand for female practitioners of medicine: "Many of these maladies," says Dr. Meigs, in his Treatise on the Diseases of Females, "are, in their beginning, of slight and trifling importance. Yet, by neglecting such affections in their rise, the whole constitution may at length come into sympathy with the deranged member of it; and the health, the usefulness, and so, the happiness or life of the mismanaged and misinformed female, are sacrificed." "All these evils," continues the same writer, "spring not from any want of competency in medicines or medical men, but from the delicacy of the relations existing between the sexes. I confess that I am proud to say that, in this country generally, certainly in many parts of it, there are women who prefer to suffer the extremity of danger and pain rather than waive those scruples of delicacy, which prevent their maladies from being fully explored. I say it is an evidence of the dominion of a fine morality in our society: but, nevertheless, it is true that a greater candor on the part of the patient, and a more resolute and careful inquiry on that of the practitioner, would scarcely fail to bring to light, in their early stages, the curable maladies, which, by faults on both sides are now misunderstood, *because concealed*, and, consequently, mismanaged and rendered at last incurable.

"Can anything be done to obviate the perpetuity of this evil—one that has existed for ages? Is there any resource by means of which the amount of suffering endured by women affected with peculiar complaints may be greatly lessened?"

To these important questions of the learned Professor, we have a ready answer. Yes, something *can* be done. A remedy is easily found. It is in simply substituting an equally qualified *female* for a male physician. The remedy is perfectly natural, and we are endeavoring to meet the demand by a competent supply.

No man in this community better understands the science, or can better perform the duties of the medical profession, than Dr. John Ware, or is better skilled in the common courtesies of life. In his Introductory Lecture before the class of 1850—1, in the Harvard Medical School, in which he is a Professor, he writes as follows:

"I trust we should be among the last to oppose the entrance of women into any department of active life, in which she can secure to herself a useful and honorable position, and a full reward for her talents and services. None know so well as those of our profession, how heavy a share of the burdens, the trials, the responsibilities of life, fall to her lot, or wonder more at that mysterious arrangement by which the author of our being has assigned so unequal a destiny to the fairest and most tender of his creatures. But so we know it to be, and we should be the first to promote her introduction to any occupation which will afford her a fair portion of the pleasures, duties, rewards and honors of society—aye, to welcome her to our own, if it can prove for her advantage or happiness."

There are other physicians in this city, of no mean acquirements, and not wanting in skill, who give their warmest approbation to this enterprise. They only ask what we propose to do, that these women shall have a full and thorough medical education.

The editor of the New York Medical Gazette, Dr. Reese, says, "We are in favor of the medical education of females, and heartily welcome them, as we do Elizabeth Blackwell, M.D., into the profession, when, like her, educated and qualified for its duties." He bears his testimony, as we do, against all kinds of quackery in the profession.

James Deane, M.D., of Greenfield, in this State, a medical gentleman of high standing, in the profession, writes to the officers of this Society, as follows:

"The objects of the Female Medical Education Society, meet my approbation, because, from an attentive consideration of the peculiar diseases of women, during a practice of twenty years, I have ever been of the opinion that, as a general thing, and especially as to diseases incident to parturi-

tion, these might with great propriety be committed to the management of their own sex."

William Workman, M.D., of Worcester, a physician of extensive practice, and former President of the Worcester District Medical Society, closes a letter to the Directors of the Female Medical Education Society, as follows:

"Finally, I will say, if your Society, either by a special college, or otherwise, shall educate and introduce into practice, a class of female midwives and physicians, of the character and accomplishments of Mdmes. Boivin and Lachapelle, of Paris, or of Miss Blackwell, of New York, you will confer a benefit on society, and do honor to the medical profession; and I, for one, will most cheerfully bid you God speed."

Of the *missionary* feature connected with the present plan of female medical education, we might fill volumes with quotations from men of the greatest eminence, in its commendations. This feature of it seems to be of great moment to the church and to the world. Some female missionaries have already been medically educated. One, a missionary among the Aborigines of our own country, attended a full course of medical lectures last winter.

We look to the one hundred and forty millions of India. Suppose a Christian missionary goes there. He finds his way hedged up—they are jealous of his religious influence. Their wives and children are sick, and this missionary cannot see them. But, like one in the early Gospel history, he has taken "Luke, the beloved physician," with him in the person of his own wife. She understands the healing art. They, like all other barbarous people, wish to be restored to health. She restores them, and they look upon her as an angel of mercy. They listen to her, and through her, to her husband. Is she not verily "an help meet for him?" Perhaps by no other means could so great "a door, and effectual, be opened" to him. Certainly by none so naturally and readily. Through the instrumentality of such means, we may yet hear these physically and morally healed idolaters exclaiming, "How beautiful are the feet of them who bring glad tidings of good things!" who bring us bodily health through the medium by which spiritual life dawns!

We look into the dominions of the Sultan. He has lately exhibited signs in favor of human rights; but he venerates his prophet. He has his seraglios, and the missionary cannot pass their threshold. It is not so with woman. She can go and administer medicine to the sick, where her husband cannot enter. Through her medical knowledge, the key is found to the heart of many a son of the swarthy Turk, and, also of the wandering Israelite; and together they exclaim, "After all, these Christian dogs do us good. They heal our sick; they save our dying. Some *good* thing does 'come out of Nazareth.' These Christians have not horns and hoofs, and such selfish hearts as we supposed. We will now hear about their *religion*."

We turn to China, that oldest, greatest, and, in her own estimation, the only *celestial* empire of the world. She numbers three hundred and sixty millions; and though, by the wonder-working providence of God, her five great maritime gates are now set wide open to the Christian minister, yet so jealous are they of his influence, that he cannot travel more than half a day's journey into the empire, from any one of them. Suppose now the female missionary goes there, medically educated, with her husband. Can we believe she could not go where he could not? Let her heal one child, one woman, and she would be *sent* for, to be carried in a grand palanquin or royal basket, where he would be prohibited admission.

A Chinese, like any other man, will pile "skin upon skin," silk upon silk, and tea upon tea, until he "gives all that he hath for his life."

It is in this way, we expect to open the door of beneficence, of humanity, refinement, civilization and religion, to multitudes. Thus, the surgeon missionary, Grant, with his cataract needle; Dr. Parker, with his scalpel; and Gutzlaf, with his medicine chest; found admission to male barbarians, through passes guarded by armies. Hence, Rev. H. G. O. Dwight, from Constantinople; Rev. Wm. J. Boone, missionary bishop, at Shanghai, with other, both male and female, missionaries, now on heathen ground, have written, highly approving of this enterprise. —*Boston Medical and Surgical Journal.*

DROWNING.

BY N. L. FOLSOM, M.D.

For a long time the question has been asked, how long may a person remain under water without breathing, and then be resuscitated? and the answer has been variously given. Cases have been reported where persons have been resuscitated at the end of eight hours from the time they first went under water; and other cases have been given where persons have been taken out, from three to five minutes, after going under the water, and yet life was not saved.

Why is this difference in the ability to resuscitate persons? Some will answer by saying, that perhaps what was done for the patient was worse than nothing; while others may say, that proper remedies were not to be had until it was too late to use them. There may be some truth in both answers, but I am strongly impressed that all of the circumstances in such cases are not known. We all know that the blood goes its round, in not far from two minutes and a half; so that if the lungs do not act for that time the blood must all become venous, and consequently poisonous for any other place than the veins, and the brain and the rest of the nervous system must be more or less paralyzed, and of course, death is speedily the result. Other circumstances also in particular cases exist, that make death more speedily ensue; such as drunkenness, when the brain is already poisoned more or less, and consequently needs very little additional poison to produce death. Age and ill health likewise, in many instances, have so enfeebled the nervous system, that a much less shock is required to produce death than in a vigorous constitution. In children the circulation is more rapid than in adults, and consequently it would go the round much sooner, and so poison the brain in a proportionately less time.

How, then, it may be asked, are persons resuscitated after they have been in the water from fifteen minutes to several hours? In the first place I will refer to the case of Andrew Ritter, a youth of seventeen or eighteen years old, who in an epileptic fit fell from a log, into Elk river, last summer. He went directly to the bottom, in deep water, where he remained fifteen or twenty minutes before he was brought up. He in a few minutes recovered as from a regular fit. He had taken no water into his lungs. In Ritter's case all the functions of the system must have nearly been suspended during his stay under water, with just action enough left to keep life in him. Consequently he came to, as from a fit simply.

Now, if a person receives a blow before or during his fall into the water, sufficient to nearly suspend the functions of the system, for a time, he may lay under water during that time, without drowning. A shock sufficient to suspend nearly, or indeed quite, the whole powers of the brain, may be produced by fright, at the time of falling into the water, in which case the person would not drown during the time the functions of the system were suspended, which might be for a longer or shorter time. Such a shock to the system may be produced by numerous causes unknown to us; and I think a more satisfactory explanation can be given of the Miss Griswold case, in the Norfolk tradegy, and of many others mentioned in the different journals, by the above view, than by any other that has been given (not denying that Miss Griswold would have died if nothing had been done for her.) We have accounts of numerous cases, in which persons have remained, from some cause, in a condition very much resembling death, for a long time. Possibly the falling into water may produce this condition in some persons predisposed to it, and consequently *they* would not drown soon. The general impression is, as far as I have learned, that experienced pearl divers can remain under water a very long time—how long I do not know. But one person, in noting the length of time the different pearl divers would remain under water, observed that none of them remained more than one minute and a quarter, and most of them not more than one minute.—*Boston Medical and Surgical Journal.*

EXTRAORDINARY RETENTION OF A DEAD FETUS.

N. B. PICKETT, M. D.

Believing that *facts* like the following should be preserved for the benefit of science as well as of medical jurisprudence, and knowing of no better way to preserve them than to ask their insertions in the Journal, I forward them to you with that request.

Some weeks since, I was called to Mrs. R——, of Stockbridge, whom I found in labor, which lasted some six hours. This, for her, was rather a hard labor. She was, however, safely delivered of a large, healthy child, at apparently her full time. While examining for the placenta, I discovered something had apparently ossified. The placenta soon passed off, and with it, this apparently foreign substance, which proved to be nothing more nor less than a dead and partially decomposed *fetus* of about four months.

The *query* with me is, how could nature's functions harmonize in thus enabling the mother to carry both a dead and living child for at least five months. The mother recollects, that when about three or four months advanced in pregnancy, the sudden announcement of the death of a relative, produced a fainting fit, some sickness at the stomach, and slight indisposition for two or three days. Since then, up to the time of labor, she has enjoyed uniform good health, enabling her to manage her household affairs without assistance to the time of delivery.—*Boston Med. and Surg. Jour.*

SPONTANEOUS INFLAMMATION OF ALVEOLO-DENTAL MEMBRANE.

BY CHAPIN A. HARRIS, M.D., D.D.S.

About three years since, Miss T., a maiden lady, 35 years of age, of a scrofulous habit, applied to me to extract a lower molar, which had been the seat of severe pain for some six or eight weeks. Perceiving, on examination, that the crown of the tooth was sound, I recommended the application of a leech to the gum. This did not mitigate the pain in the slightest degree. As the crown of the tooth was free from caries, and the character of the pain did not indicate inflammation of the pulp, I suspected it arose from some constitutional cause, and advised her to consult her medical attendant before submitting to the operation of extraction. She followed my advice, but before the treatment which he instituted had produced any effect, the pain became so intense, she called upon me again, and this time, at her earnest solicitation, I removed the tooth. The roots on examination, were found to be covered with thin blood of a dark purple color, which had seemingly been effused through the coats of the capillary arteries distributed upon the periosteum.

A few weeks after the removal of this tooth, I was requested to extract the corresponding molar on the other side in the same jaw, and under precisely similar circumstances. I again advised the application of a leech, and such other constitutional treatment as the state of her general health might, in the opinion of her medical advisor, seem to indicate. But as she had already suffered severe pain from it for more than two weeks, I could not persuade her to have the operation delayed. The roots of this tooth presented the same appearance as those of the other.

Seven or eight weeks after the last operation, she visited me again. Two other teeth, upper molar and a lower bicuspid, had become the seat of constant, gnawing pain. Both of these teeth were slighly affected with caries, but the structural alteration had penetrated but a short distance into the dentine, and could have had no agency in the production of the pain, which, as in the two former cases, was evidently the result of periodontitis, and that not caused by any other source of local irritation than the mere presence of the teeth, but dependent upon great preternatural irritability of the periosteum, arising from some peculiar cachectic habit of body, or state of the general health. Entertaining this view of the case, and not wishing to interfere with the general treatment which seemed evidently to be indicated, I advised her to have leeches applied to the gums of the affected teeth, and to place herself under the care of her physician, to whom, at her request, I addressed a note, expressing my opinion with regard to the cause of the pain from which she was suffering. As she resided in the country, some ten or fifteen miles from Baltimore, I had great difficulty in persuading her to return with the aching teeth in her mouth; but yielding to my solicitations, she finally consented to do so. She returned immediately, sent for her physician, and was at once put under medical treatment, which was perseveringly continued for about seven weeks. During this time, aperients, tonics (such as quinine and the various preparations of iron,) counter-irritants and narcotics were prescribed; but the pain continued without any mitigation, and in the meantime extended to two of her other teeth. It had become so agonizing, that she was unable to obtain any sleep at night, except when under the influence of large doses of morphia, and despairing of relief, she again visited the city, firmly resolved to have the four aching teeth removed. Her suffering was now so great, that I no longer refused to perform the operation. The roots of these teeth presented the same appearance as those of the two first.

Miss T. left Baltimore the day after the operation, comparatively free from pain; but the sockets remained sore, and at times, slightly painful for several weeks.

About three months after the removal of the last teeth, another began to ache, and in about three weeks, the pain having assumed such a degree of severity as to render its longer endurance almost insupportable, she came to the city and had the tooth extracted. The loss of this procured a few weeks freedom from pain; but in a short time another was seized, and was ultimately removed. In this way, tooth after tooth was attacked and extracted, until at the expiration of about eighteen or twenty months, all of the molars and bicuspids, except one, of both jaws, were removed.

Believing that the extreme irritability of the alveolo-dental periosteum, which seemed so great, that the mere presence of the teeth acted as irritants, arose, principally, from a scrofulous diathesis of the general system, I suggested the use of iodide of potassium. This was tried, beginning with two drops a-day of Lugol's solution. The dose was gradually increased, until the whole system had become, as it were, completely satuarated with it, but with no better effect than the remedies which had been previously prescribed. The inflammation soon extended to the sockets of the remain-

ing teeth, attended by the most agonizing pain, and one after another was removed, until not a single tooth remained in either jaw.

The roots of all the teeth presented the same appearance; and what seemed very remarkable, the inflammation at no time extended to the gums; this structure exhibited no indication of increased vascular action, but retained, throughout the whole progress of the disease, a pale, bluish rose-colored tinge; their margins were thin and regularly festooned. The pulps of the teeth were also free from inflammation, and the hard structures of the organs were, for the most part, free from caries. Some six or eight were slightly affected, and four had been filled, but in no instance had the disease extended to the pulpy cavity.

Up to the time of the development of this most singular affection, the patient had lost but six teeth; the remainder, twenty-six in number, were removed in a little more than two years.—*American Journal of Dental Science.*

PERICARDITIS, HYPERTROPHY AND DILATATION OF THE HEART; PLEURISY; DEATH FROM A COPIOUS EFFUSION INTO THE RIGHT PLEURAL CAVITY.

BY G. C. SHATTUCK, JR., M.D.

A delicate youth æt. 17 years, entered the Massachusetts Hospital, March 28th, 1853. He had been suffering from cough, shortness of breath, weakness, pain of the left side for six weeks, and had taken cod-liver oil. The heart was found beating at the scrobiculus cordis; there was a marked prominence of cartilages of the sixth and seventh left ribs. The left thorax measured one foot three inches, the right, one foot four inches. Strong impulse of heart, flatness over fourth, fifth, sixth, and seventh ribs, and from middle of sternum to the back, which was flat below the spine of the scapula. Bronchial respiration and ægophony in the same region. Both sounds of the heart distinct at the base, replaced at the apex by a strong souffle. Pulse 82, quick, regular. He reported his general health as good, no long illness; an occasional stiffness of the knees the principal infirmity. He was blistered and put upon a course of alteratives, diaphoretics, and anodynes. There was improvement generally and locally. The respiration was heard at the point of the right scapula on the 4th April; and still ægophony on the 6th. He was very reluctant to keep his bed, and on the 11th, after exposure to cold, he was attacked in the night by pain in the left side, and increased dyspnœa, The physical signs of increased effusion were present. On the 13th, the heart was still found beating at the scrobiculus cordis. There was a loud smooth murmur with the first sound over the lower left chest, but over the base of the heart, the murmur followed the second sound. On May 4th, the following sound of the physical signs was made—one distinct sound followed by a loud and smooth murmur; pulse 94. On the 14th, he had another attack of pain and distress after exposure to cold; dulness of bronchial respiration over left lower back was noted on the 16th. On the 18th, flatness at point of left scapula. On the 23d, a crepitant rule was heard distinctly over the lower left back, and there were only one or two pneumonic sputa. These disappeared with general improvement. On the 1st of June, he complained of swelling of the feet. He was disposed to sit up and to walk about as much as possible. June 6th, another attack; flatness, bronchial respiration, ægophony over lower right back. This did not yield to blisters; diaphoretics and alteratives exhibited as far as the strength of the patient admitted. There was still dulness and feeble respiration over the left lower back; inclination to diarrhea. On the 24th he could not lie down on account of dyspnœa, suddenly aggravated, and he died on the 25th.

At the autopsy, the right thorax was filled with a straw-colored serum, the lung somewhat compressed, but easily distended by air; free from adhesions. Slight adhesions of left lung; splenification of lower lobe. Hypertrophy and dilatation of heart quite marked. Several layers of false membrane between pericardium and heart. Insufficiency of aortic valves, which were thickened, smooth, and pale. Auriculo-ventricular valves not remarkable. Redness of lining membrane of right auricle.—The organs in the abdominal cavity were examined. The gastro-intestinal mucous membrane not remarkable for color or consistence.

The murmur in this case must be attributed to the insufficiency of the aortic valves, caused not so much by disease of their lining membrane, as by the abnormal situation and hypertrophy of the heart. The patient was killed by the rapid effusion into the right pleural cavity, but the pericarditis and pleurisy were the assigned diseases, to the effects of which, aggravated by exposure to cold, the subsequent phenomena in the case must be referred. The pulse was always quick and regular, the cough was never a troublesome symptom. He had two attacks

of pleurisy and one of pneumonia whilst in the hospital. The effusion into the right pleural cavity, which proved fatal, was not accompanied with signs of inflammation.—The patient's life might have been saved, for the time, by puncturing the thorax, but it could hardly have been much prolonged. —*Rec. Bos. Society for Medical Improvement.*

ANEMIA AS A CAUSE OF DISEASE IN THE FEMALE, AND PARTICULARLY OF PUERPERAL MANIA.

BY F. W. MACKENZIE, M.D.

It is unquestionably a fact, that anemia in various degrees, prevails very generally among females, and that its existence is often unrecognized both by the patient and her friends; while, at the same time, its influence is very considerable in modifying and predisposing to various secondary diseases. The great susceptibility of the nervous system in females generally, both consequent upon, and independently of, impregnation and its results, is well known; but its connection with certain conditions of the blood does not appear to have been as fully appreciated. It has been observed, for instance, that the nervous system of the female in health, is far more irritable and susceptible to impression than that of the male; but it is also the case, that the healthy constitution of the blood of the former differs materially from that of the latter, with a slight exception in favor of albumen, the blood of the female contains a smaller portion of nutritive and vivifying elements than that of the male.

The avocations of females, in many instances, their education and modes of life, more especially of those of the upper class of society, doubtless tend still further to diminish this proportion, and to produce a correspondingly more irritable condition of the nervous system, as well as a greater susceptibility to the operation of disturbing causes. Anemia, however, when induced, and existing even in an extreme degree, is not incompatible with a comparatively healthy performance of the bodily functions, and thus may have been of long continuance, without attracting any particular notice; but persons so suffering readily succumb to morbid influences; they are unequal to much fatigue; possess, for the most part, but little energy, and are often incapable of performing their allotted and ordinary duties. Should impregnation take place, under these circumstances, the blood becomes still further impoverished, and the constitutional powers heavily taxed in the performance of the functions necessary for the purpose of "forming, lodging, expelling, and feeding the offspring." If secondary disease has hitherto been averted, there is now a greater probability of its supervening, and hence, during the utero-gestation, various functional disorders are liable to occur. The brain and nervous system in particular, become unduly excitable, and in some cases, incapable of withstanding the shock, and the consequences of labor. Hence it is liable to occur under such circumstances, with or without the supervention of some casual exciting cause.

(Dr. Mackenzie has been led to conclude that there is an undoubted connection between the existence of anemia antecedently to labor, and the occurrence of mania subsequently, and that this connection is more than casual. Stout persons as well as spare are obnoxious to puerperal insanity, for a stout adipose subject is not necessarily a healthy one; as the blood may be in such, and constantly is, either impoverished or scanty.)

The existence of anemia cannot be determined by the conformation of the patient. It is rather to be sought for in the pallid complexion, the paleness of the inner surface of the lips, and of the palpebral conjunctivæ; in the frequent palpitation of the heart, the breathlessness on exertion, the abnormal murmurs heard over the heart and jugular veins, the feebleness of the pulse, and the general coldness of the feet and hands; with these symptoms, there is often langor and lassitude, and general feebleness of the bodily functions. These are the surest indications of the presence of anemia; and when they are sufficiently attended to, it will often be found to exist where otherwise it might never have been suspected.

That this condition of the blood should favor the occurrence of puerperal insanity, would appear to be highly probable, from a variety of circumstances. In the first place, it is obvious that for the healthy performance of the functions of the brain, as of other organs, it is necessary that there should be a due supply of healthy arterial blood; and that this supply cannot be greatly diminished in quantity, or deteriorated in quality, without producing disorder, or a great susceptibility to it. "That the brain is an organ receiving a very great supply of blood; its vessels are large and numerous; that an increased determination of blood to it, or, on the contrary, diminution of the quantity conveyed to it, must have an effect upon the cerebral function; and that the perfect or imperfect state of the intellectual and nervous powers is intimately dependent upon the condition of the circulation within

the head, are facts of which no doubt can be entertained. Hence, among the frequent consequences of anemia may be mentioned an extremely irritable condition of the brain and nervous system. In some cases, this amounts to actual disorder, in others to a susceptibility, which only requires some casual circumstances to develop into positive disease. Thus, in puerperal patients, when greatly anemiated, mania may occur as the result of the mere shock and consequences of labor. But when the blood is less impoverished, additional disturbing causes may be necessary; and those which would produce it in a puerperal patient, are similar to those which would occasion it in the non-puerperal state. Of these, mental agitation, shock, or emotion, loss of blood, and irritations of various organs reflected upon the censorium, particularly of the stomach, liver, and intestines, are the most potential; and the cerebral disorder induced by these in anemiated non-puerperal persons, is precisely similar to the mania of the puerperal state.

In the second place, the general symptoms attending puerperal mania, are identical with those which are met with in anemia. The brain and nervous system, it is true, are in a state of extreme excitement; but the condition of the patient generally is one of weakness and exhaustion. The pulse is small and quick; the extremities cold; and the excitement has been truly characterized as "action without power." Moreover, in all the cases which I have seen, loud, continuous murmurs were heard over the cervical veins, as well as those cardiac sounds which are indicative of an attenuated state of the blood.

In the third place, the progress of the disease does not materially differ from various cerebral affections, which are occasionally met with in anemiated patients; and while in each the tendency under favorable circumstances is to recovery, in either the reverse may happen from very similar causes. Thus, in either, congestion of the brain may occur from feebleness or irregularity of the circulation; and, consequent upon this, effusion may take place, leading to a fatal termination. When, again, the malady is protracted, various organic changes may be induced in the brain and its membranes; and these may give rise to permanent insanity, epilepsy, or paralysis.

Treatment.—The treatment generally proper for anemia will be found, upon the whole, to be most appropriate for puerperal insanity. Special indications will require to be fulfilled by special means; and slight forms of the disease will often yield to the unassisted efforts of nature. But when the attack is severe, and resists the natural efforts, as well as specific treatment, it will generally be found that this obstinacy is connected with an aggravated form of anemia, and that in proportion as the condition of the blood is improved, will the cerebral disorder disappear.

If the foregoing observations should prove to be correct, and if it should be established as a fact that anemiated persons are especially predisposed to puerperal insanity, it will follow that the treatment should not only be curative, but preventive. The practitioner, aware of the cases in which there exists a predisposition to the malady, will be forewarned, and prepared to take precautions against its accession. During pregnancy, he will endeavor to improve the condition of the blood and the tone of the nervous system, by the attention to diet and regimen, and such auxiliary treatment as may be indicated in particular cases. During labor he will especially endeavor to diminish the shock upon the nervous system, and to lesson excessive or immoderate hemorrhage; whilst, during the puerperal period, he will guard his patient against the influence of those occasional causes which are known to determine the attack, such as mental alarm, agitation, or emotion; gastric, hepatic, or intestinal irritation or any organic irritation which is capable of being reflected upon the brain. In short, the indications are twofold; on the one hand to adopt such measures during pregnancy as are calculated to improve the blood; on the other, to guard the patient, both during and subsequent to labor, against such influences, mental and physical, as have been known to occasion the attack.

The first indication comprises the treatment of anemia in all its several forms,—a subject which is far too comprehensive and extensive for discussion in the present paper. Its relations moreover, to uterine and puerperal diseases generally are so important, that I propose to consider it in a separate communication. It should comprehend the attention to external circumstances,—habits and modes of life; to the condition of the digestive organs, as well as that of the nervous system generally; to various remote causes of a depressing character, mental and corporeal; and thus should comprise measures both mental and physical, dietetic and medicinal.

The second indication, so far as a preventive is concerned, is to protect the patient, both during and subsequently to labor, against the influence of the exciting causes of the malady. These are, for the most part, well ascertained, and comprehend two classes. The first class comprises those

which directly operate on the mind; the second, such irritative disorders of the body, or of particular organs, as are capable of affecting the brain unfavorably, whether by sympathy or otherwise. All painful states of the mind should, if possible, be prevented: distress, anxiety, grief, or any emotion, have in some instances, immediately given rise to attacks of mania; as also fright, agitation, sudden shock, or alarm. These also should therefore be rigidly guarded against. Of bodily derangements, it may be said, that any "uncommon irritation spreading to the brain," may be the exciting cause; but certain organs sympathise more directly with it than others, and the disorder of these is especially to be attended to. Such irritative disorders may be enumerated in the following order, as regards their frequency, in the causation of the disease: gastric, hepatic, or intestinal, either singly or combined; uterine and mammary.

The curative treatment of puerperal insanity, should it unfortunately have occurred, is one of extreme difficulty;—not less so from the nature of the indications to be fulfilled, than from the reluctance of the patient to acquiesce in the necessary measures of treatment. It should comprise attention to at least the following four points:

1st. The removal of any exciting causes which exist, and of any bodily derangement which may have been instrumental in the causation of the disease.

2d. The subduction of cerberal excitement, and the restoration of tranquility to the nervous system generally.

3d. Guarding against the occurrence of congestion, effusion, or other diseases of the brain.

4th. Supporting the constitutional powers, restoring the general health, and improving the condition of the blood.—*Medical Reform.*

RAW MEAT AND RECENT BLOOD AS THERAPEUTIC AGENTS.

In the diarrhea of young children, connected with anemia, M. Treusseau prescribes raw meat, finely chopped and slightly salted. He attributes the medicinal properties of raw meat to the iron and manganese contained in the fresh blood. The *Presse Medicale Belge* says that in Belgium it is a common custom, in some diseases, to drink bullock's blood in the morning before breakfast, while still hot, in increasing doses. Persons suffering from hæmoptysis, and exhausted by hemorrhage, are said to rally rapidly by taking every morning half a pint of blood in the slaughter-house, before it cools. It is said that children take the blood readily, but that adults loathe it. —*Assoc. Med. Jour.*, June 17, 1853.

ALBUMEN IN THE URINE, A SYMPTOM OF DISEASE.

BY G. OWEN REES, M.D., F.R.S., ETC.

(Upon this symptom, to which the attention of the medical profession has been directed for many years, and which forms the leading features of the disease called morbus Brightii, Dr. Rees remarks:)

I shall not now describe the methods of detecting the presence of albumen, but assuming the fact established, I shall beg your attention to the pathological considerations of which it is suggestive in the present state of our knowledge.

When Dr. Bright published his views on this subject, and declared his belief that an albuminous condition of the urine inditated a peculiar state of kidney, which commenced in congestion and terminated in the deposit of an advantitious matter in the tissue of the organ, some doubt was felt among pathologists as to the symptom indicating the condition described with any degree of accuracy. It was thought improbable that the state of kidney noticed by Dr. Bright could be the only cause capable of producing albuminous urine; and some were even so bold as to assert that many articles of food would produce a similar effect on the excretion. The exhibition of certain remedies also, and various pathological conditions, were quoted, which theory suggested as capable of bringing about the result; and what with intrepid assertion on the one hand, and plausible reasoning on the other, considerable doubt was for some time cast on the diagnostic value of albumen in the urine. Among the articles of diet said to produce albuminuria, I may mention pastry, milk and cheese. Among medicines, some diuretics were thought capable or producing a similar effect; and mercury, if exhibited in salivation, was confidently spoken of as a cause for albuminous urine.—The pathologocal states which have been at different times quoted as causes are very various and very numerous:—typhoid and typhus fever; certain forms of rheumatism; severe inflammatory affections, etc.

First, then, with respect to articles of diet:—Neither milk, cheese, nor pastry will produce albuminous urine; nor have I yet been successful in obtaining from those who have made these loose statements a specimen of urine which gave the remotest indication of the presence of albumen, provid-

ed it had been previously shown free from that principle. I have also failed to detect albumen in the urine where diuretics have been given medicinally, though it is possible that in poisonous doses some of these may produce the effect. In poisoning by cantharides, albumen appears with blood in the urine: but such cases as these are scarcely likely to confuse your diagnosis. With respect to mercury, the impression was so strong on the minds of some that it always produced albuminous urine when exhibited in large quantity, that a few years ago I was at the pains of carefully examining the urine of persons who were undergoing salivation for syphilitic disease at Guy's Hospital, taking care to test the urine of each case before the exhibition of the remedy. In these experiments I entirely failed to detect albumen, and I have no doubt that the conclusion above alluded to was arrived at on theoretical grounds.

(The important conclusion Dr. Rees comes to, with regard to the presence of albumen in the urine, is, that it must be regarded as most significant; that continued albuminuria, unconnected with lesion of the kidney, is rare; but we cannot, in such case, arrive at the conclusion at once that the patient is suffering from Bright's disease, because puerperal fever, Asiatic cholera, pyelitis, and inflammation of the urinary mucous surfaces generally, will produce albumen in the urine; it will even appear in a variety of diseases before death, and also now and then during gestation. But, in cholera, puerperal fever, and gestation, there is little likelihood of any of these conditions being mistaken for morbus Brightii. In pyelitis; and inflammation of the urinary mucous surfaces, the cause is not so clear where a discharge of pus takes place. The fluid in which the pus globules float contains albumen, and this mixing with the urine renders it albuminous.)

Thus, in inflammation of the mucous membrane lining the pelvis of the kidney and the urinary tubes, or in inflammation of the lower portions of the urinary mucous membrane, albuminous urine may exist.—Though the general symptoms will by no means always assist us to discriminate between these states and the morbus Brightii, the microscope and chemistry will generally easily solve the difficulty. The nature of the deposit must be examined, and we shall find the pus corpuscles present in quantity if the albumen in the urine depend on the above mentioned causes, and not on kidney disease. The microscope will then detect the pus corpuscles in the deposit. An excellent test for pus consists in the addition of liquor potassæ to the urine, when the deposit, if it be pus, is at once converted into a mucous fluid. This when poured out from a vessel, exhibits its glairy character. This test proposed by my friend and colleague Dr. Babington, and is often very useful in the extemporaneous examination of urine. Urine which is albuminous from the existence of Bright's disease, is also nearly always of a light specific gravity; and this is an important point to remember.

In any case in which the albuminous urine contains a deposit of pus, however, we must rather look to the mucous tissues of the kidney, and the membrane lining the bladder and urinary canals.

It not unfrequently happens that the systitis consequent on calculus in the bladder produces purulent and albuminous urine, and there is then some difficulty in ascertaining whether that form of degeneration characteristic of Bright's disease may not be affecting the kidney at the same time. This is a point of some importance as regards the prognosis of the case, for if the kidney be so diseased the patient scarcely ever recovers from the operation of lithotomy.

It is necessary to obtain the urine free from pus before we can speak with anything like certainty in these cases. If we can succeed in doing this by means of demulcents and astringents, in conjunction with alkaline remedies, then we may proceed to examine the urine with some hope of arriving at a conclusion. If, for instance, the albumen leaves the urine in proportion as it becomes free of the deposit of pus corpuscles, and if, on the disappearance of the pus, the albumen cease to be present then the albuminous urine was unconnected with the morbus Brightii. If, on the contrary, however, the disappearance of the deposit of pus leaves the urine still impregnated with albumen, then the morbus Brightii is probably present, and we ought to give an unfavorable prognosis.

Attention to this is of vast importance, and I have known more than one case in which much disappointment and chagrin might have been spared the surgeon, had care been taken to inquire into this matter.

When albumen, then, exists in the urine, *without pus or blood* to account for its appearance, we may conclude that the patient is the subject of one of those forms of degeneration known as the morbus Brightii, provided we have excluded puerpural fever, gestation, and cholera, as possible causes. It must be remembered that bloody urine will occasionally be passed in Bright's disease; but the prominent and continuing characteristic is the secretion of an urine containing the serous part of the blood on-

ly, and when red blood corpuscles are to be seen they appear but for a day or so, and then the urine returns to its purely albuminous state. In the slight notice I am here able to give of the morbus Brightii, I must omit the general detail of symptoms. I cannot refrain, however, from mentioning to you one or two points with repect to diagnosis, which you will find of value.—You may derive great assistance from the observation of the following symptoms, which when present, should always lead to the examination of the urine for albumen:

1st. A puffiness of the face observed in the morning.

2ndly. Frequent calls to pass water at night.

3dly. A tendency to swelling of the wrists, often attended with pain, but not of a rheumatic character.

4thly. Dyspepsia, attended with frequent nausea.

Do not expect always to find pain in the loins in Bright's disease. It is *sometimes* a symptom, but far from *always*, and I warn you of this, because the absence of that pain may distract your mind from the right line of thought, when examining the more insidious cases of the disease.

With respect to your prognosis, it is important you should remember that this disease is by no means necessarily fatal. Cases which are detected early are frequently cured, and those who suffer from the more advanced stages may be kept alive for years under judicious treatment.

One great point to keep in view, especially as regards the application of remedies, is, the albumen passing away by the urine is impoverishing the blood, and not only thus decreasing the proportion of albumen, but likewise interfering with the formation and development of the red corpuscles, so that patients become rapidly anemiated.

The relation between the contents of the red corpuscles and the chyle becomes changed in consequence of the drain of albumen lessening the specific gravity of the liquor sanguinis, in which the corpuscles float. Now, the chyle supplies iron to the red corpuscles, and contains that metal dissolved in its serum for that purpose, and when in the healthy state the chyle enters the blood through the thoracic duct, it produces certain physical changes. The specific gravity of human chyle is about 1027; that of the fluid in which the corpuscles float is 1050 to 56; and the fluid contained in the corpuscles must of necessity be of the same specific gravity, in virtue of the endosmodic law. When the chyle mingles with the liquor sanguinis then it lessens its specific gravity, and *in health* there is an endosmodic action exerted, which draws a considerable proportion of the chyle within the blood corpuscles, the law being that heavier will draw the lighter to its own side of any membrane, in larger proportion than the lighter can draw the heavier.

It will be obvious now, that if we lessen the specific gravity of the fluid in which the corpuscles float, *by abstracting its albumen*, we shall also lessen that of the contents of the corpuscle. The contents of that body will then approach to the specific gravity of the chyle, and that fluid will therefore enter the corpuscle the less freely and there will be less iron supplied to it for its nourishment. Thus it is that anemia, or a deficiency of red corpuscles, will always follow as a consequence of a drain of solid matter from the blood.

—*Journal of Medical Reform.*

Part 3. Editorial.

PHYSIOLOGY AND HYGIENE OF THE LIVER.

[In the following essay I propose to sketch the hepatic functions as I have been accustomed to present them in our annual course of lectures. By handling the subject in a somewhat different manner from our standard authors on physiology, and introducing some new suggestions, it is to be hoped that it will not be destitute of interest even to the well read physician.—B.]

The secretion of bile is so necessary and important that the liver is said to be more generally present in the animal kingdom than any other gland. The biliary secretion, however, does not necessarily require a distinct liver; sometimes, as in certain polypi and articulata, the secretion is performed by means of follicles in the stomach. In insects generally, instead of follicles, there are tubes. All that is necessary is to have the characteristic cells for biliary secretion. When respiration is defective as in aquatic animals, the liver becomes more developed. In man, and mammalian animals generally, and in birds, the liver is smaller, and more compact in structure, than in the cold-blooded animals. It is also relatively smaller in man at the pe-

riod of maturity, than in the infant or the fetus. In the adult it weighs about four pounds, and measures twelve or thirteen inches by five or six.

The liver lies in the region of the epigastrium and right hypochondrium, between the diaphragm above, and stomach, colon, and right kidney below, lying on a level with the last dorsal vertebra. It is somewhat lower in an erect position than when lying down, and lower during expiration than in inspiration.

The position of the liver adjacent to the diaphragm, causes it to be, like the stomach, continually agitated by the movements of respiration, and the muscular actions of the body; it is also liable to be forcibly compressed by the diaphragm, and abdominal muscles, in the act of vomiting; hence spasmodic vomiting is very efficient in relieving its congestion. The liver is also liable to be mechanically compressed by the distention of the stomach and of the colon. A distention of the colon by flatulence, or of the stomach by gluttony, seriously obstructs its circulation, and sometimes hinders the discharge of bile. On the other hand, a distended or congested condition of the liver, and the organs below it, materially impedes the descent of the diaphragm, and thus interferes with the depth and freedom of respiration.

The distention of the stomach by food, produces a compression of the liver and portal vein, which diminishes their influence upon the constitution, and thus produces a pleasant and comfortable effect; while the empty condition of the stomach, depriving the liver and portal system of mechanical support, favors their congestion, and thus produces the sickening and depressing sensations which generally accompany hunger. The importance of *solid* food is probably based upon the necessity of mechanical compression for the liver and stomach. No amount of nourishment in the form of liquid food will produce a satisfactory effect if the solid be excluded from our diet.

THE GALL BLADDER lies underneath the liver, partly imbedded in it, at its anterior margin, with its neck running backwards to the cystic duct, through which it receives the bile from the liver. It consists of a cellular and muscular coat, with a peritoneal covering, and something like a mucous coat internally. It serves as a reservoir for bile, and may be regarded as a mechanical convenience, but is not of great importance, having sometimes been absent in man, without any evident injury, and being sometimes nullified as an organ by closure of the cystic duct. It retains the bile when it is not needed in the intestines, and has some degree of contractility to discharge its contents when needed. Obstructions to the passage of the bile tend to develop a muscular appearance in its structure. The common duct has a distinct contractility and may by its spasmodic irritation hinder the discharge of bile. The contractility of the ductus choledochus was demonstrated by Muller, on irritating it in a bird just killed.

THE LIVER is invested by the peritoneum, by which it is suspended or attached to the diaphragm. Its color in the normal state, is reddish-brown, but in disease varies from cream-color to very dark. It is of a lighter color when it has less blood, and generally gives a lighter colored bile; the dark colored liver is usually softer and generally secretes darker bile. The yellow hued liver, however, is sometimes very soft.

The substance of the liver may be regarded as a spongy mass, filled with blood —an injection from any of the vessels will fill the whole of the liver. The blood vessels of the liver ramify into minute plexuses, forming apparently acini or lobules as they have been termed, which consist of wonderfully delicate tufts of capillary vessels, ducts and cells. It is supplied like the lungs, with arterial blood for its own structure, and venous blood for its peculiar function. Its arterial blood comes from the hepatic branch of the cœliac artery, which originates from the abdominal aorta between the two semilunar ganglia and the crura of the diaphragm. The

venous blood, collected from the stomach, intestines, spleen, pancreas, and gall-bladder,* is conveyed to the liver by the vena portæ, which thickens its coats, ramifies like an artery, and distributes its blood extensively through the liver. Each branch being accompanied in its course by a small branch of the hepatic artery and another of the biliary duct.

Our simplest conception of the liver may be obtained by considering it as a lake or marsh, filled by two afferent vessels, the portal vein and hepatic artery, and emptied by two efferent vessels, the hepatic vein and biliary duct, its rise or fulness being dependent upon the proportion between the supply by the vein and artery, and the removal of the accumulation by the hepatic vein and duct. The vein and artery, run to wonderfully minute ramifications in the delicate structure called lobules, and from this minute ramification arise the branches of the hepatic veins, to carry the blood through the vena cava, to the heart.

Biliary secretion and cells.—From the same locality arise the delicate ramifications of the biliary ducts, the fine extremities of which mingle with the capillaries and lobules, and extract from their blood by the assistance of cells, the substance called bile. This supposed ramification of the bile ducts or biliary plexus, is so exceedingly minute that Mr. Kiernan, an accurate observer, does not profess to have seen it, and only inferred its existence.—Professor Weber and Dr. Kruckenburg, however, profess to have seen it in the frog.

In contact with the hepatic ducts, between them and the venous ramifications, lie the nucleated cells, from the fifteen-hundredth to the two thousandth of an inch in diameter, which are supposed to secrete the bile, and appear as if tinged by it. They make a large part of the parenchyma of the liver, but it is mainly composed of capillaries which are sufficiently large in their diameter to admit the passage of one or two of the red globules of the blood. These capillaries are exceedingly thin and delicate, having no cellular tissue connected with them. The secreting cells are spheroidal in shape in the liver, but of a projecting and prismatic shape in the hepatic ducts, and gall-bladder. In the gall-bladder and ducts, we find a lining membrane composed like other mucous membranes of a basement membrane, with (prismatic) cells on the inside, making a solid pavement, and on the outside, the blood vessels, lymphatics and nerves.

The cells being the real agents of biliary secretion, the coloring matter of the bile has been observed in them, not only in man, but by Mr. Goodsir, in a large number of animals. Oily globules, and a granular substance may often be found in the cells; their color and magnitude seriously affect that of the entire liver. They vary from an almost transparent appearance to a yellowish or brownish hue. In animals that have fatty livers, from oily diet or from excess, and in the fatty liver from consumption, their oily globules greatly increase, distend the cells, and enlarge the whole bulk of the liver. The cells secrete the coloring matter of the bile, which may be perceived in them by the microscope.

The cells of the duct and gall-bladder, are liable to become detached by inflammation or mechanical injuries, and the mucous from their inflamed surfaces is full of these prismatic cells.

The hepatic artery according to Kiernan, is chiefly distributed to the coats of the hepatic ducts, (but supplies also the veins, gall-bladder and liver generally.) When injected it makes the ducts look almost like arteries. Its blood after acquiring the venous character, passes into the minute ramifications of the portal vein, and contributes to the secretion of bile like the latter. The portal vein consequently takes to the hepatic vein the blood of the liver itself, as well as the blood of the abdominal organs.

The biliary or hepatic duct ramifies through the liver, and in the minute lo-

* In some vertebrate animals, blood from the lower extremities, also goes to the vena porta.

bules as the biliary plexus. The hepatic duct is formed by a union of all the ducts in the liver, and is about an inch and a half long, and about as thick as a common quill. It unites with the cystic duct from the gall-bladder, forming the common duct (ductus communis choledochus,) and runs three inches under that name to the duodenum, some three or four inches from the pylorus.

THE FUNCTION OF THE LIVER, is the secretion of bile, and the modification of the portal blood. The question whether the bile is formed by the liver, or merely separated from the blood, may be illustrated by the fact, that when the secretion is suppressed, biliary matter accumulates, and the skin is colored by the coloring matter of bile; or, in other words, the person has a dark complexion, and is jaundiced. As to the question whether the bile is secreted from the venous-portal, or arterial-hepatic blood we may refer to cases showing that either blood-vessel may be sufficient for the biliary secretion. Lawrence and Abernethy each report a case in which the portal vein ran directly to the inferior vena cava, without going at all to the liver. In this case, a larger hepatic artery supplied the blood to the liver, but the bile was paler than usual. The liver in invertebrate animals, secretes bile without a portal vein. It is said, too, that tying the hepatic artery causes the liver to suspend its secretion; but this has been denied. Ligature of the portal vein does not suspend, though it greatly diminishes the secretion.

FORMATION OF SUGAR AND FAT BY THE LIVER.—The most important recent discovery concerning the liver, is that of C. Bernard, of Paris, who has pointed out a glucogenetic and olefiant function of this organ. The blood generally contains a small quantity of glucose or grape-sugar, a substance less sweet and soluble than the cane-sugar—also less crystalizable and more easily formed from amylaceous substances. Its chemical formula is 12C, 14H, 14O. Glucose is developed in the chyle and the blood, in consequence of the transformation of amylaceous substances in the alimentary canal, (forming this peculiar sugar which is taken up by the lacteals and veins), and in consequence of the transforming influence of the liver upon the portal blood. That the liver thus developes glucose in the blood, is proved by the fact shown by M. Bernard; that glucose, or a substance nearly identical with it, is found as a regular constituent in the blood of the hepatic veins, no matter what may have been the diet of the animal. Being in the hepatic veins, it is necessarily found in the onward progress of the same blood in the ascending *vena cava*, in the right side of the heart, and in the pulmonary artery. It is a remarkable fact that the formation of this species of sugar does not require amylaceous food, and that an animal, fed for sometime, on animal food alone, yields sugar from the blood of the hepatic vein, when none has been introduced into the liver, by the portal vein. This clearly establishes the saccharifying power of the liver, which is exerted upon the blood. In the liver itself, consequently, sugar is always present, even in the embryo. In the liver of the human adult sugar has been detected in such quantity, that the whole liver was estimated to contain three-quarters of an ounce.

In diabetes mellitus or melliturıa, the quantity of sugar formed by the liver, is vastly increased, and is discharged in great quantities by the kidneys. This would indicate that melliturıa was really a disease of the liver, an excess of its glucogenetic function. (In the liver of a diabetic subject, Bernard found as much as 833 grains of sugar.) It is probable, therefore, that the treatment of melliturıa, by agents which make an impression on the liver, will be found the most successful.

This saccharific function of the liver appears to be controlled by the pneumogastric nerve, and the medulla oblongata. The irritation of the medulla oblongata at the origin of the pneumogastric nerve, by puncture or by a galvanic shock, will cause such an increase of the saccharific function, that liver-sugar will be found in all the fluids of the body, (except the saliva), and will be discharged by the urine, thus producing a temporary melliturıa, which

continues for four days or longer, in the dog, and for two days in the rabbit.

This glucogenetic function of the liver shows the antagonism of its functions to those of the lungs. Glucose, like other compounds of the saccharine class, yields but little heat in its combustion, and the change of the elements of the blood into such a substance, must have a tendency to lower the temperature. Hence the animals which have been made diabetic by irritation of the medulla oblongata, have their temperature lowered, several degrees, although their respiration is hurried, and an increased quantity of carbonic acid gas is thrown off. Their blood is also darker than usual. The liver, therefore, is the exact antagonist of the lungs, as it is engaged in producing an element which the lungs are engaged in destroying; and while the lungs elevate, the liver lowers the bodily temperature. The peculiar sugar produced by the liver, is very readily destroyed by the pulmonary action. This is shown by the statements of Majendie and Bernard, that it requires nearly five times as much of the liver-sugar, to produce a given saccharine condition of the urine, as it does of the true glucose, and two hundred and forty times as much of liver-sugar as of cane-sugar, which shows that liver-sugar is more rapidly decomposed by the lungs, than any other saccharine substance.*

Whether sugar is produced in the tissues generally, as well as in the liver, is not certainly known. Lactic acid, a substance very similar in composition, to sugar, is known to be abundantly produced in the muscular tissues, and recently Scherer professes to have discovered a saccharine substance in the juice of the flesh, which he calls Inosite, the formula of which is 12C, 16H, 16O.

The liver is believed to be a fat-making, as well as a sugar-making organ. The hepatic vein, according to Bernard, contains more fat than the portal. In herbivorous animals it is supposed that the liver is concerned in a fatty transformation of amylaceous and saccharine substances. Such substances do assist in fattening animals, and it is supposed that the liver actually transforms them into fat. It may be, however, that they become substitutes for the regular formation of liver-sugar, and thus enable the liver to form fatty matter from the protein substances of the blood, which is its more common action. The sugar-making and fat-making functions appear to be distinct and opposite in character. The bodies of mellituric patients are deficient in fat—in their livers fat is deficient, and in the fatty liver of consumptives, sugar is lacking. The sugar formation in the liver is more characteristic of carnivorous, and the fat of herbivorous animals. The formation of fat from the albuminous elements of the blood, is shown to be possible, by the fattening of animals, which is not proportioned to the quantity of fat in their food. It is also illustrated by the fatty degeneration of the tissues of the body, which frequently occurs in life, as well as by the formation of adipocere from flesh when macerated.

In consequence of the relation of the liver to fat, the impairment or destruction of its functional power produces great emaciation, either because we are less able to digest oily food, or because we are then unable to form fat from the elements of the blood.

While fat and sugar are produced by the liver, the lungs are actively engaged in their destruction. Fat disappears almost entirely from the pulmonary tissue, when respiration is established, and during the high calorific activity of fever, fat is actively consumed, and the cells of the liver scarcely contain, according to an observation of P. T. Williams, any oily particles.

Fatty Liver.—While the pulmonary functions thus appear incompatible with the accumulation of fat, the liver is a favorite place for its deposit.

The liver is very liable to a fatty condition, which has been observed frequently (in France) in phthisical subjects. Louis found the liver impregnated with fat, in

* Proportions of saccharine substances necessary to be conjected into the jugular, in order to be discoverable in the urine, according to Majendie—Cane-sugar 1; Mannite 1; sugar of milk 6; glucose 60; liver-sugar 240.

forty phthisical subjects out of one hundred and twenty—but in persons dying of other diseases, he found only nine cases out of two hundred and thirty subjects. He found it also to occur four times as frequently in females as in males.

(It is possible that this accumulation of fatty material may be owing to imperfect respiration and oxygenation, leaving a greater amount of carbon and hydrogen in the circulation; or to imperfect action of the skin, which is one of the natural outlets of oily matter, or to the same causes which lead to the scrofulous deposit, viz, imperfect vitalization, and some alkaline or saline deficiency).

The liver normally contains a small quantity of oil in its cells, in minute globules. In that condition which constitutes the fatty liver, this oily substance accumulates in the cells, and slightly in the interstitial space, to such an extent as to constitute sometimes over one-half of the entire weight of the liver; sometimes the oily accumulation is even sufficient to burst and destroy the cells.

The liver in this condition, is soft and greasy. It is enlarged or thickened, and of a pale or buff-color. Its bulk and weight are somewhat inconvenient, but it has no morbid tenderness, neither is it congested with blood or prevented from secreting bile.

Fat distends the entire liver, being generally diffused uniformly through its substance, rendering it paler and softer, and making it even light enough in some instances, for slices to float in water. Its elasticity is diminished by the fat, so that it pits on pressure. The fat is so abundant that it may easily be melted out of the liver. Dr. Bostock, placed a specimen of fatty liver in boiling water, and obtained from it a substance resembling tallow, which softened at the temperature of 80 degrees, and completely liquefied, at 110 degrees. There is a modification of the fatty liver sometimes met with, which is called *waxy*—the solid element stearine being deposited instead of olein, produces the increased consistency.

The pancreas are also liable to a fatty condition (Lobstein) in which the very substance of the organ looks as if converted into fat.

In the opposite condition, in which oily material is defective in the liver, it is reduced in size, and presents a uniform homogeneous redness, a condition called by Rokitansky, red atrophy. He says it is accompanied by a "plentiful formation of a tarry bile."

A fatty condition of the liver, may be produced by the use of large quantities of oily food, (as was shown in the dogs, fed by Majendie, exclusively on butter, fat and lard), by high living, alcoholic and malt liquors, and indolent habits. It may also be produced by consumption, by chronic pemphigus, by cancerous ulceration of the groin, and by gray hepatization of the lungs; in all these cases there is great emaciation as in phthisis. It is greatly favored by the cancerous diathesis, and by ulceration or abscess in the lower lumbar and pelvic regions.

The occurrence of fatty liver in consumption, is greatly more frequent in females than in males, and has been found more frequently in Paris than elsewhere.*

The cause of the fatty liver is not well understood, it might be attributed to imperfect combustion of fatty matter in the lungs, if it did not occur so often when the lungs are not diseased. We find that the accumulation of fat in the liver, is preceded by its absorption from other parts of the body, producing great emaciation, but why it should be thus absorbed and transferred to the liver, we do not positively know. The process of transferring fat from the adipose tissue to the liver, is illustrated in the plan adopted for making the enlarged or fatty goose-livers for the *pate de foie gras* of epicures. Baron Larrey remarks, "To procure the large livers of geese, for making *pates*, fatted birds are confined in close cages, and then exposed to a graduated heat, being at the same time kept entirely without

* In forty-nine cases of fatty liver, observed by M. Louis, forty-seven were consumptive patients.

food, and even without water. They become feverish, the fat undergoes a kind of fusion and the liver grows enormously large. The liver is considered to be in the desired state, when the animal is *extremely wasted*, and the fever increases."

Here we see that hunger or exhaustion, producing active absorption, causes the fat to be taken up, and that for want of respiration it is not consumed, while the liver, kept inactive by the lack of food, is left to be passively distended by the collapse of the neighboring organs. The general growth of the liver is favored by indolent habits and high living, but if, while the habits are inactive, the abdominal organs are empty, the liver becomes passively distended, to fill the space which is unoccupied, and fat is the most appropriate material for this distention, because it is present in the blood in excess.

To remove the fatty liver, therefore, we should return to active habits, and use a good supply of food, avoiding oily substances.

Deposit of fat in the liver may be elucidated by reference to other parts. A deposit of fat about the heart is universal, and increases as in advancing life, the two sides of the heart become more unequal. In consumption this deposit about the heart is quite remarkable, as it contrasts with the general emaciation. In the emaciation produced by chronic dysentery, a fatty condition of the omentum has been frequently noticed; and in females who have borne children, the abdomen is often supplied with a layer of fat under the integument, even when they are emaciated. A layer of fat an inch thick, was found on the abdomen of a woman, who died extremely emaciated, at King's College Hospital. In al these cases there may be, as in the fatty liver and heart, a mechanical reason for the deposit of fat to occupy space.

Cancerous tumors of the liver or heart, have also a remarkable tendency to produce a deposit of fat in their vicinity.

Somewhat analogous to the fatty liver, is the SCROFULOUS LIVER, which sometimes occurs in persons of the scrofulous diathesis. Scrofulous material is deposited in the liver, and while it is considerably distended, the circulation of blood is materially reduced, and the biliary secretion consequently more or less disturbed, but seldom suppressed. The bile is often of a serous or albuminous character, and ascites is frequently produced by the interruption of circulation, which is greater than from the fatty liver. The scrofulous deposit is described by Rokitansky, as a "compact, grayish, often transparent, albuminous, lardaceous, or lardaceous-gelatinous substance."

Like other forms of tuberculous disease, it is quiet and insidious in its approach, is not productive of pain, and yields to anti-scrofulous treatment by sorbefacints, (iodine and potassa), and tonics, especially iron.

A mercurial and syphilitic cachexy sometimes produces a condition of the liver, very similar to the scrofulous.

MODIFICATION OF THE PORTAL BLOOD BY THE LIVER.—The heterogeneous absorption by the veins of the intestines, doubtless requires some modification before entering the general circulation. Medicinal and other foreign substances may thus be removed with the bile. The changes produced in the blood may be determined by comparing that of the hepatic vein with that of the portal vein and hepatic artery. (The comparisons which have been made between the blood of the portal and the hepatic veins are not sufficient to determine the influence of the liver, as they overlook the blood of the hepatic artery). As the bile is a more watery fluid than the blood, we should expect the hepatic venous blood to be less watery than the portal blood. Lehmann states that the portal blood is far more watery than the hepatic —that the serum of portal blood contains 8.4 per cent. of solid matter, while that of hepatic blood contains 11.8 per cent., and that the portal blood contains a greater relative proportion of fatty, saline and albuminous constituents, while the hepatic blood contains more of saccharine and ex-

tractive matters. C. Bernard asserts that the hepatic venous blood contains more of the fibrin than the portal blood; which, if it be the fact, is due to the blood of the hepatic artery. The modifying power of the liver is shown in the fact stated by C. Bernard, that the albumen of an egg when injected by the jugular vein, is discharged by the kidneys; but when injected into the portal vein, it is not so discharged. Sugar is also discharged by the kidneys, if thus introduced into the general circulation, but if introduced by the portal vein through the liver, in moderate quantity, it is modified into glucose, and is not discharged by the kidneys.

THE PURPOSES OF THE BILE show it to be both a secretion and an excretion. As a secretion it serves by its alkalinity to neutralize the acidity of the chyme, in which it is assisted by the alkaline character of the mucous secretion. It assists digestion, and enables us to master non-azotized substances, such, for example, as oil or butter. And it also counteracts the putrefactive tendency of the excretions; for when the bile is defective in consequence of the ligature of the *ductus choledochus*, which has been frequently practised upon dogs, the excrement and contents of the bowels become very fetid. If the *ductus choledochus* be tied, the chyle in the thoracic duct becomes more thin and serous, from the great loss of its fatty material. The fat of the body diminishes when the flow of bile is hindered by a torpid liver, or obstructed gall-duct. As an excretion, the materials contribute to form the feces—especially to impart their coloring material.

The quantity of biliary matter thus evacuated, is variable, and difficult to estimate. Berzelius makes it nine parts in a thousand of fecal discharge, which would be 4½ grains of bile to the ounce of feces and estimating the fecal discharge at five or six ounces, there would be from 21 to 26 grains of bile. There is, however, no regularity in this excretion which would justify such an estimate. In carnivora, according to Liebig, there is no discharge of bile in the feces; the whole of it is therefore reabsorbed, and serves as fuel for the respiratory organs.

The removal of carbon and hydrogen by biliary excretion assists the function of the lungs, and we find that the liver has a supplementary development to the pulmonary organs,—being large in fish and reptiles, and still larger in mollusca, but much smaller in mammalia and birds, which rely upon their lungs for discharging the blood. It does not harmonize well with this theory that serpents discharge no bile in their excrement.

When the liver fails to secrete the biliary matter, unless the defect is remedied by the increased activity of the lungs and skin, it may be thrown off by other organs, as by the kidneys, the serous and mucous membranes, and perspiratory glands, or deposited all over the body in the cellular tissue, and even in the bones, cartilages, and fibrous tissues, or in the coats of the arteries, veins, and lymphatics.

THE QUANTITY OF BILE daily secreted, is uncertain. It has been estimated at from two or three ounces, up to twenty-four. The estimate of Liebig and Shultz, that the horse and ox secrete 37 pounds of bile daily, (!) is unworthy of notice, except to show the extravagance of a celebrated chemist, who reasoned very boldly upon very slender premises, and whose boldness has fascinated the leading minds of the medical profession. Even the learned and sagacious Carpenter has been misled by Liebig's physiological theories. This estimate was made by Schultz upon the conjectral basis that it would require this much bile to neutralize the chyme of the ox. Liebig adopts this conjecture as a fact upon which to base his physiological doctrine that the bile is chiefly derived from the non-azotized food—a doctrine contrary to some of the best established facts of physiology.

In a case reported by W. R. Barlow, the bile accumulated in consequence of an injury to the liver in an old man of 54, and was discharged six times between the 9th of October and the 26th of November,

during which time (48 days) 65 pounds of almost pure bile were discharged. Similar cases have been reported by other physicians, and in one of these cases, the discharge from tapping a boy of 13 years, was even greater per day than in the above case. If we suppose a pint of bile to be secreted daily, we may inquire what becomes of that amount, since so little appears in the feces. In the ordinary healthy condition, it seems to be mainly reabsorbed, contributing to the process of digestion. About an ounce and a half of solid biliary matter, or about an ounce of solid carbon, is thus daily secreted by the liver, to be reabsorbed or discharged. Under the influence of purgatives or biliary diarrhea, it appears in the evacuations; but in the most vigorous state of the system, it contributes to the supply of carbon for the lungs.

Source of the bile.—The biliary secretion is probably derived from the waste of the fluids and tissues, for it appears to be formed while fasting; (it is also formed in hybernating animals and in the fetus); whereas the formation of carbonic acid by the lungs is very materially diminished by fasting.

This fact would imply that digestion supplies the materials of calorification, and that the waste of the tissues was not the chief source of heat, as suggested by Carpenter and Liebig. Under abstinence, the action of the kidneys and lungs is generally diminished, because they do not act very efficiently upon waste materials, while the action of the liver is better sustained. Food readily renews the excretions by lungs and kidneys, which proves that they are mainly derived from the nourishment furnished by the digestive organs.

Bile is formed in proportion to the abundance of degenerating venous blood; hence in persons addicted to high living, and in a plethoric constitution, when the vital force is suddenly depressed by disease, and the blood accumulated by portal congestion, there is a great accumulation and discharge of dark biliary material. In many congestive attacks, the evacuations from the bowels assume a dark, tarry appearance; and nature frequently relieves itself from the consequences of intemperance and surfeiting, by a spontaneous bilious diarrhea. The escape of the carbonaceous matter by the liver instead of by the lungs, necessarily deprives us of the caloric which it would have yielded by combustion; hence, the predominance of the biliary system in cold blooded animals. In fishes, the veins of the tail, kidneys, and genital organs—in serpents the right renal and intercostals, and in the tortoise, the veins of the pelvis, tail, and vena azygos, are added to the portal system, and thus a much larger amount of venous blood is brought under the influence of the liver. In man, also, before birth, when there is, as yet, no respiration, there is a very large liver, which secretes the meconium, and acts as a substitute for lungs; in doing which it rather lowers than elevates the temperature of the fetus, which borrows all its warmth from the maternal system. This great biliary development rapidly declines when the lungs are brought into play by birth.

In hybernating animals, whose respiration is diminished, much bile is secreted. And when we breathe an impure air, which does not remove the carbonic acid, the secretion of bile is increased. It is also greatly increased by dyspnœa and asphyxia, and in warm climates, where the lungs have less active play.

Temperaments. — Let us now enquire what are the relations which the liver holds to the entire constitution, and what is the influence which it exerts in the formation of the temperament. The old phraseology which has come down from the time of Aristotle, recognizing temperaments by the titles *Bilious*, *Sanguine*, and *Phlegmatic*, or *Lymphatic*, is based upon the relative character and influence of the fluids, bile, blood, and phlegm, which were supposed to give a character to the temperament. The name *bilious temperament*, was given to the temperament of the highest energy and endurance—a temperament characterized by

firm muscles, strongly marked features, intense and enduring passions, great ambition, fortitude, perseverance and power of accomplishing great results. In the popular mind, this is supposed to be literally true. I have heard a gentleman of intelligence dilating upon the *bilious temperament*, and showing how *the bile*, by its wonderful constitutional stimulating power, invigorated and impelled the entire frame, and qualified for deeds of greatness. If any one would like to know exactly how much of this elevating, invigorating power resides in the bile, he can easily determine to his satisfaction by drinking a quart of that delightful fluid, if he can control his stomach sufficiently to retain it. He will soon be satisfied that an accumulation of bile in the human body does not inspire us either with courage, fortitude, eloquence or any other noble quality. Disgust, nausea, and depression, are the influences which he will find in bile.

Every one acquainted with pathology or symptomatology, knows that when bile accumulates in our bodies, it produces a remarkably depressing effect upon the mental and physical energies, developing a temperament and traits of character exactly opposite to those ascribed to what is called so erroneously the bilious temperament.

If this vigorous temperament was named from reference to the liver and bile, it should have been called, not the bilious, but the *anti-bilious* temperament—the temperament in which this depressing influence of the bile does not impair the energies. The liver being the organ that secretes the bile, we should suppose, if the idea conveyed by the name *bilious temperament* were correct, that in proportion to the large development of the liver, the temperament would be powerful, enduring, and firm; in other words, that all men of that temperament had largely developed livers. But in fact, this is the very reverse of the truth, as persons of that firm, active temperament, have but a moderate development of the abdominal viscera, and are often so defective in the hepatic functions as to require cholegogue remedies, while they are peculiarly liable to torpor of the liver, and more apt than others to acquire the dark hue which is produced by imperfect secretion of bile.

Throughout the animal kingdom, the development of the liver, like that of the other abdominal organs, is connected with inferiority of temperament, while that of the lungs exalts the nervous energy. Cold blooded animals have a much larger proportional development of the liver than the warm blooded. The child just born has a much larger liver, relatively, than it will ever have again. As he advances to manhood, acquiring what might properly be called the *anti-bilious* temperament--acquiring firm muscles instead of soft ones—deep, enduring passions instead of evanescent excitement, and bold marked features and lofty ambition instead of peurile aims; he acquires an increasing development of the chest, and a diminishing development of the liver. In the infant it is about the 18th or 20th of the entire body—in the well formed adult, but the 30th or 40th. The highest proportional development of the liver is attained in the state of absolute repose which precedes birth—action continually reduces it. Meckel says that during the first year the liver declines not only in proportional, but even in its absolute size.

The development of the liver begins in the third week of gestation. Between that and the fifth, it becomes one half of the entire weight of the embryo. "By the third lunar month, the liver extends nearly to the pelvis, and almost fills the abdomen." Afterwards, its size diminishes, and it consolidates.

Hence, it is clear the *hepatic temperament* is one of relaxation, feebleness, and dullness, while the thoracic organs of respiration and circulation produce an effect exactly opposite to that of the liver. The temperament falsely called *bilious*, is a thoracico-muscular temperament—the opposite of the hepatic or bilious.

While the lungs exalt vitality, the liver lowers it. The bile secreted by one, sickens and prostrates—the caloric evolved by

the other, animates the entire frame. The accumulation of fat favored by the liver, and the smoothness of the abdominal temperament, are destroyed by the combustive action of the lungs, which produces the leaner outlines of the Cassius-like temperament of activity. The sugar formed by the liver is destroyed by the lungs—the venus blood sent forth by the liver, is converted into arterial by the lungs. The fibrin and globules destroyed in the hepatic region, are restored or renovated by the lungs. Altogether, it is clear that the hepatic or bilious temperament properly speaking, is one of a low grade, and the one to which that title has been given, has been very incorrectly named.

The difference in the pulmonic and hepatic temperaments is shown in the low temperature which accompanies the copious secretion of bile, or the action of cholegogue purgatives. It is shown, too, in the prevalence of hepatic disorders in warm climates, which relieve the lungs, and the greater frequency of pulmonic disorders in colder climates; also, in the smaller amount of consumptive diseases in malarious localities, which has been noticed in Europe as well as in America, and the tendency of those localities which are unfavorable to the liver, to relieve consumptive patiants. Spirituous liquors, which are so destructive to the liver when used to excess, are often beneficial to those of consumptive tendency.

[TO BE CONTINUED.]

OUR SPRING SESSION.

It will be seen from the notice on the cover, that we will have a Spring Session as usual, and from the present indication we are induced to believe that the class will be large. We hope the friends of the Institute will make a proper effort to circulate this information. This is more necessary, from the fact, that even since we issued the announcement for the Spring Session, others have published to the contrary. N.

CLINICAL REPORTS,

At Newton's Clinical Institute.

SERVICE OF PROFESSOR NEWTON.

REPORTED BY PROF. Z. FREEMAN.

Continued from page 7.

TENTH CLINIC, DEC. 6TH, 1853.

CASE XXXVI.—John Harrington, age 6 years. *Disease*—Fungus Hæmatodes. This case was before the clinic last spring; for the history of which I refer you to the April number of the Eclectic Medical Journal for 1853, p. 188.

"When ten weeks old a little red spot appeared on the shoulder, and has continued to increase ever since attacked. Two years since he had slight hemorrhage. It has since increased in frequency. A few days ago he bled two quarts at one time. I have never seen a cancer so large located here.

I hardly know whether to operate or not, for it is somewhat doubtful whether he would survive an operation.

It embraces the arm clear below the elbow with the whole of the shoulder joint, and has contracted the chest upon the left side. The blood-vessels are very much engorged. It measures nineteen inches across from the neck, and it measures twenty-two inches in circumference. Its largest circumference is twenty-four inches. He has grown more for the last year than for two years previous. There has been no hemorrhage for a week, and is probable that in a few days he will have another attack."

Treatment—Quiet and careful exercise.

The boy is more emaciated, yet plays about the house. The tumor is large—continues to discharge a quantity of pus at times. The skin is very tense over it, and the veins very large, tortuous and blue.—Prof. Newton remarked that, if he had been treated properly at the commencement of the disease, he might have been cured; but now the arm and shoulder are involved in the extensive tumor. Prognosis still unfavorable.

CASE XXXVII.—Mary A., aged 11. *Dis-*

ease–Convergent Strabismus of the right eye. The internal rectus muscle was excised by Prof. Newton, and the normal parallelism of the eye restored.

Case xxxviii.—Thomas Flannegan, age 30. *Disease*—Stiff and swelled neck, caused by a fall, has some pain in the side of the head, unable to labor.

Treatment—Vesicate the neck with Oleum Tiglii, and keep up a discharge with the same.

Case xxxix.—John Hines, age 21. *Disease*—Nebula covering the the upper half of each cornea. The blood vessels communicating with it are much injected. Vision dim and very imperfect. Has pain in the head about 6 p. m. every day.

Treatment—Cut the engorged blood vessels and apply ℞ Hydrastin grs. xx, Tinc. Aconite 3j, Tinc. Capsicum 3ss, Water 3ij, three times a day. For pain in the head, use ℞ Quinine grs. xx, Hydrastin grs. xx, Pres. Carb. Iron grs. xx. Make powders xx, and give one every four hours.

ELEVENTH CLINIC Dec. 9, 1853.

Case xxxi.—N. Wooland. *Disease*—Opthalmia and Pterygium. Eyes improving; somewhat sensitive. Continue the treatment.

Case xl.—James Kelly. *Disease*—Ectropion of the upper lid of the right eye, caused by a burn. Conjunctiva much everted, and very sensitive. Will not operate to day.

Case iii.—J. Jennings. Cancer of the scalp. Improving rapidly. Continue the treatment. Dressed before the class.

Case xli.—Mary Jane. Scrofulous enlargement of the middle cervical lymphatic glands.

This patient is of a scrofulous habit and much debilitated, has a precocious appearance.

The desease commenced to develop itself in 1851, and now the glands are as large as a half pint cup. Treatment, ℞ Prussiate of Iron grs. vj, Hydrastin grs. vj. Make three powders, and give one three times a day.

Local Treatment.—Adhesive strap applied to promote absorption. Bathe the surface twice a week with the alkaline bath.

Case xlii.—J. Roark. *Disease*—Herpetic Ulcer of the forearm, caused by constitutional depravity. Commenced twelve months since; has never been healed; commenced by a dry scale, inflamed underneath. Terminated in ulceration; is not sensitive, but a source of annoyance.

Treatment—Comp. Zinc Oint. for two days, then change to the Comp. Lead Oint.

Case xxvii.—P. Larkin. *Disease*—Secondary Syphillis. Not much pain in the bones; ulcers and eruptions of the face much better; soreness of the gums has disappeared. Continue the treatment; may congratulate himself upon a speedy cure.

Case xxxv.—Anthony Riley. *Disease*—Jaundice. Skin improved in appearance; feels well otherwise.

TWELVTH CLINIC, December 13, 1853.

Case xliii.—Lawrence Whaling, age 5 years. *Disease*—Hæmaturia. Commenced in September '53; caused by Calculi in the the kidneys. Symptoms—Pain in the right loin, and across the region of the kidneys; some debility and cough. Dec. 10, urine presented the appearance of a mixture with blood—a specimen of the urine was shown to the class.

Treatment.—Drink freely of a decoction of the Lycopus Virginicus; use the alkaline bath, with friction, twice a week; also, for three nights apply a large mustard plaster over the region of the kidneys.

Case xliv.—Mary B. *Disease*—Tenea Capits (T. Favosa) of 15 months standing, caused by contact with an impure comb.

Local Treatment.—Shave the head clean; wash with soap suds; apply for a few days the C. Zinc Oint., and the C. Tar Oint. of the Dispensatory.

Constitutional Treatment.—Comp. Syr. Stil. Sylv. 3 j, three times per diem.

Case xlv.—Peter Carney. *Disease*—

Chronic inf. of ankle joint, ligaments inflamed, caused by a sprain seven weeks since. Not much pain except at night; (in inflammation of the fibrous tissues we have most pain at night); the ankle and tarsus are much swollen, and the patient can scarcely walk.

Con. Treatment.—Tinc. Fer. Mur. gtts. x; Tinc. Marcotys ʒ ss. Give three times a day.

Local Treatment.—Vesicate with Oleum Tiglii.

Case xlii.—J. Roark. *Disease*—Herpetic Ulcer of the forearm. Improving rapidly. Continue the treatment.

Case xxxv.—A. Riley. Jaundice, and caries of the alveolar process over the incisor teeth. Improving.

Treatment—Apply to the carious ulcer dry Sesq. Carb. Potass., morning and evening for three days. Continue the constitutional treatment.

Case xlvi.—James McClary. Irritable Ulcer behind the external malleolus. Much constitutional debility. Also, a nail hole in the bottom of the foot, from which, in a week after the accident, three small pieces of leather sloughed out with the pus.

Local Treatment—Zinc Chloride applied to the ulcer, followed by Elm poultice and Myers' Oint., Stramonium leaves when painful.

Con. Treatment—Comp. Syr. Stil.

Case xl.—Jas. Kelly. Ectropion of the upper eyelid. Produced anasthesia with Chloreform. Prof. Freeman made a crescentic incision upon the eyelid, and dissected its integument down to the edge of the tarsal cartilage; made an angular incision upon the forehead, including a part of the eyebrow; dissected the flap from the periosteum, then with adhesive straps reduced the eversion of the lid, drew down the flap upon the forehead, and covered the whole with the adhesive straps. In this case the chloroform induced vomiting as it generally does after eating.

THIRTEENTH CLINIC, Dec. 16, 1853.

Case xlvii.—McFaddin. Follicular ulceration of the throat. Disease commenced eighteen months since; was well previously. Has been treated by Dr. Burke. The throat is granulating now, yet there is some ulceration. There has been ulceration of the tonsils, and the uvula has sloughed off. His throat has an excavated appearance. Pay attention to the throat; I examine the throats of all my patients when they complain of pain in the chest and shoulders, or of soreness of the air passages. The disease often continues until the uvula and tonsils are ulcerated away; the ulceration coming on so insidiously, that the patient is not aware of the extent of the disease.

Con. Treatment—℞ Comp. Syr. Stil. ʒ iv.; Iod. Potass ʒ j. *m.* Give ʒ *j.* three times a day. Use the Alk. Bath.

Local Treatment—℞ Arg. Nit. ʒ j.; water ʒ j.; *m.* Apply with probang for a few days, and after alternate with Tinc. Fer. Mur. Continue the treatment.

Case xxxi.—N. Wooland. Opthalmia and Pterygium Crassum. Eyes inflamed to day, has exposed them to the cold wind and dust. Use Ulma Fulva poultice for a few days and the Collyrium previously used.

Case xlviii.—Mary Kelly, age 12, weak ulcer of the shin, commenced in September 1853. It is sometimes painful—is about one inch and a half in diameter, inclined to be circular, with irregular edges,—she is healthy otherwise.

Local Treatment.—Apply the mild Zinc Ointment for a few days to stimulate it, change to Meyer's Ointment for a few days; then heal it with the adhesive straps.

Con. Treatment.—Compound syr. Stillingea, give ʒj three times a day.

Case xli.—Mary Jane. Scrofulous tumor. Improving. Tumor swollen; continue the treatment.

Case iii.—J. Jennings. Cancer of the scalp. Since he was before the clinic, Ses. Car. Potass. has been applied to the granulations. Some of them near the posterior edge of the ulcer seened too luxuriant; the

sore still improving rapidly; dressed it before the class with adhesive straps.

CASE XLII.—John Roark. Herpetic ulcer of the forearm. Improving. Continue the ointment, etc. Also use ℞ Comp. Syr. Stil. ʒj, three times per day.

CASE XVII.—— Larkin. Secondary Syphillis. Improving. Is well; may consider himself cured, but had better continue the use of the Comp. Syr. Stil. for some time yet, to eradicate any impurities that may linger in the system.

CASE XLIX.—A. A. Bridges. Follicular Laryngitis Pharyngitis and congestion of the left lung. Had been bled and blistered extensively. Has been affected since March last. Has much cough, night sweats, pain in the right side of the chest, formerly in the left side. Mucous purulent, expectoration epiglottis edematous, fauces livid. Mucous follicles of the fauces, pharynx and larynx much enlarged; a muco-lymph exudation upon the posterior wall of the pharynx; rattling or gurgling sound in the upper part of the left lung; much hoarseness, system much debilitated and considerable despondency.

Treatment—Prec. Carb. Iron ʒij, Hydrastin ʒj; make vj powders and give one three times a day.

Local Treatment.—℞ Argent. Nit. ʒj, Water ʒj, apply to throat with a probang once in two days.

FOURTEENTH CLINIC, Dec. 23, 1853.

CASE L.—Joseph Vandolen. Disease of the lungs follicular disease of the throat and Chlorosis.

This patient has great debility of the lungs, not being able to count over 12 with one respiration.

This is a plain case of Chlorosis accompanied with much constitutional debility, (males may have Chlorosis as well as females.) There is no ulceration or tubercles in the lungs.

He took a severe cold last April,—had a pain in the left side—has less cough now than formerly; fulness of the precordia; pulse 144; which may be caused by excitement.

Treatment.—℞ Syr. Squills ʒij, Syr. Zingiber ʒij, Tinct. Aconite ʒij; give from ʒj to ʒij three to four times a day.

CASE XLIII.—Anthony Riley. Jaundice. Improving. Some inclination to chills,—bowels costive. Use a cathartic. ℞ Podophyllin grs. v, Leptandrin grs. xx, Pulv. Zingiber grs. v, Ex. Traxicum q. s. make pills x, give one night and morning.

For the chills, ℞ Quinine, ʒ xx, Prus. Iron grains xx, *m* make powders xx. Give one three times a day. Continue the application to the ulcerated gum as previously directed.

CASE XXXI.—N. Wooland. Opthalmia and Pterygium Crassum. Had a relapse from cold, etc. Is improving since last clinic; the pterygium on one eye has nearly disappeared. Opacity of the cornea still remains.

Treatment.—Discontinue the Syr. Stil. and Iod. Potass., but continue the Collyrium as previously prescribed. Continue the alkaline bath.

CASE XLIX.—A. A. Bridges. Follicular Laryngitis, etc. Is better, breathes easier, less hoarseness. Has some diarrhea.

Treatment. Continue as before.

Treatment. For the diarrhea, Solution of Geranine in neut. mixture, add to each dose. Diaph. powder grs. ij.

This disease commenced in the throat. Affections of the lungs more frequently commence in the throat and go down than commence in the lungs and affect the throat as a secondary result. Continue the use of the probang and sol. Argent Nit.

CASE LI.—J. Barnes, age 33, shoemaker. Dyspepsia. Has been sick four years,—feet and hands cold, skin dry, headache, but catharsis will relieve it. Stomach is acid—vomiting at times which relieves the headache, appetite good, rests well at night—has taken much medicine; did no good—tried a voyage to Europe, did not get much sea sick. Soreness in the epigastrium—is cautious of his diet—never thirsty drinks but little.

Treatment—Warm Pedieuvia at night, also tepid alkaline bath.

TO BE CONTINUED.

OUR SCISSORS AND CLIPPINGS DEPARTMENT.

ECLECTIC MEDICAL JOURNAL.

We were highly gratified to receive, from the publishers, the "Eclectic Medical Journal," for July. It is a Journal which should find its way into every family; not for the reason that every family should be its own physician, but for the reason that every family should understand the great outline of Hygiene, and the comparative merit of the different systems of *pathies*, with which at some time or other there is a probability of their being drugged, dosed, or drenched; so that among the pathies, when they are compelled to submit to the one or the other, they may at least have a knowledge of their comparative merits.

Medical reform is as much, if not more, needed than any other reform, and we opine, will be more difficult to consummate from the fact that medical men hate "innovations," and it requires morethan an ordinary amount of moral courage for a medical man of the Old School, to say, "I have thrown away the Lancet and dispensed with mercurials." They look upon the Lancet and Calomel as sheet anchors, in their profession.

The Eclectic Institute, situated in the heart of the Great West, must exercise an influence in medical reform, unprecedented in the annals of medicine; from the fact that the West is liberal, progressive and philosophic, whlle, in many instances, and more especially in medicine, the East is bigoted, conservative, and fanatic.—*Canton Dem. Transcript.*

A WORD ON COUGHING IN CHURCH.

We copy the following from an autobiography which Hugh Miller is now publishing in the Witness: A simple incident which occurred during my first morning-attendance at Dr. McCrie's chapel, strongly impressed me with a sense of his sagacity. There was a great deal of coughing in the place, the effects of a recent change of weather, and the doctor, whose voice was not a strong one, and who seemed somewhat annoyed by the ruthless interruptions, stopping suddenly short in the middle of his argument, made a dead pause. When people are taken greatly by surprise, they cease to cough—a circumstance on which he had evidently calculated. Every eye was now turned toward him, and for a full minute, so dead was the silence, that one might have heard a pin drop.

"I see, my friends, said the doctor, resuming his speech, with a suppressed smile, "I see you can be all quiet enough when I am quiet."

There was not a little genuine strategy in the rebuke; and as coughing lies a good deal more under the influence of the will than most coughers suppose, such was its effect, that during the rest of the day there was not a tithe of the previous coughing.

We think a knowledge of the above fact, may benefit *other* assemblies. N.

WORK FOR CHILDREN.

There is no greater defect in educating children, than neglecting to accustom them to work. It is an evil that attaches most to large towns and cities. Children suffer much from it. The parent never considers whether the child's work is necessary or not to the child. Nothing is more uncertain than their future independence and comfort. Much depends on being accustomed to work—accustomed to provide for the thousand constantly recurring wants that nature entails on us.

If this were not so, still it secures their health; it strengthens both mind and body; it enables them to bear the confinement of the school-room; and it tends more than anything else to give them just views of life.

It is too often the case that children, provided they spend half a dozen hours of the day at school, are permitted to spend the rest as they please. Thus they grow up in the world, without a knowledge of its toils and cares; they view it through a false medium; they cannot appreciate the favors you bestow, as they do not know the toils they cost; their bodies and minds are enervated, and they are exposed to whatever vicious associations are within their reach.

The daughter, properly, becomes that pitiable, helpless object, a novel-reading girl. The son, if he surmounts the consequences of your neglect, does it probably after his plans and station for life are fixed, and when knowledge for one of its important objects comes too late.

No man or woman is fully educated, if not accustomed to manual labor. Whatever accomplishments they possess, whatever their moral training, a deduction must be made for ignorance of that important chapter of the world's great book.

REMARKABLE DEATH.

In last July, a Mr. Bowles, living on Fifth street, St. Louis, went into the city commons for the purpose of skinning a cow that had been dragged there. The cow died, it is thought, from poison or the bite of a mad dog. In skinning her, Mr. B. cut his finger, the wound coming in contact with the poison, his hand and arm commenced swelling, and he died in about 12 hours afterward.

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FEBRUARY, 1854.

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THE

ECLECTIC MEDICAL JOURNAL.

THIRD SERIES, Vol. II. | MARCH, 1854. | WHOLE SERIES Vol. XIII.

Part 1. Original Communications.

FEMALE MEDICAL EDUCATION.

A LECTURE DELIVERED BY PROF. J. R. BUCHANAN, AT THE ECLECTIC MEDICAL INSTITUTE, TUESDAY EVENING, JAN. 30, 1854.

Gentlemen of the Class, and I am happy to add Ladies:—Near the commencement of the present session I received a general request from the medical class for the delivery of a lecture upon some subject suited to popular circulation. Time, as I remarked, forbade my immediate compliance; but within a few days, I have thought of one subject of much interest, which has never yet been fully and distinctly taught before you. I allude to Female Medical Education. I have very hastily thrown together a few thoughts on this subject, and with the ink scarcely dry and the subject unfinished on paper, I shall endeavor to give you the aspects of this subject as presented to the mind of a medical reformer.

The Eclectic Medical Institute was established in a spirit of liberal philosophy, with sanguine hopes that it might become and continue the centre of a liberal progressive influence for the medical profession.

This implies that the expectation was not to float with the current and enjoy the honors and profits which follow a popular course, but to stem the tide of public opinion and sacrifice worldly honor to real and permanent usefulness.

We do not therefore expect public honors but we expect to labor on in the conviction that "truth is omnipotent"—and to realize our reward in the gradual triumph of truth—even if we can only witness that triumph in the last days of our lives, when we are preparing to leave the scenes of earth and earthly labor.

Whenever we find young men looking forward to the medical profession, we wish to reach out our hands to diminish the laborious difficulties and obstacles which they may encounter, and to lead them away from error and bigotry, into the paths of safe and sanative medication.

But our labors are not limited by our own sex. Women are laudably aspiring to medical education, and our assistance is as cheerfully given to them as to the more fortunate sex, who enjoy the physical energy and hardihood necessary to encounter the hardships of life.

The medical education of woman appears to me a part of one of the greatest benevolent movements of the age, and as the importance of this measure has never been so fully set forth here as it should be, I have resolved to make it the special subject of my remarks this evening.

I would first call your attention to the fact that the profession of medicine is now open to woman, and that there will in all probability be an increasing number every year engaging in this vocation. The most distinguished pioneer in this direction, Miss Blackwell, graduated in an American

College, and received all the advantages that Paris could afford—finding in her whole progress a kind and courteous reception even in the midst of teachers whose general course in medical matters is far from liberal. The stern prejudices which were at first arrayed against female medical education seem to be giving way, and there is such a manifest necessity for female practitioners, that men who are utterly indifferent to any measure of reform recognize this change as necessary. Prof. Meigs, of Philadelphia, alludes to this matter as follows:

"The relations between the sexes are of so delicate a character, that the duties of the medical practitioner are necessarily more difficult when he comes to take charge of any one of the great host of female complaints, than when he is called to treat any of the more general disorders. So great indeed, is the embarrassment, that I am persuaded that much of the ill success o treatment may justly be traced thereto.

* * * *

"All these evils of medical practice spring, not in the main, from any want of competency in medicines or medical men; but from the delicacy of the relations existing between the sexes; and, in a good degree, from a want of information among the population in general as to the import and meaning, and tendency of disorder manifested by a certain train of symptoms.

"It is perhaps best, upon the whole that this great degree of modesty should exist even to the extent of putting a bar to researches, without which no very clear and understandable notions can be obtained o the sexual disorders. I confess I am proud to say that, in this country, generally, certainly in many parts of it, there are women who prefer to suffer the extremity of danger and pain, rather than waive those scruples of delicacy which prevent their maladies from being fully explored. I say it is an evidence of the dominion of a fine morality in our society."

Prof. Cornell, in the Boston Medical and Surgical Journal, speaks in the following manner: (The extract was published in the Feb. No. of the present vol. p. 69.)

In accordance with these sentiments, which appear now to be spreading rapidly, the Female Medical College of Pennsylvania, was incorporated in 1849, and has been in successful operation since its first session in 1850.* In 1848, a Female Medical Education Society organized in Boston in 1850; it received incorporation from the legislature by an almost unanimous vote, and it has since been actively engaged in preparing women for medical duties; one year since it was stated that it had received altogether sixty or seventy students.

The success of Dr. Harriet K. Hunt in Boston, who has become independent by her profession, and of Dr. Elizabeth Blackwell, in New York, as well as the probable increase of female medical schools, render it certain that woman will hereafter occupy a considerable sphere in practical medicine.

Can there be any one now a days who will seriously regret this? Will not every kind man rejoice in this for the benefit of woman, and also for the benefit of female patients, and of children to whom a female physician is evidently more natural and appropriate than a male. Is there any one who would not rather entrust a sister, a daughter or a wife in the hands of an experienced and well educated female physician than with one of the opposite sex? Instinct, judgment and a native modesty all decide in favor of the *female* physician in many cases as certainly as they would decide in favor of a female for the offices of mother and nurse.

But gentlemen, there is one serious and sad aspect of this matter. If women are falsely taught in this profession and subjected to the influences of that medical bigotry which too often prevails in medical colleges, the effects will be sad indeed. The kind heart of the woman who gives a salivating dose of mercury, or opens a vein for the want of better knowledge, cannot prevent the unfortunate consequences of her professional errors.

* I have been privately informed that a separation has taken place in the School, and the more Eclectic portion of the Faculty have organized under the title o the Penn Medical College.

Shall we then witness the stream of female intelligence which is entering the profession, running in the channels of a pernicious and dangerous system of practice, or shall we use our exertions to prevent such a calamity, and render the female practitioners of our country, dispensers of a true and sanative system of medicine. Is there one before me who would wish to see woman engaging in the sanguinary practice of venesection or healing her patients in ignorance of the benevolent resources of the American Eclectic practice. No, gentlemen, since the entrance of woman into the profession as a fixed fact, we must rejoice also that there is an opportunity for them to enter it in the paths of a bloodless and sanative system, and bring their efficient aid to the triumph of benevolence. It becomes under these circumstances the duty of medical reformers, when they know that any young lady aims to enter the ranks of the profession to take some pains to direct her exertions in the path of true philanthropy and usefulness; and it is especially the duty of those who are already in the ranks of the profession, or who are attending the college as students, to extend all the inducements of friendly cooperation, of personal politeness and attention, to sustain and encourage their sisters in this great philanthropic reform. In most of the institutions Old School medicine, where women have applied for admission, their treatment by the faculty and the students, was such as we might expect from their rigid and restrictive policy in other respects. It is a principle in those colleges to reject from their halls every student who is strongly suspected of heresy, or who associates with medical heretics. This is the law of the National Medical Association, and we know of several flagrant instances in which this law has been enforced in this city.

Women are objects of suspicion, like liberal students; it is suspected that they never can be disciplined like the regular grenadiers of the profession; and although there may be some exceptions, they will necessarily be regarded with a jealous and unfriendly feeling under the shadows of old school medicine. Under these circumstances, they approach our halls, and are delighted with the contrast—they have heretofore found both professors and students sympathizing kindly with them, and have manifested the sincerest attachment to the Institute, and to the cause of medical reform.

There are other reasons which come directly home to us, why women should be received with the greatest cordiality and pleasure in our halls.

In many instances students of medicine are married men, and wish the companionship of their wives in their studies—how gratifying it is to them to know that they can have that privilege. How often have I seen before me the husband and wife, itting side by side, and drinking in the same instruction—the one secure in the presence of her natural protector—the other, happy in the presence of his cherished companion, and ready, if need be, to guard her person, purity, and dignity; and I could not but wish that every married man in the Institute had been in like manner accompanied by his wife, for their mutual benefit. It is true there may be some young men who are less accustomed to female society, and who feel some degree of restraint in the presence of women; but if such be the case, it is only an additional reason for the presence of women in greater numbers. All young men at the outset, of life, feel a certain degree of embarassment in female society—a certain bashfulness and restraint, which is quite irksome, and often drives them from refined society to lower associations. A young man who feels this restraint, ought, by all means, to endeavor to throw it off. If he enters the profession with this *green-horn bashfulness* upon him, it will do much to retard his progress and to diminish his standing and popularity. (Applause). The only way to overcome it is by cultivating female society. If, on the other hand, the feeling of embarassment arises from a prurient inclination for rude, boisterous or vul-

gar deportment—from a consciousness that, in the presence of ladies, such vulgarity is not respectable, it is still more necessary that any one who has such inclinations, should seek the society of refined females, until his taste is improved to such an extent, that he will no longer feel it a restraint to observed the laws of good-breeding, and of gentlemanly dignity. If a medical student has not, during his pupilage, those sentiments of gentlemanly propriety, and if gentlemanly deportment is irksome to him, then it is greatly to be feared that he never will become a thorough gentleman, worthy of a proper professional position. For his own good, instead of shunning the moral influence of female society, he should seek it on all occasions, and the more irksome it may be, the more urgently necessary it is that he should seek it. Indeed, a correct appreciation of medical ethics is among the indispensable qualifications of every physician. It is presumed in every respectable community, that a graduated physician is *ex-officio*—a gentleman and scholar—and if the voice of the entire community could be heard upon this subject in tones of authority, they would forbid the entrance into the profession of every man who was not fully entitled to be denominated a gentleman, and every one knows that the first characteristic of a gentleman, in American society, is a most courteous and polite deference to woman.

When ladies are introduced into the society of true, well bred gentlemen, both parties are at ease, and the association is mutually pleasant, gay, and animated. The tendency of society now is to the free employ of the sexes in all pursuits, whether industrial or professional, and in their collegiate education. The influence of this association, has always been happy, and the time will come, when, in every college, in every academy, and in every primary school, we shall see both sexes associating together, as human beings, without thinking for a moment that difference of sex should make them strangers to each other. The effects, I say, have always been happy; men gain refinement, and women gain strength and animation by the association. It is the law of nature—man and woman are necessary to each other—we go together through life, and we are unhappy if we are not united—we degenerate if we do not associate together.

But if we are unfortunately kept too far apart—if we lose all sympathy of manners and thoughts—if man becomes stern and coarsely muscular and harsh, while woman becomes feeble, indolent, and ignorant—their union is unhappy—they have no pleasure in wedded life—as expressed in the old couplet,

> All day and night, they frown and scowl,
> She calls him brute—he calls her fool.

This is especially apt to be the case with energetic professional men: unless their wives are so educated as to be in sympathy with their husbands, their domestic life is barren of interest, and void of affection. The happiness of domestic life depends upon sympathy—but there is no sympathy between those whose whole minds run in different channels, neither takes any interest in the conversation of the other, and they soon cease to hold pleasant conversation together—the husband enjoys himself most away from home; the wife feels herself neglected and makes complaints, complaints produce recriminations, and quarrels, and soon they are permanently estranged and unhappy.

The best security for domestic happiness is sympathy in opinions aims and pursuits. This is so necessary that even a difference in politics, and much more frequently difference in religion has destroyed the comfort and happiness of a family. To you, young gentlemen, I would now speak in friendly advice in reference to your happiness for life. I have given my attention for many years to the scientific causes of human happiness and misery, and I am convinced that our domestic situation is of more importance than any other circumstance whatever. You may gain wealth and favor, may be honored by society, and recognized as one of the leaders of the upper ten thousand—but with all this if you

have no happy home of love and peace in your splendid mansion, it will be a very poor place after all, (applause) and you will look with a sigh at an humble cabin home, where you see the man and wife who are content with each other, and to whom life is a social frolic however cheap and simple their play ground may be.--They dance and sing, talk, laugh and weep together through life, and if they have a hundred dollars or a hundred cents in the purse, it makes no difference to them--they know they can supply their material wants by their own industry, and love supplies the rest. They sit by their own blazing fire, and enjoy the sentiment so happily expressed by Burns,

"Gie me the canny hour at e'en,
My arms about my dearie O!
An' worldly folks and worldly things,
May a' go tapselteerie O!"

(Applause and merriment.)

But "the canny hour at e'en" brings no happiness to the man who has no sympathy—no smiling faces around him--no cheerful words from his wife—no happy days to recollect—no future harmony to hope. His life is withered and mildewed in its prime—he is cold and dead at the heart—the fire of his ambition is gone--he cares nothing for his profession, and well it is for him if he can abstain from the terrible consolation of the bottle. It is a gloomy future—two good lives are lost, they live for no purpose, and their children grow up in discord and selfishness.

Therefore do I urge you most earnestly to seek a congenial alliance where deep and lasting love may be expected to endure though life, and do not neglect congeniality of sentiment. If thebold democratic medical reformer allies himself to one who has no sympathy with medical and social progress—how painful is his position--his practice distrusted by his own family—his most inveterate and unjust opponents receiving sympathy at his own fireside, and his pride mortified in its strongest position. If he is falsely denounced for malpractice or for ignorance or disqualification, the charge is secretly believed at his own fireside, and his indignation is equalled only by his grief. Perhaps too he is urged to relinquish his chosen profession for other pursuits, or to sacrifice his honor and integrity by renouncing the truth, and adopting a system of practice which he knows to be destructive to the sick. I need not protract the catalogue of the miseries of the man who is mismatched and has no sympathy in the great aims of his life---who hears continually the language of reproach and condemnation where he should hear the language of love. There is too a milder region of this purgatory for professional men, in which many have suffered.

The professional man who loves his profession, and the wife whose sole concern is for wealth and high living, have no common sentiments or policy. At every turn their wishes clash, and a fierce debate entirely fails to reunite their sentiments.

For all these evils there is one unfailing remedy, that is—sympathy—sympathy of opinions, sympathy of sentiments, sympathy in conversation, sympathy in action—common opinions, common aims, common friends—one common goal of life, and one road to pursue to attain it; these are the means which give to man and wife in the language of Webster on another subject, which I will take the liberty of giving a different application, "liberty *and* union, now and forever, one and inseparable."

And how are we most surely to attain this union, this sympathy, this common stock of thought and feeling? I know of but one method: let each mind be developed by the same nourishment; let each be interested in the same themes, enjoy the same knowledge and cherish the same hopes—let them live together in mind as well as in body.

The wife of a medical man "especially" should be well educated in medicine, should understand every department of the profession, both theoretically and practically: and when they have this common education, this perfect unison of knowledge, it will prove a stronger link of union, and a

more certain source of domestic happiness than any other circumstance of life. When they sit down to converse together, their conversation will always be mutually interesting; it will be substantial, intellectual and invigorating. They will read the same authors and discuss them together: each will read to the other, and both will profit by the joint strength of their intellects. I believe that the principal reason why practising physicians so often grow dull and rusty in their profession, is because they are isolated from intellectual medical companionship. They have no college, no medical society, nothing to keep them from sinking to the level of society about them: at home they never talk or think of medicine: abroad they seldom allude to it except at the bedside, and thus their whole stock of scientific knowledge becomes so mouldy and dilapidated that they are afraid to encounter a recent graduate of a reputable school, for fear of exposing their own ignorance. I dont say that this is generally the case, but there are too many examples of what I have depicted.

A physician with an intellectual, educated wife as well versed as himself in scientific medicine, has his professional subjects always on his mind; he may be said to live and breathe in an atmosphere of science. I have known of physicians removing to a city at a sacrifice of pecuniary interest, merely for the sake of medical companionship, and occasional access to medical society and medical schools. But the physician who has in his own wife an intellectual companion and a master of the science, is far better off even than those who have all the advantages of a scientific emporium; his wife is worth more to him than a dozen colleges, and will do more to invigorate his mind and keep his mental energies strong and ready for the highest soarings of ambition. Hence I would say to young men, if you design to aim at real superiority in your profession: if you are determined not to settle down into dull mediocrity; content to make a living and to die: it must be no half and half business; your whole mind with all its strength must be given day and night to your profession, and if you would do that most successfully, you must either have no wife to distract your thoughts, or you must have one who will be a help and not a hindrance. Your wife should share your studies in the medical school; she should be a graduate in medicine. In this way she can do far more to contribute to your success, to increase your fortune and your fame, than by all possible devotion to house-keeping labor. With such a wife, when you have sickness in your own household, or any near relatives which seems to require all your time, and almost unfit you for business---with such a wife you are relieved from all care. If you are in a solitary location---no physician to consult with you; you counsel with her. If you are compelled to spend days imprisoned in your office, waiting for one or another, or to neglect important cases to stay at home to meet expected calls, this burden is at once removed, for she can attend to all calls at your residence, and furnish or prepare the medicine while you are attending to patients remote from your residence.

Even while avoiding the practice of medicine herself, and attending to duties at home, she will make a large addition to your income by the additional amount of business she will enable you to transact, and the additional number of female patients whose delicacy will prompt them to seek her rather than a male physician.--- And when epidemics come—when you are in danger of losing your life by labor and exposure and watching through the night, her timely aid will enable you to get through successfully, to snatch a few hours of sleep, and yet do justice to all who rely upon you.

When you are yourself prostrated on the bed of sickness with perhaps not a single physician near you—none that you can trust, or perhaps the best of them your determined enemies—to have in your own home this ministering angel—your physician your nurse, your wife all in one—and she the best physician—the most faithful nurse and the most valuable as well as devo-

ted wife—always by your side and ever ready to do what is necessary even before you yourself are willing to acknowledge that you are sick; if you have such a treasure, you are fortunate indeed.

If stern poverty overtakes you, or crippling disease confines you to the house, your wife herself is adequate to redeem your fortunes and save you from beggary. In adversity she will save you; in prosperity, she will make your career more glorious. And so highly do I value the intellectual influence of an educated woman—that if a young man should present himself as a candidate for a diploma, and I knew that he had such a wife as I have depicted, I would contribute to furnish him the credentials for his profession with much more pleasure and much more certainty, that he would prove an honorable representative of the school, and would never sink down in the quagmire of professional apathy, and sluggish routine.—(Applause.)

These are some of the reasons why I desire to see educated women graduates of the Eclectic School, and to see every physician supplied with a wife educated in medicine.

To some these ideas may be new, but they are certainly very plain and practical, and here we do not profess to be afraid of new ideas. If you have any doubts upon this subject, I would request you to subject these ideas to the test afforded by the rules of arithmetic—addition, substraction, division and multiplication. Calculate whether your prosperity would be most advanced by the plan which I recommend, or by following the old routine—whether such a wife as I have depicted—sharing your studies and able to co-operate with you, would not do more for your advancement in every point of view, than could be done by a less educated woman with the most assiduous devotion to housekeeping, cooking, washing and feeding the chickens! (Applause and laughter.)

And why are these ideas new—merely because we are just emerging from barbarism, and are not yet half civilized in fact. The North American Savages made their women do all their drudgery and treated them like beasts of burden. In Europe at this time women may be seen working in harness like horses, in the fields and in the mines—so accustomed to it that they do not even think it wrong.

"Mr. Greely writes of having seen women driving carts, upon the roads of Germany, in which men were asleep. A correspondent of the Boston Transcript, says he saw more than one woman, yoked in with a dog, dragging a small cart between Munich and Dresden. Everywhere abroad women are doing the worst work of men, partly because of the absence of real, refined civilization, partly that men are drafted away to the army in such numbers that, did not the females plough, hoe and manure, famine and starvation would come. Nothing can be worse than the degraded, filthy labor of women witnessed upon the first landing in England, poor creatures groping with their naked hands among the dirt of the streets, to find something to sell for enriching the soil."

Prof. Silliman gives a similar account of what he witnessed in Germany.

In our own ancestral country, England, women has been treated as a cow or a dog; the husband was allowed to flog her with a stick not thicker than his thumb, and if he was tired of her he might take her with a halter round her neck to the public market place, and sell her to any one that would buy her. This custom has been kept up among the lower orders even to the present day.

Of course in such a country a woman who dared to speak out her sentiments like Lucy Stone would be treated with the utmost contumely. In the reign of King James I, whipping, burning in the hand, imprisonment and the stocks, were the punishments inflicted on women for petty larceny. The idea of flogging a woman was so familiar in the popular mind as to originate the proverbial couplet.

"A woman, a dog and a walnut tree,
The more they are beaten, the better they be."
(Laughter.)

The following extract from Southey's common place shows how the expression of her political opinions was received:

"1646. At Henly upon Thames, a wo

man speaking against the taxation imposed by Parliament, was by the committee there ordered to have her tongue fastened by a nail to the body of a tree, by the highway side, on a market day, which was accordingly done, and a paper in great letters, setting forth the heniousness of her fault, fixed on her back."

"The whipping of women in public was a common practice, indulged in by our Puritan fathers. An old gentleman of Boston who can run his mind back into the olden time, has handed us the following account of a scene witnessed by himself:

"The whipping post in Boston, stood on the south side of King street. It was there that I one day witnessed the flogging of a sailor, who was stripped, tied up, and given thirty-nine lashes. A woman was then stripped down to her waist and tied up. "What!" exclaimed the sailor, "whip a woman!---no," pulling off his jacket, tho' his back was streaming with blood, he continued, "give me the stripes intended for her." But they said it would not answer the law, and the sailor turned his back to the sight, put his hands to his eyes and exclaimed, "I will never see a woman whipped."

The following extract from Eliza Cook's Journal, shows to what barbarous oppression women are still subjected in England:

"In England, the husband possesses the power of seizing on the property of his wife —on the very fruits of her own industry, and of squandering it as he pleases in the most dissolute revellings or with the vilest associates.

"The following case is strikingly illustrative of the shameful disadvantage at which an industrious, well-doing woman is placed, who has been so unfortunate as to marry a dissolute and unprincipled husband. The pair in question were in the middle class of life. Shortly after marriage, the man began to frequent low haunts, and very soon he used to come home at nights drunk. Domestic unhappiness was inevitable; and after many bickerings, and much ill-usage and injury inflicted on the wife, (such as cannot be described here,) she determined to leave him. She did so, and then endeavored, by the aid of her friends, to establish herself in a small way of business. She did so in her own name, and before many months were over, the husband, whose means were now exhausted, took forcible possession of her small stock and sold it off, and drank up the proceeds.

"She fled from the neighborhood, and came up to London. She managed again to raise a small stock of money, furnished a small house and took lodgers, still in her own name. She was doing well, making an honest living, and gradually increasing her stock of furniture, when her husband one day accidently saw her in the street, followed her home, and the next day entered and took forcible possession of the house, and sold off every stick of her furniture, putting the money into his pocket.

"A third time the brave woman began the world anew, under an assumed name, in another part of the town; and it was while occupying a rather elegant furnished house in the neighborhood of the parks, the rooms of which she let out to respectable lodgers, that the circumstance occurred which brought the case to our knowledge, for it was related to us by one of the lady lodgers in the house. One evening a strange, ill-looking man, shabby and desperate in appearance, was observed prowling about the front door. Shortly after, a shriek was heard in the lobby. My lady lodger rushed out upon the landing, and lo! there was the suspicious looking man already within doors. It was the landlady's husband! and the first glimpse of his face overwhelmed her with horror. 'Ruined again!' she was heard to cry, after imploring the wretch to leave her alone: but he would not. At first she managed to get rid of him by a payment of money, which he took; but as he knew she would at once fly beyond his reach, he held possession of the house, shutting up and confining his wife, (for the law gives the husband this power too), and brought the same to bear on the effects, and in less than a fortnight the wife's sole industry went under the hammer."

When you hear such narratives I know you are indignant at the conduct of such brutes, and rejoice that public opinion forbids such outrages in this country.

Even in polished France, woman has not that deference or politeness which the true gentleman here would accord her. Mr. Dawson writes from Paris to the Albany Evening Journal:

"I have seen ladies roughly jostled from the side-walks on the Boulevards where if any where, you might look for politeness, and, in crossing from Dover to Ostend, and from Bologne to Folkestone, I have seen Frenchmen stretch out at full length upon sofas, while ladies could find no place to sit down. But I never saw a Frenchman discommode himself to oblige a lady. All this may seem apocryphal. And so I would

have deemed it but for the evidence of my own senses. Americans may be ignorant of many of the higher branches of politeness; but if one of the "Universal Nation" should treat women as caviliarly as Frenchmen treat them, there is not a backwoodsman east of the Rocky mountains who would not volunteer to pitch him into the Mississippi."

The absence of politeness is a small circumstance however, compared to the fact that all over the world, woman is kept down by a cruel difference. The brother goes to work and earns from $1 00, $1 50 to $2 00 a day, but the sister is only allowed 25 or 50 cents a day, or under some wonderful circumstances she realizes a dollar a day. This is what keeps her down and makes her a poor ignorant dependent creature. But if woman is ignorant and degraded, the whole human race must be degraded with her. If you have an ignorant, unintellectual mother, an ignorant feeble spirited wife, and equally unfortunate sisters, you cannot attain eminence. If the mother is lacking in the higher qualities, the children must have some deficiencies also.

The human race is composed of two halves that cannot be separated. You cannot have noble men and ignoble women. As a pair of compasses stands on its two legs, so does the race rest on the two sexes, and if one of its branches be fastened in the earth, the other can only move in a little circle around the one that is stationary.

But in America both sexes are now advancing. Woman is demanding more reasonable rewards for her labor, and nobler pursuits than kitchen drudgery, and it is the interest of all that she should have them.

I am proud to say that we have advanced beyond the entire world in politeness, deference and justice to woman. A woman can travel throughout the country alone safe from insult. And although in a large city like this, a two legged brute may sometimes strke a woman or grossly insult her—yet in every village in the land, where public sentiment can take cognizance of the fact, the man who maltreats a woman will be very speedily punished, and unless protected by a woman, will be ordered to leave in twenty-four hours. (Applause.

We have reversed the old order of things entirely. In Europe kings rule by divine right, and women were flogged for expressing their will. Here woman rules the social circle by divine right, and kings are flogged if they attempt to claim their authority. (Applause and laughter.)

The gallantry of the age of chivalry extended to ladies inhabiting lordly castles, is with us, often an affair of daily life, which requires no lordly title to elicit it. Sir Walter Raleigh we are told, threw his cloak on the ground before Queen Elizabeth, that her dainty feet might not be soiled by contact with the vulgar earth; but this manœuvre paved his own way to royal favor. Here where every citizen is a democratic sovereign the gallantry which may be shown to a democratic princess springs not from the love of office, but from native goodness of heart. The other day a young lady was tripping along Broadway, New York, unconsciously approaching the place where an Irish laborer was shovelling dirt into the street. A young gentleman was approaching in an opposite direction, and observed that her rich, delicate attire was about to be defaced by the dirt thrown out into the street, and as the volley of dirt was flying against her person, he suddenly interposed and received the whole in his bosom. With a smile and a blush, she expressed her gratitude, and he withdrew to repair his damages. (Merriment.)

But gentlemen, let our gallantry be something useful and substantial; let us not be content with giving woman a hand to help her through the mud or assist her out of the carriage. Let us help her on to a higher destiny; let us help her to her just position as a benevolent minister at the bedside of the sick, especially of her own sex, and of children.

Her entry will greatly accelerate the progress of reform. Woman is by nature a medical reformer and an enemy to blood-

shed. She has already proved her powers repeatedly in medical practice.

"In Boston, for several years past, out of 4000 annual births, the dead-born have averaged 300 yearly, or one in every fourteen. In the Hospital of Maternity, in Paris, entirely under a Female Superintendent, Madam Boivin, out of 21,502 births, only 783 were still born, a fraction over one in twenty-eight; about *half* the ratio in Boston!!"

Woman has in fact proved her powers in every field.

"We are well acquainted with a young and very handsome girl, says the accomplished editor of the Merchant's Ledger who has the principal management of a large mercantile establishment in a flourishing country town, who visits different cities alone, stops at hotels, purchases supplies of dry goods, hardware, china, groceries, shoes, nicknacks, and all multifarious saleables which make up "a stock" in a miscellaneous store. She gives notes, makes contracts, and all such business as belongs to her; and we have never yet learned that she has sacrificed one iota of the dignity, admiration and respect which are her just due as a young, amiable and very pretty woman."

One of the most extensive manufacturers and mill owners in Europe at the present time is a woman. A widow who was left in total destitution among the mountaineers of Spain, and who by her own energy alone, has built up a large manufacturing business. At a recent sale of one of the largest mills in Europe, she became the purchaser, against the competition of the heaviest capitalists of the continent.

I might refer to scores of women illustrious in every position. I might refer for proof of her ability even in the sphere of goverment---commanding men and armies ---to SEMIRAMIS to QEEEN ELIZABETH of England, and to CATHARINE of Russia.

For evidences of her intellect, I might refer among wome. of the present day to HARRIET MARTINEAU, of England---to Mrs. SOMERVILLE, author of a work upon the connection of the physical sciences, of which any man might be proud, and to FRANCES WRIGHT, whose intellect and thrilling eloquence gave her an eminent position among the distinguished of the 19th century.

Three of the most eminent and purely practical philanthropists of the present day are women. Miss DIX, the Howard of the Insane in America, who has done so much to improve their condition and to secure the establishment of proper asylums for their relief. Miss SIEVEKING, in Germany, whose whole life has been incessantly devoted to education and practical benevolence, and Mrs. CHISHOLM, in England, who has been the greatest benefactor of Australia. Witnessing the horrors of the system of emigration—the filth, disease, death, demoralization and destruction of family ties, she devoted herself to the institution of better regulations, and with the cooperation of the benevolent, but chiefly by personal exertions, she has arrested the prevalence of filth and disease, has preserved the family ties unbroken, and has thus arrested at its source the fountains of disease, misery and vice, flowing into that young country. If she had been a man she would have received some high appointment, but as she is a woman she only pursues her career of usefulness.

Look to the sphere of courage, love of liberty and martyrdom—at the three heroic women, the illustrious MADAME ROLAND, CHARLOTTE CORDAY and JOAN OF ARC, whose story is familiar to all.

Even on the bloody battle-field where woman should not be---*nor should man*--- (applause) women have been in some way engaged in every war of liberty, and even sometimes in other wars. In the Hungarian revolution without reference to women in the ranks, we can recollect the brave and accomplished JAGHELLO. In the foray of Lopez in Cuba, we were told that a young and beautiful woman fought under his banner. In the army of France a woman served so long, so bravely, and faithfully that she finally received from Louis Napoleon the cross of the Legion of Honor. This was given to the widow Bruno for her faithful military services as private and as an officer.

These incidents prove that talent, energy and power are not confined to either

sex, and although I am very far from contending for the identity or equality of the sexes, I do contend that wherever talent or power of any kind exists in either sex, it is virtually a divine command to give its owner a sphere in which it may be developed for the good of mankind. Hence do I rejoice in the great movement in behalf of woman at the present time, as a movement which will remove every obstacle from her path and enable her to fulfil every duty imposed before her by the endowments which she may have received.

But I rejoice in every movement for the benefit of woman because it is equally a movement for the benefit of man. The two sexes are linked together by the eternal laws of the universe and when woman becomes strong and great—radiant with intellect as well as with personal loveliness, then shall we have a noble race of men—whose heads will rise high above the barbarisms of the present age.

We cannot have any personal interest adverse to woman—men of narrow and uncultivated minds, are sometimes jealous of intellectual women, because the presence of such makes them conscious of their own inferiority. In reality the man who is jealous of the advancement of his sisters, is but a narrow minded creature whose intellect does not reach out far enough to be able to comprehend his own true interest. Such are always the opponents of benevolent reform---and this I regard as one of the greatest of all reforms---a movement to unfasten one of the two feet by which Humanity must advance to its highest destiny. Heretofore we have had the clogged and abortive efforts of men alone—hereafter we are to have the cooperative labor of man and woman—and the commencement of a new era for human progress, in which I rejoice, and rejoice to recognize your sympathy. (Great applause.)

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After the lively sensations produced by the lecture had somewhat subsided, Prof. Newton was loudly called for from all quarters, and at length arose, being greeted with hearty applause, as he presented himself before the class. Prof. N. alluded to the doctrines which had been advanced by Prof. Buchanan, and declared his hearty concurrence in the suggestions of Prof. B., as well as his great gratification at the cordial manner which those sentiments had been received by the class.

He expatiated at some length upon the duties of a gentleman in relation to women; adducing pertinent illustrations from his own personal experience, and referred in strong terms to the generally degraded and infamous character of men who were guilty of insulting women, or who were unwilling to see the welfare of woman promoted. Such persons he would hardly call men—They could only be recognized as *things* in a miscellaneous world, which required every variety of things to complete its fulness as a world.

He dwelt upon the injustice which our laws inflict upon woman, and upon the dependent condition in which a man at the hour of death is often compelled to leave his family. Prof. N. made several strong points, and gave some severe blows to the enemies of women, and of progress in general, which were warmly seconded by the frequent applause and sympathetic enthusiasm of the class.

After the conclusion of Prof. N's. remarks a member of the class, Mr. Roe, senr. rose and jocosely remarked that, as the professors had lectured upon the general principles and diagnosis of the case, he would like to follow with a special prescription for the patients—viz: that they should each seek out the most intelligent wives they could find, and bring them here to be thoroughly educated in medicine.—(Applause and laughter.)

Prof. Sherwood, being loudly called for, came forward and made a brief and spirited harrangue, which elicited much applause by its pertinent applications. He referred to the elaborate efforts of the old school party to *put down quackery* by building large edifices, (the interest on the cost of which could hardly be paid by the third generation), by demanding high fees and

large salaries to elevate professional dignity, while all the time quackery was spreading and increasing in spite of them. We, on the other hand, introduced a different remedy for quackery; by removing the obstructions in the pursuit of true science, and enabling every student of medicine, however poor, to become a scientific man. This was one of our *new remedies*, (applause), and we claim the right, and necessary capacity to introduce *new remedies* instead of adhering to the old path of calomelizing and bleeding. While these gentlemen were keeping up their dignity, they found all over the country a certain branch of the profession falling into the hands of uneducated female practitioners. This they were unable to remedy; but we have found a *new remedy* for this evil—to educate woman thoroughly, and substitute scientific female physicians for the unscientific. And who would not prefer as a physician to meet such women at the bedside, rather than the uneducated class who have heretofore occupied the place.

He referred to the improving moral sentiment of our country, and the fact that women might travel in safety without an escort. It reminded him of the anecdote of a European traveler, who, when General Washington was pointed out to him, asked "Where was his body guard?" "Here," said the American in reply, with his hand on his breast, "*I am one of them.*" Thus, (said Prof. S.) when a woman is traveling about our streets without a protector, if it is asked where is her guard, I am ready to reply, *I am one of them.* (Applause.) There are men, as you know, who are destitute of such sentiments, who would not hesitate whenever they could do so with safety, or in an *underhand* manner, to insult an unprotected woman. I can only say, that wherever such a man may be found, I shall be proud to recognize him as my inveterate enemy! (Applause).

Prof. S. dilated upon the subject of the elevation of woman, and remarked with ironical humor, that if we were the "Lords of creation," we should not degrade our subjects to such puny condition that it could be no honor to rule them, but rather elevate them until we could have a dignified empire, and our subjects sufficiently elevated and enlightened to appreciate our own lordly grandeur! (Applause and laughter.)

The remarks of Profs. N. and S. being entirely extemporaneous, we can not pretend to give a report, but merely mention some of the striking points of their remarks. After the close of Prof. Sherwood, a motion was made by Mr. Newman, of the class, to request of Profs. Buchanan, Newton and Sherwood, a copy of their remarks for publication, which was adopted *nem. con.*

Prof. Buchanan rose to observe that Prof. Newton had referred to the Eclectic Medical Institute, as the pioneer school in the movement of female medical education. This, he remarked, was literally true. We had not the honor of educating the American pioneer in this direction, Miss Elizabeth Blackwell, but application was made in her behalf, for her admission to the Institution by her friends, very soon after this edifice was erected, and she would have been received but for the fact that she would have been refused admission to the State Hospital and Library by the Faculty who had then the control of them, as the Dean of the State College distinctly stated. For the want of these opportunities she was compelled to seek an opportunity elsewhere.

Prof. Newton observed, that, after the dismission of the audience, he would make some remarks to the gentlemen of the class who might remain. The ladies, and others, having withdrawn, he proceeded to illustrate the malicious and underhand style of opposition which had been made to the Institute. He referred to the laborious exertions of the Faculty to perform their duties to the utmost of their ability. His remarks elicited frequent spontaneous responses from the class, expressive of their satisfaction and approbation. The last and lowest trick of men unworthy of the name of men, consisted in sending obscene anonymous insults to respectable and esteemed ladies of the class, signed, "A Fellow Student," in the hope of creating some disturbance in

the school; an act so utterly disgraceful and disgusting, that he must bring the subject before them not merely as medical students, but as gentlemen who could not but abhor such indecent outrages. The letters he said were anonymous, but he was well satisfied that he knew their author, who was no member of the class, and he believed that many of the class would be able to recognize the handwriting. The letters in question, full of the lowest obscenities of the bawdy-house, and the vilest personal insults, (which were addressed to ladies of most exemplary character now attending the Institute,) were produced, and partly read amid cries of "*shame!*" "*shame!*" and expressions of disgust. The letters were examined by a number, and notwithstanding the artful attempt to disguise the handwriting, it was recognized with very little difficulty, by a number of the class, and we doubt not there are many who have sufficient knowledge of the characters of medical men in Cincinnati to form a pretty distinct idea of the authorship of these obscene effusions, without any reference to penmanship.

CLINICAL REPORTS,

At Newton's Clinical Institute.

SERVICE OF PROFESSOR NEWTON.

REPORTED BY PROF. Z. FREEMAN.

Continued from page 92.

FIFTEENTH CLINIC, Dec. 27, 1853.

Case lii.—Martin McFadden. Opthalmia and nebulous opacity of the cornea. Disease commenced in July last; was blind 15 weeks; is better now and can see best out of the left eye. Cornea slightly injected, both eyes considerably conjested. Is now in the chronic stage. Has been using Podophyllin in small doses; vesication to the back part of the neck and stim. Collyrium.

Former Treatment.—℞ Tinct. Myrrh 3j, Tinct. Capsicum 3ss. *m.* Apply four times a day. Change now to ℞ Hydrastin grs. xx, Tinct. Aconite 3 ss; water 3ij. *m.* Apply as a Collyrium. He says that Tinct. of Capsicum gave no pain. This is a fact in the treatment of some cases. Diet low—keep from exposure.

Case lviii.—P. Flippertigibbet, age 22. Convergent Strabismus. Operation without Chloroform, by Prof. Freeman; normal parallelism restored, though there is paralysis of the external rectus muscle, the other muscles giving the eye its normal position. Cloth wet in cold water kept to the eye, and the eye kept from the light.

Case xxiv.—P. Collins. Scrofulous enlargement of the cervical lymphatic glands, and scrofulous ulcer under the angle of the jaw.

Ulcer is nearly healed. Hurts none unless struck or pressed,

Treatment—Continue as before.

Case v.—T. Gould. Intermittent fever. Discharged cured.

Case xliii.—Lawrence Whaling. Hematuria. Discharged cured.

SIXTEENTH CLINIC, Dec. 30, 1853.

Case liv.—James Scanlin, age 2. Talipes Vulgus. First observed when he was eight months old,—leg and ancle smaller than the other, walks lame, can be bent to the natural position,---no tenderness.

Treatment—Stim. liniment and Scarpa's shoe to brace the ankle and foot to their normal position,

Case iii.—J. Jennings. Cancer of the scalp. Sore nearly healed, two little spots near the edge present fistulous openings; these led to the bone—presume the bone is not sound but exfoliating, have been using Sesq. Carb. Potass. to these fistulas, the last ten days. Dressed it as usual.

In some cases the capillaries are too weak at the edge of the newly formed tissue to sustain the recuperative action leaving an indolent ulcer, thus they do not heal, and in some cases too much is attempted and too much medicine is used. It is not so in this case, but the exfoliation of bone causes the fistula.

SEVENTEENTH CLINIC, JAN. 3, '54.

CASE LX.—P. Paxton. Purulent Opthalmia, caused by the introduction of a piece of powder into the eye on christmas day; feels as though something was moving in it; there is only a small quantity of pus in the eye, conjunctiva injected considerably—patient otherwise healthy.

Treatment—℞ Hydrastin grs. xx., Zinci Sulp. grs. x., water ʒ j.,*m*. Apply to the eye night and morning. If the pain is severe, add ʒ ss. Tinc. Aconite; it seems to have a soothing effect.

CASE XXXVII.—Mary A. Strabismus—discharged cured. The eye is in its normal position, and a little goggled at the edge of the incised tendon.

CASE XL.—James Kelly. Ectropion. Took off the dressing; the lid is improved; it covers the eye; may have to loosen it near the internal carthus. Appearance is much improved. Dressed before the class.

Case XXXV.—Anthony Riley. Jaundice. Has taken a slight chill; improving generally.

Treatment—Comp. Cath. Pill—two night and morning.

CASE XLIX.—A. A. Bridges. Follicular Laryngitis. Improving; cough less at night than at the previous Clinic; breathes easier. Continue the treatment.

EIGHTEENTH CLINIC, JAN. 6, 1854.

CASE III.—J. Jennings. Cancer of the scalp. Applied Sesq. Carb. Potass. to the fistulous opening, not strong enough; used Zinci Sulp., and cut them down to the bone—the edge of the bone is rough; this will scale off, and the part heal soundly. The sore is improving. Dressed before the class.

Case X.—John Reed. Spinal Curvative. Is improving—walking about the house. Continue the treatment.

CASE II.—L. D. Secondary Syphillis. Discharged cured. Recommended to use the Comp. Syr. Stil. for a while, as Syphillis is hard to entirely eradicate.

CASE VII.—Hix. Necrosis of the left Femur Improving. Discharges more watery and green pus since been using the Zinc injection—injection of Zinc is not painful. The medicine injected is now disorganizing the bone, as the fetid pus indicates. Pus from disorganizing bone, always has a very fetid and peculiar odor.

Treatment.—Continue the Zinc injection.

CASE XIV.—T. Gaines. Chronic Constitutional Rheumatism; feet deformed from spontaneous dislocation. Have reduced the luxation and restored the normal appearance of the feet, yet there is some soreness in the region of the ankle and hip joint. Has gone home; may fail to cure him from his regular rheumatic diathesis and enemic habit. His is one of those peculiar cases where the vitality of the system is so low that acute rheumatism cannot occur; but the symptoms are of a chronic character from the commencement, and the recuperative power is not sufficient to restore normal action.

CASE XXXI.—N. Wooland. Pterygium Crassum and Opthalmia. Since the last Clinic, we have dissected off the pterygium and cut the blood-vessels leading to the incipient ulcerated spot on the cornea. The pterygium discharged about half an ounce of blood, and assumed a pale appearance. Patient is much relieved by the operation, though it was very painful—the adventitious growth being morbidly sensitive.

Treatment.—Continue the Collyrium as previously prescribed. The progress of cure must be necessarily slow.

CASE XLI.—Mary Jane. Scrofulous enlargement of the cervical Lymphatic Glands. Is improving slowly; the glands are less swollen; the general health not improved; the swelling becoming dissipated; leaves the glands separated and approximating their natural size.

CASE LVI.—Martin Rody, aged 28. Pneumoma. Had fever and ague last August, for three weeks; got better. Had it some six days ago. Has now pain in the right and left side, attended with some soreness; cough increases the pain; coughs most on lying down at night. Nausea at times; pain in the joints, increased at night. No

appetite; spat up some blood and purulent mucous, six days ago; inhalation painful; sanguino-mucous sputa is diagnostic of pneumonia. Tongue furred, and breath offensive; when quiet has no pain.

Treatment.—Comp. Cath. Pill, three at night; if catharsis induced be too active, give the Diap. powders grs. v; use hot pediluvia, sinapisms over the chest. Next day use Diap. Powder, grs. v, four times a day. If fever after catharsis, use, ℞ Quinine grs. x, Prus. Iron grs. x, Diap. Powder grs xx. *m* make Powders x, give one three times a day.

Case lvii. J. Simpkins, age 18. Epilepsey. Caused three years since by being over-heated by the sun; laid several hours; convulsion lasted half an hour. Since that time has had convulsions every two or three days; each convulsion lasts about thirty minutes, and is supervened by coma.

Treatment commenced Jan. 1, '54.—Oleum Tiglii to the back of the neck to induce vesication.

Constitutional Treatment.—℞ Tinc. Scut. Lat., Tinc. Castor, a a. ℥ ij, Syr. Zingiber ℥ ij. *m*. Give ℥ j. every three hours. If this produces its specific effect, lessen the the dose. Has had but one attack since I commenced treating him.

Remarks on Epilepsey, by Prof. Newton. ℞ Oil Stillingia ℥, Oil Lobelia ℥ ij., Alchohal ℥ iij. *m*. Apply twice a day, and continue until the patient complains of nausea.

TWENTIETH CLINIC, January, 10.

Case. lvii.—J. Simpkins. Epilepsy. Improving; no spasm since the last clinic. If you watch the symptoms carefully, and trace them to their causes, you may treat such diseases with an uncommon degree of success. I have never found opium beneficial in this disease; Belladona Hyosciamus and Stramonium, answer a better purpose. This patient used to have a convulsion once in two days, but since we have been treating him, has a fit only once a week. He is improving decidedly, and we expect to cure him.

Case lviii.—Incised wound of the hand. The tendons, nerves, and blood-vessels of the palm of the hand were excised by a blow from an axe. The fingers are now paralysed, though the wound is nearly healed. The patient has no control of the fingers; the fingers were separated from the hand, except a slight pedicle of skin; they have now healed to their proper places. The genius of the physician is in healing the wound, not in amputating,

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NINETEENTH CLINIC, Jan. 13, '54.

Case lix.—Ezra Senate, aged four years. Curvature of the Spine. (Cyphosis). In March '53, complained of severe pain in the precordia and chest; it came on in paroxysms, four or five hours apart; during the night the pain would be much worse; appetite good. An old school physician attended him several months, and treated him for other supposed affections, but neither afforded any benefit nor detected the curvature. When Dr. O. E. Newton first commenced the treatment of him, he could not stand on his feet but a few minutes, unless supported by the shoulders; was also bent at right angles, and could not be straightened. The curvature was a posterior convex one, at the fourth dorsal vertebra. The patient is much debilitated.

Treatment—Irritating plaster over the curvature.

Constitutional Treatment—℞ Com. Syr. Stil. ℥ iiij., Iod. Potass. ℥ j., *m*. Give ℥ ss. three times a day.

Mechanical Treatment—Spinal Prop as exhibited to the class, made by Dr. Daniels of this city. This lifts the shoulders, and supports the head in its natural position. The curve is now less, and the child can play around the house a little, and seems cheerful. Is gradually improving.

Case lx.—J. Culberton. Schirrus Herpes of the wrist, and dorsum of the hand. Commenced in '51 by a white pimple, which scaled off, leaving a black lump and scab; it spread around the hand like warty excrescences, and was very sensitive. Was treated at the time, and at different periods by

Potassa. Fusa., Ag. Nit. Arsenic, &c. The back of the wrist was healed last June. The applications have been too active; have induced inflammation, and diffused the disease; it itches nearly all the time. At present the sore is very red, and filled with granular warty excrescences, morbidly sensitive, while the skin around the cicatrix is covered with herpetic eruptions, both livid and pale. His father, aunt and sister, all died of cancer. Prognosis unfavorable. Patient suggests amputation; I will not amputate for I would not expect to heal it.

Case LVI.—Martin Rody, aged 28. Pneumonia. Improving; has a little cough at night—not so much as formerly; nearly convalescent; tongue coated a little yet.

Treatment—Continue the Cath. Pills, warm pediluvia, Diap. Powders as an expectorant. If more pain, sinapisms over the chest.

Case XLIX.—A. A. Bridges. Follicular disease of the throat. Examined the lungs with a stethescope; right lung sound, left lung diseased; respiration sound like blowing air through water; upper part of the lung not so much affected as the lower; (this is rather uncommon), and thickened mucous in the upper part of the lung. Diarrhea has disappeared.

Treatment for disease of the lungs—℞ Syr. Squills, Syr. Senega., aa. ʒ ij., Tinc. Aconite ʒ ij., Tinc. Lobelia ʒ j., *m*. Give ʒ j. every two hours; use sinapisms over the left lung for two days, night and morning, then use the irritating plaster.

TWENTY-FIRST CLINIC, JAN. 17, '54.

Case XLII.—Michael Roark. Herpetic ulcer of the forearm. Nearly well; does not trouble him now.

Treatment—Continue Meyer's Oint.

Case XXXI.—N. Wooland. Opthalmia and Pterygium. Much better; eyes pain him but little; Pterygium nearly absorbed; vision improved much; general health good; can see best with the eye that was worse. Has been using nearly ʒ ij. of the Tinct. Aconite to the ounce of water, and the eye is benefited by it. Continue the treatment.

Case XLIX.—A. A. Bridges. Consumption. Does not cough so hard; expectoration easier; left lung equal in expansive power to the right. Improving. Respiration easier. Proper nourishment is better in such cases than nauseants and expectorants, for they are apt to do more harm to the stomach than good to the lungs, paying attention, however, to the assimilative capacity.

Case LIII.—J. Simpkins. Epilepsy. In the last three days he has had a slight fit, but was not unconscious. The pain that had effected his head for years has disappeared; he feels much relieved; no pain or fulness of the head followed either fit,—previously the convulsions and coma lasted from twelve to twenty-four hours, and for years has had them nearly every day, but now has only one slight one every week. He is elated with the idea of getting well; his mind is exerting a great influence upon his body; he has grown up not daring to apply his mind to his books or walk out alone for fear of an attack of the fit.

Treatment—Continue as before.

Case LXI.—M. Mc M., age 37. Intermittent Fever and Follicular Laryngitis.

Has had the fever about 22 months. Had it broken for two months at one period, and one month at another. Has a chill every day now; the fever lasts about three or four hours; nausea comes on after the fever, unpleasant taste in the mouth, tongue broad, flat and white, paroxysm or chill comes on about 4 p. m.

Treatment. ℞ Tinct. Gelseminum gtts. xxx, three times a day. ℞ Quinine grs. xx, Prus. Iron grs. xx; make ten powders, and give one three times a day. Topical application to the throat, ℞ Argent Nit. ʒ j, Water ʒ j. *m* Apply with probang once a day.

The mucous follicles of the Larynx, Pharynx, post-nares and uvula are inflamed and Hypertrophied; throat and posterior nares somewhat excoriated, and patches of purulent lymph are attached to the posterior wall of the Pharynx. Patient has a slight degree of hoarseness.

Case LXII.—Charles Mayless. Intermittent Fever. Has had it four months—has it almost every day. The chill continues from twelve to two o'clock, p. m., and the fever to twelve p. m. Has nausea, pain in the head, tongue coated and red; bowels costive, feet, abdomen and face swollen, feet and legs very hard, has much thirst, and much enlargement of the left side most of the time; much hepatic derangement.

Treatment.—℞ Podophyllin grs. ij, Leptandrin grs. x. *m* Make eight powders, and give one twice a day. Tinct. Gelseminum gtts xv, three times a day.

TWENTY-SECOND CLINIC, Jan. 20, '54

Case LXIII.— — Vandoler. Cataract with Amaurosis. Obtuseness of hearing.

Has been affected one year; left ear worse, its meatus-aud-ext. seems covered with a false membrane,—looks black—not much secretion. One also seems forming in the right ear, its edges can be raised; secretion profuse; condition the same now as it was a year ago. The inflammation of the meatus has terminated in a deposition of lymph; this has become organised, a common result from inflammation; roaring sound in the ear.

Former treatment.—Glycerine dropped into both ears, and they plugged with cotton; when the cotton was removed, the wax was softer and some of it came out on it.

Treatment.—Glycerine ℥ iij, Tinct. Nux Vomica ℥ ss. *m* and if much pain, add Tinct. Stramonium and fill up the ear with it.

Symptoms of the disease of the eyes.—Distorted and double vision after looking for a few minutes—has had some pain in the eye. Right eye lachrymose, I dilated the pupil yesterday by the internal exhibition of Tinc. Aconite, and the vision was improved.

Treatment.—Tinct. Aconite ℥ iij, Tinct. Capsicum gtts xxx, *m* Bathe the eye with it four times a day for a number of days, and then use Tinct. of Aconite alone.

Case LXIV.—W. H. Ely. Follicular Pharyngo Laryngitis and Intermittent Fever.

Disease commenced about two years since; not much cough; no soreness on pressure. Soreness in the lower part of the lungs; has a slight hacking cough and muco-lymph expectoration. Has intermittent fever; chill once in two weeks since October last. Throat is worse when he has a chill; hoarseness slight.

Treatment for the throat. ℞ Sol. Argt. Nit. 3 j, Water ℥ j. *m* Apply once a day with the probang. Thinks the pain in the lungs is only sympathetic. ℞ Syr. Stil. gtts v or viij, six times a day; carry the vial in the pocket and use accordingly.

Case LXV.—Morris Du Weir, age 50.—Dyspepsia and Hepatic torpor.

Been affected since last March. Since September has had a constant pain in the head and bones; bad taste in the mouth, tongue coated and red edges; nausea on eating; epigastrium swollen. Has taken much medicine, does not know what, (few do know what the doctors give them.)—Bowels costive; not much thirst; coughed much this last month; no night sweats; never had much fever after the chill.

Treatment.—℞ Leptandrin grs. xx, Podophillin grs. iij, Diaphoretic powders grs. xx. *m* Make ten powders and give one four times a day. if they act too brisk, reduce to three, two or one according to circumstances. Apply sinapisms to the back of the neck; warm pediluvia at night; use the alk. bath three times a day.

Case LXIII.—J. Simpkins. Epilepsy. Omitted his medicine contrary to orders for twenty-four hours; had one slight convulsion yesterday morning.

Treatment.—Continue as before.

TWENTY-THIRD CLINIC, Jan. 24, '54.

Case LXI.—Michael McDonald. Disease—Intermittent Fever. Improving. Has had neither chill nor headache since the last clinic.

Treatment.—Continue the Tinct. Gelseminum. Also ℞ Quinine grs. v, Prus. Iron grs. v. *m* Make powders v, and give one a day. Think no further treatment

will be necessary after this prescription is used; therefore we will discharge him cured.

Case xl.—James Kelly—Disease, Ectropion.

He can close the eye lids and protect the eyeball, but the edge of the upper lid is a little everted. This is better than I expected; I may have to operate upon the edge of the lid at some future time.

Case lviii.—Incised wound across the palm of the hand; excision of the tendons and four fingers nearly detached by an axe. Improving; some motion of two fingers that had been motionless.

Treatment.—Continue the splint; time may induce a reunion of all of the tendons.

Case lxvi.—John Flannery, age 41.—Disease—Purulent Opthalmia.

His eyes have been sore for the last thirteen months; bright sunlight or snow causes great pain, conjunctiva much inflamed. Pus incrustations have formed upon the edges of the eyelids and face near the eye. General health good.

Treatment—℞ Hydrastus Canadensis 3j. Water ʒiij, make a decoction, bathe the eyes thoroughly with this three times a day. Use the Opthalmic balsam between the times of bathing with the Collyrium.

Case lxvii.—Michael Gulliver. Disease—Intermittent Fever, (tertian type.) Had it since last August; has headache nearly all the time; sweats a good deal, is weaker now than a few weeks previous, tongue coated slightly, broad and white.

Treatment—℞ Tinct. Gelseminum gtts xx, three times a day. Also, ℞ Quinine grs. xx, Prus. Iron grs. xx. m make powders x, and give one three times a day.

Case lxviii.—Mary Kilroy. Disease—Gangrene of the toes of the right foot, caused by frost-bite. Her foot was exposed to the frost four days ago. The toes and foot are much inflamed and edematous, and the gangrene has involved the three middle toes and extends upon the anterior edge of the foot; odor very fetid and mortification extending.

Treatment.—Zinci Sulph. 3j, Hydrastus Canadensis 3j, Water oj, m use this solution in making an Elm poultice. Apply the poultice to the part affected, renewing it three times a day. We may have to apply the Zinci in full strength with the Elm. Wash the foot in a decoction of Hydrastus as you apply the poultice.

Case liii.—J. Simpkins. Epilepsy.—Still improving; had a slight fit on Saturday morning. Had no medicine for one day previous to the fit, but is supplied now, presume that if he had not have got out of medicine he would not have had a spasm. Is taking one drachm of medicine every three hours; the pustulation with Oleum Tiglii is discharging freely; the patient has more confidence in his own mental and physical capacity than previously.

TWENTY-FOURTH CLINIC, Jan. 27.

Case lxix.—Theresa McGuire, age 9.—Disease—External Scrofula, or Scrofulous eruptions of the anterior nares.

External Scrofula generally developes itself in the anterior nares, and extends down upon the upper lip. The accompanying inflammation may extend along the lachrymal passages to the conjunctiva, inducing Strumous Opthalmia. Dyscrasia Scrofulous.

Treatment constitutional. Use alk. bath (add salt and whiskey,) use it twice a week. ℞ Comp. Syr. Still. ʒss, three times a day. Diet, avoid grease.

Local treatment.—℞ Hydrastus Canadensis, and Sesq. Carb. Potass. aa, ʒss, Water ʒ ss, m apply to the eruptions with a small nasal probang twice a day. Use also the Zinc Ointment.

Case lxviii.—Mary Kilroy. Disease—Gangrene of the toes. Improving; the gangrene is arrested. Suppurative separation has taken place, and the line of demarcation is distinct. The toes will be saved. Continue the use of the Elm poultice.

Case lxix.—Dennis Keating age 26—Disease—Gangrene of two fingers of the right hand and one of the left, caused by frost-bite while carrying iron on Saturday the 24th inst. We can see the line of de-

marcation forming between the dead and living parts.

Treatment.—Zinci Sulph. 3j, aqua Oj. ℞ use this in making an Elm poultice, apply the poultice and renew it three times a day, until it sloughs properly; then heal it with Meyer's ointment.

Case lxx.—Martin Garroty, age 22.—Disease—Purulent Opthalmia. Chronic inflammation has degenerated into that purulent condition. Commenced spontaneously on the 4th of July last, has not had much pain; is healthy otherwise; not much intolerance to light; eyelids granular; conjunctiva injected.

Treatment.—(Collyrium,) ℞ Hydrastin grs. xx, Tinct. Aconite 3 ss, Sesqui Carb. Potass. grs. xx, aqua ʒ ij. ℞ Wash the eyes three or four times a day with this. If the granulations do not disappear I will apply the dry Sesq. Carb. of Potass to them. Continue treatment. Alk. bath three times a week.

Case lxxi.—James Farrell, age 24. Disease—Follicular Pharyngo, Laryngitis and Bronchitis.

Was well twelve months since, has been getting worse ever since; has dry hacking cough; expectoration purulent; no pain; cough sometimes loud; throat a little sore; lungs somewhat irritated; follicular irritation of the uvula and post wall of the pharynx; throat excoriated.

Treatment.—Argt. Nit. 3 j, Water ʒ j. ℞ Apply once a day with probang. ℞ Tinct. Aconite ʒ j, Tinct. Lobelia ʒ j. Syr. Zingiber ʒ iiij, ℞ Gargle 3 ss, frequently through the day and swallow it. Vesicate frequently over the Larynx with Oleum Tiglii.

Case xlix.—A. A. Bridges. Follicular Laryngo-Bronchitis. Improving slightly—still has night sweats; slight chills. For chills: ℞ Quinine grs. x, Prus. Iron grs. x, ℞ make powders x, and give one four times a day.

If the night sweats continue I shall direct the use of a solution of Nitric acid.

The rest of the time was occupied by Prof. Freeman in exhibiting a collection of malignant tumors,* that had been extirpated by Prof. Newton and himself.

TWENTY-FIFTH CLINIC, Jan. 31.

Case lxxx.—Thomas Crane. Ulcer of the elbow.

This patient fell upon the ice two years since and bruised his elbow, inducing extravasation of the blood, and oozing through the skin at the point of injury. Ulceration occurred and continued for ten months; it healed, and in four months after developed itself again. The part is now slightly inflamed, with some eruptions near the edge of the ulcer, while the ulcer presents a weak appearance.

Treatment.—Wash the part with soapsuds; apply the Sesq. Carb. of Potass. twice a day and follow with Myer's ointment.

Case xlii.— – Roark. Herpetic Ulcer of the arm. Improving. Continue the treatment.

Case lxxii.—Dennis Keating. Frostbite. Gangrene arrested; slight ulceration of the fingers at the point effected; very painful in consequence of the extensive distribution of nerves to the bulbs of the fingers; two of the finger nails have dropped off since the previous clinic.

Treatment.—Continue the Elm poultice.

Case lxxxi.—Patrick Muiligan. Portal Congestion and Spinal Irritation.

Has been sick for two years, pain over the stomach and abdomen, nausea every morning, costive, tongue thickly coated, and fetid, food oppressive, pain in the shoulders. No fever follows the sensation of coldness that occurs in the morning.—Some pain in the head follows the morning's chill. Some spinal irritation, presume the liver is much affected, some inflammation of the stomach and bowels; has to be much exposed as a laborer.

Treatment.—Podophyllin, Caulophyllin aa grs. ij, Leptandrin grs. xx, ℞ make powders vj, give one three times a day until a laxative or alterative effect is produced. Use the alkaline bath with friction ev-

* Largest collection in America.

ery night on going to bed. Also a sinapism over the chest alternately every night between the chest and abdomen.

Case lxx.—Mary Kilroy. Gangrene of the toes from Frost-bite. Improving.—Grangrene is arrested; scarcely any pain or ulceration, suppurates a little.

Treatment.—Use Meyer's Ointment to the sore.

Remarks on the use of the Sulph. Zinc: Prof. Newton suggests that he was the first to call the attention of the profession to its use in the treatment of gangrene. It stimulates the capillaries and assists in the formation of the line of demarcation. Reported a number of cases where it was successfully used. It is the only specific I know of in the treatment of gangrene.—You may rely upon it under all circumstances. I sometimes use it in solution, and sometimes as a dry powder in combination with Hydrastus Canadensis, spread upon a poultice of Elm.

Case lxxxii.—Joseph Bell. Disease—Cutaneous Cancer.

This disease commenced two years since by a small indurated spot near the internal canthus, with a vesicle upon its surface; the itching became severe, it became more indurated and the itching intolerable. Applied caustic for three months, took away the external disease and left a tumor on the inside; the disease involves the internal canthus of the left eye, both lids at that point, and also is complicated with encanthus. The sore presents a ragged appearance, the edges are inverted with a number of warty excrescences mixed up in the schirrhous mass; the edges are also indurated and cicatrised, while the sore discharges slowly a sanious secretion. It is not very painful, but proves a source of annoyance from its involving the conjunctiva, etc. The prognosis is unfavorable.

Treatment.—Excise it and apply Zinc Sulph. to the excised edges until you have produced a healthy granulating surface; then heal by suppurative action. I doubt a cure.

Case lxxxiii.—Daniel Croney. Disease Hemiplegia.

Some two years since he sat down as usual, but on attempting to rise he found that he had lost the use of his right side; continued paralysed for five weeks, since that time the side has been gradually improving, yet it still feels heavy; he can walk about for the last three weeks, but the right leg, side and arm are still very weak; the right side of the face and right side have now some sensibility, he is evidently improving; his tongue is coated, breath offensive and appetite indifferent; can scarcely walk, has only a slight control over his lower extremities; bowels costive, not thirsty. Was healthy previous to the attack.

Treatment.—Quinine grs. xx, Prus. Iron grs. xx, make powders x, and give one three times a day. Also use the alkaline bath at night, and apply a mustard sinapism over the dorsal vertebra at night.

Case lxxvii.—Theresa McGuire. Scrofulous eruptions of the anterior nares.

Improving; nearly well; the eruptions have disappeared, and the nares are clear of scabs. Discharged cured, though she may continue the Zinc ointment for a few days.

Case lxxxiv.—Lucy McGuire, age 10. Scrofulous enlargement of the base of the lower jaw anterior to the angle.

Scrofulous diathesis, herpetic eruption on the face over the scrofulous swelling; the jaw somewhat painful and second molar tooth somewhat carious.

Treatment.—Comp. Syr. Stil. ℥ ij, Iod. Potass. ʒ j, ♏ Give ʒ ss, three times a day. Use the alkaline bath three times a week.

Case lxxiv.—John Farrell. Follicular disease of the Throat and Bronchii.

Improving; not much pain in the chest. Continue the treatment.

TWENTY-SIXTH CLINIC, Feb. 3.

Case v.—Gould. Ectropion.

Eye is much improved, can close the lids, but the upper is still inverted (it has not been operated upon here, will operate upon it some time.)

Case iii.—J. Jennings. Cancer of the Scalp.

The bone has detached its sequestra and is now healing; I think it will be well in a

few days. He has left for home, considering himself cured. This was one of the worst cases of cancer that has ever been cured in so short a time.

Case II.—John Barnett. Cancer of the temple and brow.

Was nearly healed, but from the great age and constitutional debility of the patient, it assumed a sloughing form and is now increasing in size. Erysipelas attacked it a few days since inducing great prostration and mental aberation. Prognosis unfavorable.

Case LVII.—J. Simpkins. Epilepsy.

Had a slight attack of spasm two days since—continues about the streets alone, thinks that he is getting well fast. Continue the treatment.

Case LXXXV.—Catherine Gaffney.—Nebula and Leucoma. Opthalmia of both eyes.

Commenced eight months since, was attended with severe pain for five weeks. her eyes have been very lachrymose ever since. Eyes yet inflamed some, with Nebula of the right cornea and Leucoma of the left. The eyes are very intolerent to light, red and painful yet sees best with the right eye.

Local Treatment.—Elm poultice for five nights. Come to the next clinic. Treatment through the day, ℞ Hydrastin grs. xx, Tinc. Aconite ʒij. water ʒij. Apply frequently through the day. Puncture the enlarged bloodvessels leading to the Nebula and Leucoma.

Case LXXXI.—P. Mullegan. Portal engorgement.

Improving; Spleen is now engorged and somewhat painful. Continue the treatment; also apply a mustard plaster over the spleen every night for a few nights.

Case LXXX.—Thomas Crane. Weak ulcer of the elbow.

Improving; granulations more healthy, edge of the ulcer whiter, pus more healthy. Continue the treatment.

Case LXXIV.—James Farrell, Folicular desease of the throat and Bronchii.

Much better. Continue the treatment.

Case LXXXVI.—J. W. Hill. Disease; Opacity of both cornea.

Can see a little with the right eye. Conjunctival frænal attachment of the left cornea to the upper lid, complete adhesion all the way across,—a narrow frænal attaching the centre of the cornea to the middle of the upper lid. Prognosis unfavorable.

Treatment.—Dissected off the frænum, shall not treat him further. This was the sequel to severe Opthalmia.

(TO BE CONTINUED.)

Part 2. Miscellaneous Selections.

THE THERAPEUTIC POWERS OF VERATRUM VIRIDE.

BY W. C. NORWOOD, M.D.

Veratrum viride, as a therapeutical agent, had excited comparatively little interest previous to June, 1850; and it was noticed for a time after that date, more on account of the extravagance of the claims set up for it as a remedial agent of superior powers, than because of any belief that it was possessed of peculiar and valuable properties. If we recollect correctly, it was about the year 1835, that Dr. Charles Osgood's interesting article on the powers and properties of veratrum viride made its appearance. The only additional information he conveyed was that it is destitute of cathartic powers, which give it a superiority over the Veratrum Album or European Hellebore, in the treatment of cases where active cathartics are inadmissable. Be this as it may, it is certain, and cannot be successfully controverted, that prior to June, 1850, it was not known positively to possess any superiority over veratrum album; indeed the one was supposed to answer the same purpose as the other.

Why Dr. Osgood ceased to give further notice of its powers we are not prepared to say; whether his silence grew out of a want of confidence in its remedial powers, or from death, we are wholly ignorant.—We do not wonder at the violent and drastic effects he witnessed; but we rather wonder, from the large doses given, that he obtained any beneficial effects. Be this as it may, if it possesses the powers and properties we attribute to it, and is adapted to the treatment of the symptoms and diseases indicated by us, the discovery must be eminently valuable. Greatly enlarged experience and observation have strongly

confirmed us in the belief of the correctness of what we stated on a former occasion, namely, that when its powers and properties are fully known and understood, it will constitute a new era in the treatment of disease.

In July, 1841, we first used it in the case of Mrs. L. She had been laboring under a severe attack of pneumonia typhoides for several days. Calomel, Blisters, Dover's powders, &c., failed to afford relief. This case having annoyed us by its severity and obstinacy, and opium producing unpleasant effects without relief to the pain, we determined to make a trial of the tincture of veratrum viride. We withdrew all other remedies, and put her on tea-spoonful doses of the tincture, to be repeated every three hours.

We gave her a teaspoonful at 11, A. M. About 1, P. M., we were sent for in haste, as the medicine, or something else, was acting drastically. We found the patient vomiting every few minutes; skin cold and covered with perspiration; great paleness, nausea distressing; complained of a sense of sinking and exhaustion. After vomiting had ceased, the pulse was found not more than 60 per minute, full and distinct.

In a few cases, in which nausea was great and the vomiting frequent, we have found the pulse very slow, small, and almost imperceptible at the wrist; but as soon as the vomiting and consequent exhaustion subside, the pulse will be found slow, full and distinct. The nausea or vomiting, when in excess, can be readily and certainly relieved by one or two full portions of syrup of morphine and tincture of ginger, or laudanum and brandy.

In this case, before administering the tincture of veratrum viride, the skin was hot and dry; pulse 130, small and soft; circumscribed flush on the cheeks; pain severe; breathing hurried and difficult; cough frequent; expectoration scanty. The very striking effects of the medicine, the great reduction in the frequency of the pulse, and the sudden breaking up or arrest of the disease, in this and another case, profoundly enlisted our attention, and led us from that period to observe more particularly its powers.

The second case in which we used the veratrum veride was that of Mrs. M., who was also laboring under a severe attack of pneumonia. Pulse from 130 to 140 beats per minute; pain violent, and extending from the right side, near the spine, to, and under the sternum; tongue red on the edges and tip, and covered in the centre with a thin, dark, dry fur; bright scarlet circumscribed flush, appearing first on one cheek, and then on the other, rarely on both at the same time; the end or tip of the nose and chin frequently red; very pale around the mouth; expectoration scanty; mucus streaked with blood; cough frequent and very harrassing; great increase of pain under the sternum during a paroxysm of coughing; decubitus on the back; breathing labored and difficult. Did not see her till the fourth day: she had been bled, and otherwise treated, with little or no relief. Applied a blister, and gave a camphorated powder to allay the cough and violent pain, and to excite diaphoresis. At the expiration of three hours, to commence with the tincture of veratrum viride.

The first portion excited intense nausea, violent emesis, great paleness, coolness and a sense of sinking or exhaustion. The patient and friends becoming alarmed, another physician who lived much nearer than myself, was sent for in great haste, but when he arrived the nausea and emesis had ceased; the patient was comfortable, pain and febrile symptoms subdued, pulse 65, full and distinct. The doctor was surprised to find the condition of the patient so different from the representation given by the messenger. The disease was really broken up and a crisis and resolution brought about. Our friend, the doctor, ordered a little paragoric and quinine, in which we fully concurred on our arrival, as there was entire relief of all active febrile and inflammatory symptoms.

Deeply impressed with the peculiar effects of veratum viride, we determined to make further and careful trial of it in pneumonitis. The third case in which we administered it was that of Mr. T., who was taken sick when on a visit to his friend in this section of the country. We ordered the tincture given every three hours, beginning with eight drops, to be increased one drop at each dose until nausea, vomiting or some other visible effect was produced.—On the dose reaching twelve drops it induced vomiting with but little nausea. The pulse was reduced from 135 to 78 beats per minute; the surface, from being hot and dry, became cool; and the severe pain was now but slightly felt on taking a deep inspiration. The interval between the doses was extended from three to five hours; but as twelve drops induced too frequent vomiting, the quantity was reduced to seven drops and continued three days without any return of the symptoms, when the case was dismissed and the patient was soon able to return home. This case was one full of interest on account of the success and promptness with which the violent

symptoms were removed and the disease cured.

We might report any number of cases, but as many of them have already been given by others, we will confine ourselves to such facts only as may tend to illustrate particular points. We continued our experimental trials with various doses from three to twelve drops, increasing or diminishing them according to circumstances, until we acquired a perfect knowledge of its effects, and could graduate them at will.

We ascertained that in cases which had run on for sometime, or in which emetics and cathartics had been freely used, a very small quantity was necessary. Where tartar emetic has been given, it is almost sure to act harshly and drastically. Where tartar emetic had been taken, we would therefore always give a full portion of syrup of morphine, at least one hour before entering on the use of the veratrum viride, and in such cases would not commence with more than six drops for a male adult. Free venesection increases very materially its activity, especially its unfavorable or drastic effects. No one should think of following a large bleeding with the veratrum viride, unless with the greatest caution. The depressing influence of the loss of blood upon the brain and nervous system generally, cannot fail to render the use of so potent a sedative as veratrum viride exceedingly hazardous. The administration under such circumstances, of an agent capable of reducing the pulse from 130 or 140 down to 75, 70, or even 50 beats in the course of a few hours, cannot be too carefully watched.

But, to proceed: We soon discovered, to our surprise, that in almost every instance, so soon as nausea or vomiting was excited the pulse became slow, full and distinct, the skin cool and often soft and moist, and in some cases bathed in a most profuse prespiration, with entire relief of pain in a number of cases, and materially mitigated in others. The cases in which there was no abatement of pain were very few. The mouth and tongue grew moist, breathing and expectoration more free and easy, and by continuing the remedy, in doses short of the nauseating point, from one to three days longer, there would be no return of the symptoms in a large majority of the cases in which the disease was subjected to early treatment. In a small number of cases, if not continued longer, the symptoms would return on a suspension of the remedy. In very few cases we have had to continue the tincture from five to twelve days. These cases are exceedingly rare, and were often treated with other remedies, or suffered to run some time without any treatment. We had, by a continued series of experiments and observations, arrived at the fact that, in nearly every case, we could reduce the pulse to any point we wished; that by putting the patient under its influence, we could predict with certainty that the pulse would range between 56 and 85 beats per minute.

In 1846 we were called to see Mr. E., in consultation with Dr. J. A. Stewart. Mr. E. had been laboring under a severe attack of pneumonia for several days. The remedies prescribed were entirely approved of and continued for a time, but failed to relieve. The threatening aspect of the case was such, that it was thought prudent to inform his parents, at a distance, of his perilous condition. At this critical juncture, we observed to Dr. S., that we had been using an article in a number of cases of pneumonia, with a success and peculiarity of effect we had never been able to obtain from any other remedy, and proposed to use it in the present case. We immediately put Mr. E. on the use of the veratrum viride, to be given every three hours—the quantity to be increased one drop at each dose until nausea or vomiting occurred. At 8 o'clock A. M., commenced with seven drops. The third portion excited severe nausea and free vomiting, with great paleness, coolness and moisture of the surface. During the occurrence of these interesting and striking effects, we were notified that Mr. E. was vomiting freely, was much worse and was thought to be dying. We found, however, that what had caused so much alarm to the patient and his friends, was to us a source of gratification; for, after the effort at vomiting was over, and nausea relieved, the pulse was reduced to 63 beats and the pain relieved.

In this case, a pulse of from 120 to 130 beats, was reduced in twelve hours, to 63, and all the febrile and inflammatory symptoms were relieved. This was to us an occasion of thrilling and exciting interest. Dr. S. was the first physician to whom we had stated our belief in its powers, and he now stood before us witnessing the most commanding demonstration of the powers of the agent over a disease of acknowledged fatality, and under the most unpromising circumstances. Who would charge us with wanton enthusiasm? or who would fail to be enthusiastic on such an occasion? The portion was reduced to one half, and continued several days without any return of the symptoms, and the patient rapidly convalesced.

We were at one time impressed with the belief that nausea or vomiting, one or both,

was essential to the control of the heart. Called, in February, 1847, to see a son of Mrs. T., laboring under a violent attack of pneumonia; we put him on the use of veratrum viride every three hours. Although 12 years of age, his general slender health and deformed chest, having been severely afflicted with asthma, induced us to commence with a very small dose, that we might avoid any drastic effect of the remedy. The first portion given was two drops, to be increased one drop every portion until the slightest nausea was experienced, then to lessen or discontinue the remedy, as the case might require. On taking the third or fourth portion, Mrs. T. discovered that he was getting very pale, and the skin was cool and moist, and the pain scarcely felt only on taking a full inspiration. The slowness of the pulse, and the palor and coolness of the surface alarmed her, and she sent for us. We found him pale, cool, moist, and with a pulse beating 35, full and distinct.—When put on the tincture, in the morning, his pulse was 120 to 125, skin hot and dry, frequent and labored breathing, pain severe, great thirst. In the short space of twelve or fifteen hours the symptoms were subdued, and by continuing the tincture in doses of from two to three and four drops, there was no renewal of the symptoms.

Since the above, we have been able, in a number of cases, to succeed in reducing the action of the heart and arteries, without exciting the least nausea or vomiting, by commencing with a very small dose.

In 1850, we determined to announce to the world the fact, that *the great desideratum had been discovered: an agent by which we could emphatically say to the heart and arteries, thus fast shalt thou beat, and no faster.* Aware of the fate of many remedial agents urged upon the attention of the profession, and which have proved valueless we with-held our notice until we had, by the utmost care and observation, acquired the conviction of its being as much a specific in pneumonia typhoides, as quinine is in intermittent fevers. We leave it to an enlightened profession to judge whether or not the agent has failed to answer or equal the representations made.

We now began to reflect upon the fact, that in a very large majority, if not in every disease of violence, a frequent pulse is manifest, and that we judge in a great measure, of their intensity, by its frequency and the condition of the vascular system. We asked ourselves the question, if veratrum viride will control arterial excitement, break up and arrest pneumonia typhoides, why should it not succeed in arresting other fevers and inflammations? Believing, as we did, that the altered and vitiated condition of the secretions were the consequence of increased and perverted circulation, and that the degree of their morbid condition might be measured by that of the vascular system, we concluded that the veratrum viride would cure other febrile and inflammatory affections by its specific action on the heart. We were therefore led to test the veratrum viride in a number of diseases.

In nearly all, if not in every acute disease, especially of a febrile and inflammatory character, we find the frequency of the pulse and the derangement of the vascular system in proportion to the force and severity of the case. There is scarcely an exception to the rule. Why this is so we do not know. The fact cannot be denied; and in order to restore health, we must, of necessity, control the circulation, directly or indirectly. Now veratrum viride will almost invariably effect this, whatever may have been the disturbing cause. The how and the why, we do not understand. We look upon the universality of its application, to be exactly defined by the universality of the occurrence of increased cardiac action. In testing its powers, we did not confine our experiments to febrile and inflammatory diseases of an idiopathic character, but extended them to traumatic lesions in which fever and inflammation had supervened, and our labors were crowned with a success that we little dreamed of realizing. Its power of controlling arterial action, in febrile and inflammatory diseases, and in traumatic lesions, we consider established beyond a doubt.

It stands unrivalled in palpitations of the heart, for promptness and certainty of relief. It is a specific in the painful affection of the testicle consequent upon metastasis in mumps. We have not failed, in a single case, to obtain relief from the pain and fever in twelve hours, and prevented a return of the symptoms, by perfect rest and a continuance of the tincture for three or four days. How far it will succeed in orchitis, from other causes, we are not prepared to say. It affords us no ordinary pleasure to record its value in the treatment of the inflamed mamma of lying-in females. If taken in time, in these cases, it may be relied on to control the fever, pain and inflammation of the gland, so as to prevent suppuration in almost every instance. It is valuable in inflammation of the brain. In hooping-cough, accompanied with high febrile excitement, it has no equal. In convulsions generally, it is highly valuable. In asthma and rheuma-

tism its effects are peculiarly striking, especially in the acute forms. In chronic rheumatism we have not used it. In puer peral fever our experience is limited, but the few cases in which it was used stamps it a reliable agent in that disease. We have found it of great value in the treatment of typhoid dysentery, and would feel unable to combat that disease without it or some other remedy of equal power. Its effects on the system are in perfect antagonism to those of scarlet fever. Combined with the diuretic treatment, we do not believe it can be equalled by any other plan of treatment that has ever been adopted in scarlet fever.

When we reflect upon the powers of veratrum viride to allay pain, irritability and irritation, and more especially irritative mobility, in connection with its influence over the heart's action and deranged secretions, it is truly difficult properly to appreciate its value.

We must confess, that notwithstanding the time and space already occupied, that we have scarcely entered the threshold. much less exhausted the subject. It would take a volume to unfold the powers and effects of veratrum viride, and the almost innumerable cases to which it is peculiarly applicable. The powers and properties of veratrum viride, when fully known and understood, will open new fields for thought and investigation, and give greater scope for practical research in all that relates to the pathology and treatment of disease, than any agent that has ever enlisted the attention of the medical world; and we are persuaded that it will completely change many of the existing views of pathology, and simplify the treatment of disease to an extent unparalleled in the history of medicine.

We now enter on the most important and interesting part of our subject, viz—its value in the treatment and cure of Typhoid Fever—a disease whose fatality renders big with interest any thing proposed for its cure. The treatment of typhoid fever is a matter in which every individual is deeply interested. Might we not ask with emphasis, what country, what community, has not felt and heard of the destructive mortality following in its wake? and has not the cry been echoed back by every tongue and breeze—a remedy to stay the the fell destroyer's progress! When we have presented as much of facts and evidence as we deem sufficient on the occasion, you will be able to judge, and others can determine, whether a cure has been discovered and the destroyer stayed or merely checked; when the value of veratrum viride in pneumonia typhoides and other malignant and fatal diseases, is embraced in the subject, it becomes doubly interesting and important. In 1850 we first entered on a trial of the tincture of veratrum viride in the treatment of typhoid fever. It was due to our patients and to justice that we should proceed with caution. We accordingly, at first, gave it in mild and moderately severe cases; avoiding its use at first in all cases of unusual severity and malignancy. We first used it in the case of a negro boy of Mrs. W.'s, which was uncomplicated and yielded readily. When called, on the third day of the disease, the bowels had been moved sufficiently by a cathartic of calomel, followed by repeated portions of camphorated Dovers Powder, without abatement of the symptoms. The skin was hot and dry, great thirst, severe pain in the forehead; the eyes dull, heavy and ecchymosed; tongue covered in the centre with a dark thin fur, tip and edges very red and dry; pulse 127, small, soft and with a quickness in the stroke, that indicated greater frequency than really existed. The patient was ordered a six drop dose, to be increased till nausea or vomiting occurred. By mistake, the dose was not increased. After continuing the treatment twelve hours, there being no abatement in the symptoms, we were notified of the fact and wrote to increase until an impression was made, and that we would see the patient in twelve hours. During the absence of the messenger, Mrs. W. discovered that the dose was to be increased, and did so, and when this reached eight drops there was free vomiting, with a subsidence of all febrile symptoms, the severe pain in the head excepted. At the expiration of twelve hours we found the boy with a skin cool and moist, thirst materially abated, and the pulse reduced to fifty-six beats. A blister was applied to relieve the unmitigated pain in the head, and the veratrum viride was continued four days without any return of the symptoms.

Other mild cases were treated with the same rapidly favorable and successful results. We were thus emboldened and warranted in extending it to the treatment of cases much more severe and malignant, as were those of Mr. R., the son of Mr. W., the two at Dr. Q's. and that of Dr. T's.—all of which, except the first, were published at length in the January number of the Augusta Medical Journal, in 1851.

TO BE CONCLUDED IN THE NEXT NO.

CHOLERA.—This disease which has visited various parts of Europe and America within the past year, has almost entirely disappeared.

NEWTON'S CLINICL INSTITUE.

BY G. W. L. BICKLEY, M. D.

The importance of an inquiry in which the public are so much interested as this can not be lightly disposed of, since a considerable proportion of every community are deeply interested in every thing which can assist the physician and surgeon in his efforts to eradicate from the system those diseases which of late years have multiplied to such an alarming extent. It is not my purpose to enter into a disquisition upon the prophylatic or preventive agencies which may be brought to bear; but a simple inquiry into *the means which those afflicted may avail themselves*. In tracing this inquiry I feel that I am conferring a positive blessing upon those who only hopes for life depends upon the skill of the surgeon and physician.

If the public were informed upon this subject, I am well persuaded, that a vast number of diseases which are suffered to prey upon the body until its destruction is accomplished, would be entirely eradicated from the system, and health and buoyancy established while the system yet retains sufficient vitality to recuperate. But here the question arises, is it politic to give the public every kind of information upon such a subject as medical science? To this I would answer, that if it is not *politic* it is *humane*. I would be much opposed to that kind of information which would lead to more empiric practice that at present exists; but I would see the afflicted informed of the best means that has yet been adopted for their relief, and hence the preparation of this article.

Before I enter into a consideration of the subject, however, I beg to observe, that those who are directed in all their pursuits by a selfish desire to amass wealth, even at the expense of suffering humanity, will very likely argue strongly against my positions, because the positions militate against their own interests. Such opposition, however, carries but little force, when directed against truth or philanthrophy.

What is here stated may be relied on, as my observations have been made in various parts of Europe and America, and under such a variety of circumstances that I would hardly assume untenable positions; and as I have no interest in what I would recommend, further than a desire to benefit my afflicted brothers and sisters of the human race, I shall hardly be accused of speaking from interested motives.

For several years I have constantly urged upon my brethren of the medical profession, the necessity of erecting suitable Institutions for the treatment of Chronic diseases. In vain I attempted to show how much more successful the practice of Private European Institutions was than that of either Public Hospitals or private practice at the homes of the afflicted. Notwithstanding the truths of my demonstrations were admitted none seemed willing to introduce it into this country for fear it might not *pay*. Half a score of years have rolled away, and though I had still cherished the practicability of the scheme, I had despaired of its demonstration in my day, until Prof. R. S. Newton and his brother O. E. Newton, M. D., during the last year, in order to afford proper facilities to their patients, who are here from every point of the Union, purchased and have now fitted up a splendid building, which is capable of accommodating all who may desire it while under treatment.

These gentlemen, with their characteristic urbanity, took me through their establishment, and showed me all its arrangements, which in justice must be said to be equal to those of any private Institution to be found in the world.—Neither money nor time have been scantily used upon it; and from the known reputation of these physicians and surgeons, the afflicted public may feel sure that the Newton's Institute will be all and more than is pretended.

Let me compare for a moment the merits of a public hospital with those of a private one. In the public hospital, men from the lowest walks in life, and women of the most depraved and desperate habits are promiscuously huddled in its wards, many of them afflicted with the most revolting diseases which have been contracted in the filthiest haunts of great cities, which, from want of due

care, are often propagated from one to the whole number, and in place of the hospital being a place of cure, it is only a charnel-house—a stepping-stone to the grave. The neglect of patients, improper ventilation, unskilful practice, and surrounding circumstances, account for a very unsuccessful practice of our Public Hospitals; which generally is only about half as successful as that of private Institutions, where patients have all the comforts of a home, and the advantages of the Institute. No secret prescriptions are here made, so that the patient who has been treated, has a good general idea of what has been done for him and *why* it has been done.

The patient of this Institution is also not subjected to the contaminating influence of the associations of the public hospital, and need not associate with any person except by choice. Now, also in an Institute of this character, the patient is under the constant care of the physician, so that any change may be carefully watched and the comfort of the patient attended to. As to the success of this Institute there will be no question. It is only necessary that the public should know of its existence and by whom conducted to fill its rooms.

All persons, therefore, who are afflicted with chronic diseases of any kind, will here find an asylum where the expenses are not so heavy as to deter any one from availing themselves of its advantages.

The experience of every physician corroborates my sentiments in this matter, i. e. that the treatment and practice of a properly conducted PRIVATE INSTITUTION is the *safest* and at the same time the most *economical* mode of ridding the system of those deeply seated constitutional diseases, which have generally defied the skill of the private practioner. Let every man afflicted, with this class of diseases read and show to his neighbor similarly afflicted, what is here said by one who can have no interest to prompt him but an earnest desire to do good.—*Western Medical News.*

CRIMINAL LUNATICS.—It is stated on the authority of the Poor-law Board, that there were 439 criminal lunatics in England and Wales the past year.

LIFE AND DEATH.

A generation is usually admitted to occupy, on an average, a space of thirty-three years. Hence arise some facts which may be considered as rules in the history of human nature. A man, being likely to be a father at thirty-three, will probably be a grandfather at sixty-six. Many are, of course, fathers and grandfathers at earlier ages; but they are averages. When we see at any time a new born babe, we may calculate pretty safely that the son of that babe, if he is to have one, will be approaching the close of life at a good age about a century hence. We meet every day in health and vigor, a gentleman whose father was born in 1720, but it is rare to find any man capable of business or social pleasure more than a hundred years after the birth of his father. In like manner, any individual who finds himself (we shall say) this year at any particular stage of life, may be assured of it as a rule, that his great grandfather was in just about the same stage of existence, and experiencing all its appropriate sensations, and aiming at much the same objects, in the year 1754—that is, a hundred years ago. Does he see his son at a particular stage of life? Then his own grandfather was at the same stage as that son a century ago; and so on. There are occasional exceptions of a surprising kind. for instance Charles James Fox, who died in 1806, at the age of fifty seven, had an uncle who was paymaster of the forces in 1679, the year of the battle of Bothwell Bridge, and his grandfather was on the scaffold with Charles I. But the rule is as stated. During any particular decade, as the forties and fifties, &c., look into the obituary, and you will find that the old people then dying—of the class who, being best off, live longest—are, for the most part, the produce of the eighth decade antecedent. Thus for example, the individuals born in the seventies in the last century, are the people who are now closing their pilgrimage in the ripening of their days. It has become rare to see the announcement of a death of a person born in the sixties; and one in the fifties only occurs now and then.—Thus overlooking the many premature

deaths, the obituary is like an index always coming down nearer and nearer to our natal decade. Those whose births take place in the eighties must soon be on the lookout for the arrival of the fatal finger at their point in mortuary chronology. In a few more years the men of nineties will be in the course; and so it goes on. Let us seek to improve the hours, and not to be taken unprepared.

ECLECTIC PRACTICE OF MEDICINE.

THE ECLECTIC PRACTICE OF MEDICINE, by *W. Byrd Powell, M. D.*, formerly Professor of Chemistry in the Medical College of Louisiana, &c. *R. S. Newton, M. D.*, Professor of Medicine and Pathology in the Eclectic Medical Institute of Cincinnati, &c. Cincinnati: H. W. Derby. Price $5.

This, is emphatically, an age of book-making, whether in science, literature or the arts; the leading desire of the principal portion of mankind seems to have been concentrated into the one great responsibility of writing a book. Fame and reputation are thus sought after by the many, who, as our libraries will too plainly develope, if they have not succeeded in securing these, have, at least, obtained considerable notoriety. At the present day, book-writing is a trade; the question being with the writer, not how much thought or investigation must be bestowed upon his subject, but how bulky a work he can present to the public for the purpose of consuming both their money and their time; and if in the course of his writings he can purloin the labor of other person's brains to his own advantage, but little conscientiousness is manifested in so doing. This condition of things pertains to medical matters as well as all others, and but few books are destined to receive that attention, or cause that amount of interest, which their authors probably anticipated when preparing them; except, indeed, it be the vile trash with which the country is flooded intended to pamper the morbid appetites of depraved minds. This being the case, whenever a work of originality, thought, and usefulness is brought before the public, the liberal and investigating mind hails it with pleasure, and bestows upon it a careful consideration, without sectarian or prejudicial reference to the peculiar views which may be entertained by the writer. Such is our condition at this time, and such will, undoubtedly be the condition of every educated mind, who may have the good fortune to possess a copy of a work just issued by *Henry W. Derby*, our enterprising book-publisher, the title of which heads this article.

Prof. W. BYRD POWELL, at present a citizen of our sister city, Covington, one of the authors of the above work, is well known to the scientific world as a bold and fearless investigator of all subjects having for their tendency, a knowledge of mind, its cultivation and elevation, as well as the improvement of man in his physical sphere; for many years his mind has been solely devoted to these objects, regardless of fame or pecuniary considerations, and in the course of his studies he has discovered many new and important truths, some of which are given in this work, and which will be received with gladness by the medical philosopher. Prof. R. S. NEWTON, one of our fellow-citizens, also one of the authors, is well known throughout the United States as an able and skilful surgeon, and stands among the first in his profession.

In part first of the work, the authors advance an idea both novel and original, and which demands a thorough consideration before it be too hastily adopted or rejected, viz: "that the animal functions of the entire system are, in a great measure, if not entirely, founded in, or controlled by, the cerebellum." To sustain this position the whole of book first is occupied in briefly investigating the physiological and pathological relations of the cerebellum, and an expose of the human temperaments; and as far as our own limited knowledge of these subjects extends, we think they have been handled in a masterly manner, and will require the strongest kind of refutation to prevent them from becoming generally received. This part of the work will be perused with much interest, and the views and facts advanced will tend to produce an entire revolution in many of the most important points in medical science.

The interest of book first is by no means lost in book second, which presents to us "physiological considerations in relation to parents and the treatment of children," and which considerations are based upon the facts and arguments adduced in book first. In this book, an investigation is entered into of the parental relations to children, embracing in its scope the important and unsettled points of "marriage eligibility," "parental constitution," "improper marriages," "health of parents," "psychological influence of the mother on the fetus," "influence of children on a mother by a first husband, with reference to children by a second," together with the

duties necessary to the child. It is impossible for us to do any thing like justice to this part of the work, and can therefore, only make a brief reference to the topics treated upon, and which should be read and thoroughly understood by every man, woman, and child in the community. We believe that if the principles laid down in the first and second books of this work, were received and adopted generally, much misery and unhappiness would be spared the human family in nearly all its relations.

After bestowing attention upon the mental and physical culture of children, and the causes of infantile mortality, we are suddenly startled by a doctrine so opposed to the views of the whole civilized world, as would have caused us to doubt the sanity of the writer, were it not for the unanswerable facts and arguments brought forth.---The doctrine maintained is, that "under existing circumstances of the human race, juvenile mortality, to the full extent of its natural causes, is both necessary and useful." And we would especially commend this portion of the work to the careful reflection of both parents and physicians, it contains truths which have been too long concealed from community.

The remainder of the work, consisting of books three and four, is chiefly occupied with the natural history, pathology and treatment of disease. The pathological views are in accordance with the propositions sustained in the previous book, and certainly present a new field of enquiry to the medical mind. The treatment is according to the Eclectic School of Medicine, in which Prof. R. S. Newton, occupies the chair of Theory and Practice. At this day, Eclecticism in medicine is too well known to need much explanation from us; suffice it to say, that it teaches freedom of thought and liberal investigation without any mental shackles; that it adopts *good* wherever found, and rejects *evil* without regard to its source; and acting upon this principle it discards all agents as medicines, which produce permanent injury to the system by non-assimilation with any of its constituents, as for instance arsenic, mercury and its many preparations, antimony, copper, silver, etc.; relying chiefly upon the internal administration of remedies taken from Nature's garden for the cure of disease. And in the work before us we have evidence of the truth of these assertions in the treatment laid down for the many diseases therein named. A goodly share of these medicines, are what are termed "concentrated preparations," for the introduction of which the medical profession are greatly indebted to Eclectics. We find much reference to these preparations in the treatment given in the work, to which it appears, if we may be allowed to judge by it, constitute the major part of agents employed, so that as a general thing, as far as quantity is concerned, Eclectic doses are nearly as minute, but much more active than Homeopathic.

We wish it were in our power at this time to give a more extended notice of this work, for it is richly deserving one; what we have said, has been from a mere cursory glance over its pages; what we may say, will necessarily be reserved, until we have carefully and thoroughly digested its matter. One thing however, is certain, let the points of discussion and explanation be true or not, they are original and worthy a fair consideration; they will accomplish what is seldom done by other works---make the philosopher, the physician, the student, think---all who read the work *must think*---it will effect this result, if no more; and in so doing must undoubtedly result in some benefit to the human race. We look upon the work as one not to be passed by lightly, and which we trust will be found in the library of every medical man, no matter what may be his peculiar opinions in relation to the science of medicine.

As to the getting up of the work it is in H. W. Derby's best style, constitutes a book of 1054, 8 vo. pages, in good type, on superior paper, bound in calf with spring-back, forming one complete and elegant volume.—*Newton's Express.*

"It is hardly to be expected that we should postpone the performance of our daily duties to critically read the one thousand and eighty-four pages of this ponderous volume. Had we done so, we have some slight misgivings as to our ability to comment upon it, in a way which would be entirely satisfactory to ourselves, much less to the professional reader of our notice.—Without granting to the school to which the authors of the book belong, that superiority which they claim, we have no hesitancy in asserting the correctness of the principle on which it is founded. And, whatever opposition their school may have encountered from the adherents of older or newer ones, it seems to us impossible that any intelligent and conscientious physician should practice upon any other than the eclectic principle. This is simply the principle of choosing what appears to us to be true in any system, and putting it in practice. Of course we do not express any opinion upon those points wherein the different schools of physic differ. It would not become us to say dogmatically that the lancet should rust in its case, or certain active remedial agents be no longer employed; because upon these points men of the profoundest scientific acquirements, and after years of practice and observation, have been unable to agree. Prejudice, education, reputation and ambition no doubt contribute to keep

the different schools apart but these must gradually lose their influence, and will finally cease to have any at all. Indeed, certain medical notions, like certain theological opinions, although they hold their old places in the creed, have already lost much of their importance, and are no longer ostentatiously and obstinately inculcated, and are even silently repudiated in practice.

"We are not sufficiently acquainted with the Practice of Medicine to express any opinion upon that part of the book which is the work of Dr. Newton. This gentleman is widely known in our city, and an extensive practice has fully prepared him to do justice to this branch of the subject. Not being able, however, to contrast his system of practice with that of other schools, we are not prepared to express an opinion as to its value to the professional reader. Professor N. has given the experience of his own practice, and so far as he has been able to learn, that of the most eminent practitioners of Eclecticism.

"The physiological portion of the work was prepared by Prof. Powell. Many of the theories proposed by him would, no doubt, create a great deal of discussion among doctors—a race famous for their controversies—but many of them will commend themselves to the general reader, as being founded in reason and truth. A wide latitude may well be allowed, when the facts are few and of a character that naturally leads to a diversity of opinion. Upon some such subjects, Professor P. has expressed himself with a degree of confidence that may seem unwarrantable to other members of the profession, whom his facts and arguments may fail to convince of the soundness of his views. But we believe he has no where manifested a disposition to wrest facts to the support of his theories. On the contrary, he seems to have pursued his investigations and observations in a sound catholic spirit, and with an earnest desire to discover the truth.

"To the adherents of the Eclectic School we can cheerfully and warmly recommend the work of Professors Powell and Newton; and to those who heretofore had no respect for this school, we may hint that a perusal of this work might change their opinions and suggest some new views.

'The work is published by Derby, in an exceedingly handsome style, and is fully equal, in that respect, to any medical work published in this country, which has fallen into our hands." —*Cincinnati Daily Gazette.*

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"We have received from the press of H. W. Derby, a work on the above subject, by Professors Powell and Newton, the latter of this city and the former of Covington, Ky. These two gentlemen were educated in the two most distinguished schools of medicine in this our western country—the Universities of Lexington and Louisville, Ky. Hence it may be presumed that they know what they are about—that they understand, at least, the regular or old school practice, and as they have abandoned it, it must be conceded that they believe themselves to have found a better.

"Prof. Powell, is already known in several departments of science, and is regarded as a bold and original investigator. This peculiarity of mind is certainly disclosed in the present volume.

"The work consists of more than a thousand pages divided into four books; the first is devoted to a consideration of the functions of the cerebellum and of the human temperaments, and reveals his views of Pathology, Diagnosis and Prognosis. For the accuracy of his conclusions he appeals to demonstration. He denies that any disease is *hereditary*; he only admits organization to be hereditary, and that certain organic forms are attended with a liability to certain forms of disease, under the agency of given causes, and that these organic forms may be detected at sight. The Doctor has been able, it is said, in a room of many gentlemen, to designate those who had, or were liable to have acute rheumatism, and also those who were organically liable to the chronic form alone, without making a single mistake; and the same of other diseases.

"If Prof. Powell can really do this, and can teach others to do the same, it must be admitted that he has arrived at a greater precision in the pathology of disease than any of his predecessors, who, in treating of the various forms of disease, particularly the functional, can do nothing better than refer them to some occult or mysteriously morbid state of the system—a state about which very few know anything.

"The second book treats of the physiological care and training of children, and of parents, with reference to children. The last chapter contends that the existing mortality of infants is founded in necessity and utility, except so far as it depends upon mechanical and chemical causes, including under the last medical malpractice.

"The third book treats of the diseases incident to infancy and childhood; and the fourth of those which are mostly confined to adults.

"The treatment or practical part is the work of Prof. Newton, who, to our community, and to this portion of our country, is much better known than Prof. Powell, and is, perhaps, twenty years his junior; and yet it will scarcely be contended that we have a medical practitioner or a surgeon who has more thoroughly made his social, business and professional impression upon this city and this region of our country. No one has a character in either department of the profession that inspires more confidence.—Hence the work under consideration may be regarded as presenting the Eclectic practice in its best and most enlightened shape, with much that is new in physiology and pathology from the pen of his co-laborer, who has measurably devoted his life to the investigation of these subjects.

"The application of all the new Eclectic remedies which have been found to possess much utility by Prof. R. S. Newton, have been made to various diseases treated of in the work. This we understand is the first instance in which these have been adopted in works on practice; this will prove to be of great importance to the cause of Eclecticism practice, and to the profession at large.—*Cincinnati Daily Enquirer.*

ON THE NECESSITY OF RE-VACCINATION.

BY G. BENEDICT, M. D.,
Physician to the North-western Dispensary, New York.

The complete failure of vaccinnation in some instances to protect the system against smallpox, and its partial failure in other cases, has led to various theories and practices. Some have, in a measure, doubted its efficiency, others have rejected it as worthless, while others still have endeavored to discover the reason of such failures, in order, if possible, to obviate them.

Action has wonderfully corresponded with sentiment. Vaccinnation has been carelessly performed, and suffered to run its course unregarded, or it has been entirely neglected; or, on the other hand, has been performed with due care and watched with interest.

As yet the fact stands as it ever has done. Vaccinnation sometimes fails, sometimes it seems to exert a complete protecting influence against a most loathsome and very fatal disease. Hence the question, as to the cause of this, is in truth a very important one. It will hardly do to put it aside, by considering the case analogous to that in which specific remedies for various disorders are employed with more or less general success, and yet with now and then a failure. For we have no so-called specific for any one disease, which is not also used with more or less benefit in other diseases, so that, in different states of the constitution, it is productive of good results. We have yet to learn that the vaccine infection affords the least protection to any other than the variolous disease. It is said by some to exert a protecting influence against measles, by rendering the attack less severe; but our own observation contradicts the assertion. The mode, too, of introducing this protecting agent into the system is different from that of other remedies for existing or expected disease. It is with a view to save the patient from the peril and disfigurement of smallpox that it is employed, and for this alone; and this object we believe it capable of effecting. If we attempt to account for its apparent failure in some instances, on the ground that there is a greater susceptibility to variola in some individuals than in others, we are met by the fact, that many thousands of those who would undoubtedly have suffered from, and succumbed to, the disease, have been saved; and this, too, when the operation of vaccination has been so carelessly performed. If those only who are least liable to the variolous affection are to be benefitted, the great value of the discovery is taken from it. I can conceive no better evidence of the great susceptibility to a disease, and the value of any remedy for it, than I find in the generally admitted fact, that, where once many died, the employment of such remedy has diminished and almost extinguished mortality from such cause. Nor need we, as it seems to me, adopt the opinion, that the changes effected in the system at puberty destroy the hitherto protective power of vaccination. A change it certainly is from childhood to adolescence; but that the organization of the solids or fluids composing the body undergoes any such modification as to render an active agent inert, or *vice versa*, is at best hypothetical. It looks too much like the old whim that vaccination should be repeated once in seven years, because in that period its power had all "run out" of the system. The reason is as good in one case as in the other. Comparatively few adults, who were vaccinated in infancy or childhood, are susceptible of successful vaccination. How does this happen if there is such a change at puberty?

Some stress has been laid upon the number and appearance of the cicatrices, as enabling us to judge of the efficacy or inefficacy of vaccination. Doubtless they indicate more or less the efficiency of the pustules, but they alone are not to be relied on. Nor should we judge from the local intensity of the pustule, that it is sufficient or otherwise; for in different individuals and in different states of the constitution, there is great variety in this respect.

We are not permitted to look into the human organism so intelligently as to understand how and by what means all its changes are effected. The action of remedies on the secretions, *e. g.* in various conditions of the system, though the results are often visible and marked enough, is by no means capable of being fully comprehended. And when we come to the question before us—how the active existence of one poison is rendered forever impossible by the previous existence of another and different poison—we hesitate for an answer. The results of experience, however, justify the belief that it is so, and we rest upon this belief as a fixed fact.

A peculiarity in my own person, perhaps not remarkably uncommon in others, has led me to attentive thought and careful observation on this subject. I remember to have been vaccinated in childhood several times, before the presence of the virus manifested itself by the formation of a pustule. It did at length happen, and the cicatrix still remains. While at college, a few cases of variola and varioloid appear-

ing among the students, I was again vaccinated, under the impression, that, as seven and even fourteen years had elapsed, I might now be subject to smallpox if exposed. Here again I received the infection, and had a postule larger, and, so far as memory serves me in regard to the first, more intense than that. About four weeks from the time of re-vaccination, and after my arm had entirely recovered from its effect, I again vaccinated myself with lymph taken from the arm of a fellow student. Again, and so soon after the second vaccination, I had a large pustule, which went through a regular course, the scab adhering until about the twelfth day. Now here, after the re-vaccination, I would have been considered as safe as the vaccine disease could render me, and doubtless, had I suffered from variola, my case would have been set down as one of those in which vaccination had availed nothing. And yet was there any reason why I should not have suffered the full force of the disease, had I been exposed? Since that time I have repeatedly inserted the virus in different situations, with no other effect than the slight irritation which is known to follow the scratch of the lancet charged with the poison in those thoroughly vaccinated. My own experience has been partly confirmed by observation. I have re-vaccinated many children, and quite a number of them those in whom I have watched the progress of the first pustule. I have seen the re-vaccination unequivocally successful in only eight cases, and in no instance have I been satisfied that true vaccinia was present the third time. Re-vaccination of adults has been successful in about the same proportion as in children.

My observations have not been sufficiently extensive to establish any new fact, but I make them known that others may observe also, and see if they do not confirm the following proposition:—

That vaccination, properly performed, and repeated until the susceptibility to the vaccine disease is exhausted from the system, affords entire immunity from the variolous disease.

It may seem that, by including so much, my proposition is worthless, as it would extinguish not only the genuine disease, but its modification, varioloid. But we are to bear in mind that one, two or three successive pustules may still leave the system unprotected, at least in part. Vaccination should be repeated until nothing like a pustule can be obtained. Let each one observe for himself, until evidence accumulates which shall sustain or overthrow this position; and let no one say that vaccination is not a protection for those in whom the susceptibility to variola is unusually strong, until he first ascertains whether there is not still left some susceptibility to vaccinia.—*New York Journal of Medicine.*

PHYSICIANS IN FRANCE.

There are in France, 11,216 physicians, 7,221 health officers, and 5,175 pharmaciens. These give one medical attendant for every 1,940, and one pharmacien for every 6,914 of the population. What is singular is that the richer departments have fewer doctors than the poorer; thus in those of the north there is one practitioner for every 2,496 persons, while in the south there is one for every 1619. It is still more singular that there are nearly 600 towns or communes with populations varying from 2,000 to 8,000 souls, which have neither a medical practitioner nor pharmacien.—*Exchange.*

CASES OF CÆSARIAN OPERATION.

BY (1) M. STOLTZ; (2) M. AERSCHODT; AND (3) M. SACK.

Two of these cases were completely successful, the third was successful only so far as the child was concerned.

1. M. STOLTZ'S CASE. *In which the child's life was saved at the expense of the mother's.*—A woman æt. 37, who had already had five easy confinements. Soon after the birth of her fifth child, she had experienced what she thought to be rheumatic pains. These increased greatly during her sixth pregnancy, when she became unable to walk without support. For two years she had been unable to sustain herself in the erect posture. Her back had recently become considerably bent. On examination, the promontory of the sacrum was found to rest literally upon the sacrum, and there was no possibility of effecting delivery by the crotchet. Under these circumstances, the Cæsarian section was undertaken, but not until she had been in labor for three days. The operation was unattended with any accident. No blood was lost. The child breathed and cried immediately. Four twisted sutures were employed. For the next twenty-four hours everything went on well, when the patient became restless and disquieted, her vital heat failed, and in spite of all efforts to relieve her, she sank ten hours afterwards.—After death, there were no signs of either inflammation or hemorrhage. The pelvis and the bones generally were greatly distorted. This case happened in 1846.

2. M. AERSCHOLDT'S CASE. *In which the*

lives of both mother and child were saved.—The patient, whose age is not given, fell in labor of her first child on the 1st December, 1851. She was very rachetic, and the sacro-pubic diameter was not more than five centimetres. The operation was performed after the labor had been in progress for more than twenty-four hours. Some difficulty was experienced from the protrusion of the bowels, but eventually this was overcome, a vigorous child was extracted, and the external wound was closed with four twisted sutures. The first two days passed without accident; the day following, symptoms of milk fever, with tympanitis, and some erysipelas about the wound made their appearance, but these passed off, and on the tenth day, the wound was perfectly healed, except at its inferior extremity. In a month the patient was well.

3. M. SACK'S CASE. *In which the lives of both mother and child were saved.*—The patient was in her 22d year, and in her first confinement. The pelvis was greatly deformed. The child's head was greatly impacted in the inlet, but the outlet was so distorted as to make any further progress impossible. The mother being extremely anxious to save the child, the Cæsarian section was performed. On dividing the parieties the omentum was found stretched across the intestines, and not to be displaced. On dividing this there was considerable hemorrhage. This, however, was checked after some little delay, and the child was delivered, though not until some considerable force had been employed to free its head from the pelvis, into which it had been impacted. Eight twisted sutures were used to close the external wound. Symptoms of peritonitis followed the operation, and the wound had to be partly opened to allow a quantity of bloody serosity to escape, but in the end the symptoms subsided, and the patient recovered, without any further difficulty, though tediously.—(1) *Gazette de Strasburg*, March 1853; (2) *Annals de la Societe de Med. d' Anvers*, March 1853; (3) *Schmidt's Jahrbucher*, No. 8, p. 195, 1853.

EFFECTS OF LIME.

Prof. GRAY thus briefly sums up some of the offices performed by lime:

1. It tends to convert the vegetable matter into vegetable food, thus performing the office of a solvent, or convertor of nutritious matter into nutriment.

2. It corrects the acidity of soils, by uniting with free acids, or decomposing poisonous salts.

3. It forms a part of the vegetable structure, and properly inorganic food. Like all other alkalies, it also contributes to electreal effect, which may be regarded as a kind of stimulus to the vital functions.—It is found, as we have seen, in vegetable productions, sometimes united with organic, and at others, with inorganic acids.

NEW METHOD OF INDUCING PREMATURE DELIVERY.

BY M. SCANZONI.

The author was induced, by observing the active sympathy between the breasts and the other parts of the sexual apparatus, to try to produce premature delivery by irritating the nerves of the mammary glands. The first experiment was made upon a young woman, æt. 21, who, two years ago, had been delivered by perforation, in consequence of contraction of the pelvis. In the 32d week of utero-gestation, an apparatus, constructed of caoutchouc, forming sucking-pumps, were put upon the nipples. During three days this was used about seven times, the process going on upon each occasion for two hours. After the third application, the neck of the uterus became shortened; after the sixth, severe labor-pains came on; after the seventh, the child was born.

The only danger likely to ensue from this very simple method of treatment is inflammation of the mamma; this can be met with proper treatment.

A second case of a similar kind, occurred to the author. A young woman, *enceinte* for the first time, suffered so severely from dyspnœa, connected with organic disease of the chest, that premature delivery was necessary for the preservation of her life.—After the third application of the sucking-pump, an apparantly dead child was born; respiration was, however, soon re-established. The author remarks, that this case is not quite conclusive, because premature delivery occurs often in connection with severe dyspnœa, independent of other influences.—*Medical Times and Gazette*, Oct. 1, 1853.

POISONING WITH INK.—A case is quoted from the Austrian "Journal of Pharmacy," in which severe symptoms of gastro enteritis were caused by drinking a glass of ink by mistake for a glass of porter. The patient recovered, after having suffered for many days from weakness and trembling in the limbs, headache, &c.—*Pharmaceutical Journal*, Oct. 1853.

RECOVERY FROM POISONING BY ARSENIC AND CHROMATE OF LEAD.

BY THOMAS R. H. THOMSON, M. D.

On the morning of the 3d Sept., while residing in Douglas, I was called to a woman, aged 50, who was supposed to be suffering from the effects of poison. On proceeding to her residence, I was told that some hours previously her neighbors, hearing something fall heavily in her room, rushed in, and found her lying almost insensible, and vomiting and retching violently, which was still going on when I entered, the matter ejected being white, greasy, and viscid. The face was pale, covered with profuse clammy perspiration; the eye sunken, and but for the absence of purging she looked like one in the collapsed stage of cholera. She complained of pain, burning heat, and dryness of the fauces, difficulty of swallowing, with a continual tendency to hawk up, as if something was sticking in the throat. There was no epigastric pain, only slight tenderness on pressure. Headache violent; pulse 132, feeble; tongue moist, and covered with a greyish fur. By her own statement it appeared that about 3, P. M., on the preceding day, while assisting to wait in a lodging-house, she had taken four dessert-spoonfuls of a yellow syrup contained in a drawer, and, as she expressed herself, "to get the best of it she had taken the thickest of it," which mixture she subsequently found out to be one used for poisoning flies. She afterwards eat a hearty dinner, and felt no ill effects until the evening, when, in consequence of griping pains, and feeling sick, she drank a basin of new milk.—During the night the pain and burning heat of the throat came on, and ultimately she fell in a sort of faint while trying to get up and call her neighbors. Having ordered hot bottles to her feet and stomach, I went to the chemist who had supplied the fly poison, and ascertained from his assistant that from a drachm to four scruples of arsenious acid, powdered and colored with about the same quantity of chrome yellow had been supplied; and of this, sweetened with sugar, it appeared from the statement of the patient, as well as of the parties in whose house she had accidentally taken the poison, that at least a full half or more had been taken, as in lead was afterwards determined by weighing the residue. There being no recently-prepared hydrated sesquioxyde of iron ready, the patient's daughter was sent back immediately with two ounces of newly-made light magnesia, with directions to give it in water at two draughts and finding on my return with the stomach-pump that it had not been vomited up, the contents of the stomach were drawn off, and eventually by threats and solicitations she was induced to take several more basinfulls, in all to the amount of about eight ounces of magnesia, mixed as thick as consistent gruel, repeating the dose almost as soon as the previous one had been brought up, by tickling the fauces with a long coarse feather. As soon as she was somewhat rallied, I ordered her a mixture of gum acacia, olive oil, lime-water, and tincture of henbane, every hour, with plenty of thick solution of gum, and thin flour porridge, all of which she required to have forced upon her.—Evening: Much soreness of the epigastrium complained of. Ordered a large bran-and-mustard poultice to be applied, and a full dose of tincture of opium, with nitric spirits of ether, to be taken at bedtime.

Sept. 4th.—Passed a tolerable night, and expresses herself as feeling better. Throat still very dry and burning; much thirst; epigastric region still very tender on pressure. Continued the olive oil and lime water with the mucilaginous drinks and repeated the mustard poultice. Pulse 120, full and hard.—Evening: Bowels much purged, with tenesmus and some blood; suffering also very much from dysuria.—Continue the remedies, with a full dose of compound tincture of opium, and spirits of nitric ether.

5th.—Somewhat better, though suffering greatly from headache; tongue covered with greyish white, smooth, moist coat; pulse 120, full and soft; bowels quiet; still much pain and difficulty in passing water. Continue the remedies, with opium.

6th.—Still suffering from pain and tenderness of the bowels. The heat and dryness of the throat much diminished. Continue the remedies.

7th.—Going on favorably. As I was unavoidably obliged to leave for a few days, I desired her to call in other medical advice if required. Ordered her to continue the oil and lime-water, and some pills, with the third of a grain of opium powder, and two grains of extract of hyoscyamus three or four to be taken daily; with directions that if the bowels became confined, a little castor oil was to be taken every second day.

From Saturday afternoon until Wednesday morning, I examined the urine, and found by the ordinary tests, confirmed by Reinsch's, positive evidences of arsenious acid; but in no case could I detect any trace of lead, which I presume must have been from the almost insoluble character of the chromate.

On my return on the 19th, the patient mentioned that the day after I had last seen

her, she had a return of severe, excruciating pain of the stomach, with tenesmus and frequent bloody stools; but that under the use of the opium pills and mustard applications it gradually subsided. She then expressed herself as being very well, though weakened by her illness. The pulse was down to 80, soft. The only pathognomonic trace of the late ordeal was found in the tongue, which had the whitish, silvery coating sometimes observable in those who have taken the liquor arsenicalis for some time; but there was very little appearance of the poison in her urine. This woman must have taken at least two scruples of powdered arsenious acid, and the same quantity of the chromate of lead.

In all cases of poisoning with arsenic, I should be inclined to try the light, recently-prepared magnesia again, as it is so easily mixed and so safe in its administration.—In this case not less than eight ounces must have been used within two hours.—*London Lancet.*

ON PROLAPSIS OF THE UTERUS AND VAGINA DURING PREGNANCY AND LABOR.

BY J. H. HOUGHTON, ESQ.,

Surgeon to the Dispensary, Dudley.

Mr. Houghton relates a case of this rare disorder, and collects the particulars of fourteen cases of the same kind from the writings of Drs. Merriman, Davis, Ashwell and Capuron.

CASE.—Mrs. S——, æt. about 26, had been much neglected in her first confinement, and had since suffered from prolapsus uteri. About November, 1850, she had retroversion of the uterus, followed by a miscarriage at the fourth month; since which time the uterus had descended daily, and had prolapsed every day during her present pregnancy, even to the day of her delivery. At times she had had considerable discharge from it; and she was aware of ulceration existing round the os. She had not had any medical advice for the prolapsus.

She was taken in labor with her second child, on November 12th, 1851, at four p. m. The pains continued feeble and infrequent till 2 p. m. the next day; and Mr. Houghton saw her about four. The head presented naturally; the os uteri was dilated to about the size of a crown piece; the passages were moist; the membranes had been ruptured twenty-four hours previously. On examination, the os uteri was found close to the outlet; the walls of the uterus, from the margin of the os to that part of the uterus against which the head of the child pressed, formed a cone three inches long, the apex downwards. The lips of the os were very thick, rigid and unyielding; and indeed the whole of the cone presented the same character. The pains were regular and tolerably strong. As the labor proceeded, the whole mass, uterus and head came down together, dragging with it the anterior wall of the vagina, and at length obliterating the anterior *cul-de-sac* of the vagina; the tumor thus formed dilated the vulva. The descent continuing, and the os uteri scarcely dilating at all, the uterus came so low down that the anterior lip of the os uteri was pushed outside the vulva, and the anterior half of the os uteri and the posterior half of the vaginal orifice formed an eliptical opening, through which the child's head could be readily felt, and, if necessary could have been seen. Still the os uteri continued firm and unyielding and eventually the whole of the os, with an extraordinary *caput succedaneum*, protruded from the vagina.

Tartar emetic was given, and nausea kept up for about three hours. After this, 40 drops of laudanum were administered.

At eight p. m. the os uteri was rather larger than a crown piece; the *caput succedaneum* protruded; the bones of the head pressed on the margins of the os, which were thick, hard and very unyielding. The pains were strong. The anterior *cul-de-sac* of the vagina was obliterated with each pain, with a disposition of the whole os uteri to pass externally. For some time after the laudanum was given, the pains became more moderate, but they never ceased, and at 10 p. m. returned sharply. The os was now more disposed to dilate though very firm and rigid.

Mr. Houghton determined to wait for dilatation, and in the meantime to prevent total inversion of the vagina. To effect this, he proceeded in the following manner: Having replaced the uterus and the vagina as well as he could, he watched carefully for each pain; and when it was about to commence, he passed the fingers of his right hand into the anterior *cul-de-sac* of the vagina, and the thumb of the same hand into the posterior *cul-de-sac*. The fingers and thumb thus embraced the os and the child's head; and while the latter was allowed to press on and dilate the former, he supported the whole mass in position, or nearly so. For sometime the dilatation continued very slowly, and he could feel, from time to time, that abrasion of the anterior and posterior lips of the os had taken place. The os now very tightly embraced the head, the posterior lip being soft ish, the anterior very hard and thick. At about half-past eleven p. m., during a very strong pain, Mr. Houghton felt something sudden-

ly give way, and the child was almost immediately born alive; laceration of the posterior lip of the os uteri having taken place to the extent of about an inch. No flooding followed. The uterus and vagina were prolapsed when the placenta was expelled. The uterus was easily returned: the patient was much exhausted; a stimulant and a dose of opium were given, and she was allowed to rest.

The patient went on favorably; but remained subject to prolapsus, which returned every time she sat up.

From a review of his own case, and then of others, Mr. Houghton finds:

That two cases were primiparæ; four multiparæ; while in eight the number of pregnancies was not named. That in two cases the head presented; in twelve the presentation was not named. That in four cases there was great rigidity of the os; in ten the state of the os was not mentioned. That in thirteen, the prolapsus was complete; in one this was not mentioned. That in one case venesection, tartar emetic, and opium, remedies calculated to remove rigidity, were used with benefit; in four, counter-pressure was used; in four, dilatation; in four, the mode of proceeding is not clearly related; in two, incisions were practised; in one, turning. In twelve cases the patients recovered (probably with prolapsus uteri remaining), in one, death occurred; in one, recovery without prolapsus. Rupture of the cervix uteri took place in one case.

The accounts of treatment of the disease are very meagre. Counter-pressure, dilatation, and incision, were the means most practised.

Counter-pressure seems applicable in all cases of prolapsus during labor; for on seeing the uterus and vagina protruded, and reflecting how the uterus is naturally suspended in the pelvis, it follows that by supporting the vagina with the tips of the fingers, and thus maintaining its *cul-de-sac*, a point is afforded from which the child or the membranes may press on and dilate the os.

Mechanical dilatation is objected to by Mr. Houghton, on the grounds that by its performance a risk is incurred of stimulating the reflex function of the uterus, and hence producing violent uterine action, and laceration of the cervix or body of the uterus.

Incision of the cervix is recommended by Mr. Houghton to be employed, after counter-pressure has been continued some time, and rigidly continues in spite of the ordinary means of overcoming it.—*Dublin Quarterly Journal of Medicine*, May, 1853.

From the Boston Medical and Surgical Journal.

FOREIGN CORRESPONDENCE—LETTER FROM PARIS.

The School of Medicine was opened to the medical fraternity, to whatever name or nation belonging, on the 7th of November last, with considerable manifestation on the part of the faculty. It was an occasion of unusual interest, and an audience of twelve hundred medical gentlemen greeted the orator of the day, M. Bouchardat, with much warmth, as he proceeded to pronounce eulogies upon two eminent professors of the faculty who have died within the last three years—M. Hippolite Royer-Collard, and Achille Richard. The former was professor of hygiene, the latter of natural history. As M. Bouchardat has been recently elevated to the place occupied by M. Richard, and as he had been his pupil, his *agregé* and friend, it was befitting that he should be permitted to pay this tribute of respect to his distinguished teacher, who, in his last hour, said, "I have occupied well my day; all my life has been consecrated either to things useful or to aggrandize the sphere of human knowledge. I have done the best I could with what was given me to do here below—my conscience is tranquil." At the next annual commencement of the medical lectures, an eulogy will be pronounced upon M. Orfila.

When M. Malgaigne commenced his course upon operative surgery, he took, as his *theme*, for his introductory lecture, the schools of surgery represented by Boyer, Dupuytren and A. Cooper. He gave the personal histories of these men, and graphically described the field in which each one strove to distinguish himself. He called Boyer a *conservative* in surgery, Dupuytren a *radical*, and A. Cooper a pretty clever surgeon—the two former as the *base* of the pyramid, and the latter the summit. He was rather more complimentary to the English surgeon than most Frenchmen are apt to be. Yet he spared not the *knife* of criticism when he saw a morbid growth. Perhaps there are very few better medical critics than M. Malgaigne. He can *elucidate* better than he can *execute*—hence his lectures are highly instructive; yet he does not operate with that dexterity which is peculiar to some surgeons.

I noticed recently a statement of the result of 157 cases of typhoid fever which had been treated by M. Secretain, by six different methods. Although this number is not large, yet it is worth something—as we can judge somewhat of the value of the methods employed; and, moreover, it would seem that when an epidemic typhoid fever reigns, it is better not to be confined exclu-

sively to any one method of treatment. Of these patients, 118 were cured; and 39 died, or one third. Among them, 64 were men, 73 women, and 20 children. With the expectant treatment, 2 died out of 28 cases; in 18 of which the fever was light, 8 medium, and 2 grave. This upon the first view appears well, but unfortunately the two grave cases succumbed. Sixty-one were treated by symptoms; among which we find that 26 were grave, 24 medium, and 11 light—deaths 16. In 42 cases treated by sulphate quinine—14 grave, 22 medium, 6 light—there were only 6 deaths. With the method by evacuants, there were 12 cases, 9 grave, and 8 deaths. In the treatment by cold water externally upon the abdomen, and a free use internally, there were 5 cases grave, 1 medium, and 1 light; none died. By the antiphlogistic method, bleeding, &c., there were 7 cases—6 grave and 1 light—with 6 deaths.

At the clinique of the Faculty in the service of M. Dubois, several trials have been made with the warm *douche* upon the neck of the uterus to produce labor. I saw it applied last week to a patient in the eighth month of pregnancy, who has a contracted pelvis from rachitis; and the result was most happy. I have also seen its application when the placenta has been retained ten days from the rupture of the cord, in a case of abortion, and with the same success. The method of employment is by irrigation. A constant stream of warm water—at the temperature varying from 30 to 40 degrees *centigrade*—is forced upon the os uteri, by an irrigator, for twenty or thirty minutes, according to its effect in producing pains. It seems to have a stimulating and also a relaxing effect upon the neck of the uterus; and soon the patient begins to experience the ordinary phenomena usual in the first period of labor. It is re-applied in twelve or twenty-four hours, if the uterine contractions still remain feeble, or have entirely ceased. Generally from two to four applications are sufficient to cause the uterus to expel its contents. This method of employment of warm water in producing premature labor was first introduced into notice, I believe, in Germany. Since then, two or three cases were reported at Dublin of its successful employment, and one in London. From the results thus far obtained, it may be considered, a *safe, energetic* and *sure* method of producing uterine contraction, when it becomes necessary for art to interfere, in cases where the placenta has been retained a long time, and the uterus has ceased to act, and also in the production of premature labor.

Recently M. Cazeaux, an obstetrician of some note, was summoned before one of the courts of Paris, to testify what took place in his office during a private consultation. This he refused to divulge; and the court sustained him in his decision, and ruled that a physician was not obliged to divulge what occurred, or what were his prescriptions, in his private consultations. A few days after, the *patient consented* that M. Cazeaux should divulge the secret, and the prosecuting party offered him 100 francs, as a bonus, and in case of refusal that he should be again brought before the tribunal; but he scorned their bribes, and felt himself protected by the strong arm of justice extended to him under the *imperial eagle*.

By the side of a puerperal epidemic fever in the obstetrical hospitals, I have seen another affection, within a few weeks, which has probably some etiological connection, but which differs as much, even by the nature of its accidents, as by their circumscribed locality to the external genitals. At one time, most of the women, who escaped peritonitis, were attacked with *eschares* upon some portion of the genitals, which resulted in gangrene. Generally a few hours, or the next day after confinement, there might be seen some ecchymosed spots upon the internal face of one of the external labia, or upon one of the sides of the fourchette, coming on without any rupture of the parts or any prolonged pressure from difficult labor. Soon some fissures in the mucous membrane would appear, and in a few hours the epithelium would be destroyed, and an ulcerated surface more or less extended would result, perhaps covered with a diphtheritic exudation, thus destroying the surface in a few hours, or in one day; and if not arrested in its progress, it would extend in some cases to the complete destruction of the mucous membrane of the vagina, even to the neck of the uterus; or it might destroy the whole external portion of the genitals, and even the perineum and anal region would slough away. Notwithstanding this melancholy aspect of affairs, nearly all of the patients have survived, or are in a way of recovery. What can be the cause of so many women being attacked so suddenly? Is this affection an epidemic? or has some inoculating matter been conveyed from the dissecting rooms upon the fingers of the students? These questions I will not pretend to answer; but I will say, that the same regulations have been adopted here since the appearance of the malady, as are put in force in Vienna, when a puerperal epidemic becomes manifest, viz., that those who practice dissections during the prevalence

of the epidemic, are prohibited from practising the *toucher* upon the women in the hospital.

The discussion upon the use of *perchlorure de fer* in obliterating tumors of the veins and arteries, is still going on with much vigor at the Academy of Medicine. When the end will be, I cannot divine. Last week, M. Roux, the venerable surgeon at Hotel Dieu, said, in the discussion of this question—that he had ligated the larger arteries, including the crural, brachial, popliteal, &c., 84 times; and that 66 times he practised the method of Hunter; that he had operated for false aneurisms of the arm 10 times, and for aneurisms of the popliteal artery 23 times. Surgeons have long sought some remedial agent that would have a salutary effect in coagulating the blood. In perchloride of iron is found a property which acts powerfully in arresting hemorrhage from bleeding surfaces, as I have abundantly seen. And it has succeeded in some cases of aneurisms, when the article was pure, and the operation made with precision. Nevertheless, its merits are not sufficient, as yet, to supersede the methods which have long been in use. But every day experiments are made with it upon patients as well as upon animals.

Within ten days cholera has made its appearance among us. There have been nearly two hundred cases; and more than one half of this number have died. Within the last three days it has been on the increase, so that one day there were thirty cases. As yet, the number is small to the population of Paris. But the future may swell the bills of mortality. Diarrhea, a constant precursor of cholera, is now quite prevalent. The administration of the hospitals are taking measures to establish a separate hospital for the cholera patients.

In looking at my note-book, I find among the record of cases seen at the hospitals, one which is not without interest in a practical point of view, as showing the reliance placed upon *one* symptom—and yet, the surgeon was deceived. It was in a patient upon whom M. Nelaton diagnosed an ovarian cyst, but which proved to be ascites. I must forbear entering into any history of the case, but will state the point at issue. The woman had all the external appearance of ascites. She had organic disease of the heart, but from the enlargement of the abdomen the liver could not be examined. Nothing abnormal could be found by the vaginal touch. By percussion, the intestines were found upon each side of the abdomen, occupying both sides of the vertebral column, showing that the liquid was anterior to them. This hitherto positive symptom of Mr Rostan, caused M. Nelaton to diagnose this case as an enormous ovarian cyst, in the absence of any other notable sign. She was punctured, and 20 *litres*, or about five gallons, of clear liquid were withdrawn; and injections of tincture of iodine were made. The patient suffered for three days very much from vomiting and pain in the abdomen, but became better. The abdomen began to enlarge again, and she died in four days, suddenly, as was supposed from the affection of the heart. Upon a post-mortem examination, the heart was found enlarged, pericardium adherent, right auricle large enough to admit the whole hand into its cavity, filled with a clot; the liver was in a state of cirrhosis; the uterus in its normal condition; one of the ovaries slightly enlarged; peritoneum showed that there had existed an ancient peritonitis, but was now very little inflamed. But there was found a false membrane extending from the transverse colon down to the os pubis to which it was attached. It also had attachments to each side of the abdomen, and along the omentum, thus forming a complete covering to the intestines, uterus and bladder, thereby preventing them from rising upon the surface of the liquid; and of course being an obstacle liable to deceive the most astute perception in the diagnosis.

I notice that some of the English journals are recommending the working population, who labor in the dust, and where there is much gaseous exhalation, to wear *la mustache*, to prevent the inhalation of obnoxious particles which may be injurious to the lungs. As you are aware, such recommendation is not *necessary* in France.

With these few hasty "*on dits*" to day I will subscribe myself,

Respectfully, A. B. H.

Paris, Dec. 6, 1853.

Poisoning with Mushrooms.—A family of five Italians residing in Paris, having partaken of mushrooms at a meal, were soon after seized with severe pain in the abdomen. Three out of the five (the wife and two children) died in horrible convulsions. Two dogs, which ate part of the food, speedily died in convulsions.

A laborer, who, in disregard of caution, ate a considerable quantity of what he considered were edible mushrooms, died in convulsions after three days of extreme suffering—*Journal de Chimie Medicale, October.*

WHAT IS DYSPEPSIA? HOW CAN IT BE CURED?

WHAT INFLUENCE HAVE THE PASSIONS OVER IT? OUR MODERN EDUCATION ITS GREAT CAUSE.

Foremost amongst the evils entailed upon us by an artificial life, is Dyspepsia, or Indigestion, so called from the Greek word signifying to concoct. In the following remarks on the disease, we shall give our own personal observation on ourself and others, abjuring all the dicta of the books; for if there be one truth more apparent than another, it is, that the stomach, when artificially educated, is quite as capricious in its fancies and predilections, as the most whimsical brain that ever attempted to govern it. There is but one proper rule to be observed in the exposition of the subject and the cure of the disease, and that is, a strict attention to the abuses and requirements of nature, unperverted by artificial life.

In the article on Catarrh, or Colds, we have described that portion of the great MUCOUS MEMBRANE that lines the air passages and lungs, and its most frequent disease, CATARRH. We have now to do the same for the stomach and intestines.

DYSPEPSIA is the affection that most resembles a cold, only it is apt to be persistent, as it exists in a membrane continually liable to the same abuse that originally produced it; for although the mind and its harrassing cares are often the predisposing causes, still the improper selection and mode of taking the food, is the great exciting cause. Nature makes ample allowance for slight errors of diet, but not for continued abuse of her beneficence.

Dyspepsia begins with loss of appetite, weight and oppression at the stomach, vomiting, puffing up of the stomach, with eructation and heartburn, and burning at the stomach; constipation or costiveness usually accompanies these symptoms; there is, however, a great variety in the symptoms of its accession; we may give indeed the widest latitude to the manner in which this protean affection approaches. Most of us feel that the natural and healthy appetite of childhood is gone when cares and age or sickness attack us; still with a rational care in the selection of our food it may be that nature will tolerate all we put into the stomach, and consent to add it to the body without complaining. When one or more of the above symptoms appear, and persist in attacking us soon after a meal, we may conclude the enemy to be approaching, to establish a permanent siege. Now let us examine the natural functions of the mucous membrane, and see whether we have not been afflicting it with over work.

In the first place, it is well known by the experiments of our persevering countryman, Dr. Beaumont, who has done more for the correct understanding of digestion than every other writer in the world, that the mucous membrane of the stomach produces a fluid called the GASTRIC JUICE, from a Greek word signifying the stomach,—that has the power of dissolving every article of food, even when mixed with the food outside of the body. Dr. Beaumont, however, actually placed the various articles in the stomach of Alexis St. Martin, enclosed in a perforated silver ball, governed by a thread, which was passed through a fistulous opening, left after the healing of a wound received from a musket ball. By this means he actually ascertained the time required to digest every article of food in use in the list of edibles of this country. We shall have ample use for that table in future articles, on the varieties of food; at present we must attend to the laws of digestion.

Chewing our food until it is thoroughly comminuted, is apparent to all, to be the first condition implied by nature to its complete solution by the gastric juice; if we bolt it in masses, it would be nearly as reasonable to expect its complete solution, *i. e.*, for any considerable length of time, as to expect the water and the mixing, to produce a beautiful and even loaf of bread with coarsely cracked wheat. The stomach, it is true, as it produces a chemical solvent, may for some time consent to its complete solution, but in a few weeks or months, particularly if its owner be debilitated and harrassed, either the fluid ceases to be produced in sufficient quantity, or the muscular action which mixes the food and commingles it with the gastric juice is impaired, and the stomach complains by some of the symptoms enumerated.

It was intended by nature, that in from one to four hours, almost every article of food swallowed, should be reduced in the stomach into an even and perfectly consistent mass, called CHYME, from a Greek word signifying juice, and then passed by a peculiar motion of the muscular coat of the stomach, of a wormlike character, through the "PYLORUS," or lower gate of the stomach, into the upper tract of intestines, intended only for the election of the nutritive parts of the food. In this uppermost portion of the intestine, it is mingled with the bile from the liver, with the fluid produced by the PANCREAS, or sweet-bread, a great fleshy gland, and with the mucus of

the intestines, secreted by thousands of little glands, distributed over the entire surface; the consequence of all this mixing and comminution is, its reduction into a beautifully smooth and milky fluid called CHYLE; this fluid is taken up by a vast number of little vessels of a milk-white color, called LACTEALS; these are gathered into a large one, the size of a crow quill, which goes up on the left side of the back bone, and on reaching the neck, makes an abrupt turn, and dips down directly into the angle of the great descending jugular vein of the left side of the neck, and another great vein coming from the left arm. This is the sole vessel which conveys the food into the blood. In the well known case of Calvin Edson, the thin man, it was found, after death, to be strictured or constricted within the abdomen, and thus the supply of blood material, was partially cut off.

The excrementitus or indigestible portion of the food is carried downwards, into the greater intestine, where it is expelled from the body. This is the sum and substance of the entire process of digestion, and is as good as the whole volume on the subject.

Now let us consider what the nerve power, or that natural power of reaction which is the consequence of alternate action and rest of the mind and body, has to do with this process.

Let any person examine the circumstances and emotions attending his every day life, and try to realize their influence in elevating or depressing his nerve-power and digestion; he will find, that it is by no means active exertion that deprives him of appetite; all experience proves the contrary; more especially if that exercise be taken during the influence of cheerful emotions, and in the open air. When thus excited, and the appetite demands food, who doubts that a small quantity of nutritious or animal food, taken with no liquid, will be digested? On the contrary, when depressed with anxiety, and in the solitude of one's chamber, or even at the comparatively cheerful fireside, when we goad the unwilling appetite with luxurious food, or tea and coffee and wine, does not the dyspeptic always dread the consequences? How can it be possible that several articles, each having, according to Dr. Beaumont, its appropriate period of digestion—from one to four hours—and the gastric juice diluted with cold water, or hot tea or coffee—how can it be possible that this capricious thing, the stomach, will consent to act in a healthful manner? One article it might receive with pleasure, but when called upon to divide its powers with several others, requiring, perhaps, double or quadruple the time, how can it possibly act, as intended by nature? Its power of toleration will soon be exhausted, and it will evince a desire to eject those it chooses to consider the intruders.

Who does not feel, when bolting his food, that the stomach is not ready to receive it? The posterior part of the tongue, and its opposite part, the arch, forming the fauces or mouth of the gullet, and its *uvula* or hanging palate, are the gate-keepers to the stomach, and they invariably inform us when the food has not been sufficiently chewed. When a delicate and agreeable morsel is sufficiently masticated, the posterior arch of the palate and the muscles of the gullet *consent* to receive it, and propel it into the stomach in a manner perceptibly easier than when bolted.

This *consent* of the muscles, may be traced in many other functions of the human body. The sexual passion and the functions of the two great excreting apparatuses will not allow themselves to be forced to anticipate their natural wants, beyond a certain extent of time, without deranging *their organic nerves*, whose powers of noticing the ill-usage are somewhat slower, though equally certain to appreciate it, than those other nerves which convey to the organ the unjust command to perform an unnatural act.

Impulse and morbid passion are hostile to all the operations of the animal economy. In the formative process, from the first life cell in the womb, nature demands quiet, and she has impressed her great law upon the very countenance itself. The animal passions when they over-influence the conduct of the debauchee, can be traced in his face, as directly as the hours upon the face of the most accurate chronometer. The control of the passions, has produced a marked distinction upon the countenances of an entire modern sect (the Quakers,) that illustrates, forcibly, our assertion; and it is just as certain that all the operations of the secretions and of organic life, demand a quiet and equable action of the great *sympathetic nerve;* on this subject, however, we have spoken at length in past Numbers; would that we could induce our readers to investigate them with that earnestness the subject demands.

We have said the stomach has the power of election; but unfortunately the palate has the same, and is a most willing pupil to acquire bad habits; how much more capricious the stomach is, may be known from the modern use of tobacco. The greatest slave to the vile weed, would hardly venture to swallow his delicious

quid, although a goat would do so with impunity. An infant would be likely to prefer its mother's milk, even if she herself should think the pure gift of the cow improved by the addition of brandy; whilst the poor cow herself, like her master, falls so rapidly into the morbid education, that she is contented with the refuse of the still, whilst he is preparing the favorite stimulant, so much more acceptable to his badly educated palate, than the wholesome bread he ought to prefer. The goat and the infant are both right, because they both act from unperverted instinct; neither can we give any reason for the election; the tobacco is no more injurious to the goat than the milk to the child; both depend upon an organic law; but reasoning man is ever ready with an apology for the most palpable and monstrous departure from the laws of his being; the healthy palate refuses brandy; the human stomach will not tolerate tobacco.

I know a gentleman engaged in the arduous and harrassing duties of a public office, and of fine stature and constitution, and of middle age, who presents every symptom of dyspypsia; eats a hearty late supper, without the slightest regard to the selection of any article it may consist of, retires at ten o'clock, and is obliged in two hours to arise and take a glass of brandy, and then spends a night of horrible dreams; he smiles when I tell him it is his supper that troubles him! I know another of twenty years, who is a slave to tobacco, and another loathsome vice, whose eyes are constantly telling the tale his lips need not express to the correct observer, whose stomach and nervous system are quailing under his inflictions, and who has periods of such protracted mental anguish as to amount to actual despair, and no representation, and no eloquence that I am master of can convince him of his suicidal course!

Whatever tends to produce exhaustion, whether general, or of the stomach, will produce indigestion. Whoever has not felt upon one or more occasions, too fatigued to eat? That sensation is nature's warning: her muscular system has been exhausted by severe exercise, and she has no nerve power to spare for digestion. She therefore beneficently warns you to rest a few minutes, before you offend the stomach with that food it will soon loudly call for. Now do you not perceive that you can tax the stomach in the same way? It requires rest as well as the muscles; it is offended by the withdrawal of its proper fluids in using tobacco; it will not tolerate large quantities of water during meals; it will not spare its energies for the exercise of any of the passions; it is offended by a general bath, either warm or cold; the warm, because it debilitates, or diverts the blood to the skin by relaxing the blood vessels, and so robs the stomach of its blood; the cold bath, because it contracts the vessels and skin, and thus sends too much blood upon the inner organs, besides robbing the body of its heat; in a word, the entire plan of nature is one of action and repose; every function demands its time, and every organ its proper supply; and no more, nor no less, will satisfy it.

Our popular habits and education have much to do with dyspepsia. The nervous excitability of our young people, produced by the superior dryness of the climate, impels them to seek an increased variety of excitement, necessary to expend the actual preponderance of nerve power over the inhabitants of most other nations; for the very reason that despotism could not exist in our country, for that very reason, we require a greater variety of rational and elevating amusements. We need as national and civic institutions, vast gymnasia, in which every part of the physical system can be developed. We want numerous professors of hygiene, or the science of health and life, with all the necessary appliances for the elevation of the physical and intellectual condition of our young men. The vapid fireside and ball-room, and the ignorant parent, do not answer the wants of the nervous system; the medical colleges are corrupt; the soul is not satisfied with the antiquated mysteries of the pulpit; both of the great classes of teachers (that should be) are in fault; so long as the great mass of our profession, spend their energies upon the cultivation of "practice," and acknowledge that it is valuable to them precisely in proportion to the ignorance, wealth and submissiveness of their employers; so long as a large portion of our clergy practice the same miserable tricks, and teach people that the observance of the rules and regulations of "the Church" are the chief means of elevating their moral nature, whilst so many of them both present in their own persons the most pitiable examples of mental and corporeal imbecility, and are the very worst enemies the enlightened physician encounters in his ministrations at the bedside and in the lecture-room; so long as the theatre and the novelist present their love-sick and lascivious pictures to the youthful mind, and society aids with her inane exhibitions of the best fruits of the school and the dancing master. I know not to whom we are to look for reform, unless it be to a few noble spirits in our own profession, and to a more

enlightened clergy, who can only become so by abandoning the effete dogmas of their schools, and studying the page of nature in connection with the sublime teachings of the enlightened and benevolent Jesus.

The climate of our country, from its greater dryness, constricts the solids and drives the blood upon the inner organs in increased quantity. Consequent upon this is a premature development of the nervous system, and a desire to escape from the parental roof and mingle with the great world; this produces a morbid desire for stimulants, and an early failure of digestive power; this is followed by a disgust for the more innocent recreations and amusements of domestic life.

The conduct of our children too often shows a great dearth of the affections; the almost universal superficial character of their education, and the adulation of wealth so common amongst their parents, abstracts the attention from the study of the individual character of the different members of the household; the father has neither time nor education to win his child's affection or to constrain his respect; he is either a religious fanatic, or his mind is directed intently on the acquisition of wealth in order that he may outshine his immediate and vulgar neighbor; the child looks upon the parent, chiefly as a convenient resort for the means of gratifying the more sensual desires, or aping the dress of a rival. Cigars, champaign and the opera are the requirements of American boys, and soon women, brandy and the fashionable gambling-house; mirrors, routes and the polka, and a premature marriage, may be set down as the goal which guides the progress of most of our young women, from the homes and the hearts they could have loved, to a life of sorrow. How often the fashionable wedding is followed by a few years of wretched existence, when the flaunting plumes of the fashionable hearse closes the scene, and in a few short months the memory of the misguided child is all that remains, and the ostentatious monument and its inscription of the virtues of the early lost, conveys to those who knew the history of the dead, the keenest satire upon the parents.

We have lent what force we possessed to this absorbing view of the great causes of physical degeneration, and its most prominent functional evil, so common in the inhabitants of our city, because we believe it true. No puling sentimentalism will meet the subject; nothing but individual reform, commenced by retracing the errors of life, can restore the dyspeptic invalid; nothing but a higher tone to the education of our children, can elevate them above that miserable and sickly thing—fashionable society—and its invariable consequence, bodily and mental feebleness; demonstrated always by want of nerve power, attachment to stimuli, such as wine and brandy, tobacco and tea, and—constipation and dyspepsia, one or both.

We have very little to say of the cure of dyspepsia, nor do we suppose that little will avail much. People who are slaves to their passions and appetites, are not willing easily to resign their bondage.

One article of food only should be selected, either the lean of beef, mutton or the black meat of game (wild is best,) and that should be eaten only when hungry, either warm or cold, without any fat or gravy, vegetable or bread, and with no kind of seasoning, except a little salt; using no fluid of any kind, until a full hour after a meal, and then only a teaspoonful of water. Nither wine, ale, brandy, tea, coffee, nor tobacco should ever be used, for they are direct excitants, and inflammatory agents to the very membrane whose functions are deranged; and tobacco is an exhauster of the nerves, after stimulating them. Whenever the patient feels disgusted at meat, he should live on arrow root for a dinner or two, then resuming meat again.

The prolonged respiration spoken of in the leading article of our last number will very materially assist a cure in every case. The patient should carefully avoid all conversation with physicians. The exercise should be moderate, never to the extent of fatigue, and taken with dry feet and warmly clad, from three to four and six times a day, for idle people. Tax the mind with nothing whatever, if possible; use no general baths, either warm or cold—we say so because from the universality of the popular ignorance on every point connected with so comprehensive a subject, we believe it best to omit it altogether, as this article is already too long. We shall add what is necessary, when speaking in our next on Constipation, which will form the other part of this subject, assuring the reader that nine cases out of ten of dyspepsia, can be cured with no other directions than what are here given.—*The Scalpel.*

OHIO MEDICAL COLLEGE.

We regret to learn from so many sources, that our Cincinnati brethren are still perpetuating the strife between the faculty of this College and their rivals, for the medical control of the chief hospital of that city. Still more humiliating is it to see in the secular paper, the details of the con-

flict, which are anything but reputable to the parties concerned, and must be disastrous to both the College and Hospital, no less than to the profession. Is medical education in the Queen-city of the West doomed to utter extinction? We confess that such are the present indications, unless our old friends, Dr. Mussey or Dr. Lawson can pour oil on the troubled waters.—*New York Medical Gazette.*

We are not prepared to say how much *oil* Dr. Mussey may have poured on the troubled waves of the Medical Ocean, but for ourselves we can claim a most anxious desire, and a direct effort to quiet the storm. In no way did we contribute to the production of the difficulty, but at the very first meeting offered the olive branch to those concerned in the affair, and urgently besought them to harmony and good will. But our counsel was disregarded, and the result has been—what we clearly foresaw—an acrimonious, unprofessional and disgraceful scene, which has brought on the whole profession of the city, a deep and abiding disgrace, at home and abroad. We feel deeply humiliated by the occurrence, and our participation in the public proceedings was in self-defence, and reluctantly entered upon, even then.

We do not complain of any person for advocating a change of the hospital government, for this is a mere matter of opinion, about which the fairest and best disposed persons might differ; but our complaint is in regard to the time, the manner, and above all, the *spirit* which animated the controversy. The whole combination of circumstances was *least* calculated to accomplish the objects proposed, but *best* adapted to do the largest injury to medical schools and the whole profession.—*Western Lancet.*

Dr. how many students have you in the Ohio Medical College this winter? Dr. Reese of the New York *Medical Gazette* can have no reference to the Eclectic Medical Institute judging from their class this winter. N.

Oxygen an Antidote for Chloroform.—Dr. Abrahams, of New York, has successfully employed the inhalation of pure oxygen gas in the case of a young man asphyxiated by the vapors of chloroform, and apparently *in articulo mortis*. Dr. Abrahams suggests the employment of this agent in suspension of life from drowning, from inhalation of the fumes of charcoal, from the fixed air of pits, mines, &c.—*Association Journal, Sept.*, 1853.

Comparative Mortality in France, England and Prussia.—In France, the annual mortality is 1 in 42; in England, 1 in 45, in Prussia, 1 in 38; in Austria, 1 in 33; in Russia, 1 in 28. In the latter country, the mortality to 100.000 living is 3590 annually; while that of 100,000 living in England is 2207. In most of the towns of Italy, the mortality is 3 or 4 to per 100; at Naples, to 100,000 living, there are 4046 deaths annually. It is in England, that, contrary to all expectation, the mortality is less than in all the civilized States; and this, notwithstanding the high rate of mortality in her manufacturing towns. It is the agricultural districts that produces for England this favorable result, as compared with other countries.

Part 3. Editorial.

"THREE MEDICAL COLLEGES IN CINCINNATI."

On Tuesday night, February 18th, 1854, we had the pleasure of attending the closing exercises of one of the "three medical colleges of this city," called the "Cincinnati College of Medicine and Surgery," which was held at Greenwood Hall. Prof. A. H. Baker, President of the Faculty, made a short address to the audience, and among the startling discoveries which he announced, was the fact that there are at this time "*Three Medical Colleges in Cincinnati.*" First the Ohio Medical College; as this school was old enough to speak for itself it was not necessary for him to refer to it, more than to inform the public that such an institution really exists at this time. Next but not least the, "Miami Medical College." This like the first, although, not so old was doing a fine business, but he did not tell how many students either of the above or in fact his own had. We inferred however, that they *had several and perhaps more.* Next came his own; the College of Medicine and Surgery, the two first were all right "*this was righter,*" and judging from the President's remarks, we are fully convinced that he either supposed that he could easily impose upon the audience, or that he has been wearing leather spectacles during this winter. Another discovery

Proclaimed is, that all these schools are in perfect love and fellowship, neither regarding the others as competitors, but co laborers in the common cause, and as having for their object the elevation of the profession and the good of mankind. Now Professor Baker has certainly forgotten the late row among the Doctors of this city, and what was said by them at that time; and we would ask the Professor, how many of the Professors belonging to the "Three MedicalColleges of Cincinnati," will consult with each other? Such *Buncombe* is good argument:—one more discovery—all the "Three Medical Colleges" teach the same doctrine, (and of course use the same text books,) and are governed by the same code of ethics. (we wonder what code governed the Doctors in the late pitched battle,) and that neither of the "Three Medical Colleges" is Allopathic. Well, now, Professor, we shall have to help you out with this last announcement, lest you may claim to be Eclectic. Prof. John Bell, late Professor, in his introductory, delivered before the students of the Ohio Medical College, Nov. 4th, 1850, page 25, says:

"You will not be taught by us, either in the Hospital or College (and in this respect we do not differ from our professional brethren in other places,) exclusive or one-sided medicine. We shall not attempt to indoctrinate you with Allopathy alone, still less with Homeopathy or Hydropathy alone. Sometimes, more generally indeed our remedies will be given with a view to remove the disease, by inducing a series of actions antagonistic to those which constituted its symptoms. and so far, we are allopathic practitioners. Sometimes, but less frequently than in the circumstances just mentioned, we have recourse to medicines, or remedial measures, which produce effects seemingly analogous to the symptoms of the disease, and in this sense, we practice homeopathically. But then we give, in all cases where we profess to give medicine at all, appreciable doses, not infinitesimal and impossible ones, as the dilutions of homeopathy are. The virtues of water for drink in health, and free dilution in disease, as well as for external use by bath, douche and fomentation, have been familiar to every well-read and experienced physician long before Preisnetz and Graffenberg were ever heard of In the selection of remedies, and the study of their precise adaption to the stage, and the duration of the disease, and the constitution of the patient, a spirit of *Eclecticism has always been invoked.*"

Now Prof., we see one of the "Three Medical Colleges" professes to be Allopathic, Hydropathic, Homeopathic and *Eclectic.* Again, if you all teach the same doctrine you are a little Eclectic; but we suppose you in this respect to be much like an old minister who was very unceremoniously interrogated by a very self-conceited and arrogant young minister of a different denomination. "Sir, do you think you have any religion?" The old soldier of the cross meekly replied, "not enough to hurt any body," and so with your Eclecticism. Now we wish you to have all the advantages and popularity arising from the doctrines of the "Three different Medical Colleges of Cincinnati," and for the special benfit of the three Medical Colleges give our readers some idea of your doctrines as regards the Practice. Prof. Eberle, late Prof. of Practice in—(and it is hard to tell who has not been late Professor in)—the Ohio Medical College used to teach, and the same is to be found in his work on Practice, and his Practice of Medicine we suppose to be one of the standard text books of the "Three Medical Colleges," as follows:

"In the following diseases, Eberle says:

In jaundice of infants, "A fourth of a grain of calomel should be given every two or three hours." &c.

In Dysuria, he recommeds "the daily use of calomel and ipecacuanha.

In Dentition, "A small portion of calomel should be given every third or fourth evening."

In Diabetes, "Spirits of turpentine, with an occasional mercurial laxative."

In Erysipelas of Infants "One of the first remedial measures is a grain of calomel."—He also recommends, "mercurial ointment, and a weak solution of corrosive sublimate."

In Skin-bound, "Calomel in union with ipecacuanha."

In Ulcerations of the Mouth, "Small doses of calomel."

In Colic, "Very small doses of calomel."

In Constipation, "A small dose of calomel in the evening."

In Vomiting, "Minute doses of calomel and ipecacuanha."

In Diarrhea, whether Feculent, Billious, Mucous, Chylous, Lienteric, or chronic, in all "calomel," and in some "mercurial ointment."

In Worms, "Small doses of calomel," &c.

In Ophthalmia, "calomel and ipecacuanha."

In Cholera Infantum, "Purgative doses of Calomel."

In Remittent Fever, "Calomel" is given.

In Catarrhal Fever, "A full dose of calomel."

In Congestive Catarrhal, "A full dose of calomel."

In acute Bronchitis, "Small doses of Dover's powders, in union with calomel."

In Pleuritis, "An efficient dose of calomel with rhubarb."

In Quinsy, "Five or six grains of calomel."

In Croup, "Calomel in union with tartar emetic."

In Dropsy in the Brain, "An efficient mercurial cathartic."

In Peritonitis, "Small doses of calomel and ipecacuanha."

In Measles, "Opium and calomel."

In Scarlet Fever, "A brisk mercurial purge," "Calomel 5, 10, 15 grains," and a gargle, "Calomel grains 20, lime water 8 ounces."

In Hooping Cough, "Calomel in minute quantities."

In Convulsions, "Calomel in combination with jalap."

In Infantile Epilepsy, "Small doses of calomel."

In Carpopedal Spasm, 'Calomel and jalap.'

In Chronic Eruptive Affections, "Calomel and calomel ointment."

Dr. Oldshue of Pittsburgh, an eminent practical physician, says that:

"If this is not calomelizing infants with a vengeance, I know not what is; and this is the general view every thinking mind must take, upon perusing that work. Can the world produce a more perfect system of quackery and empyricism than this? Calomel in constipation, as well as looseness of the bowels. Inflammations. ulcerations, worms and sore eyes. Oh! Science, thou art powerful, that by the same means thou canst cure diseases so opposite in their nature. And, Oh! Calomel, thou art a jewel, to be subservient in so many ills.

Where is the rational man that will, knowingly, submit his "little ones" to such mercurialism? And where is the "old school" practitioner that is found to discard this their text book, in prescribing for their little patients? Ask these physicians if they prescribe calomel for their own families when ill, or take it themselves when afflicted, and if honest, they might answer like an old calomelite of this city did the same question: "Divil the bit ever did or shall enter my mouth." And why? Because "of the *modus operandi* of mercury we know nothing, (says their Dispensatory,) except that it probably acts through the medium of the circulation, and operates by substituting its own peculiar action for that of the disease." And how? Just the same as any other poison.

A person laboring under bilious fever, when salivated, has no longer bilious fever, but mercurial fever; it has substituted its own peculiar disease in the stead, the same as any other active poison would do. A person laboring under any disease, by taking arsenic in sufficient quantity, will no longer feel the effects of his former disease, but the poison; the arsenic, like the calomel, subverts the former disease, by substituting one, a thousand times more dangerous, and infinitely more lasting in its torturing effects.

This is the "modus operandi," or mode of cure by calomel, and, lest a portion of our readers might think this an exaggerated view, I have made the quotations from their own works; and would further say, that where they have found calomel insufficient to subvert a disease "arsenic is employed with encouraging success."—"Fowler's Solution" of which, has become a very popular remedy in some diseases, among the "old school." Verily, their practice seems like the Doctor's who for all mild diseases would endeavor to throw the child into fits, and then try to cure the fits."

As we are taught not to despise the day of small things, we must say to Prof. Baker and the "Three Medical Colleges," as Uncle Toby said to the fly, " * * * the world is large enough for both of us," that is, the three Medical Colleges and one Eclectic school.

As Prof. Baker has been so constantly employed this winter, that he may not be aware of the existence of the Eclectic Medical Institute, or if its having been in operation, we invite his attention to the fact that there have been *three* times the number of students attending the Institute that have attended *both* the Cincinnati and Miami Medical Colleges. N.

SAD CONFESSION OF AN ALLOPATHIST.

Looking over some late numbers of the Boston Medical and Surgical Journal, our eye fell upon a very remarkable confession from M. M. Rogers, M. D. of Rochester, N. Y., a correspondent of that paper. He was rebuking a recent writer in the same Journal, for a very bitter invective against "Empiricism," which he thought "disclosed too much of the impatience and bitterness of the author to produce any salutary effect." He then gave an item of his own sad experience, when, "in then charitable days, he foolishly wrote smart invectives against quackery, and vainly hoped to exterminate it," adding this, as the result;—"I beat heavy blows by logic, scathed and blistered by irony, tickled by wit, burnt by caustic, and pestered by perseverance—as I thought. My reward was curses from editors, sneers from critics, contempt from quack proselytes, hatred from quacks, and a poor living from community!" His experience taught him to labor honestly for himself and let other people alone.

A sad confession truly! Yet no honest man will regret a recompense of that kind inflicted, with such a result, upon a very uncharitable, conceited and self convicted dogmatist of the profession. Much of that which is condemned by such minds as *empiricism* contains the soundest elements of medical science. It surprises us that professional men claiming to be progressive and solicitous for the truth, many of whose best remedies have been brought into note by the primary experiments of some negro or old woman, in domestic practice, should now perseveringly shut their eyes against any new modes of treatment, merely because these happen to be introduced by a class denounced as empirics! It is not wonderful that the people should see, editors curse and critics sneer at, such inconsistencies. Every one who knows any thing of the history of medicine is aware that epiricism formed its starting point, and has been its nursing mother through all ages. "Cut and try"—or experiment until experiments verify facts. Will any one deny that this principle has given to medicine all that it is as a science? Some of the most valuable experiments too have been made by a class now denounced as empirics. Yet these are spurned and discarded. Some conceited children grow so fast as to disown their mothers! A better day, however, is approaching. The confession above recorded shows it. And we should not be surprised if, at no distant day, a sort of thanksgiving gathering should take place at the old maternal homestead, wherein we and our somewhat "stuck up" professional brothers of the old school practice, may shake hands in the presence of our common mother!—*Worcester Journal of Medicine.*

We are well acquainted with several medical gentlemen in this city who have taken the same course, and have met with the same result. Why? Because that which their illiberal minds considered "empiricism" was truth, and notwithstanding the community appreciated it as such, they still held to their previous opinions and acted accordingly, and then because they "received a poor living from the community," they cry out against those who will not yield every principle and opinion of their own to those who are an hundred years behind the age. The present condition of the Old School Colleges of this city clearly proves this fact. N.

TO THE MEDICAL PROFESSION.

The Medical Society of the University of Nashville, composed of students in attendance on the lectures, has been in the habit of occasionally inviting distinguished medical men to address its meetings, which are held weekly. In December last, one of the Professors of the College, well known for his pleasant satire, accepted an invitation to deliver us an address ridiculing Quackery. At the earnest solicitation of the Society and entire Medical Class, to furnish us copies of his amusing Epic, he was induced to permit us to have a few copies printed for our special inspection, but not published.

Whereas, one of the Editors of the Southern Journal of the Medical and Physical Sciences, purporting to be published in this city, Philadelphia, New York, and Boston, has seen fit in his wisdom to denounce the address, as "chiefly characteristic for indecent expressions, and the portrayal of lascivious scenery, gross obscenity, lewd pictures, and filthy imagery, sufficient to startle the gray haired in venality;" and further intimates, that it was not published "merely to evade the law which prohibits the publication of obscene books and pictures;" and moreover, declaring "that this production, more fitted to represent the vilest brothel, than an institution of learning, demoralizing to students, a stigma to the College, a disgrace to the profession, is sanctioned by the Nashville University, and that the present class are willing disciples." Understanding that one thousand copies of this vile slander upon us, our teachers, and

College, have been issued for general circulation, we are impelled, by the first law of nature, to hurl back, with feelings of indignation, the charges thus invidiously thrown in our midst. Therefore,

Resolved, 1st. That the Hudibrastic representations of Quackery, in and out of the Profession, has ever been considered legitimate game for amusement, and has only been opposed by abettors of empiricism.

Resolved, 2nd. That in the satirical address delivered before our body, and, at our request, printed, there was no indecency perpetrated, no immorality was committed, and that the assertion, "that it teaches obscenity, venality, and licentiousness," is a gross perversion of truth.

Resolved, 3rd. That we consider the attack thus made upon the Poem, the Faculty, and Class, uncalled for, and originating in jealousy and malignant feelings towards the University.

Resolved, 4th. That whatever may have been the motive of said Editor, his conclusions with regard to the immoral influence the address is likely to exert upon the class, are illegitimate; and so far from taking it as "a guide at the bedside of their female patients," they expect to have no further use for it than as a weapon of warfare against Quacks and their allies.

Resolved, 5th. That we regard with feelings of contempt the epithets of our insignificant slanderer, and that we call upon his fastidious associates for instances of immorality and licentiousness, said to be taught us; and we appeal to the good citizens of Nashville in behalf of the moral bearing of our Professors, and our own conduct during our sojourn among them.

Resolved, 6th. That we inquire of the ungenerous Editor, who, we believe, has treacherously sold himself to a certain clique in this city, (that through jealousy has ever opposed the interest of this School,) if he has forgotten the many special acts of kindness conferred upon him by a "Western Medical Editor," and if his mendacious article is a fair specimen of his mode of paying debts of gratitude.

Resolved, 7th. That we publish to the Profession, that the ridiculous article brought forth by the parturient efforts of this ungrateful Pigmy, is the first notice they have ever given of the existence of our flourishing Institution, while nearly every other Medical Journal has marked and published its unprecedented success.

Resolved, 8th. That these resolutions be published in the Nashville Journal of Medicine.

J. D. HILL, *President*.
F. M. BUNCH and W. P. HEAD, *Sec'ys*.

Wishing to note the progress, which the brethren are making towards a medical millenium, we have copied the above from the Nashville Medical Journal, which shows plainly that progress is on the march at this time. This, like the late difficulty in this city in the language of Dr. Tom O. Edwards appears to be only a "difference of opinions" between the "outs and the ins" and unless a more unanimous reconciliation is made in Nashville than was effected in Cincinnati it will prove as injurious to that school as the schools here. Of course we have great sympathy for all of them. N.

MEETING OF STUDENTS.

Eclectic Medical Hall, Cin'ti., Feb. 22, '54.

At a meeting of the class of the E. M. Institute, H. H. Lewis, was called to the chair, and C. Cropper was appointed Secretary. On motion a committee of three consisting of Q. V. Williams, H. C. Rice, and Wm. Beadle was appointed to draft resolutions expressive of the sentiments of the class, in regard to the private lectures of Prof's. J. King and J. R. Buchanan in particular, and of the public lectures of the faculty in general.

The meeting then adjourned to meet on the 23rd of February.

Feb. 23d, 1854. The class met pursuant to adjournment: When the committee presented the following resolutions, which were unanimously adopted by the class.

Resolved, That Prof. King did by the earnest solicitation of the class, consent to deliver a course of private lectures, comprehending his views in regard to the pathology and treatment of various diseases, not embraced in the regular course of lectures from the chair he fills in the Institute.

Resolved, That his course of lectures has been entirely satisfactory, founded upon scientific principles, the truth of which is fully demonstrated by his own success, and that of hundreds of others that are carrying out the principles of his teachings, in alleviating the sufferings to which flesh is heir.

Resolved, That we do unanimously ex-

press our entire satisfaction with his course, and hereby tender him our sincere thanks for his kind forbearance, patient perseverance, and untiring industry, which have always characterized his efforts for our advancement; and whereas accusation has been charged upon him of fleecing students by his private lectures, thereby implying stupidity of the latter, and dishonesty of the former, we repudiate the charge as false, calumnious and base, indicative of the malevolence of its author, and we hurl our malignant contempt upon the evil inventor of so base and diabolical calumny.

Resolved, That Prof. J. R. Buchanan did, in consideration of a solicitation of the class, deliver a course of lectures on Anthropology, and to him we are indebted for various new and important discoveries; we unanimously accept his doctrines as filling a great vacuum in the science, as first developed; that they are in perfect accordance with reason, and their rationale is incontestable, that his discoveries in the science of Psychology have illustrated many parts of it heretofore veiled in darkness, and enveloped in mystery; that he has demonstrated those facts beyond question, that were regarded by others as wild and visionary.

Resolved, That we gratefully acknowledge the kind attention, unwearied zeal, and invaluable instructions of our esteemed teacher, and tender him our heartfelt thanks and desire to assure him of our sincere respect and continued remembrance of his generous and valuable instructions which are indicative of, and could be offered by none other than a philanthrophist, and a sincere friend to the cause of medical reform.

Resolved, That Newton's Clinic Institute, which was founded, not for the benefit that might accrue from it in a pecuniary point of view, but alone for the convenience and instruction of the classes of the Eclectic Medical Institute, has been conducted in a manner entirely unobjectionable; that during the session we have had presented to us a great variety of diseases, which have been treated successfully by Prof. Newton, according to his teachings, which we readily subscribe to and believe to be scientific and skillful; also that we have had a variety of Surgical Operations by Prof. Z. Freeman, that have sufficiently demonstrated his ability as a practical and skilful Surgeon.

Resolved, That the Eclectic Medical Institute of Cincinnati, youthful but gigantic, has been the nucleus around which has clustered the strength of medical reform, and which now, bids defiance to its antagonist of centurial existence, that it is the institution which is to reflect on Europe all the knowledge that America ever borrowed from that source; that the present Faculty are men of untiring industry, and unconquerable energy in whose breasts is kindled the flame of medical reform, worthy, efficient, and enthusiastic; under whose teachings we have sat; whose society we have enjoyed; and have been allowed access to the stores of knowledge, that their years of toil have collected, and their experience tested. That their teachings are liberal and scientific, in conformity with the progressive age; that despite the malice and calumny that have been hurled against the Institute, it will stand firm and unshaken, as the adamantine rock, and will continue to increase and spread until it shall illuminate the whole medical world that is now mantled in comparative obscurity.

That we are ever ready and proud to acknowledge her as our Alma Mater, and hereby pledge ourselves to promote and sustain her interest to the utmost of our abilities.

Resolved, That these resolutions be submitted to the Editors of the Eclectic Medical Journal, the Herald of Health and Newton's Express, for publication.

H. H. LEWIS, *Ch'm.*

C. CROPPER, *Sec'y.*

SPRING COURSE OF LECTURES.—It will be seen from the announcement on the cover that the Spring course of Lectures will commence at the Eclectic Institute, on the first Monday in March. The prospect for a full attendance is very flattering. N.

THE

ECLECTIC MEDICAL JOURNAL.

THIRD SERIES, Vol. II | APRIL, 1854. | WHOLE SERIES Vol. XIII.

Part I. Original Communications.

PUBLIC COMMENCEMENT OF THE ECLECTIC MEDICAL INSTITUTE, AT SMITH & NIXON'S HALL.

Saturday the 25th day of February was a proud day for the friends of Medical Reform in Cincinnati. The Winter Session of the Eclectic Medical Institute terminated by the usual public exercises, and conferring the degree of M.D., on eighty-four candidates. This we believe is the largest graduating class which has ever been seen in Cincinnati, and largely exceeds the numbers graduated in all the other schools of the city together.

The occasion was all that could be desired. The class presented a body of young men whose general fine appearance elicited the flattering comments of the spectators. The intelligent audience filled the entire Hall and gallery densely, and manifested their sympathy with the occasion by frequent expressions of applause. The whole was set off to the best advantage by the large, beautiful and brilliantly lighted Hall, and the fine music of the orchestra. Altogether it was the most respectable, imposing and brilliant commencement which has been witnessed in Cincinnati, since her medical schools have been in existence, and but for the fact that the weather was rainy and muddy on the evening of the exercises, the large Hall would have been entirely insufficient to hold the crowded auditory.

It is evident that public sentiment is everywhere changing. For some years past the public exercises of the Eclectic Medical Institute have presented a more pleasing spectacle, and been attended by larger and more sympathetic audiences than those of any other school; on this occasion, for the first time, Hunkerism was very distinctly present, and manifested itself in its own characteristic style. A number of the students of "the three medical colleges" of Cincinnati, manifested their liberality and good breeding by a feeble hissing, whenever the "deafening applause" of the auditory gave token of their approbation of the sentiments of the speakers. This was very appropriate. It is well known that the students of the Eclectic Medical Institute are carefully instructed that courtesy to all, however deluded they may be, is a portion of their professional ethics, and that this courtesy is uniformly practised. A more decorous and respectful body of young men cannot be found in any college in the United States. Not so with those who are drilled in bigotry by the "*three medical colleges*," and taught to exhibit their vulgarity by insolence and contempt against all who disagree with their dogmas. It was but the natural result of their bigotted teaching that they should publicly violate those proprieties which are respected by gentlemen — and that Hunkerism should thus on an occasion so galling to its pride, reach forth its puny, half palsied hand and sketch its own profile. This single instance, however, scarcely disturbed the pleasant-

ness of the occasion. The following programme exhibits the order of exercises:

PROGRAMME

OF THE COMMENCEMENT OF THE ECLECTIC MEDICAL INSTITUTE, SATURDAY EVENING, FEB. 20, 1854.

1. Music—Overture, "Zampa," by Herold; COLUMBIAN ORCHESTRA.
2. Prayer—REV. W. P. STRICKLAND.
3. Music—Cavatina, from "Linda," by Donizetti; COLUMBIAN ORCHESTRA.
4. Report—From DEAN OF ECLECTIC MEDICAL INSTITUTE.
5. Music—Echo Polka, by Jullien; COLUMBIAN ORCHESTRA.
6. Conferring Degrees, by the President; W. P. STRICKLAND.
7. Music—American National Quadrille, by Jullien; COLUMBIAN ORCHESTRA.
8. Address—Prof. J. W. HOYT.
9. Music—Overture, "Massaniello," by Auber; COLUMBIAN ORCHESTRA.
10. Valedictory—In behalf of the Graduates; T. L. FAULKNER, M. D.
11. Music—Air from "Somnambula," by Bellini; COLUMBIAN ORCHESTRA.
12. Address to Graduates—Prof. J. R. BUCHANAN.
13. Music—Gloken Gallop; COLUMBIAN ORCHESTRA.

Committee of Arrangements.—H. C. RICE. G. R. BENTON, A. H. CABLE, A. BAILEY, R. W. GEDDES.

REPORT OF THE DEAN.

As Dean of the Faculty, I have the pleasure of reporting that the past session of the Institute has been of remarkable prosperity and harmony. The facilities and accommodations of the Institute have been greater than at any other session heretofore. The means of clinical instruction in the Clinical amphitheater connected with the Institute have been highly satisfactory, and have afforded a clear demonstration of the superior success of the practice taught in the Institute.

The number of pupils matriculated during the past winter session has been 226, and the number of the preceding spring session was 75. The coming spring session will probably be as a large or larger—thus yielding an annual matriculation of over three hundred students.

Of those who have received the instruction of the Institute, the Faculty have found eighty-four worthy to receive the degree of DOCTOR OF MEDICINE, which degree will be conferred this evening by the President of the Board of Trustees. Four of these are of the gentler sex, who have long been known as the most faithful and acceptable attendants at the bed side of the sick, but who of late are beginning to demonstrate their ability to serve the invalid, not only as friends and nurses, but as medical counsellors. So far as experience has yet tested the capacity of woman in this new sphere, the result is favorable, and as regards those who are now to receive the honors of the Institute, it is but bare justice to remark, that they have not proved inferior in their medical scholarship and attainments to those of the hardier sex. Here as well as elsewhere the capacities of woman have been honorably demonstrated in medical study. The following are the names of the

GRADUATES OF THE WINTER SESSION OF 1853–54.

Anderson, Samuel Brooks, Ohio.
Armstrong, Zaccheus, Ohio.
Bailey, Abram, Kentucky.
Baily, Mary Malin, New York.
Barber, Lewis, Ohio.
Beadle, William, Ohio.
Beachley, Nathaniel Jacob, Pennsylvania.
Bethea, William Laurin, Georgia.
Barnes, Orville Julius, Ohio.
Benton, George Root, Illinois.
Blythe, Baughman. Ohio.
Brown, Zachariah Cox, Pennsylvania.
Burdsall, J. S., Indiana.
Burkitt, Samuel, Kentucky.
Burke, Francis Noel, Ireland.
Cable, Abram H., Ohio.
Carman, John, Ohio.
Cleis, Margaret; Pennsylvania.
Conway, John, Ohio.
Coombs. William Franklin, Kentucky.
Coates, Edmund John, Ohio.

Davis, Jephtha, Ohio.
Dickinson, Simeon, Alabama.
Dove, Alpheus, Virginia.
Doyle, John, Missouri.
Durant, Joseph Fuller, Illinois,
Ellis, Jonathan W., Indiana.
Faris, Michael, Kentucky.
Faulkner, Thomas Lamb, Indiana,
Fisher, Wilson, Illinois.
Foote, Thomas Whiteside, Illinois.
Frease, Solomon, Ohio.
Gans, Oliver C., Pennsylvania.
Gartrell, Luther Sylvester, Tennessee.
Geddes, Robert Walker, N. Hampshire.
Gibbs, George Lundy, Indiana.
Gullett, Andrew, Indiana.
Holland, Willis Siddons, Missouri.
Holmes, Luther C., New York.
Ing, Joseph Henry, Tennessee.
Jacoby, George Thomas, Pennsylvania.
Jones, Enoch Pearson, Indiana.
Judd, Harriet Amelia, Connecticut.
Judge, John French, Ohio.
Kyle, Samuel, Ohio.
Lane, John H., Ohio.
Latta, William S., Ohio.
Laws, Ovid S., Ohio.
Leech, Jerry, Illinois.
Lewis, Henry H., Kentucky,
Long, George, Ohio.
Mauney, George Rush, Arkansas.
Mershon, Elias H., Kentucky.
Monahan, Isaac Thomas, Ohio.
Myers, Henry A., Pennsylvania.
McKinney, Archibald, Ohio.
Neely, Levi H., Ohio.
Newman, Lane L., Michigan.
Payne, William Wesley, Michigan.
Pearce, George Charlton, Ohio.
Rice, Henry Clinton, Ohio.
Roe, James, Kentucky.
Rumsey, Julia, New York.
Short, Wesley, Indiana.
Shultz, Francis Asbury, Indiana.
Smiley, James, Ohio.
Smith, James Alexander, Iowa.
Stearns, Elias Phinney, Indiana.
Stick, Jesse, Pennsylvania.
Stuve, Bernard, Missouri.
Sullivan, Ulysses Taylor, Kentucky.
Swan, Grosvenor, New York.
Sorber, Jacob L., Kentucky.
Turrentine, Joel, Alabama.
Walker, Edward, Indiana.
Wilkerson, William North, Tennessee.
Wilson, Richard M., Michigan.
Wiley, John Huston, Indiana.
Woolley, Edward, Indiana.
Work, Samuel L., Indiana.
Wright, William E. H., Mississippi.
Wonsetler, Gideon, Ohio.
Wuist, Jacob Frederick, Ohio.
Yeagly, Andrew, Pennsylvania.

HONORARY DEGREES.

Campbell, A. S., Mississippi.
Gamble, William J., Pennsylvania.
Massie, J. Cam., Texas.
Poor, John Slavens, Kentucky.

The ceremony of conferring degrees was performed in groups. The gentlemen of the class were arranged in eight companies of ten each, and each company being called up separately, the degree was conferred by Rev. Dr. Strickland in the regular form, "*Auctoritate nobis commissa*" &c., ending with the words "*exanimo donavisse.*" The four lady graduates received the degree last in a distinct company.

PROFESSOR HOYT'S ADDRESS.

LADIES AND GENTLEMEN OF THE GRADUATING CLASS:

Having just completed a four month's course of arduous study, you are about to go forth from the halls of science to mingle with the busy world, to receive its burthen of duties and join in its strife; and since many of you go, not to return, it seems fit that, as those to whose teaching you have so long, patiently and attentively listened, we should address to you a few congratulatory, and, if you will suffer it—advisory words.

Congratulatory, because to you and your friends this hour has come laden with the fruition of long-cherished, and the beautiful buddings of new-springing hopes;—advisory, because, although you, have accomplished much, through patient study and thorough college discipline to fit yourselves for the great drama in which we have a common part, there remains much, almost everything yet to be done.

Your intellectual and moral energies—your wisdom and your virtue abide a fiery trial—may they pass it unscathed.

As you have earnestly and wonderingly looked out into the material universe, you have been struck, aye, thrilled, enraptured and enlarged by contemplation of the order and harmony, beauty and majesty of physical law. You have seen nature through her sublime forces marshalling her elements for earth, and air, and water—for the beautiful crystal and the mountain range; for the delicate blue-bell and the giant oak; for the tiny insect, and the godlike man—*and all*, with a perfection of form which baffles human skill and a definiteness of proportion which challenges the most refined mathematics.

With ravished ear you have listened alike to the song of atoms and the "music of the spheres." Thus the chance of the ignorant world has met with deserving contempt, and harmonious, determinate law with a joyous recognition.

And this law of the Almighty is everywhere, controlling the phenomena of the inorganic world, of vitality and morbility, and the yet higher *phenomena of the soul*.

Wonderful is the advent of man upon the earth, sublime may be his mortal career, and glorious his future. But he must not forget that he is to become the artificer of his own fortune—that upon himself depends whether he lead a manly life of heroic effort, and in the end win immortality, or sitting down in inglorious ease, in the end of life go down to oblivion like the beasts that perish.

To many of you this is the most interesting period of life,—this the hour from which you will date your life of labor—of blessing, or of cursing to the world.

In view of this, let us spend a few moments in examining some of the *elements of success*.

These for convenience I will consider under two general heads—the *scientific* and *ethical*.

To be a true man of science; how blissful the being, how glorious the result!

Man was made a little lower than the angels, and he may, if he will, make himself scarcely inferior in intelligence; and he is never so really godlike as when he subjects to his sway the majestic laws which God has made for the control of his limitless universe, when he seats himself among the clouds, or rides upon the storm; makes the lightning his errand-goer, and the tempest his messenger of mercy; when he laughs at the power of disease, and defies the monster Death.

"True," says one, "but this is most difficult—seemingly impossible. How am I to become this true man of science."

First, there must be an earnest seeking, a hungering and thirsting for knowledge, a deep genuine love of the truth for truth's sake.

Nature is not mean and miserly, demanding exorbitant prices, and with tenacious avarice grasping her stores lest they escape her. No, her great heart is frank, and throbs with the largest and purest benevolence.—With earnest entreaties she invites you to her feasts of fatness, and with her own hand, offers you her jewelled diadems. And oh, how her vast temple echoes with the glad notes of her rejoicing, when even *one kingly soul* kneels at her altar to receive coronation!

Aye, the angels of God shout for joy when the man of *genius* comes to the earth; the man who stops not, either in the outer or the inner court, but boldly demanding the keys and declaring the right, dares to press into the holiest of holies.

Hence, I have thought the twenty-fifth of December, 1642, a glad day in the universe of God. Then all nature clapped her hands with wildest joy—then the "music of the spheres" for the second time on that day and that month became a louder, sweeter anthem of praise, the stars trimmed anew their glorious, beauteous lamps—the maddest comets became orderly—and the meteors danced to a sacred song, for a Newton was born!

Nature had longed, as she always longs for a man whose asking should be *how* and *why*, not simply *what* and *where* and *when*.

She had long been looking out for an *inspired* man—a man whose research might fathom her mysteries—a man to whom mathematical truths should become the basis of scientific inspiration; for these are the pure intellectualities of all created beings, and have their life, therefore, in God.

Those pure and incorruptable formulæ which already were before the world was, and will ever be after it, governing throughout all time and space—being, as it were, an integral part of God, put the mathematician in direct communion with the Divine Thought, and to the restless, discordant world, he says, "Let us be silent, we shall hear the murmur of the God's."

And again, there must be the utmost importunity of asking, together with a promptness to detect the most delicate relations and analogies. Herein was the secret of Kepler's success:—

"Figures pleased me," he says, "as being quantities and as having existed before the heavens were."

Therefore he expected to find the heavens included under geometric figures. Half mad with prophetic feeling he is represented as going up among the stars, "praying, joking and experimenting together, trying on his formulæ to see how they will fit, and scolding the obstinacy of the heavens when they will not"—returning again to make another trial, and enduring labors which, if done without the spirit of inspiration would have crushed any mortal; till at last, behold! his prophetic formula settles into place! the heavens acknowledge it, and in holy phrenzy he exclaims, "what I prophesied two and twenty years ago, as soon as I discovered the five solids among the heavenly orbits—what I believed before I saw Ptolemy's Harmonics—that for which I joined Tycho Brahe, I have brought to light! It is now eighteen months since I caught the first glimpse of light; three months since the dawn; a few days since the unveiled sun, most admirable to gaze on, burst out upon me! Nothing holds me; I indulge my sacred frenzy; I triumph over mankind! The die is cast; the book is written—to be read either nowor by posterity; I care not which. It may well wait a century for a reader, as God has been waiting six thousand years for an observer."

What a glorious spectacle is here—a noble, enthusiastic, divinely—gifted man, running to and fro for more than twenty years, importunately knocking at every door of knowledge, and so earnestly, authoritatively, and patience-wearyingly demanding of Nature her secrects, that had she not been willing, she had been compelled to make him her confident! Let the stars be the record of his triumph, and their pure light, a halo about him forever!

But these, and like illustrious examples were lovers of *one* science—worshippers at the shrine of Astronomy and Natural Philosophy—sciences worthy the devotion of the noblest intellects of any age. There must not, however, be a limitation of the soul in its devotion to any particular territory of truth—not a special loving only, but a universal loving of which all specialities are but necessary parts.

I love the soul whose longings after Truth and Right are not only sincere, earnest and importunate, but also *comprehensive, perennial, infinite*—the man of true nobility, who will allow of no prescription, and who is intimidated and restrained by no proscription—who, when the names of great leaders are sounded in his ears, and the words, "Lo, here, this is the only true path, walk thou in it," replies with proper modesty and reverence, and yet with becoming manhood, I too am a man, not *simply* a *pathwalker*, but a walker *everywhere*—yielding myself up to no indications but the *finger of God!* Of such there is a goodly number on the earth; but by far the greater number are *not* such.

Ever since the world began, there has been discoverable, deep down in the constitution of man an irreconcilable antagonism, and it is an account of the fierce warfare growing therefrom, that is the subject of all history.

In the fable of Uranus and Saturn, we have personified the two great principles which have ever been at war,—the one to

establish despotism and consequent slavery —the other to crush monarchy, aristocracy and hierarchy, and establish therefor independence and equality of rights! One lies wrapped up in the sombre, musty garments of the past—the other, unsatisfied, with an inborn, resistless energy, strides on, if possible, to anticipate the future. One satisfiedly pours over the book of memory, the other with clear, fine intuition penetrates the separating veil, and with the tongue of prophecy, heralds the things of coming years. One fondly clings to what has been,—the other, lured on by Hope, gladly leaves the dull monotonous past, and with irrepressible energy, rushes forward to know what shall be.

The first we call Conservatism, the other Radicalism.

The one is a restraining,—the other a propulsive force—conservatism acknowledges a necessity which cannot be overcome. voluntarily assumes the immense burden of the world's folly and weaknesses—denies the possibility of absolute Good—stands in man s limitations. Reform rises superior to every obstacle, is ever attacking, triumphant, and stands on man's power and *indisputable infinitude*. Conservatism seeks its own comfort—Reform scorns all ease and boldly cries "where is the Truth?"

Conservatism entrenches itself in immense redoubts, with its mountain front, and rear and flank, and its wide, bottomless trenches—plants its standard on every foot of the earth, and turns its thundering batteries against every assailant or even silent denier of its authority. Reform, with an unconquerable spirit, loving the Right and aiming at the utter demolition of every wrong, scales the towering bulwarks, cleaves down the flag of Error and Despotism, and triumphantly raises in its stead, the banner of *Truth* and *Freedom!*

Dionysius and Nero, with their antipodes have long since gone from the earth: but the antagonisms which they represented have not gone with them.

Alas! how slow are men to learn wisdom. Like the power of Saturn it has its unceasing ebb and flow—to day, the mob cries, "away with him,—it is not fit that he should live," and to morrow the same rabble will be found weeping at the sepulchre of the slain. Let us learn to hate that kind of conservatism which says to all innovation, under whatever form it may come, "away, the *old* truth is *all true* and *all the truth*."

But we will not despair; in the darkest night as well as in the brightest noon, the Good and the True just as surely exist, though they have their root in an invisible reality.

The times, however dark, are the receptacle in which the Past leaves its history; the forest and quarry out of which the genius of to day builds up the more glorious Future. We know not what new fields we are entering what greater duties will claim our attention to morrow. But without caring to know this, let us now faithfully cultivate those which we already occupy, and nobly perform those duties already incumbent. Let us have an unwavering faith in God. To day, as ever, the great parties of the Past and Future divide society, and it is ours to make a choice.—Whether we will join with the innumerable multitude of those who accept church and state and science from the past generation, and ground ourselves alone on the argument of possession—rely not on the intellect but on instinct; blind ourselves with the brute forces of nature, or unite ourselves with the *Progressives*, whose gratitude is for the Past, and hope in the *Future* and the *infinitude of man!*

But, however, correct may be our choice --however sincere our devotion to the Beautiful and True, we cannot, if we are really priests of science, offer sacrifice for ourselves only, but for the entire world,—we cannot, in the brief period of our lives, and with our limited means, accomplish all that we could, had we the world's co-operation, and if we might, yet a pure benevolence and genuine philanthropy, would scorn to do it.

In our love for our race, we desire for it an elevation equal to that on which we suppose ourselves to stand. And here is a labor more than Herculean; for, the law of

"action and re-action" is as true of mind as of matter, and the force which is propulsive to some is repulsive to others. Hence progression and retrogression are simultaneous, and the necessary concomitants of every action—reference of course being had to the immediate results of minor laws, which are subsidiary, not exceptions, to that more comprehensive law, whose final action is *always in the direction of the force applied.*

The mind, too, has its "*vis inertiæ*," and at times requires a master dynamatist to give it a pro-impulse, except at such times as great masses of mind are in equipoise, when there is needed but the weight of some giant intellect to carry them, with an overwhelming force in the direction either of wrong or of right.

On such a pivot rested the fate of France; when the eloquent words of Tallien, like an electric spark, inflamed the Convention, and raised throughout the nation, the contagious shout, "*A bas le Tyrant! Vive la Republique!*"—a moment sufficing to transform a band of ruthless murderers into an army of patriots, capable of even the noblest deeds! And the present is not unlike that period, and its revolutionary indications mark it as the time when the genuine loving and the noble daring of a few moral heroes may give the world such an impetus in the way of progress as we can scarcely conceive. Almost every gale that sweeps the Atlantic comes to our ears freighted with the freedom-cry of revolters and the despairing wail of the vanquished! But, alas! too often the shout and the wail are uttered by the same voice. Yet, courage, ye strugglers for freedom! God loves the brave.

"Truth crushed to earth, will rise again,
The eternal years of God are hers!"

Ye may be fettered, but your sons shall be free, and yours the cherished names of all coming generations.

Crumbling thrones and quivering sceptres are the heralds of a glorious era, when heaven-born freedom shall mantle the whole earth with perfect peace, and purest happiness, and the tree of liberty spread its golden branches to the utmost bounds. Then shall the nations as the lambs of our flock lie down under its shade, and no note of jarring discord interrupt the harmony of that universal song of triumph—Allelulia, allelulia! The Lord God Omnipotent reigneth!

Nor will the result of these mighty European convulsions, these noble, heroic strugglings for freedom; these earnest, anxious, and protracted stretchings after the glorious life-giving light of truth be exclusively political. Nay, they have a higher, a loftier aim than the simple riddance of an oppressive land aristocracy and physical despotism. They are not battlings for purses' sake but for *consciences'* sake.

They are strugglings (and in some instances at least, intelligent,) for the infinite, divine nature of Right:—not the impulse of a purely mechanical,—but the Titan movement of an irresistable *dynamic* force—piling mountain on mountain, that its subjects may mount up to the heaven of truth! And this spirit of Reform, this whirlwind rush of progression, this tyranny-destroying fire of democracy, by the power of omnipotent sympathy is kindling its flames in every land; and men of faith already hail the glorious day, when clogging Conservatism shall yield to enlightened and judicious Radicalism—when restrictive bigotry and proscriptive despotism shall furnish the tombstone from which, as her rostrum, Universal liberalism shall proclaim the truth as it is, to an eager world!

Already there are occurring revolutions in science; or, rather, I should say, new and important developments are being made; for, strictly speaking, such revolutions are impossible, since science is but the expression of their existence and the *modus operandi* of certain great fixed laws,—the voice of God to man, giving him knowledge of things as unchanging as his own immutable nature.

But we are not permitted to stand as spectators of the grand pageant which the present exhibits in its upheavings and mighty revolutions: *We* are PARTIES also, and have a responsibility that cannot be evaded. Let us then only inactively observe

sufficiently long to distinguish semblances from realities, to the end that we may play a manly part. I would have you neither rush madly on in a blind radicalism, nor yet remain shackled by a clogging conservatism. Nature teaches the necessity of combining the two. For while change is written every where; while astronomy teaches, that in the great masses of matter composing the infinite series of planets and falsely called fixed stars, there is no such thing as *absolute rest;* but that change succeeds change in their ever recurring and oft-repeated revolutions, and that whole systems and central suns with revolving satellites are ever hurrying away with inconceivable velocity through the regions of boundless space; and while Geology and Chemistry teach us that change too is written in unmistakable characters—often in burning letters of volcanic fire, on those emblems of stability—huge mountains of metal and stone—nature gives not the crown of her approbation to either of these change-producing forces, but rather to the beautiful results of the combination of the *changing* and *preserving* forces. The giant forest tree delights us, and we say, "here is an emblem of growth—of progress." But the growth is only of the new green leaves and outside layer of soft wood, while the solid, columnar trunk, lifting its enormous weight of wood and foliage into the air above us, and standing with its strong arms against the storms of centuries, is the product of long forgotten years. Then we will be sufficiently conservative not to despise the past—since, as some one has beautifully said, the contest between it and the Future is but one between Divinity departing and Divinity entering, and sufficiently radical to ever build new and improved structures on the broad foundations which the departing Divinity has left for us. Thus prepared to labor philosophically, we may promise ourselves abundant success.

And with *our field* for action, how vast is our responsibility, and how great will be the forfeiture if we fail to meet the demands of our own time and country. For, since America has been the first to lead the world in great political reforms—building for herself a government unequalled for the breadth and stability of its foundations; so too, in her arts, literature and science, must she lead the world and become as a beacon light on the shore of time, sending her pure rays into all space, that all places, the most remote and most benighted, may yet hail the brightness of her radiance.

But somehow that same tendency to sectarianism which is found in politics and religion, is found also in science. That pride of opinion which loves self and hates opposing, unpromising and uncompromising truth is yet abroad in the earth, blinding the race and stopping the mouths of her heaven-inspired prophets. But here and there rises up some Nathan or Elijah, whose will it is to speak, and whose courage gives them to speak the truth. O, that the number of such were co-equal with the number of those who stand in the ranks of science. But let us take courage, the number of those heroes is rapidly increasing. But hitherto the priests of Æsculapius have followed the lusts of their own hearts and must needs purify themselves before putting on their sacredotal robes, and presuming to read the law for themselves and to the world; for true knowledge is a knowledge of the truth and he alone may expect to acquire it who loves truth for truth's sake.

Medical science has hitherto been an imaginary something, springing up from a distorted vision—a chimera of the brain—a very chaos, and nothing can ever be accomplished by way of reducing it to order, until vain speculation and *a priori* reasoning yield to careful observation, rigid experiment and logical deduction. Facts and truths should make theories and not theories coin facts.

And here, let us thank God that such a course is being intelligently pursued—that the day-star of truth has arisen—glorious presager of the meridian sun,—that the world is being emancipated from the cruel thraldom of centuries, bursting its fetters and going forth from the dark caverns of superstition and ignorance to greet that

sun at his coming, and shall we be the *last* to drag ourselves forth when it shall have become noon? No! rather let us be the first to scale the mountains of Error and bask in his radiant, life-giving beams.

Medical despotism is, I believe in its last throes; and while I detest, from the bottom of my heart, the mighty and long-protracted efforts of oppression, with prophetic eye, I look forward to the time when Truth and Right will reign triumphant. Therefore, haste thee, O Despotism to satiety, of self-gratulation for the earthquake tramp of Freedom is beginning to rock thy poising kingdom; and the day is not far distant, when the liberalism of the masses having given birth to social and scientific truth, and broken in sunder the deep, galling fetters of down-crushed, error-bound thought, will emancipate thy suffering millions from the murky vapors, and noxious atmosphere of the degrading, stultifying oppression into the pure, marvellous light of a glorious, ennobling, God-given Republicanism—totally subvert abused "peculiar right," and establish therefor "equality of rights."—God, speed the day! and He will speed it; for the earnest prayers of suffering humanity have reached his ear, and the answer *will come!* Towards the accomplishment of this great work—reform in medicine—the Institution which proudly stands first in the world as the exponent of a true Eclecticism, whose career has been one of unparalleled prosperity, and which you call "*alma mater*," has done much.

There is much, however, yet to be done; I pray you let not our happy progress and growing prosperity lull you to rest.

It is to do something—may we not hope much—towards making new developments in this most important of all human sciences, that your names have been enrolled here to night.

And as you have long and faithfully labored to prepare for the important work, we dismiss you with high hopes.

May they be more than realized. Your facilities are unexampled; for the public mind is becoming every day, more and more liberalized, so that it is now, only the minority who deny the possibility of improvement—who would block the wheels of science and stay the progress of Reform.

Having exhorted you to give yourselves to a true liberality, as one of the most important conditions, I now would say, Be philosophical students of nature.

Nature is but the development of law, and the shadowing forth of Divinity; the study of nature, therefore, is the great business of man, and whether his investigations be confined to the realm of matter, or be extended into the higher, more beautiful realm of mind, every step so taken will have its reward in the enjoyment of enrapturing visions, and such new revelations as add link upon link to that golden chain which connects us in our inferior, half-divinity with the Omniscient.

Then, must it be that, whichever way we turn our eyes in this vast realm, the grand spectacle which is ever present, will excite within us such an ardent thirst, such a burning desire and anxious longing for the rich treasures of knowledge which lie but half-concealed there, that we shall feel ourselves irresistibly impelled to an investigation of the combined causes which have produced these wondrous results. The foot-prints of Deity are seen all around us. Beneath us from the little particles of dust adhering to the soles of our feet, through the mountain masses of earth and rock and mineral, even to the vast sea of liquid fire which boils and heaves within, are subjects for unending study. Around us, from every quarter, whether from the organic or the inorganic world, come forth sweet music and persuasive words enticing us on to an investigation of the many and beautifully harmonious laws which the great Author, in His infinite wisdom gave to each and all. Above us is the immeasurable heaven, checkered with its million suns and countless systems—whose archipelago on archipelago of worlds is but the beginning of an infinity of such systems, which in their ceaseless journeyings finally compass the great universal center—wooing us to a

successful study of the mysterious forces which alike govern the simple motions of our own quiet little planet, and the eccentric movements of the madly-rushing comet, bringing it back submissive, to its point of departure, after a fiery flight in its zigzag, lightning course, through the boundless ether for a decade or a century of centuries. And *in* us—apart from the God-like, immortal mind, into which all nature ascends, and up the whole ascent is a prophetic hymn heralding the advent of the *man complete*—in the investigation of the laws extrinsic and intrinsic, physiological and pathological, which control vital action and develope morbid phenomena, is an immense field for cultivation.

But here I am forced to stop, and recognize the deplorable fact that, in all things, the great mass of the world stop short of philosophy—that nearly all men, when they look out upon this sublime and beautiful world with its multitudinous and varied phenomena, simply say, "yes, this is so, and that is so," looking no further.

Let *us* as men mindful of the *manhood* that is in us, and of the *right* we have to *know*, though reverently, yet boldly interrogate Nature in regard to the things which so nearly interest us, and we shall be astonished at her willingness to answer, and the value and the beauty of the revelations which she will make. Who knows what unexplored worlds lie just beyond us—what things of beauty and of grandeur we may yet discover in the air we breathe, or in the earth we so unheedingly tread upon?

We may yet discover that every grain of sand and every drop of the ocean is a microcosm, with its land and sea, mountain and river, its forest of vegetable and countless myriads of living beings.

As yet, I believe we know nothing of the beauty and power of the physical forces.

From the but glancing notice we give of most things around us, who could have conjectured that, every tear that trembles on the eye-lid or dew-drop that glistens on the morning-glory holds latent within its crystal chambers lightning enough to cleave a mountain to its base or to illuminate the heavens to the paling of the meridian sun! Or who that has seen the delicately tinted flower blushing in the morning light, has reflected, that, in order to effect the solidification of the elements which constitute its several parts, a force must be exercised indefinitely greater than that of the most powerful steam engine!

I tell you there is nothing mean—nothing trifling in the universe,—everything that God hath made is brimming with sublimity!

Again, the world, like its Author is a unit; all things are related.

Be prompt, therefore to discover these relations.

You go out from this hall to become guardians of the public health: let not your knowledge be wanting in anything which might, in the least contribute to success. Let it not be simply of that kind which a mercenary profession would improperly style practical—available—meaning thereby largely productive of personal, physical comforts in the shape of sumptuous living, fine houses, lands, and bank stock. God has so intimately interwoven our individual interests with those of society, that no act can be wise that is dictated by selfishness. Prove to the world that the imputation of sordidness to the medical profession is a libel on its true character—that your acts all come from an innate, necessary love of the Good—from the promptings of a pure benevolence and genuine philanthropy.—Teach to the world the sublime lesson of self-renunciation—that the surest method of doing good to one's self consists in coming out of that SELF and doing good to others. "He that would save his life shall loose it, and he that looseth his life shall find it," has a fullness of meaning of which the selfish world has as yet formed no conception.

Were I convinced that any one of you had entered this noble profession with his aim simply fixed on the paltry trash of decaying goods, and personal, sensual advantage, I could not but erase my name from the parchment which is to honor him, and which it is his duty to honor.

In our efforts to instruct you in the truths which are essential to the separate existence of our several departments we have not failed to point out to you the ten-thousand by-paths which lead off into the provinces of collateral science,--that *science* also is a *unit*—that the *true* physician must be a man of *universal* science—a *philosopher*.

Having then called your attention to certain great general principles which root themselves, and grow indigenously in the soul of the really scientific physician, I have scarcely need to descend to the minutiæ of habit.

To become all that I have described will require the patient, earnest labor of a life. Be careful, then to husband your time, for it is by saving its clippings that you are to amass intellectual fortunes.

When you shall have commenced practice, you will find that necessary business and the courtesies of social life will claim nearly, if not all, your time and energies; nevertheless, by properly systemizing—by dividing the day and assigning to each duty its metes and bounds, by regulating your affairs so that the whole community of sciences may dwell together in harmony, you will be able, even under the pressure of seemingly more imperative duty, to continue unremittingly, and successfully your scientific pursuits. Devote a small portion to a review of your collegiate course, that your knowledge of fundamental principles may thereby be preserved and perfected.

Reviews are especially essential to preservation, because impressions made upon the memory by mere knowledge, since it does not inflame the passions and thereby burn its image into the very tissue of the soul, are ordinarily soon effaced. Reviews are likewise essential to the perfection of knowledge supposed to be already acquired. In the too brief period which usually constitutes a complete course at college, it is almost impossible that no important principle, or individual fact, or even body of facts, should have been entertained to be but half comprehended. Upon such half recognized facts and truths, the effect of a careful review is like the magic retouching of the artist's pencil, which warms the first imperfect sketch into life-like beauty; or like the oft-repeated search of the analyst which at each successive trial discloses certain occult connections, correspondencies or dependencies which the first hasty analysis had failed to discover.

Another element is promptness in the discharge of all professional duties. Scarce anything will win the regard of your patrons, like the earliest possible attention to their pressing needs.

Cultivate a proper familiarity with your patients. Let them feel, that, in you, they have in addition to the learned and skillful physician, a kind and sympathising friend. You will thereby secure two important desiderata: the love and confidence of those in charge—the value of which cannot be too highly estimated—and a better knowledge of their habits and idiosyncrasies.

Be moderate in your charges, and never exacting of such as must suffer in order to pay your fee. I would, if it were possible, establish a system of gratuitous practice, so that the medical profession might be looked upon as the impersonation of a true benevolence, and enlarged philanthrophy, like our great Examplar, ever going about seeking to do good—not as the incarnation of avarice, seeking to enrich ourselves from the direst necessity of others. *Never will medicine rise to its true position until its votaries shall have been purified from all selfishness.*

It will often be in your power at the same time, to alleviate the sufferings of the body, and quiet the troublings of the soul. O, then, be true to your trust, remembering, that, "as much benevolence as a man hath, so much life hath he;" and you may surely hope for a hundred-fold reward for all you give of kind words and substance and skill.

Lastly, be ever willing to receive advice. There is a man who with a comfortable consciousness of all knowledge, forgets that there is a diversity of the gifts which God gives men, and "safety in a multitude of counsellors"—"that Newton could learn

from a goatherd and Cæsar from a raw recruit;" and though wisdom should mingle her wines and prepare a rich repast, aye, and go forth herself to invite him to her banquet, he turns not to her temple. For deeming himself a very God-send—a light to shine in a dark place, he heartily congratulates the world on his arrival in due time, complacently appropriates "ye are the light of the world," and straightway begins to utter oracles. He may glory in his strength for a while, but he will assuredly learn in the end, that "the laws of nature were not framed for unadvised action."

Hitherto I have addressed you as physicians; I would be glad to say a few words to you as *men*. But I must relieve your patience.

Your profession will give you more than ordinary influence in society: may the value of that influence be adequate to the obligation which it imposes. To you it is given to *know*. Heavenly gift! Enjoy it then; firmly and gratefully cherish her gifts received, and accompany Truth, in the future, whethersoever she may lead you,—joyfully, if through flowery meadows and enchanting scenes, nor yet fearfully, should she bear you through the storm. As Hercules, when he went to unbind Promethus, made the perilous voyage in an earthen pitcher, so may Truth safely sail the roughest sea, in the frailest bark, for she too is a divinity.

It is yours to think. Exercise that power patiently, strongly, lovingly, boldly. Discipline yourselves to such thought as shall develope new ideas, never thinking, because a host of intellectual giants have lived on the earth and exhausted their mighty powers,—because the world is full of books and babling tongues, that therefore you can attain to no original thought.

The progression of the human mind in knowledge must from the nature of its powers, be infinite; therefore, its workings must fill eternity with ever new and glorious wonders; so that the mightest intellect of earth or Heaven will ever find before its lightning wing some unpierced world of thought.

But it is also yours to *act*; and the incentives are becoming every day stronger and stronger. O, then, spend not your lives in trifling and ease, when humanity implores and nature invites, and God commands to action! Be not simply defenders but heralds of adopted truth, active architects for the upbuilding of beneficient institutions, and prudent, earnest, heroic leaders in every scientific and moral reform. In a word, by deeds of holy benevolence and active philanthropy—by your intellectual energies and a moral heroism, make the world know and feel that you are in it. Do this, and your lives will be useful and happy, though full of privation and toil, and though martys to Truth and Right, you will wake to joy and reward when time shall be no more.

I have spoken as though long years were before you. Alas, while I address you, Death may have been commissioned to cut you down ere you enter your field of labor.

One of your number who came to our halls with desires as strong, and hopes as ardent as yours, has been robbed of the honors which to-night have been confered upon you. May the warning incite you all to present, earnest, unremitting labor.

We must part—Soon the steam-boat and rail-car will separate us—it may be for years, and it may be till the trump of the archangel shall summon us to meet upon the other shore.

Through all life we will cherish pleasing recollections of you; for although our out-of-college associations, have been but limited—too limited—to many of you we feel strongly attached. Yes, we love you as a company of brothers and sisters, and will follow you with enquiries and prayers through life, sincerely hoping, if we meet not again on earth, to meet you all at the right hand of the Judge.

Go forth, then,—to perfect yourselves in knowledge, in wisdom, and in virtue, to honor your profession and Alma Mater—to do your duty to God and humanity; and may Truth, Mercy, Justice and Wisdom go with you.

DR. FAULKNER'S VALEDICTORY.

GENTLEMEN AND LADIES:

In behalf of the members of this Medical Class, I tender you their thanks for your presence here to-night, assuring us, as it does, of the interest you take in the cause we have espoused, and in those rights for which we now, and shall forever contend,—the right of free thought, free speech, and free action in all that pertains to medicine or its collateral sciences, despite the edicts of petty colleges, the dogmas of state societies or the anathemas of National Associations.

We are Americans, some by birth, and some of choice; and as Americans we should fail in the discharge of our high duty did we not contend earnestly and constantly, for all those rights which cluster in rich profusion around the brow of the American citizen, chief among which are freedom of thought, of speech and of action.

As American citizens—and American physicians we acknowledge no aristocracy, but that of mind. No nobility but that of nature, nor do we bow at any shrine save truths,—which, radiant with heaven's own glory may well challenge our homage and receive our adoration.

Let the devotee of an exploded philosophy still grope and stumble amid the ruins of his fallen temple; let him still hold forth the rusted and tarnished fragments of his decayed system. Let him still in his well tried circle seek for truth, ne'er casting a glance beyond his old area; let him then assume all dignity, and don the lion's clothing while he casts his lightnings and fulminates furiously at all progress, which heeds not the claims of his party, bows not to its edicts, nor submits to its yoke and galling chains.

Let the worshipper of authority do this, but know and let all know,—the man of science, the man of enlarged intellect is *not* the man of a party, nor yet the man of an age. For,

"Seizing on truth, wherever truth is found,
Whether on Christian or on Pagan ground,"

His researches carry him back to the long ago past in the world's history; to the slow moving days of creation,—when from out the ocean's slime, the monsters of the deep were made, down to the period when man appeared on earth.

Through all *this* period—through all the weary ages of old time—through all the dire and dread convulsions nature has felt—through all the grandly sublime, and inconceivably terrible revolutions that have changed at different periods, and though different, and through different ages the appearance of our globe—through all those slowly rolling ages,—through all these revolutions, the true man of science lives, and with all the past his identity and association and interest is as strong and is intense, as is the interest, association and identity, which bind him to the present hour.

Every shell thrown up from Ocean's caves by the wind and the tempest, sings for him a song of the olden time, a lay of the far off past, when creation yet was young, when all around was fair; when laughing angels chased the flying zephyrs over earth, which gave back tones of sof est cadence in answer to the spirit foot-falls, ere pestilential vapors fraught with death, were wafted o'er her sunny plains, or adown her charming vales.

Or, as the wave destroys the shore, thus exposing ocean's treasure, or exhuming the remains of the Saurean tribe, it turns for him another page in time's history, which speaks of the period when God laid the foundations of the world, placed its beams in order, raised its pillars by the plummet of Eternal Wisdom, and peopled the tenement with creatures *best adapted* to his work.

Or, as the earthquake rends the mountain and tears the plain in chasms; as strata after strata rise there before him, and as object after object meets his vision, truth after truth is revealed; and, as his research identifies him with all the past,—so shall his discovery of truths long concealed identify him with all the future.

Thus, ranging the wide field of the past, conversant with the laws made known by each, and though each process of Creation, from its first obscure nebulosity, through every stage upward in the work, till the

cap-stone was laid amid angel shoutings of grace—grace—while all the sons of the first morning shouted aloud for joy.

Reading, proclaiming, and explaining *all law*,—he projects his knowledge and wisdom around him through every clime, forwards and downwards through every age. The man of science thus becomes the man of all climes, of all languages, and of all time. Succeeding generations rise in times long vista, and call him blest,—for these he has removed all danger from the Ocean's breast, robbed the winds and the lightning of their power to harm—stayed the pestilence that walketh in darkness—dispelled the destruction that wasteth at noonday—taught man that God is indeed his friend, and father, who by every manifestation of the function of his providence, seeks to bring him nearer his own eternal throne, nearer the fount of perfection, whose streams of purity he shall quaff, and live forevermore.

Shall the man of science then be a bigot? does science forge a collar for her sons? does she kennel them as stupid brutish dogs? does she teach her sons to scorn and despise those who look not through their glasses, and who view objects in a different light from that they use. No, never, never.

Her first command to all is, be free—break every band, every yoke, cast prejudice and bigotry aside, *be free!* shall not her sons be free when truth takes them under her ægis? Whom the truth makes free is indeed free, nor shall the tyranny of charlatanry ever enslave them.

For this then we contend:—we want no collars for men; we want no party influences; we want no separate sects, worshipping one idea,—bowing to a single law; we cast aside parti-colored glasses, and seek to love the truth for the truths own sake.—Therefore, while one cries out *similia similibus curanter* we acknowledge his law and act upon it; or another in a different direction exclaims *contraria contrarius curanter*, we acknowledge his law also and act upon it—for each is true, yet neither separately is *the* TRUTH to the exclusion of the other.—Thus while our name is eklektikoi, we are neither Alleopathic, Homeopathic, Hydropathic, Physopathic, Antipathic nor Orthopathic; we are all these, for we acknowledge the law before which each party bows, and form of elements which clash and jar with harsh dissonance in their hands, a beautiful and harmonious system chiming symphoniously with the discoveries peculiar to ourselves, and, hence, in reference to other divisions of the profession, we are Pantopathic.

So ladies and gentlemen, never recognise a man, as scientific, who is the bigoted slave of a party, the insane worshipper of a single idea.

Ever remember that the man of science is a free man; is liberal, courteous and generous to all; a calm and sober seeker after truth which he honors above all things, and adores fervently at all times. For truth is the breath of the power of God; an influence emanating from his glory;—the brightness of the everlasting light; the unspotted mirror of God's own goodness, more beautiful than the sun, and above all the orders of the stars of light; possessing as she does whatsoever is excellent, whatsoever is high, or pure, or noble; therefore have we as physicians chosen her as our patron, and enshrined her in our hearts.

GENTLEMEN PROFESSORS:—The Collegiate year is dying; a few moments more and it shall be gone with all its privileges,—with all its toil and care,—its joys will have past with it, and its sorrows perchance shall be dispelled by the bright sun of the future, as morning mists fly before the face of the day king.

Yet while its last few moments linger, on the part of my fellows of the class, it is my duty to breathe out that sad word farewell: and, here I would fain close this address by again repeating farewell, and retiring from your presence.

Yet gentlemen, some other offering is due to those who have so long been our Mentors; who found us darkly blind to the fair light of science; who led us in a way wherein we had not walked, and in steps wherein we had not trodden,—even to the foot of Mount Science, where, striking the bandage from our mental vision, you caused

us to read the inscription over the portals of the temple at the summit, *Scientia melior aurum;* taught us to love this motto, engraved it deep in heart and mind, then led our inexperienced feet up the rough and devious winding way, smoothing the path before us, ever removing obstructions barring our passage; pausing here and there in the ascent to regale with choice clusters kept in store to refresh the weary Neophyte, and encourage him *upward* toward the temple on the pinnacle, and onward to the blazing light within it. And, finally gentlemen, after our mutual toil, through a long and somewhat tedious journey, you have met us here to night in the presence of this host of witnesses, to ordain us priests, whose duty it shall ever be to offer incense through life, before the sacred altar of a glorious trinity, the altar of *Truth, Hygeia* and *Humanity*.

We thank you gentlemen, that you have deemed us worthy to be called your brethren, and to become co-laborers with you in the great work of medical reform, confident that each member of this class will ever walk worthy of the high vocation, whereunto you have called him.

GENTLEMEN:—Afar from this city rises a lofty mountain range,—at a certain point thereof is a gloomy precipice, over whose rough brown rocks flows a feeble spring,—which dropping from rock to rock in its downward journey gains at length the mountains base, where it forms a pool which a newly weaned fawn would drain in slaking its thirst;—from this a tiny rill flows forth—here, diverted from its course by a pebble, there, by a tuft of moss. Yet its course is ever onward, backward never. Rill after rill flows into it; its current becomes deeper and wider; receiving thus still other streams, gathering strength as it advances, it bursts its mountain barriers and flows at last a broad and deep, a calm and peaceful river; winding through woody hills, and flowery vales, and sunny plains—where flowers ever bloom, and fruits ever ripen—passing in its course every diversity of climate,—bearing on its peaceful breast the interest, and the hope of a million hearts,—at last, by an estuary as grand, as its origin was obscure, its waters pass forth into the vast ocean, which lies spread out forever the emblem of eternity. As with this stream, so with the enterprise with which you stand identified; how faint and obscure *its* origin:—how tiny its stream at the beginning—how faint the hope that *it* should survive the morning ray of the sun of opposition,—or that its stream should not be dried at noon, hard by where it first began its course. What barriers in the form of legal enactments reared up by charlatanic bigotry, and the prejudice of ignorance were thrown in its course,—yet still *this* stream moved onward, winding round a barrier here,—turning a jutting point there,—ever and anon receiving a fresh thought rill or mind stream, receiving thus stream after stream, at last its gathered forces are precipitated against the barriers opposing its progress—rending these assunder, and sweeping their ruins aside.—Onward forever it rolls grandly and sublimely down the slope, and amid the plains of time, causing by its healing waters the hearts of countless millions to sing aloud for joy.

GENTLEMEN: if the blessed, can be made more blessed; if the completely happy, can be made more happy; if the departed are at all, in sympathy with those great schemes of benevolence and reform for the public good in which they bore a part, and in which they delighted while here, what must be the hight, the intensity of MORROW'S rapture as he gazes down from the high star chamber of the King of glory, and witnesses the full and complete triumph of the principles, and Institute to which his life was devoted.

GENTLEMEN: with the most earnest aspirations for your success and happiness through life, with feelings of warm devotion to our Alma Mater, represented here by you, to sustain which we pledge you our hearty co-operation, we part,—

Yet though we to distant regions hie,
Pursuing fortunes slippery ba',
Your kindness in our mind shall lie
We'll mind ye aye though far awa,

While the truths you have taught us shall

ever constitute the landmarks of our practice.

LADIES AND GENTLEMEN OF THE CLASS—we have met this night to part forever—never while life lasts shall we meet again. Some of us will pursue our vocation amid the snows of the North, some on the shores of the stormy lakes, some on the wide spreading plains of the West, and some beneath the skies, and amid the flowers of the bright and sunny South, scattered from Maine to California, almost from the Equator to either pole. Yet, friendship shall narrow the distance dividing us, and in the domain of fancy we shall often meet, while the memory of the scenes of our College life, and of all the interviews enjoyed as well as of associations formed here, shall arise like oases crowned with living verdure among the deserts of life, give to us an hour of unalloyed happiness, and cheer us on to the discharge of our duty in the weary battle of life.

Ladies and gentlemen who have kindly given us the honor, and encouragement of your presence to night: Gentlemen of the Faculty—long our friendly guides in the rugged paths of Science; Ladies and Gentlemen of the whole class—may we all be so endowed with wisdom, as that we may act well, and nobly, the several parts assigned us in the great drama of life, fulfill to its utmost extent, our duty to God, to our fellows, and ourselves, and at last, looking back over the landscape of the past, then faintly illumined by lifes declining sun, reviewing, in prospect of the grave our final home, our whole career, may we find nothing therein we should wish had been omitted, nothing omitted that our lives should have contained; may we find lifes volume perfect and spotless; and then, as calmly sinks the morning star, which goes not down behind the western hills, but fadeth from our view in days clear light, so may we all, gently sink to rest on earth and wake to the light and bless of heaven. Adieu.

PROF. BUCHANAN'S ADDRESS.

GENTLEMEN AND LADIES:

You are now going forth as physicians, representative of a new American movement in the medical profession. Europe has heretofore been the home of art and science, which have attained their highest conditions under governments of a despotic or arbitrary character, that have stamped their own peculiar character upon all things under their control. America, as a colonial country, has received her arts and sciences from Europe. Hence, in America, as in Europe, our literature is full of the spirit of monarchy and oligarchy, scornful of the "swinish multitude" and idolatrously fond of illustrious women and high-sounding titles. Our sciences too, are starched and stiff with the spirit of old oligarchies, and in their pedantic lore their ostentatious display of learned opinions and their remarkable deficiencies as to benevolent applications, they give proof of their aristocratic origin.

In our colonial dependence, our governments, laws, institutions, customs, manners, dress, language, arts, and handicraft employments were but importations from our ancestral country. We are still in this state of colonial dependence, we still dress according to foreign standards, read and follow foreign authors—and, in the medical profession—the doctrines, the sciences, the ethics, the titles, the organization and the entire *espirit du corps* are so nearly *fac similes* of the foreign originals as to leave no important distinctive marks except the variations produced by some difference of circumstances.

Our forefathers threw off the political yoke of the mother country, but all other connexions and influences were retained. In the medical profession America has had no distinctive nationality. The system of practice in the mother country has been copied here, and the idea that the entire profession should implicitly obey the dicta of the leading individuals and societies is still in full force. There is no democracy in medicine, *authority* and *regularity* are the words that govern everywhere; and instead of recognizing the profession as something for mankind, responsible to the people for the discharge of its duties—instead of

recognizing the cure of diseases as the first object and duty of the members of the profession—instead of making this the point of honor—the point of honor has been *to be regular* in obeying authorities, even in the most preposterous doctrines, and to be faithful to the pecuniary interests, reputation and social standing of the profession. To disturb the dignity of the profession by criticising established modes of practice has been made an unpardonable offence—to violate some imaginary ideas of dignity by advertising for business in a newspaper has been a very grave offence, but to confess a loss by death of one half the cases of Asiatic cholera has been no offence at all. and to confess utter incompetency to cure consumptive disease, cancer, or hydrophobia has been no dishonor, but on the contrary rather an honorable evidence of professional regularity, showing that the physician was not disposed to disturb the honors of his seniors or cast any oblique reflection on his brethren.

A profession governed by such sentiments needs a revolution—needs to be Americanized and essentially changed before it can fulfil its legitimate destiny of benevolence.

This revolution has begun—you gentlemen are to be representatives of this American revolution. The pioneer college in this movement of reform has given you its credentials and expects you to sustain their honor. Your Alma Mater expects you to prove that it is not necessary to follow the old authorities. She expects you to carry far and wide through the land the demonstration that the new remedies and measures peculiar to our American system of practice are as far superior in value to the old routine as our republican government is to the despotisms of Italy, Austria and Russia.

But do not in your zeal forget that this reform is *ethical* as well as scientific. It is not merely to introduce a better system of practice that we expect you to labor, but to aid in introducing a system of permanent and rapid progression, by trampling in the dust the despotic principle that any association, however numerous or talented it may be, has the right to enforce conformity to its decrees, in the profession of medicine.

Do not for one moment admit the flattering thought, that the great superiority of the American Eclectic System of Medicine renders it necessary that you should regard it as the summit of human wisdom and guard its permanency by denouncing those who would sincerely attempt improvements. Those who do not attempt improvement are hardly entitled to be called reformers.

And do not, we pray you, forget that other members of the profession have as good a right to cherish their own errors as we have to cherish our positive knowledge. However sad and destructive, or however fanciful those errors may be, they *may be* cherished in perfect sincerity. owing to the influences of habit and early training; and we have no right to exclaim in Pharisaical complacency "stand by for I am holier than thou." We have no right to denounce Allopaths, Homopaths, Hydropaths or Chrono Thermalists because they reject resources which we know to be valuable—on the contrary, if they are honest and well educated men, every true Eclectic reformer will take them by the hand as members of an honorable profession, and seek by the presentation of facts to awaken their minds to a perception of truths of which they have been kept in ignorance by their peculiar position. We have no contest with honest and fair-minded men of any position or persuasion in medicine.

Gentlemen who practice the principles of professional and personal courtesy—who are willing candidly to investigate or discuss any difference of doctrine, we are always happy to meet. But there is another and too numerous a class for whom we have very little toleration--men who assume an arrogant tone of superiority, and who discard all courtesy—who refuse courteously to discuss the points at issue, and rely upon vituperation alone, who regard difference of opinion as a personal differ-

ence, and attempt by an incessant social warfare, by professional and social ostracism to crush at once every independent mind which will not receive or submit to dogmas that are demonstrably false and destructive—as a certain church in ancient times endeavored to exterminate heretics. For those who are engaged in this unholy crusade against free thought and speech we have no toleration, for liberty cannot endure despotism, or tolerate intolerance. Nor can the medical profession ever be peaceable and harmonious, or ever attain its most honorable position, until the entire generation of intolerent men have passed away, and given place to younger men more imbued with the American spirit of freedom and progress.

As heartily as we detest such intolerance, so heartily should we resolve to guard against imitating the vice. But it is not the whole truth to call it a vice, it is a *crime*; what is the crime of assault and battery against the person of a single man, in comparison with the far greater crime of an assault upon the very temple of liberty. An assault upon the unquestionable right of free investigation and free speech, in reference to questions that affect the lives of millions, is an assault upon one of the dearest of those rights, won by our forefathers on many a hard fought field. And although this assault may not be by law, by the prison or by the bayonet, yet such an assault by private combinations and conspiracies, carried out by social warfare, is just as formidable and as odious as a political attack on the liberty of the press.

Let our abhorrence for such a crime be manifested by our scrupulous avoidance—let no medical reformer even attempt to enforce a creed upon his neighbor, or speak in the language of hostility against any one who *honestly* differs in opinion or in practice.

I am proud to refer to one fact in the history of the Eclectic Medical Institute—to the fact that a medical college professing liberality was willing to give a free and candid hearing throughout an entire course of lectures, to the representative of a distinct party in medicine—a party which in the high quarters of the profession is commonly denounced with the epithets of quackery, knavery and charlatanism—a party with whom it has been made a grave offence to hold any professional intercourse. So far from disparaging their claims or professional respectability, they were admitted to select and send to the Institute their chosen representative to advocate their own doctrines, and even to assail and discredit the doctrines taught in the Institute. It was not convenient or practicable to make this measure a permanent one, but it stands on record as a noble illustration of the spirit in which every reformer should meet all doctrines and all parties by giving them even to some sacrifice of his time, a full, candid and courteous hearing.

But when we have patiently listened to all and heard the doctrines of all—and moreover examined the arcana of Nature for original truth—when we have found ampler resources unknown to the authorities,—and sciences not dreamed of in their philosophy, it is becoming that we should advance and take our positions not as humble applicants for favor, but as men born in freedom, reared in intelligence, qualified for our position, fearing no competition, acknowledging no superiors, and claiming our rank by virtue of a commission which outranks all others—the possession of the deepest science—of the highest truth—which is a commission from the Divine author of all science. They bear his commission of superiority, who have received the largest influx of the most benignant truths.

Those who thus realise the value and the dignity of those great truths which medical reformers are reducing to practice, will not be disposed to compromise with falsehood, or to yield to their influence of temporary and local fashions.

But while shunning this time-serving compliance with fashions, you should guard with equal care against that headlong zeal for reform which outruns its discretion. A determination to be different from the majority merely for the sake of difference,—

for the sake of keeping up party differences, and carrying on a contest, cannot be approved by any good moralist—it is but the old spirit of intolerance and bigotry in a new position. Such a spirit instead of elevating tends rather to degrade the medical profession, and keep it forever involved in false philosophy and narrow views.

The over zealous medical reformer does much to discredit true reform. His zeal outrunning his discretion, he demands some fundamental principle, which shall be so different as to establish an irreconcilable hostility between the reformatory and conservative parties. If he is told that the fundamental doctrine of medical reform is that a physician should use all means beneficial to his patients, but should avoid the use of such agencies as were unsafe, and liable under the most judicious care to produce serious or permanent injury—he acknowledges that the principle is just, but he demands something more decisive than this—some party Shibboleth which none can adopt or repeat but the select cohorts of reform. The plain practical principle of using agents that may be used safely, and discarding those which are unsatisfactory or dangerous if used as medicines, is not enough for him, it does not admit of fierce declamation and party rancor—it does not sound like the war cry of an intolerant party. Hence he seeks for something that will answer to separate parties and enrage them against each other. The most ignorant class of these pseudo reformers exclaim loudly that they are pure herbalists—pure botanic practitioners, and declaim against the terrible evils of administering mineral substances to the human body—like their patriarch Thompson they suppose that as vegetable substances tend to grow up while mineral substances from their gravity sink down in the ground—so the man who uses vegetable medicines will rise and flourish like a tree, while he who uses minerals will sink into the ground. Such men in the density of their ignorance do not know that minerals are an essential portion of our food, as well an essential portion of our medicine, and that no man can exist without them, nor can the human body be constructed without them. I have even had the pleasure of conversing with one of this class, who denied the use of minerals and maintained that there was no such thing as iron in the human blood—and he aspired to be recognized as an able teacher of medicine.

But the class who ignorantly denounce all minerals is nearly extinct, and we have now instead a similar but more intelligent class, who assert that all the medicines they use are perfectly innocent, while other physicians make free use of poisons. They claim to be pure anti-poison practitioners, and are unsparing in their denunciations of all who dare to use valuable remedies which they in their wisdom have proscribed. By dividing the profession into *poison* and *antipoison* practitioners, they throw out a plausible bait to popular ignorance, and place themselves habitually in the position of demagogues appealing to ignorance and prejudice. They do not make any account of the fact that their own patients die as fast or faster than the patients of those whom they assail—they make no reference to the fact that patients may easily be killed by overdoses of their "roots and herbs" as well as by more concentrated remedies. All remedies are unsafe in the hands of ignorance and malice—all are safe in the hands of skill and benevolence, which administer only what is beneficial to the patient. If medicines are crude and feeble, the practice is not thereby rendered safe, for it is at least as painful to be beaten to death by clubs, as to be killed by the sharpest sword. It is the adaptation of the remedy to the disease which renders it safe and beneficial—it is the want of this adaptation which renders it dangerous. The profession is not to be reformed by depriving it of all its powerful agents—educated physicians are not like children to be kept out of mischief by decreeing that they must not play with sharp edged tools. In the terrible battle against disease, we need, in the language of Pitt, all the powers that God and Nature have given us—we cannot afford to dispense with anything that is re-

ally useful—for if we do the patient must suffer.

And this illogical delusion that substances capable of acting as poisons cannot be used with propriety in medicine, cuts of an immense amount of our most valuable resources. Almost everything in nature, if out of place or in improper quantity or in an improper form, becomes a poison. Even the lobelia, boasted of as harmless, becomes when its medicinal element is concentrated an efficient poison. We are surrounded by nature with poisons. The potassa and soda which are essential elements of human food, and without which we cannot exist would, be if presented in their purity corrosive poisons, which in spoonful doses would produce death. The lettuce which we eat with so much pleasure, contains an opiate element, capable if concentrated of producing all those narcotic poisonous effects on the brain, for which we are loudly invoked to discard opium. The mild emetic, ipecac, when its medicinal energy is concentrated, becomes unequivocally poisonous, in doses of a few grains.

The tobacco which so many injudiciously use as a luxury, is to a constitution entirely unaccustomed, a dangerous poison, even without concentration. The medical element of common tea is also well known as a poison in its concentrated form. The purest bottle of native wine harmless and pleasant as a beverage, contains alcohol, which in its purity is a poison. The salt, pepper, mustard and vinegar, our daily and wholesome condiments, are each capable of destroying life in a poisonous manner, if used to sudden excess. The leaves, flowers and seeds of the peach tree, often used with pleasure and safety, yet contain a poison which in its concentrated form is about the deadliest known to man.

The salt which is an essential part of the human body and which seasons our food, consists of two deadly corrosive poisons, combined together; either separately will kill—both combined will nourish. The very atmosphere that we breathe, if its elements are presented in a more concentrated form and different proportion, becomes one of the deadliest and most corrosive poisons; although if diluted, it is still a safe and valuable remedy. The pleasant and refreshing glass of soda-water contains a mephitic poison, which in a close apartment has often proved fatal to human life. And this poisonous gas which when concentrated in a well, is so often fatal to those who descend—is by the medicinal system of nature diffused all through the atmosphere, and instead of destroying the human race in that diluted form, it originates no disease whatever, but becomes the great sustainer of vegetable life. Nature surrounds us with poisons, and feeds us with poisons. The phosphorus so necessary in our food, without which she cannot construct a brain or a bone, would be in doses of one or two grains, a fatal poison, if not disguised by combination. The chlorine which is constantly in our food and blood, would be a deadly poison if admitted into the lungs, and would be dangerous in the stomach if not disguised by combination. The oxygen which is the leading element of the human body, and which by the lungs animates each moment of our life, is a most corrosive poison, when it is presented in a liquid form, without any agent capable of controlling its action. Hydrogen is also a rapidly depressing and fatal gas if inhaled. Nitrogen soon produces suffocation, and Carbon in any inhalable form is fatal, and in combination. contributes to the formation of many poisons.

Thus our bodies are built of poisons—we live and breathe in an atmosphere of poisons, we swallow poisons in health and in disease, but so long as we take care that they are properly combined or properly diluted and used in the proper quantity at the proper time, we enjoy health in obedience to the laws of nature, and know no poisonous effects. Poisoning, generally, results merely from the concentration of too great an amount of power in too small a bulk, so that the substance becomes destructive in a small, instead of a large quantity.

It is not *poisonous agents* that we discard, for if we discard them thoroughly, we must discard man himself, and discard

the whole plan of nature—but it is *poisonous practice* that we reject—all practice which produces injurious results, no matter how high the authority in its behalf. We utterly repudiate the idea that a physician must necessarily debilitate and injure the constitution of his patient. The fond father who exclaimed that he was deeply affected by the death of his child, but that every thing was done that was possible—that he had three physicians—that he was bled five times, leeched three times, blistered all over, and took seventeen doses of calomel, and as that could not save him, he could only submit to the will of Providence—expressed a delusion which you will contribute to dispel by showing that in such cases, it is the treatment and not the will of Providence which is fatal. When the public are properly enlightened on these subjects, we shall not have an aged ex-president like Andrew Jackson, tottering to the grave and exclaiming that he has had a return of his maladies, but with the lancet to correct the one, and calomel for the other I am of course greatly debilitated. The deaths of Jackson, Taylor, Harrison, Washington and Lord Byron are signal examples of a medical barbarism of which mankind are weary —and which we hope soon to place among the obsolete follies of that age when red-hot irons were applied to bleeding wounds instead of the simple but heretical practice of tying the arteries.

Gentlemen, shall we accomplish these things or not? Shall our principles be known throughout the world as the American System of Medical Science occupying this Continent, and and constituting the noblest embodiment of Medical Science, as our government is the best form of self-government, our ships, our steamboats, our locomotives, our agricultural implements, our fire-arms, and I may add, our armies are unsurpassed by any rivals? Is it our destiny to reap the just reward of truth and untiring labor, or shall Eclecticism go down like the Spartan, Athenian and Roman republics, corrupted within and overwhelmed from without? Shall it be blotted out like unfortunate Poland and Hungary—or shall it share the grander destiny of our own republic?

We have no reason to entertain a serious doubt if we continue to perform our duty. At our primitive organization, eight years since, had you enquired of any opponent what would have been our destiny, he would have prophesied *obscurity* and *contempt*. None but those who felt the internal inspiration of noble truths had any conception of our future progress. Had you hinted here to any professor of a medical college eight years ago, that the time would arrive in in 1853, when Cincinnati should have six medical schools, and five hundred medical students, but three hundred of the number should rank under a new name conceived in 1845, which in eight years growth should over-shadow all surrounding influences, he would have deemed you a visionary as John Fitch was deemed, for believing that in a few years, the flat-boats and keel-boats of the Ohio should be superseeded by the magnificent steamers.

And perhaps those respectable gentlemen who are so much astonished now, are destined to be more astonished hereafter. Our past is an index to our future, and every year new features of power and progress are developed in our movement. The central society organized last evening, may be one of the most efficient measures yet adopted.

The errors against which we contend are so palpable, that their doom is sealed, wherever free discussion is tolerated. The absurdity of taking from the human body its blood the immediate source of life—its red globules, the criterion of vital power, just at the time that life is endangered, and the vital forces reduced, will soon be ranked as a relic of barbarism.

But, on the other hand, the principles of rational Eclecticism are so self-evidently just—they so commend themselves to the common sense of mankind that many who have no just claim to the title of Eclectic are endeavoring to appropriate the name—conscious of the power which lies in a just principle. In that name we shall succeed. As when Constantine saw in the Heavens a figure of a cross, and the motto

"*In hoc signo vinces*," "By this sign shalt thou conquer," which was the forerunner of victory—so do we behold in the signs of the times, in the movements of the nations for liberty, the indication that destiny is with us, and believe like Constantine "In hoc signo vinces." But let us not forget in these martial figures of speech, that our vocation is one of peace and kindness:—we war against war for peace, we make a party against parties, we refuse to tolerate intolerance. We claim the right to do good without restraint as to form or fashion from any earthly power; we claim the right to unite in that reformatory army of benevolence whose labors according to the statistics of Cincinnati, reduced the mortality of Cholera from three or four hundred in the thousand to forty or fifty in the thousand.

You gentleman, constitute a noble addition to the army of peace—not like an equal number of recruits whom I have here seen gathered with horn and drum, marshalled in stern array for a foreign war:—the music which accompanied their march sounded in mine ear as a funeral wail, for few and haggard were they who returned from that campaign, and bloody were the records of their deeds abroad. How different it is with you, going forth as bearers of health and joy to unnumbered homes.

The gory cimetar may crash through skull and brain,
To still the purple founts of life,
But not by battle-axe or sword do you attain,
The glorious objects of your strife.

'Tis yours to staunch the flowing blood—to heal the wound,
To lift the mangled victim up—
To check the fever's deadly rage—the pulses' bound—
To give the healing, cooling cup.

'Tis yours to bring bright hope—to lift those sunk in gloom,
To call the dying back to life—
To snatch youth, love and beauty from the tomb,
To save the father, child and wife.

As soldiers boast of hostile legions slain in fight
So you may boast of pestilence dread,
Expelled from homes of peace and love, by tranquil might,
And battle fields that know no dead.

With honest pride you may survey in *living men*,
Eternal monuments of skill,
Knowing if man doth e'er a God-like act 'tis when
His science conquers mortal ill.

Then go, Eclectic vanguard go, your Hosts of Peace,
Are filling all our wide domain,
And Health attends your paths, as leaves and flowers increase,
When spring dissolves the winter's reign.

CLINICAL REPORTS,

At Newton's Clinical Institute.

SERVICE OF PROFESSOR NEWTON.

REPORTED BY PROF. E. FREEMAN.

(Continued from page 113.)

TWENTY-SEVENTH CLINIC. Feb. 7th.

CASE XLII.—Roark. Herpetic ulcer of the elbow. Continues improving, the granulations are healthy and there is nothing to prevent its healing soundly. Continue the treatment excepting use a larger proportion of the Meyer's Ointment in the combination of Meyer's and Zinc Ointment.

CASE LXXXIII.—Daniel Croney. Hemiplegia.

Can walk better, has more control over his limbs in walking,—has a pain in the right shoulder, also pain in the head—face is not so stiff and insensible. These symptoms show a return of the normality of the part and are favorable. The pain in the head is caused by the Quinine.

Treatment.—Continue the Quinine and Iron, but use it twice a day instead of three times.

CASE LXXXV.—Catharine Gaffney. Nebula and Leucoma.

Inflammation of the eye less, feels much relieved. Continue the treatment.

CASE LXXXVII.—D. D. Marsh, age 15. Opthalmia Tarsi and External Scrofula.

Been affected for fourteen years—eruptions about the eyelids and anterior

nares,—is healthy otherwise, there is only a slightly inflamed condition of the palpebral conjunctiva, while the edges of the tarsal cartilages are much inflamed and encrusted with a thickened secretion; the meibomian glands are but slightly affected.

Treatment.—Continue ℞ Comp. Syr. Stil. ʒj. three times per day.

Local Treatment.—℞ Hydrast. Canad. grs. xx., Seq. carb. potass grs. xx., water ʒj. *m.* Apply to the tarsi morning and evening; use the Zinc Ointment to the lids one hour after applying the above caustic solution. Make the same application to the nose and repeat. Use the alk. bath twice a week.

Case lxxiv.—James Farrell. Follicular disease of the throat and Bronchii.

Improving; has some cough but is much better. Continue the treatment.

Case lxxxviii.—E. Eagon, Hypertrophied and Indurated Tonsils.

Have been applying Argent Nit. 3 water ʒj, *m.* with the probang for three or four times. The inflammation has partly subsided, to day I excised the right tonsil with the guillotine—in one of the lacunæ of the tonsil there was a small quantity of tuberculous matter, the gland was much indurated—in the course of one or two days I will apply the Argent Nit. with the probang, to correct any morbid condition of the part and resolve the difficulty.

Case lxxxix.—Daniel Terry. Opthalmia.

Commenced six weeks ago,—epiphora attends it; the lachryma is more profuse at night and produces a scalding sensation upon the eye and face.

Treatment.—℞ Sol. Hydrastus Canadensis. Bathe the eye with it for two days, then use the Zinc Ointment twice a day. If inflammation arises, use the elm poultice.

TWENTY-EIGHTH CLINIC, Feb. 10, '54

Case xxxviii.—Thos. Flannegan. Stiff and swelled neck, caused by a fall.

Discharged cured.

Case xl.—James Kelly. Ectropion.

Discharged cured.

Case xlvi.—James McClary. Irritable ulcer at the Ext-Malleolus.

Discharged cured.

Case l.—Vandolen. Follicular disease of the throat, and Bronchial Blennorhea.

Was improving while under our treatment—went home—consulted a spiritual medium—used its prescription—lingered a few weeks under the influence of its medicines and died.

Case lxxx.—Thomas Crane. Weak ulcer of the elbow.

Improving; nearly well. Discontinue the Caustic—use Meyer's Ointment.

Case lxxxv.—Catharine Gaffney. Opthalmia.

Improving; can see better, eyes less congested, not so painful. Continue the treatment.

Case xlii.—James Roark. Herpetic ulcer of the elbow.

Is nearly well—scabbed over—is sore yet a little. Continue the treatment.

Case lxxxix.—John Ryan. Uniting-fracture of the lower third of the ulna. Provisional callous, shown to the class. Also straining of the carpal ligaments—bursa on the anterior face of the wrist.

Treatment.—Cold water dressing and roller.

Case lxxxvii.—D. D. Marsh. Scrofulous Opthalmia—Tarsi.

Improving. Continue the treatment.

Case xli.—Mary Jane. Scrofulous enlargement of the cervical lymphatic glands.

Much better. Glands dimished in size, gone home—may return in one or two months.

TWENTY-NINTH CLINIC, Feb. 14th, '54.

Case lxxxv.—Catharine Gaffney. Opthalmia.

Is much better. Eyes improving every day. No glimmering now, can see a person distinctly at some distance. Could not see a person distinctly close by when first presented at the Clinic.

Continue the treatment. The prescription used in this and other similar cases has become nearly a specific with us.

Case lxxxxi.—J. O. Conner. Indolent ulcer.

Caused by a kick from a horse three months since. Is now the size of a silver dollar—its edges are thick, hard and rough—granulations pale and flabby and its secretion sero-purulent.

Local Treatment.—Cover the sore with Sesq. Carb. Potass once every other day, using Meyer's Ointment during the intervals---we expect to cure it in four weeks from this time.

Case lxxxiv.—Lucy McGuire. Scrofulous enlargement of the lower jaw, near the angle; and Impetigo on the face.

Disease of the jaw is improving; general health improving. Continue the treatment.

Local Treatment of Impetigo.—℞ Oxalic Acid 3js. warm water 3j. *m.* Apply to the ring-worm twice per day, washing the part with castile soap-suds previous to the application.

Prof. Newton exhibited to the class an Arcephaloid Fetus of nine months uterine life—born three days since. The Fetus was of full size. one hand was slightly deformed---no other deformity excepting the cerebral deficiency.

The mother can give no cause for this singular monstrous development. During the period of utero gestation she suffered much pain in the right iliac region. As soon as the child was born the womb contracted and Dr. O. E. Newton (who officiated as obstetrician) could not introduce his finger into it by the side of the chord. Prof. R. S. Newton some hours afterward by the use of medicines and manipulations introduced first one finger and then the hand into the uterus, and with some difficulty peeled off and released the placenta. After this, the pain subsided.

February 17. No Clinic to day.

THIRTIETH CLINIC, Feb. 21, 1854.

Case xxxi—N. Wooland. Opthalmia. Improving; continue the treatment.

Case xcii—Thomas Keiser. Disease—Granular Palpebral Conjunctiva. Eyes much inflamed.

Treatment.—℞. Sesq. Carb. Potass. Hydrastis Canadensis aa grs. xx, water 3 j; *m.* Evert the lids and apply once per day; bathe the eyes with cold water frequently, also use the Tinc. Aconite 3 j; Hydrastis grs. xx; water 3 ij; *m.* Prof Newton remarked that he had observed a tendency to periodicity in all cases of Opthalmia that he had treated.

Case xciii.—Mary Shay. Opthalmia, with slight nebula of both eyes and incipient Staphyloma of the right. Has been affected for the last eighteen months; can scarcely detect the presence of a person on the opposite side of the street; cornea injected, much intolerance to light, not so much now as a few months since.

Treament.—℞. Elm poultice at night. Collyrium, ℞. Hydrastis grs. xx, Tinc. Aconite 3 j, water 3ij; *m.*, use through the day. I will cut the conjested blood vessels of the conjunctiva in a few days if necessary. You must treat this case as we did N. Wooland's for it resembles it somewhat.

Case lxxxv.—Catharine Gaffney. Opthalmia; improving. Inflammation less; blood vessels less engorged; ulceration disappearing; continue the treatment.

Case lxxiv.—Jas. Farrell. Follicular disease of the throat and bronchii. Discharged cured.

Case ii.—John Barnett. Cancer of the temple and brow; prognosis still unfavorable; continues to pick and scratch his sore, which keeps it irritated; in his dreams he pulls off the dressing, supposing it to be some wild animal that he has caught in the woods. There is no cancer about the sore, but it is only a weak sloughing ulcer; he may live some months yet. Left for home this morning.

Case xviii.—A. Leaper. Cancer of the face and ear. Discharged cured; has been home and well for two months.

Case iii.—J. Jennings. Cancer of the scalp. Discharged cured.

THIRTY-FIRST CLINIC, Feb. 24, 1854.

Case xciii.—Mary Shay. Nebula and Opthalmia; eyes much better; less engorgement; will not cut the blood vessels yet. Continue the treatment.

Case lxxxv.—Catharine Gaffney. Opthalmia; pain extending from the eye to the angle of the lower jaw, is disposed to have a chill every day when she exposes herself to the cool air. Eyes better. Treatment for the chill. ℞. Quinine, grs. vi; Pus. Iron. grs. vi; make powders vi; give one three times a day.

Case xxxi.—N. Wooland. Opthalmia. Improving; continue the treatment. You perceive that I have kept this patient upon a certain prescription for some time, and you may ask the question why I have not changed it, my rule is, to never change the prescription if it is answering a good purpose, "let well enough alone" is the old maxim, and this reminds me of a well remembered epitaph seen in a church yard in England, "I was well, wished to be better, took *physic* and died." There are in this city as well as in other cities of the Union, a large number of physicians who receive from the druggists a per centage upon all prescriptions which they send to them, thus inducing the physician to change the prescription often, and this per centage is added to the price of the medicines which the patient has to pay, and while the physician smiles and courts the favor of his patrons he takes this paltry measure to fleece them—some of these per centage practices I exposed in the daily papers some time since.

Case xcii.—Thomas Keiser. Granular Eyelids. Eyes improving since the first day; the granulations have smoothed down; pain in the left temple has disappeared. Continue the Sesq. Carb. Potass solution once more, and then use the Collyrium as prescribed previously.

Case iv.—J. Simmons. Herpetic Opthalmia. Discharged cured.

Case vii.—J. B. Hix. Necrosis. Improving.

Case ix.—R. Baskerville. Indurated and swelled testicle. Discharged cured.

Case x.—John Reed. Curved Spine.—Improving rapidly.

Case xii.—John Cassily. Intermittent Fever. Discharged cured.

Case xiii.—M. McDonald. Indolent Ulcer of the Shin. Discharged cured.

Case xv.—Timothy Mano. Disunited Fracture. Discharged cured.

Case xvi.—A. L. Sore Finger. Discharged cured.

Case xvii.—Anthony Kane. Chronic Conjunctivitis. Discharged cured.

Case xix.—Michael Courtney. Scrofulous enlargement of the Lymphatic glands and ulcer of the hand. Discharged cured.

Case xxi.—Richard Hooper. Inflammation of the ligaments of the ankle joint. Discharged cured.

Case xxii.—John O. Donaldson. Weakness of the lower extremities. Is nearly well.

Case xxiii.—Daniel Sullivan. Follicular disease of the throat. Discharged cured.

Case xxiv.—Barney Tracy. Irritation and hepatization of the left lung. Improving rapidly.

Case xxv.—John Given. Inflamed and ulcerated finger, bitten by a man. Discharged cured.

Case xxvi.— — Larkin. Syphilis. Discharged cured.

Case xxviii.—Mrs. Margery. Icterus. Discharged cured.

Case xxx.—John Baskerville. Tape worm. Discharged cured.

Case xxxiii.— Cunningham. Laceration of the thumb. Discharged cured.

Case xxxiv.—Thomas Gallagher. Incipient varicose ulcers of both legs. Discharged cured.

Case xxxv.—Anthony Riley. Jaundice. Discharged cured. His skin continued slightly icterode.

Case xxxviii.—Thomas Flannegan. Stiff

and swelled neck caused by a fall. Discharged cured.

CASE XXXIX.---John Hines. Nebula. Discharged, vision improved.

CASE XLIV.---Mary B. Tinea Capitis. Did not return.

CASE XXV.---Peter Carney. Inflammation of the ligaments of the ankle joint. Discharged cured.

CASE XLVII.---John McFadden. Follicular ulceration of the throat. Discharged cured.

CASE XLVIII.---Mary Kelly. Weak ulcer of the shin. Discharged cured.

CASE LI.---J. Barnes. Dyspepsia. Discharged cured.

CASE LIV.---James Scanlin. Talipes Valgus. Improving. Still wearing Scarpa's shoe.

CASE LX.---P. Paxton. Purulent Opthalmia. Discharged cured.

CASE LVI.---Martin Rody. Pneumonia. Discharged cured.

CASE LVIII. Incised wound of the hand. Discharged cured.

CASE LIX.---Ezra Senate. Curved spine. Improving rapidly.

CASE LXI.---M. McM. Intermittent Fever and follicular laryngitis. Discharged cured.

CASE LXII.---Charles Mayless. Intermittent fever. Discharged cured.

CASE XLIV.---W. H. Ely. Follicular pharyngo-laryngitis. Discharged cured.

CASE XLV.---Morris De Weer. Dyspepsia and hepatic torpor. Discharged cured.

CASE LXVI.---John Flannery. Purulent Opthalmia. Discharged cured.

CASE XLVII.---Michael Dulliver. Intermittent fever. Discharged cured.

CASE LXVIII.---Mary Kilroy. Gangrene of the toes from frost-bite. Discharged cured.

CASE LXIX.---Dennis Keating. Gangrene from frost-bite. Discharged cured.

CASE LXX.---Martin Garroty. Purulent opthalmia. Discharged cured.

The rest of the patients not noted, in this summary are yet under treatment, and will be reported with the reports of the Spring Clinic.

This being the last day of the course of Clinic Lectures and the hour of closing at hand, Prof. Newton remarked:

LADIES AND GENTLEMEN, members of the Clinic class, during our pleasant intercourse within these Clinic halls, we have examined a large number of patients, and prescribed for them according to their various diseases, and though the variety has not been so great as we would desire, or the major surgical operations so numerous as we have hitherto presented to the class, yet we feel conscious that we have presented to you disease in so many forms, that it has not failed to become exceedingly interesting. Our design in establishing this Clinic, was to make the class familiar with such forms of disease as you would be most apt to meet with in an every day's practice, and the best method of treating such, so that from the commencement of your professional duties, you might feel a degree of confidence in your abilities and thus be more likely to succeed; and we feel that we have not failed in accomplishing our purpose. You have from week to week watched the progress of cure in those patients presented, and have seen the various changes produced by the medicines and circumstances, both favorable and unfavorable, and have not only examined and prescribed in your own minds, but have suggested plans of treatment for some; and indeed it has been a good school for you all, to be remembered with a degree of satisfaction when you would, had not you received the training, been puzzled, on many occasions, and if I were sick, I would have no hesitation in receiving a prescription from any one of you who have paid close attention to what has been taught here. Among the diseases treated are ulcers of all kinds and grades, gangrene, syphillis, opthalmia, necrosis, ectropion, strabismus, laryngitis and follicular diseases in general, ague, &c. &c. &c. and others too numerous to make a summary of here; we have pre-

sented numerous cases of *cancer*, with the method of treating them successfully.—This disease is one of the curses of our country, and a knowledge of its pathology and mode of cure is almost a fortune to you, and even if we had taught you no more than to cure cancer, you would have been an hundred fold paid for the small amount expended as Clinic fee; and now gentlemen, since some of our *good friends* have said that we intend to "fleece you," and fleecing has something to do with wool and sheep skins, we will not account for the wool, but will present you with the sheep skin in the shape of a certificate of attendance, signed by R. S. NEWTON, M. D., Prof. of Clinical Medicine; Z. FREEMAN, M. D., Prof. Clinical Surgery; O. E. NEWTON, M. D. Consulting Physician.

GENTLEMEN, we part, the most of you to your respective locations to practice your profession, while some will meet us here in the spring session. We hope that you may profit by the instructions you have received in this hall, teaching us that our labor has been properly appreciated.

Here Prof. Newton presented each member of the class with a neatly engraved certificate signed as above, testifying that the presentee had attended a full course of Clinic lectures.

Part 2. Miscellaneous Selections.

THE THERAPEUTIC POWERS OF VERATRUM VIRIDE.

BY W. C. NORWOOD, M. D.

(*Concluded from page* 117.)

While on a visit to Georgia, in July, 1851, we were asked by Dr. M. to look at a negro woman of Mr. T's. She had been sick a number of days, with no abatement of the symptoms. Pulse 116, skin hot and dry, tongue red and dry, great thirst, more or less delirium, and a peculiar nervous motion, or more properly, a tremor and inability to hold the head still or to take a drink of any thing out of a tumbler with her own hand. The owner was exceedingly uneasy about the condition of his negro, as a great many had fallen victims to that disease. We might have noticed the gurgling noise, sickness at the stomach, and spinal tenderness, which had resisted the use of blisters to the stomach and spine, as well as cupping of the same, together with an alterative treatment of calomel. On being asked our opinion, we observed to Dr. M., we thought the fever could be cooled and the pulse reduced. By request, we remained five hours, put her on the use of the tincture of veratrum viride—gave her seven drops at 12, eight at 2, P. M., and nine at 4, P. M. In half an hour after the third portion nausea and vomiting were excited moderately. The pulse was reduced to 80 beats per minute, the skin became cool and moist, and the nervous tremor or motion very much relieved. The Doctor observed, that the pulse was reduced as low as he wished it; the dose was consequently reduced to four drops, to be given every three hours. A son of Mr. T. was also sick of typhoid fever. His case was mild, the pulse at the highest numbering but a few beats over one hundred. When the effects on the negro woman were known, he was quite anxious to take it also. Accordingly, he was ordered it every three hours, beginning with seven drops; to be increased one drop. The third dose excited severe nausea and free emesis, producing cool and moist skin, and reducing the pulse to 58 beats per minute. The portion was then reduced to four drops, at intervals of three hours. The next morning, at 9 o'clock, found the negro's pulse 80; delirium entirely gone, and full relief of all nervous tremor; skin cool and moist; tongue moist, and little or no thirst. The son's pulse was from 58 to 60, other symptoms in unison.

The above was an occasion of interest and solicitude to us, for the time, and our feelings can be much better imagined than expressed. Dr. M. dismissed the cases within thirty hours after we first saw them, the medicine to be kept up for a few days, and he to be notified in case of change for the worse. Dr. W. saw them, and Dr. S., then a student, was also present. Dr. W. has since used the veratrum viride extensively, and with great success. This circumstance led to its introduction into that region, Coweta, Troup and Heard, as Dr. M. practiced in the three counties. The letters of Dr. M., Dr. Ridley, and Dr. Renwick, are testimonials of their opinions of its value and beneficial effects in the treatment of typhoid fever, &c.

We were called with Dr. P., to see a negro girl of Judge B.'s, on whom he was attending. The girl was severely sick with typhoid fever, which had been unusually fatal in that region. The pulse was

from 120 to 130, when at the highest; tongue dry, and red on edge and tip, dark brown or black in the centre; great tenderness of the abdomen; gurgling or rumbling and tympanitic abdomen; decubitus on the back; feet drawn up; knees separated; muttering and delirious while inclining to sleep, especially during the night; tendency to diarrhea; tip of the nose peculiarly sharp or pointed—had been treated with calomel, turpentine, and camphorated Dover's Powder. It was on the eighth day we saw her, and, with desire of Dr. P., commenced giving the tincture every three hours. The patient being ten or eleven years of age, we commenced with two drops, and increased each dose one drop. In thirty hours the pulse was reduced from 110 to 90 beats per minute, surface became cool, and mouth and tongue moist. In fifty hours the pulse was reduced to 70, at which time she was nauseated and vomited—it was kept at between 75 and 85, till she was fully convalescent, and did not exceed that point, unless suspended, or given at too great intervals.

This was a case of no ordinary interest, as in that immediate section many had denied the efficacy and the powers of the veratrum viride, but had witnessed the mortality of the disease under every other mode of treatment. This closes the history of three cases we assisted in treating in Georgia. We will again turn to our own, and an adjoining county, and give the cases of most interest.

On the 14th July, 1852, we saw, in consultation with Dr. C., Mr. C. It was the sixth day of his relapse. Pulse 120, small, soft and weak; gurgling on pressure, and tenderness in the right iliac region; bowels flatulent and slightly tympanitic; burning in the palm of the right hand; edges and tip of tongue dry and red—slight white fur on the tongue, which we attributed to calomel; preternatural wakefulness. Had been treated with alterative doses of calomel and Dover's powder—had taken an emetic. Gums slightly distended from calomel, fetid or mercurial breath, and a number of small ulcers on the cheeks and tongue; skin dry; bowels inclining to diarrhea, but readily controlled. By consent, was put on the tincture of veratrum viride every three hours, to be increased slowly, and to avoid emesis, as he was opposed to taking it till it produced this effect. This is a great error; for those who take it till free emesis is excited, and the liver properly aroused, convalesce much faster. Commenced with three drops, and increased one drop every portion given, till six were taken, and slight nausea produced. It was then reduced to three drops, or more, according to effect. On reaching six drops, the pulse was reduced to 80, and kept from 80 to 85. By continuing this treatment for a number of days, the pulse was reduced as low as 70 in the morning, with the skin rather cooler than ordinary, and towards sun-set it would get up to 80 or 85, and the skin would be rather warm, and accompanied with more or less restlessness till midnight, and then pass off. It was suggested to try a few portions of quinine. The morning on which he took the quinine, the pulse was 70, skin cool, mouth and tongue moist. A portion of quinine was given at 9 and 11. Before 1, his pulse was 130 to 135, and skin hot and dry, and a general aggravation of all the febrile symptoms. The veratrum viride was resumed in full portions for a few doses, which soon subdued the excitement, and was continued. Convalescence was slow but perfect. It is an error, not to reduce the pulse as low as sixty in many cases. There is as much febrile excitement in some, with a pulse of 80, as there is in others with a pulse of 90 or 100; consequently, when this is the case, the convalescence will be extremely slow. In such cases, the veratrum viride should be given till free emesis is excited, and the pulse should be kept at 60 or under.

On the 19th of July, 1852, we were called into an adjoining district, to see a negro woman of Mr. G.'s, in consultation with Drs. T. and McD. We saw her at 8, A. M., on the 20th, the 12th day of the disease. She had been treated with all the remedies usually resorted to, without relief. She was slightly mercurialized; supposed to be three months advanced in pregnancy; pulse 130, extremely quick and weak, so much so that it was difficult to count; tongue dry and red on the tip and edges, with a thick dark fur in the centre. The papillæ that were not covered with fur, were elevated, enlarged and flattened at the top; thirst extreme; great heat in the region of the stomach, and complaining of internal heat and burning; extremities cold, with general coldness of the surface, except over the region of the stomach; answered questions in a quick and hurried manner—would invariably change some part of the body before giving an answer. Discharges from the bowels dark and muddy, mixed with slime; more or less tenderness and gurgling on pressure in the right iliac region; tendency to diarrhea slight. On the ninth day from the attack, there was a sudden and decided change for the worse, and brandy and quinine were freely given to sustain the action of the heart and arteries, and the surface was thoroughly rubbed to keep up external warmth.

We have given such a description of the treatment and of the patient, at the time of our first visit, as will be fully endorsed by the physicians in attendance. Two cases had just terminated fatally in the same family, and two others in a family not more than six hundred yards distant. We could not complain of the reputation that had preceded us; but the standing of the medicine was any thing but favorable in that region of the country. The previous and threatening mortality, the severity of the case, the new remedy, the unfavorable prognosis of the physicians in attendance, naturally excited the deepest interest, and curiosity was wrought up to the highest point as to what course would be pursued. By consent, every remedy was discontinued, both internal and external, and the tincture of veratrum viride ordered every three hours, to be increased *pro renata*, which we superintended in person from 9, A. M. till 5, P. M. Three drops were given at 9, which nauseated and vomited pretty freely before 12. The first matter thrown up was a large quantity of mucus and slime, followed by a quantity of dark, green bile, or bitterish fluid, on the ejection of which she expressed considerable relief from the unusual burning or heat in the region of the stomach. Four drops were given at 12, which excited free emesis in from thirty to fifty minutes, bringing up an abundance of thick yellow bile. After this paroxism of vomitting had subsided, the extremities and surface generally became warm, or, in other words, there was a general diffusion and equal distribution of heat. She expressed perfect relief from internal heat or burning, followed by a general feeling of agreeable coolness; but three drops were given at three o'clock, which excited slight nausea, and perhaps a slight but single paroxism of vomiting. What we had achieved when we left (at 5, P. M.) was the relief from unusual heat in the stomach, severe thirst, general restlessness, an equal diffusion of heat and greater fulness and distinctness of the pulse. Instructions were left to continue the veratrum viride in three or four drop doses, as she might be able to bear it, avoiding too much nausea and vomiting, if possible. After leaving, we sent a message back to give twenty or thirty drops of laudanum, one hour before the next portion, to prevent nausea or vomiting, if possible.

That night, as a matter of course, was passed by us with more or less anxiety and interest. On reaching the patient the next morning, the viride was exciting very little nausea, the pulse was reduced to 120, more full and distinct, and all the other symptoms were slightly improved. We were not satisfied with the small quantity of the veratrum viride we were using; we therefore ordered an enema of four ounces of cold water and six drops of the tict. of veratrum viride every six hours, and the three drop doses, every three hours, to be continued, thus making in all, forty-eight drops in the twenty-four hours. The enemata were ordered to be given between the portions by mouth. The nausea and vomiting were kept up for a time after each enema, but not to an extent that required them to be suspended, and which subsided after a few repetitions of the enema.

The morning following, which was the fourteenth day of the disease, the pulse was down to 100, and with a like improvement in all the symptoms. The morning following, the pulse was reduced to 85, and all the other symptoms were greatly mitigated, so much so that we were not to see her for the next forty-eight hours. On Sunday morning, at 9, a. m., (the seventeenth day of the disease,) we were at our post, with our pleasing anticipations disappointed, blasted, and for the time, scattered to the winds,—but to fight the battle at far greater hazard. Found her flooding; pains severe and frequent. Requested Dr. T. to examine the condition of the uterus; found the os tincæ soft and dilated, so that he could discover a substance or body presenting; gave her a portion of ergot; the fetus was thrown off within half an hour, and flooding ceased. By this time the pulse had reached 135 beats per minute, was peculiarly quick and feeble; number of respirations 63 per minute; skin hot and dry, the heat of that peculiar acrid kind called "calor mordax;" thirst greatly aggravated. The veratrum viride was increased to five drops every three hours; spirits of turpentine to be given every six hours, in fifteen drop doses, in a little warm sweet milk to cover the taste, which excels any vehicle we ever tried. The enema of cold water to be continued every six hours, and the viride increased to eight drops. When we left, at 4 o'clock in the afternoon, there was slight moisture of the surface; the pulse was 130, more full and distinct; breathings a little less frequent and hurried. On the day following it was reduced to 98 beats per minute; on the following day it was reduced as low as 85, with a like improvement of all the symptoms. The remedies were continued, and she rapidly and perfectly convalesced. It did aprear that Providence brought us safely through the most critical of all the cases we have met. It also appeared, that so soon as the fetus was thrown off, she was much less suscep-

of its use and effects:—When called to a case of typhoid fever—with a hot surface, frequent pulse, great restlessness, in a word, with all the symptoms of such a case—if the patient be an adult, I commence with giving him 8 drops of the article every two hours, and increase the dose a drop or two at every succeeding dose, until slight nausea is produced, never fearing but that when this effect is produced I shall have a cool surface, and infrequent pulse, and an absence of all febrile excitement. I then continue more or less of the article, until the case is broken up." Dr. J. A. Stewart, in a letter on the same subject, writes thus: I do not believe any remedy or combina- of remedies possess the same powers in pneumonia or pleuritis as yours—it not only lessens the frequency of the pulse, but exerts a curative influence on the disease, and with regard to its lessening the frequency of the pulse, I unhesitatingly say, without fear of successful controversy, that it will control the pulse in *any* and *every* case where it is morbidly excited. I regard your "remedy" as peculiarly adapted to the treatment of pneumonia typhodes, pertusis, typhus fever with increased action of the heart and arteries. Mr. Rodgers, in whose family you practice, was attacked with typhoid pneumonia about the time you left home. And Drs. Agnew and Traynham attended him, and when all hope of his recovery was lost, his family recollected that some of them had been rescued from an untimely grave by your remedy—urged the physicians to give the "drops." Neither of the physicians having the medicine, they determined to send to me for it; and, with only 3 ij of the tincture, both of the physicians assured me they had saved Mr. Rodgers, and would not take less than five dollars for the remnant of the two drachms."

We challenge the world to discredit the above. We pledge ourselves, and stand ready to demonstrate the powers and effects claimed. We have staked our reputation for veracity and medical skill on the above, and we are perfectly willing to abide the verdict of a liberal and enlighted profession and intelligent community. Truth is omniptent. The above was not got up in a day, or in a corner, but is the result of years of laborious investigation, and of time and money spent to prove and test the certainty and correctness of our experience, and the conclusions reached. the world can either receive it or reject it.

We will, for the benefit of many who have written us, state the diseases in which we have used it with success, and leave the matter with the profession for further experiment and application from analogy. We do not hazzard any thing of opinion or reputation, when we assert that it is a specific in pneumonia, in the qualified terms we have stated; we say the same of convulsions accompanied with high febrile excitement, also of palpatation of the heart. In typhoid fever it has more than answered our most sanguine anticipations; we assert the same of puerperal fever, rheumatisms and asthma. In the spring of 1851, we were called in consultation with Dr. Stewart, to Dr. G.'s child, who was well nigh run down with the hooping cough, fever and diarrhea. We advised the tincture of veratrum viride, which acted like a charm, since which time, Dr. S. has written us a letter highly extolling it as unparalleled in the treatment of hooping cough. We have seen no case of metastasis to the testicle in mumps, that was not relieved of pain and fever in twelve hours. It may be styled *the remedy* in croup, when there is great vascular derangement. We have used it with great success in inflammation of the brain also in typhoid dysentery. It is a valuable emmenagogue. In the inflamed breast, we give it with a confidence bordering on a certainty of success. In epileptic convulsions we have confidence of obtaining great relief from it. We look with confidence to being able to cure consumption, by a timely and judicious use of it. We trust even cancer will be robbed of its terrors. We are anxious to test its powers in yellow fever and in phlegmasia dolens, &c.

In conclusion, we will state to the profession at large, that we have endeavored to give a faithful and unexaggerated account of a portion of the cases in which we have used it, with a statement of its powers and properties. We know that we have like passions with other men, and that we are liable to be carried beyond the bounds of truth and soberness, as well as others, in our great desire to advance and consummate as far as we may, the honor and perfection of our science. But we feel confident, that when all is cool and calm—when every property and power is put to the test of fair and proper trial—that every effect and power claimed by us belonging to and possessed by veratrum viride, will be emphatically confirmed and established by the profession. We have not made any effort to distinguish between its primary or direct and its secondary or indirect effects. If we have succeded in getting the profession awakened to its properties and enlisted in the investigation of its application and adaptation to the treatment of disease, we have achieved our object.

Part 3. Editorial.

PHYSIOLOGY, PATHOLOGY AND HYGIENE OF THE LIVER.

(*Continued from page* 89.)

Pathological conditions of the biliary Secretion.—The secretion of bile may be either excessive, defective or morbid. Of morbid bile we know but little, because it cannot be collected and examined during life, but there is no doubt that an unhealthy state of the blood, or the absorption of irritating materials or drugs from the intestines may cause a vitiated condition of the bile, producing irritations of the gall-ducts, gall-bladder and intestines and deranging the process of digestion. An acid condition of the bile is mentioned by Dr. Budd, in a subject dead of "cancerous ulceration of the rectum and granular kidney," the bile was "of a pale amber color." Urea may be present in the bile when the secretion of the kidney is suppressed; it was detected in the bile of a cholera patient (three parts in a thousand) by Dr. O'Shaughnessy. In cirrhosis and other diseases which change the structure of the liver, the bile is sometimes found pale, thin and of less than its usual bitterness. In dropsy too it has been found pale and thin. A dark viscid condition of the bile is found in cholera and consumption, produced by its retention and inspissation. A dark, concentrated condition of the biliary secretion may arise from the excess of materials for bile, which becomes a cause of oppression and disturbance until the bile is discharged. This condition produces a foulness of the tongue and fauces and a bitter taste in the mouth and sometimes headache. Anxiety or depression of spirits arises from this bilious condition and the discharge of this accumulated bile into the intestines is apt to produce purging and vomiting. The concentrated condition of retained bile is apt to favor the developement of gall-stones. The concrete biliary matter generally forms the nucleus, and cholesterine aggregated around it forms the gall-stone, which becomes a serious obstruction to the cystic duct or the ductus communis—sometimes they are formed and lodged in the hepatic ducts or in the substance of the liver by the mere obstruction and inspissation of the bile forming a dark substance while the cholesterine is white and crystaline. Other solid substances beside inspissated bile may serve as the nucleus of a gall-stone. A pin, a worm, inspissated blood and even globules of mercury have been mentioned by different authors as nuclei of gall-stones. These calculi have in some rare instances a calcareous character, consisting of carbonate or phosphate of lime.

Gall-stones seldom occur until the individual is past thirty and the majority of cases are over fifty-five. They are more frequent in families and persons of sedentary habits, and their developement is much favored by the cancerous diathesis.

When gall-stones have been formed they may sometimes produce an irritation and ulceration of the gall bladder or fatty degeneration of its coats, or they may be a product of these conditions. If they remain in the gall bladder they do not generally cause much disturbance or more than a little local uneasiness, but in passing to the duodenum with the bile they may block up the cystic duct and cause its obliteration by adhesion, thus depriving us of the use of the gall bladder. They may even get lodged in the common duct after passing through the cystic duct, thus producing a severe attack of jaundice, by preventing all escape of bile. However, the pressure of the accumulated bile is almost sure to drive the calculus slowly on to the duodenum even if violent distention be necessary. Very large calculi may produce colic, constipation, tenesmus or fatal ileus in their passage through the bowels. Small ones may lodge in the vermiform appendix and produce an abscess; but such cases are very rare. The common duct expands sufficiently to allow a calculus as large as an almond to pass. If it cannot be discharged from the common duct, it may produce fatal jaundice, a biliary abscess, or cause a fatal rupture of the distended gall bladder, pouring its contents into the peritoneum. Calculi sometimes escape from the duct or gall bladder by

ulceration into the duodenum or colon, forming a fistulous orifice (secured by adhesive inflammation around it.) The violent irritation produced by the distention from the calculus in its passage, brings on severe paroxysms of pain, with nausea and vomiting of acrid matters, general prostration and feebleness of the pulse, cold sweats and sometimes rigors, similar to those produced by extreme distention of the bladder. The debility and nausea thus produced may be accounted for by the neurological relations of this region to the entire body. This prostration is so great that death has been produced without apparent cause, but the inflammation of the duct and the adjacent portion of the duodenum. Urinary disorders frequently accompany these attacks, and there seems to be some connexion between biliary and urinary calculi from the frequence of their coincidence.

As to the cause of gall-stones, they can only be referred to some unhealthy state of the liver and gall bladder (not understood,) and to retention of the bile favoring its inspissation. Temperance and exercise in the open air are the best prophylactics.—Alkaline mineral waters may be serviceable.

Excessive Secretion of Bile is a natural mode of relieving the constitution from an excess of imperfectly assimilated matter. Hence those who indulge in luxurious intemperate habits at the table, and do not have the corresponding amount of exercise and respiration are frequently attacked by a bilious diarrhea, after which they find themselves much better—or if the liver be too inactive to give them this relief, they find themselves unwell, and take a cholegoge purgative which restores them to a comfortable condition. In going to a warm climate it is very common to have a bilious attack of this kind, often accompanied by more serious symptoms of disease. The cause is found in the fact that in a warm climate the respiration is not sufficient to remove the crude materials from the body, and hence they accumulate until the liver is excited to discharge them. For the same reason indolent habits and excessive sleeping tend to produce a bilious condition by diminishing the respiration. Sleeping just after a full meal is especially pernicious, whether it be after a heavy supper at night or after dinner. It may be, however, that a very short nap taken while sitting in the chair or in a slightly recumbent position would not be injurious. Whether it would or not would depend on the general habits and condition of the person. If the general habits are active, and the blood kept in a pure condition by the healthy action of the viscera—a little indulgence in sleep might not be injurious.

Defective secretion of bile.—As the excessive secretion of bile is checked by exercise and abstemiousness, it is obvious that these means may carry us too far and diminish the secretion to an injurious extent. Bleeding to death produces an anemic condition of the liver, and abstinence may have a similar tendency. The healthy natural diminution of the bile in temperate industrious persons may be carried too far by a life of severe labor, high excitement, rigid abstemiousness and little rest. The hydro-carbonaceous matters of the blood in such cases are consumed by the lungs, and the blood becomes too impoverished to furnish much bile. Digestion is therefore somewhat impaired (especially of oily food) and acidity in the stomach and bowels becomes productive of dyspepsia diarrhea, headache and other disorders.—These consequences, however, are not apt to ensue if the liver be healthy and well developed, but if it be very small or incapable of healthy action, these disorders in the alimentary canal ensue. In these cases the constitution is not in a decidedly bilious condition, but presents a lean compact appearance, and the disorder is limited to the digestive organs.

But when the bile is superabundant, from the effects of high living and indolence, or from climate, defective secretion of bile is a different affair. A healthy liver aided by a slight use of cholegogues will remove this condition, but adhesive inflammation in the substance of the liver, rendering it contracted and yellowish from hindrance to the circulation (which is most commonly

caused by alcoholic beverages used to excess,) or from impairment of the secreting structure produced by hot climates, renders it difficult to perform the necessary offices of life. The patient has imperfect digestion and is constipated. He is jaundiced lean and shrunken with a dry wrinkled skin. If the suppression is complete, the functions of the brain are greatly oppressed and the consequences must be fatal; although life may be considerably prolonged in consequence of the partial relief afforded by the escape of bile through other outlets especially through the kidneys which discharge a bilious urine that gives a yellow stain to linen

In this condition it is necessary to take a course exactly opposite to that which produced it, by strict temperance and exercise in the open air in a cold climate.

A defective secretion of bile may arise from its retention in obstruction of the ducts by gall stones. It may arise from destruction of the secreting cells, which is sometimes produced by this retention. They may also be destroyed by atrophy, inflammation or softening of the liver.

In fatal cases of defective secretion from softening of the liver combined with atrophy reported by several authors, this condition has produced congestion of the brain, delirium, stupor, coma, dilated pupils, spasms, and even a paralytic tendency. In such cases there is but little serum in the brain, but its blood vessels are full, showing congestion especially in the basilar and anterior portions. The liver is small, soft and yellowish, and its cell structure injured or destroyed.

Such cases show a remarkable sympathy between the liver and the brain.* The direct sympathy between the brain and liver, is also shown in the fact that grief and great mental depression, very frequently produce a congestion of the brain, and may even result in jaundice.

The congestion of the brain, and coma, in certain cases of biliary suppression, may possibly be referred to the influence of bile in defibrinizing the blood, as it has been shown by recent experiments that bile entirely destroys the coagulability of the blood.

The *temperamental and pathological variations* of the liver, relate to its *color, firmness and size.*

The COLOR is derived from its fluids—the blood and its secretions. The blood when congested in the capillaries produces a dark red color; as its quantity is diminished, the color becomes a lighter red, and when the blood is quite deficient a yellowish color is perceived. This circumstance originated the idea which pevailed until recently, that the liver contained distinct yellow and red substances. Being injected generally by the hepatic veins and capillaries, they were decidely red and surrounded by the ramifications of the portal vein, made yellowish by biliary cells.

The coloring fluids of the cells produce a tint varying from a light brown to a deep olive, according to the quantity of oil globules and biliary coloring matter they contain.

It is obvious from this explanation that a congested state of the liver will produce a very dark color, and that when from its functional inactivity, or from compression, or from great losses of blood or any other waste producing anæmia it is deficient in blood, its color must become lighter, being dependent on the cells and their secretion, which produces an orange, or yellowish, or even greenish tint.

The SIZE AND SHAPE of the liver depend chiefly on the number and size of its cells, secondly on the quantity of blood in its vessels. The quantity of blood is increased by whatever throws a greater quantity of blood to the liver, or obstructs the discharge of its blood by the hepatic vein. Unusual developement and exercise of the abdominal viscera, as from gluttony or intemperance, supplies the liver a greater quantity of blood, and encourages congestion. The retardation of the discharge of blood by the hepatic vein, is effected when debility or disease of the heart renders the

*Abercombie gives a case in which a female was deeply jaundiced, vomited, and at length threw up black matter, but had no cerebral symptoms. Her liver was atrophied to nearly a third of its natural size, was dark soft and disorganized

circulation languid, or when indolent habits diminish the action of the heart, or when disease of the lungs obstructs the flow of blood from the right heart. Hence the fatty liver of pthisis pulmonalis.

It is quite common in organic diseases of the heart to find the liver congested and enlarged—to find its edge perceptible two or three inches below the short ribs.

Congestion from any cause long continued, is very apt to result in structural disease.

All these causes of hepatic congestion, except organic disease of the heart and lungs, are removed by temperance and exercise, which cause less blood to go to the liver and more to leave it.

In fatty conditions the cells greatly increase the size and thickness of the liver, as well as the size of its lobules which become very distended. Tumors, inflammatory deposits and enlargement of its ducts, mayalso increase its size.

The size and shape may be greatly changed by pressure, as by an aneurismal tumor, or by tight lacing, or by flatulence. When the colon is distended by flatulence, it compresses the liver. A cast in the museum of King's College exhibits a deep groove in the liver, formed by the pressure of the colon distended by gas. Tight lacing frequently flattens the lower portion of the liver and increases its length from above downwards.

The FIRMNESS of the liver may be greatly decreased by congestion, and by deficiency of fibrin in the blood. It is also quite soft when there is an accummulation of oil in the cells.

Its firmness is increased when the venous blood is diminished, and it is relatively better supplied by the hepatic artery. It may become unusually firm and solid from interstitial deposits, from the fibrin of the blood in inflammatory conditions.

Congestion of the liver depends on the proportion between the amount of blood introduced by the portal vein and the hepatic artery, and the amount removed by the hepatic vein. Consequently, whatever increases the amount of portal blood increases the liability to congestion, and renders it more formidable when it occurs. Hence, high living and intemperate habits, especially the use of pungent condiments and alcoholic drinks, are among the causes which render congestion more frequent and more serious. A temperate man would escape congestion in a climate where it would be sure to seize the dram drinker. (Dr. Cartwright of Natchez and New Orleans, has published a very interesting illustration of the relative effects of temperance and intemperance, showing that of 62 physicians who settled at Natchez between the years of 1824 and 1835, 37 who were strictly temperate are all living (1853) except nine—while the remaining 25 who made use of ardent spirits, are all dead except three. Of seventeen physicians who were at Natchez thirty years ago, and whose habits were temperate, twelve are still living—but every one who was addicted to tippling is long since dead.)

Strict temperance is therefore especially demanded in every locality where hepatic diseases abound, and indulgence in stimulants is much safer in climates where such diseases are rare. The colder the climate the greater the impunity of spirit drinkers and gluttons.

Pathologists, however, affirm that congestion arises generally from the obstruction to the escape of the venous hepatic blood, as it shows itself chiefly in the ramifications of the hepatic vein. Its presence is not positive proof that the congestion originated in the hepatic vein, as the blood in the portal vein would probably flow on into the hepatic branches, at and after death. This congestion of the hepatic vein causes an accumulation of blood, and consequent redness in the centers of the lobules, while their margins having less blood, present a more yellowish appearance. But, as the congestion increases, the entire mass of the liver becomes uniformly red, and the lobular appearance is lost.

The causes of congestion are numerous. Everything that weakens the action of the heart, diminishes the amount of blood re-

moved from the vena cava and the hepatic veins, and consequently favors congestion; hence a portal congestion generally occurs at death. The weakened action of the left ventricle favors pulmonary congestion, and tends to produce a blue or purplish complexion, while the weakened action of the right ventricle, tends to produce a yellowish hue, as it favors congestion of the liver, the head and indeed the whole venous system. The head, however, does not yield to a congestive influence as the cranium protects the brain from distention; but the liver being nearest the right heart of all our important organs, and being of the most distensible tissue, is of course of all bodily organs, most liable to become congested when the action of the heart is enfeebled. Hence every debilitating influence upon the heart becomes a congestive influence upon the liver. The hot sun and malaria of unhealthy climates, the fatigue from excessive labor, grief and other depressing passions, debility from unwholesome food, and diseases of the alimentary canal, (dysentery, typhus, ulceration of the bowels, hemorrhoids, &c.,) debility, in short, from any condition of disease in which the circulation is not active, may become a cause of hepatic congestion.

The impression of cold on the surface, when our calorific energy is not sufficient to keep us warm, drives the blood inward and is another important cause of congestion in the liver as well as the lungs. In very warm climates and seasons, this cause is perhaps more operative than in cold ones, as the delicate constitutions of the inhabitants are easily affected by the chilly influence of the morning or evening air. (Hence the importance of having a fire in our apartments in the mornings, and evenings when they are at all cool.)

The coldness of cholera and of ague are also causes of severe congestion, which in both cases affects the liver and tends to the suppression of the biliary secretion, a fact which renders cholegogues beneficial in both diseases. The remarkably depressing influence of serpent bites is another cause of hepatic congestion, and as explained heretofore, a defibrinized state of the blood is a cause of hepatic congestion, as well as of all other local congestion. Hence the tendency of severe fevers generally to produce congestion of the liver. ("In a person dead of purpura hemorrhagica, says Dr. Budd, I have found the liver and spleen very large and of the dark color of a Morello cherry, from the great quantity of blood they contained.")

The imperfect action of the heart in various states of organic disease, is a frequent cause of hepatic congestion, and even obstruction to the circulation through the left lung, may extend its influence through the right side of the heart, and develope or increase congestion of the liver.

All these causes of congestion are favored by those indolent habits which while diminishing the power of the heart, render it more liable to yield to depressing influences.

Congestion to a moderate extent may increase the biliary secretion by increasing the supply of blood for that purpose, especially when it arises from the portal vein. Thus, an excessive supply of blood to the liver from intemperate eating, provokes in many cases that biliary flow, which operating on the bowels, produces efficient depletion. But, as congestion generally implies retarded circulation, and lowers the vitality of the organ, hepatic congestion is generally a cause of diminished secretion of bile, producing that coated condition of the base of the tongue, and unpleasant taste in the mouth which belong to the deranged liver, together with more or less of the yellow or dark hue produced by the presence of bile in the circulation, as well as the depression of the animal spirits and cerebral energy, which result from bilious blood and the diseased liver. Congestion, whether of blood or bile, still more efficiently reduces the amount of bile by oppressing the secreting cells, hindering the discharge of bile through the hepatic ducts, and ultimately diminishing their number and producing their absorption or destruction. This it may do more readily when the liver has become hardened and contracted by previous inflammation, and cannot yield,

and of course this destruction of the cells produces a jaundiced condition, and is more dangerous to life in proportion as it is more extensive. Still one may live many years with his liver very greatly impaired in structure and functions.

If the structure of the liver be soft, as it is in the young, and relaxed temperament, it yields more readily to distention and becomes much enlarged by congestion, especially if it has but little pressure from the neighboring organs, as in persons of indolent habits (who make less exertion of the abdominal muscles and diaphragm,) and in those whose ill health prevents their eating enough to keep the stomach distended. It projects below the edge of the false ribs on the right side, and in cases of extraordinary enlargement even reaches to the pelvis.—The frequent repetition and long continuance of the congested state, bring about this great enlargement.

When the liver thus yields, great congestion may occur without any jaundice or suppression of the biilious secretion; cases of this kind are related by Andral.

To remove Congestion of the Liver we must diminish the afflux and increase the efflux of blood. We diminish the afflux by diminishing the amount coming from the abdominal organs, by means of temperance or abstinence and the depletory action of cathartics and diuretics. Probably the most efficient means of reducing the hepatic afflux will be found in *a fruit diet*. This not only diminishes the material for the formation of bile, but by its cooling anti-phlogistic effect on the alimentary canal, diminishes the amount of blood furnished the liver. The efficacy of a grape diet in hepatic disorders, (highly esteemed in France) is an appropriate illustration. Grapes and peaches and ripe fruit generally, may be recommended, and if animal food is indulged in, the use of cooked and ripe fruit may serve to neutralize its bilious tendency.

We increase the efflux by such increased exercise and respiration as may carry on the blood—by stimulants and tonics which may increase the force of the circulation—by mechanically expelling the blood as in the act of vomting—by mechanically withdrawing it as by cupping over the liver—by counter irritation and by hemastasis, and especially by promoting the secretion of the liver itself, with cholegogue remedies upon which physicians mainly rely, which probably have some tonic as well as evacuant influence on the liver. B.

(TO BE CONCLUDED IN OUR NEXT.)

CHOLERA INFANTUM.

This form of disease is unknown to European society, and but little known in our own country, except in our middle and southern states.

If to those conditions of the mucous membrane of the intestines which constitute feculent and catarrhal diarrhea, we add a derangement of the liver and an erythematic inflammation of the mucous lining of the stomach, passing sometimes into a state of congestion, we shall be able to form a pretty accurate conception of cholera infantum.

The exciting causes correspond with this synthesis—improper food and atmospheric exposures of the body, as by the use of insufficient clothing. We shall find the evacuations from the bowels and the condition of the stomach still further sustaining the above estimate of it.

The natural fæces are frequently greatly retained, while the others are sometimes thin and serous or watery, sometimes more consistent and consisting principally of mucus occasionally containing some blood. The color is variable, being green, yellow, white, or brown, inodorous or very offensive, but generally having a sourish smell. Sometimes the alvine irritability is such that the ingesta lienterically pass through the intestines.

Although the intestinal actions, in the beginning, may only indicate a diarrhea, yet the stomach is generally affected from the start, and when the attack is violent, the vomitings and purgings are attended with such spasmodic actions as to resemble the cholera morbus of adult life.

The fever, which soon follows the first

symptoms, is irregularly remittent, having its highest exacerbations in the evening. The brain is greatly involved, as is manifested by the delirium and even frenzy which attend it. The eyes, by their fierce or languid expression, when awake, and half-closed condition, when asleep, are indicative of the same.

The pulse is generally small, quick, and feeble, or irritated and corded, but rarely full or strong. The thirst is intense and cold water is urgently demanded, and as soon as it is swallowed it is rejected. With all this, there is an unequal distribution of temperature, while the extremities are cold, the body is very hot.

Emaciation progresses in this affection with great rapidity—the complexion becomes pallid, the flesh flabby, and such is the demand of the respiratory function, that the fat becomes entirely absorbed; livid spots appear which finally pass into ulcerations.

The eyes and cheeks become sunken, the lips shriveled, the integuments corrugated, except on the forehead, and nose pointed. Now, such is the character of the disease, that at this stage it is possible for the patient to recover, but still it is probable that he will not.

In many instances, the vomiting, in connection with the above symptoms, continues to the close of life; but more generally it ceases, leaving a diarrhea to wear out the patient. In still more advanced stages of the disease, several other fearful symptoms are generated—the abdomen becomes tumid or sunken, the mouth becomes moist and aphthous, petechiæ and a small, vesicular eruption appear on the breast, the skin becomes of a dull and dirty hue, and the conjunctiva appears bloodshot. The circulation has become exceedingly languid, the patient very restless and plaintively moaning, coma comes on and terminates the suffering, but not always without symptoms of hydrocephalus.

The vesicular eruption on the breast, the discharge of living worms, and the thrusting of the fingers into the back part of the mouth, as though desirous of withdrawing something, are regarded as invariably fatal symptoms: but the tenacity with which the infantile system clings to life, in this form of disease, most generally, is truly remarkable: the struggle seems to be one of time, and if the physician can stay, even to some extent, the progress of the disease, to a more advanced season, the patient may recover, however improbable it might appear from the exceedingly worn-out condition of the patient.

In duration, the disease varies from a few hours to weeks, and from weeks to months; and in accordance with an old adage, it may almost be truly said of it, that "while there is life there is hope."

Causes.—Much has been said about the cause of this disease—it is maintained by very many that the process of dentition, the existence of worms, and exposure to cold have much to do in producing a predisposition to it. But all of these causes operate upon children in the second dentition, and yet they do not have this disease. Again, all these causes act upon children, under two years of age, during the cold months, as well as the warm ones, and yet they are not assailed by it. The children of other countries, and in the same latitude, are operated upon as much, by the same causes, as are the children of this country, and yet they do not have the disease. Is it safe, then, to infer that these causes have any agency in the production of it? As it occurs during the process of first dentition, it is very convenient for those who have not candor enough to confess their ignorance, to avail themselves of the coincidence, as of a cloak with which to hide their ignorance.

Prof. Wood, in treating of this disease, says, that the first indication is to remove the causes, and that while these are permitted to continue, the physician can do but little to promote a cure. Now, as we are sure that the causes have not been discovered, we are equally sure that they are never removed unless by accident, hence we may charitably suppose that the astonishing fatality of the allopathic practice, in this disease, is to be charged to the non-removal of the causes.

As the disease is confined to a certain district of country, we hold it to be impossible to remove the causes, but it is possible to remove the child out of the midst of them.

We are told that this disease prevails much more in small courts, alleys, and narrow streets, than in other and better ventilated parts of the city. If this be a fact, one step is made toward a discovery of the conditions under which it is produced. It is our conviction, that, in the south at least, the alleys and narrow streets of the cities, and low situations of the country, are much more exempt from summer and fall diseases than the less crowded and better ventilated portions, and the more elevated ones of the country, so far as regards adult life. Our observations in the city of Baltimore, in Mississippi, Alabama, and Louisiana, but more especially in the city of New Orleans, forced us to this conclusion. If this statement be true, then, we have made another step in the progress of this inquiry.

Again, it is an admitted fact that the disease is measurably confined to our middle and southern states, and will it not be admitted that these states produce a greater amount of evaporation than any other district, of the same magnitude, in the world? If this be admitted, we have safely made a third step.

In the next and last place, it is already admitted that it prevails more in our cities, than in the country, while the disease of adults, during the same season, prevail much more in the country.

Now, although we shall have safely taken these four steps, it does not follow that we shall discover the precise cause of cholera infantum; but it does follow that we have made a useful advance toward it, and that too, without pressing into our service that other cloak which was invented to cover ignorance—*miasmata*.

We will now venture another step: to chemists, we believe, it is well understood, that where there is the greatest amount of evaporation, there is the greatest reduction of temperature and the evolution of electricity. The predisposing cause or causes now lie concealed in the preceding facts, for assuredly it is not doubted that all children, during the first two years of their existence, because of the peculiar condition of their systems at this age, are susceptible (not predisposed) to the influence, for a time longer or shorter, a predisposition to it will be produced, when a exposure to cold, too much drink, or an improper article of food may excite the predisposition into action, and cholera infantum is the result.

Admitting that we have truly advanced thus far, it will be admitted, although we have not discovered the *entity* that causes or predisposes to the disease, and although we cannot remove it, that we have shown, that by the removal of the child, even fifty or a hundred yards, we may place it in a condition very nearly the opposite of the one in which it contracted the disease, and this can, most generally, be done.

Inasmuch as we have not got obvious facts to lead us further, and inasmuch as we are entitled to the privilege of indulging in such inferences, from the facts we have, as suggestion may furnish, we will attempt a nearer approximation to the predisposing cause of the disease before us.

The great amount of electricity evolved in ventilated and evaporating situations may be assumed as the cause of the various forms of summer disease in adults, for it is true, that there is not a morass or swamp in our country, about which a man may not live and have good health, provided he will live in the woods, or even sleep in them. About the country farms there is more evaporation than in our cities, and he is more liable to sickness in the former than in the latter.

Now, with regard to children, it may be assumed that their cutaneous function is rendered imperfect by the surrounding humidity that could not injuriously contend with the force of an adult skin. In the next place, may it not be safely assumed that this humid state of the atmosphere impedes, to an equal extent, the pulmonary function, preventing a thorough elimina-

tion of the carbon of the venous blood—and preventing such an absorption of oxygen as may be essential to the elimination of the metamorphosed tissues? If these two functions shall be embarrassed, it is obvious that an excess of duty will be imposed upon the liver and kidneys and cause them to fail. If we are justified in the preceding conclusions, have we not found a sufficient cause for the disease?

But we have not done. Considering the soft, serous, immature, and developing condition of infancy, may not its organism require that electrical atmosphere which evaporation produces in freely-ventilated situations? To us, this seems to be exceedingly probable.

It appears far more than probable that we shall never be able to understand the *modus operandi* of any of the occult causes in creating predispositions to disease; but it is possible, by a careful observation and comparison of facts, to obtain a knowledge of the conditions under which it is produced. When we shall have acquired this knowledge, although we shall be no more able to change or modify them, we will be able to deport ourselves wisely with reference to them.

TREATMENT.—Although, under Allopathic treatment, this disease proves very fatal, yet, as far as our observation and inquiries have extended, the treatment which we herein lay down as Eclectic, has been almost uniformly successful—the failures being mere exceptions to the general rule.

The agent on which we principally depend for the removal of infantile summer complaint, is the Syrup of Rhubarb and and Potassa, which removes nausea and vomiting, when present, acts mildly upon the stomach and bowels, and restores the evacuations to their healthy condition.

If febrile symptoms are present, the whole surface of the body and limbs should be sponged two or three times daily with a weak alkaline solution rendered stimulant by the addition of a small quantity of whisky or spirits; and in obstinate cases, attended with high fever, Compound Tincture of Virginia Snakeroot may be added to the above syrup, in the proportion of one part of the tincture to four of the syrup.

Where the discharges from the bowels are frequent, and attended with pain, we employ the following injection, used cold, to be administered immediately after each evacuation, and retained in the rectum as long as possible.

℞ Ulmus Fulva,
Cort. Prunus Virginiana, aa ℥ s,
Aqua, octj. Mix,

let it stand two or three hours, and it is ready for use. The quantity to be used as an injection must vary from one to two drachms; larger quantities increase the disposition to strain or defecate, which should always be avoided. Usually, we add a few drops of the Compound Tincture of Virginia Snakeroot to each enema, and in protracted cases, we add about one-fourth part of the Saturated Tincture of Prickly-ash berries. This injection has a decided influence in moderating inflammation and relieving pain.

Where vomiting is obstinate and frequent, a Mustard poultice, applied over the epigastric region, will be found useful, in connection with the internal use of the syrup and tincture, as above named; and if the patient at any time during the disease becomes prostrated, stimulants must be administered, as diluted Brandy, Wine-whey, or Aromatic Spirits of Ammonia.

Cooling mucilaginous drinks should be frequently given when irritabililty of stomach and accompanying nausea or vomiting are absent.

After the inflammatory or febrile form of disease has been removed, should diarrhea remain, astringents, with tonics, must be given; as,

℞. Hydrastin,
S. Quinia, aa grs. ij,
Gefanin, grs. xvi. Mix,

Divide into sixteen powders, of which one must be given every hour or two, according to the urgency of the case, and continued until the accessive evacuations have ceased.

Occasionally, very obstinate cases of cholera infantum occur, in which the employment of Leptandrin to overcome biliary derangement, in conjunction with the other means already recommended, will exert a highly-beneficial influence.

The child's clothing should be often changed, the diet should be light, as boiled milk, with powdered Cinnamon added, or milk thickened with Wheat or Rice flour; and, if possible, it should be removed from the city to the country, or at all events, some distance from its home; and, under all circumstances, it should not be confined within a closed room, but should be exposed as much as possible to the air, but not to the influence of the sun's immediate action.---*Newton & Powell's Eclectic Practice.*

INFANT MORTALITY.

The death of the young is a beautiful and mournful theme for the poet. "*Whom the gods love, die young*," said the ancients.—If the rule holds good in all cases, the gods have certainly a great deal of affection for the juvenile colleges of Cincinnati. Almost every spring a litter of these institutions is brought forth, under the kind nursing of their foster mothers, the "*three Medical Colleges of Cincinnati*;" but scarcely have we time to admire their baby beauty and learn their distinctive titles, before "Death on the Pale Horse," has carried them off to the bourne "whence no traveler returns." Before their first infant squalls have been heard by all their friends, their creator MERCURY, demands their presence in the other world, and *Pluto and Saturn* make room for their arrival.

Is there no help for this? Must the numerous *Medical Institutes* for spring sessions, born of the Medical College of Ohio, die every year without even three weeks existence? Shall distinguished names and even professors called from a distance still be unable to prolong their vitality? Shall the Miami and the Cincinnati Colleges too be defeated in their praisworthy efforts? And last and most horrible of all, shall these dignified institutions beseech the young men of the profession to enter their spring sessions, and even offer to under bid the "free school" Eclectics—offer to "take them in" for $15 a session, Hospital fees included—giving all their old students, and all who expect to be students hereafter, absolutely free tickets—and after all, shall "Young America" turn away in contempt and leave them empty halls to be closed by the Janitor, and the Dean to announce that the Lectures are *suspended*? Shall the honor and dignity of the regular profession, be thus degraded in Cincinnati? Even so, but true courage is not to be vanquished by defeat; *another spring session* is announced in the halls of the Miamis, eight professors are on the programme, with "clinical lectures," "surgical operations," "cabinets," city Dispensary," "St. John's Hospital," "great facilities," &c. and *all for fifteen dollars!*

All we have to say to the Faculty is—fair play gentlemen—if your bantling can't live, let us have no secret funeral, but give due notice of its death, and let us have a public coroner's inquest, and scientific autopsy to reveal the causes of its premature death. Do not bury it in any fence corner or out-of-the-way place, but let its neat little marble monument stand in sight of the profession, with a record of the cause of its death, and a suitable poetical epitaph; if the writing of the epitaph is to be open to free competition, we think our research and observation would justify our seeking the honor. We remember what Miss Martineau says of an African cemetery in South Carolina; a negro baby of eight months age, was honored with this simple brief and characteristic epitaph which, we would submit to the consideration of the managers of the Miami "Institute" as admirably adapted to their wants,

"Sweet blighted lily."

Or if this be considered too poetic and romantic for so *grave* an occasion, we would select a more sober and matter-of-fact epitaph from an old English graveyard, recorded on the tomb of a very young infant:

"So soon was I done for—
What was I begun for?"

This will certainly be appropriate, even if the last Miami "Medical Institute" should live more than *three days*. However, as the lectures are to commence about the first day of April, we think All Fools day a very appropriate time for illustrating practically the "*powerful weakness*" of our regular neighbors.

If we are permitted to write the epitaph of this little specimen of regularism, we have but one other request to make—that its funeral discourse shall be pronounced by "*the immortal Tom O. Edwards.*" There is no doubt it would be a very interesting funeral if the Honorable Tom O. should consent to officiate for the Miamis, and when his own parent school, the Medical College of Ohio, which now has one foot in the grave, shall be finally buried,—"*ashes to ashes and dust to dust,*"—we promise that all the favors that he may shower upon the ungrateful Miamis, shall be repaid with the gratitude of young Physic by a deeper grave, a heavier tombstone, and a more appropriate inscription than any that are "dreamed of in his philosophy." B.

MEDICAL SCHOOLS.

The number of matriculants in Cincinnati, during the past winter, has been as follows according to the best information that we have been able to obtain:

Colleges.	Matriculants.	Graduates.
Ec. Med. Inst.,	226	88
Med. Col. of O.,	92	24
Miami College,	40	17
Cincinnati Col.,	40	26
Physio-Medical,	17	—
American Medical,	20	—

(The numbers above given (except the first) are not perhaps exact, but as near as we can come at the truth, being a medium between conflicting statements, and a little above the actual attendance.)

The above table teaches a very obvious lessen—*concentration is strength, division is destruction.* The Eclectic Medical Institute has had sufficient energy and ability thus far to concentrate the strength of medical reformers upon one enterprise, and in consequence, it overshadows everything around it. The old school party, divided into rival cliques, cannot, even with the aid of the State, sustain a respectable school. Dr. M—— loudly declares that there are not over fifty paying students in the "three medical colleges" of Cincinnati. Botanico medicalism attracted from fifty to seventy students annually to Cincinnati until its advocates separated into two factions and now it is hardly heard of. Eclecticism might have degenerated in the same way and frittered away its strength in petty schools had not the paramount strength of the Eclectic Medical Institute prevented this destructive process. The attempts of selfish intriguers to pull down the Institute in order to nourish a petty institution by its fragments has entirely failed, and the miserable burlesque upon Colleges attempted at Louisville, in 1850–51, is no longer in existence—although the same feeble factious influence is now at work in Cincinnati endeavoring to prolong its cancerous existence by exciting jealousy and hostility among Eclectic reformers. The ruinous and disgraceful effects of such a course if it could be at all successful are displayed before us in the numerous petty schools of Cincinnati and with such a warning before them we cannot believe that the Eclectic reformers of America will give any countenance to purely factious movements for the division and degradation of their cause.

The Homeopathic party exhibits no little wisdom in its course on this subject. The Homeopathic Medical Faculty of the State of New York recently appointed a committee upon the subject of a Medical College in the city of New York. From the indications among Eclectic Reformers, we have no doubt that if our cause had anything like the strength of Homeopathy in New York, a Medical College would long since have been established there, if not two or three of them; but the Homeopathic physicians take a much more judicious view of the subject. Their ablest men know very well that their private practice is worth vastly more than they could possibly realize by serving a College, and they have no morbid ambition for the empty

name of Professor. At the same time they perceive that the public good of their cause would only be injured by establishing a College to lower the success of those already established and subdivide a patronage entirely inadequate, hence the committee state in their report that "the greatest good can be accomplished by a concentration of the influence as far as practicable, of each member of the school upon a single College" and "that it might redound to the credit of this society to avoid at the outset favoring the multiplication of Homeopathic Colleges, because experience in the Allopathic school teaches that this sort of rivalry in a school of medicine diminishes the value of the Diploma in public estimation, and may keep in existence numerous weakly and sickly Colleges, located in unsuitable places. And your *committee* would submit the following resolution.

Resolved, That the further consideration of the subject be postponed." B.

VERATRUM VIRIDE.

The reader will find that we have reprinted Dr. Norwood's essay upon this article, thus giving the profession an opportunity of knowing what he claims for this agent. We do this without endorsing what may appear to many an infallible remedy for too many conditions. We have not yet used it, but shall on the first opportunity examine and test its powers. Our Journal is the organ of every thing new in medicine, come from whatever source it may. This we do upon the experience of those who have tested the same, not wishing to hold from the profession such information until we have tried it, but let all examine for themselves. N.

COMPOUND STILLINGIA LINIMENT.

We have for the last year been using this preparation very much, having been induced to examine its qualities from the beneficial effects we have observed in its appliton in many diseases. The following is the formula, and is recommended in Newton & Powell's Eclectic Practice:

℞ Ol Stillingia ʒ j,
Ol Lobelia, ʒ ij,
Alcohol opt. ʒ iij.

Mix.

In croup we have used this remedy often with the happiest results. In these cases the neck, throat, chest and vertebral column, as far down as the fifth or sixth dorsal should be bathed freely every hour until relief when the attack is violent; otherwise every three or four hours will be sufficiently often. When used in the former case it will produce vomiting and relaxation in a short time; this may be used in many cases when it is almost impossible to get the child to take any medicine internally, for its further application in this disease, see Eclectic Practice of Medicine, by Newton & Powell.

This liniment is one of the most powerful relaxants and anti-spasmodics known, and in asthma should be applied in the same way as recommended in croup. It is also reliable in sciatica, angina pectoris and many other diseases of this class. We claim to have formed and used this compound but Prof. J. King has used it in several similar cases with the same success; he, however, has added a small quantity of the oil of cajeput to the compound.* The local application of the oil of Stillingia must soon be used extensively by Eclectic practitioners. It not only possesses valuable properties as an internal agent, but is entitled to much consideration and confidence as an external remedy, and in cases where the stomach rejects agents, it will act with as much certainty when applied in this way. The Eclectic Practice gives in detail the application and the proportions. N.

MILD ZINC OINTMENT.

Having used in a large number and great variety of diseases the above ointment, we will give the formulæ, which is as follows:

℞ Ol. Olive opt. lb ij;
Spermaceti, ʒ xij;
Cera alba, ʒ ix;
Zinc Ox. alba, ʒ iv;
Acid benzoin, ʒ ij;
Sulph. Morph. ʒ ij;
Otto Rose, gtts. xx.

The first three articles are to be melted, and while warm the other articles are to be added, after being finely pulverized and mixed together; the whole to stand until its natural consistency is formed.

This ointment can be used in almost every variety of opthalmic disease either acute or chronic, in opacity of the cornea, in nebulæ, etc., etc. We have found it very valuable as can be seen by referring to our clinical reports, in the extensive applications in opthalmic diseases. It is also very valuable as a local application for tetter and salt rheum; excellent as a dressing for indolent ulcers as well as wounds in general. In herpetic eruptions it is highly valuable, and should be applied according to the plan in the clinic reports published in the Journal. N.

COMPOUND COLLYRIUM OF HYDRASTIN AND ACONITE.

The following formula we have found to be valuable in many forms of Opthalmia, and used extensively as will be seen by referring to our clinical reports:

℞ Hydrastin, grs. xx,
Tinct. Aconite ʒ i,
Water, ʒ ij.

Mix and filter.

Bathe the eyes three or four times a day; In some cases the quantity of aconite may be doubled. For the particular cases in which we have used this remedy, we would refer to the clinic reports in this number of the Journal. N.

U. S. ECLECTIC DISPENSATORY.

By J. King, M.D., Professor of Obstetrics and Diseases of Women and Children in the Eclectic Medical Institute of Cincinnati, and R. S. Newton, M.D., Professor of Pathology and Practice of Medicine, and late Professor of Surgery in the Eclectic Medical Institute of Cincinnati.

We are now enabled to announce to the profession that another edition of this work much enlarged and improved, is now in press and will be issued in a short time.

All the additions which have been made to our catalogue of new and concentrated remedies, with their method of preparation, and action as remedial agents will be found in this edition. Also, the result of the investigation and use of all the concentrated preparations contained in the first edition, will be found in the second.

Even since the publication of the first edition, which has been out of print for many months, and the introduction of the new remedies to the profession, a great improvement has taken place in the Eclectic Practice, this has been so well marked as to cause many of the Old School party to investigate this new practice, and the result is, that already hundreds have discarded their old remedies, which have ever been known to produce such destruction to the human system, and now use the new medicines. Our friends may rely upon this work being up to the age and spirit of the Eclectic profession at the time of its publication. N.

BOOK NOTICES.

New Work.—Prof. Calvin Newton, M.D., late of the Worcester Medical College, had in press at the time of his death, a work on Thoracic Diseases. We learn that Marshall Calkins, M.D., has undertaken to complete and bring out this valuable work; and from the confidence inspired by the ability of the Doctor, his friends have no doubt but the work will be well done. This will be a valuable acquisition to the Eclectic literature. It will be announced to the readers of the Journal as soon as issued. N.

The British and Foreign Medico-Chirurgical Review.—This valuable reprint, by S. S. & W. Wood, New York, for January, has been received. This very able Quarterly has now reached its xxv number. It embraces reviews on almost every subject connected with medicine and its collateral branches. It should be found in the library of every practitioner of medicine and surgery, who claims to keep pace with the discoveries and improvements that are daily taking place. Price $3 00 per annum in advance. N.

NEW ENGLAND MEDICAL AND SURGICAL JOURNAL.—We learn from the Worcester Medical Journal that another medical journal with the above name has recently been started, and edited by A. R. PORTER, M.D., but does not inform us of the locality. N.

THE MIDDLE STATES MEDICAL REFORMER.—We have received the first number of the above work published monthly at Milford, Del., and edited by J. S. PRETEYMAN, M.D., of Milford, Del., and P. JOHN, M.D., of Millville, Pa. It is a neat sixteen page pamphlet, double column, and contains several excellent articles. We wish them success in their undertaking; but the publication of medical journals are attended with an expense that seldom pays the editors and publishers. Yet as the press is the lever by which all subject are to be raised, it has to be applied even at a pecuniary loss. N.

JOURNAL OF MEDICAL REFORM.—We have received three numbers of the above work. It is published in New York monthly, and is edited by W. H. COOK, M.D., and as its title indicates, it is clearly devoted to Reform in Medicine. No place in the country is more in need of a staunch journal devoted to the most liberal course in medicine than New York. N.

RANKIN'S HALF YEARLY ABSTRACT.—This reprint has reached its XVIII number, embracing the six months preceding December, 1853. It makes a large octavo volume of 326 pages, and is filled with papers of a highly interesting character to the practitioner of medicine. It is well worth the subscription price, $2 00 per year in advance. Lindsay and Blackison, Philadelphia, publishers. N.

AMERICAN JOURNAL OF PHARMACY.—This publication edited by W. PROCTOR, jr., has reached the XXXVI volume. It contains 96 pages 8 vo., printed on good paper. Its pages are well filled with matter relative to pharmaceutical preparations. It is published bi-monthly at $3 00 per year in advance. N.

THE AMERICAN MEDICAL MONTHLY.—We have received the first number of this Journal, recently started in the city of New York. It is edited by Dr. Edward H. Parker, formerly of the New Hampshire Medical paper, assisted by the Professors in the New York Medical College. It makes a handsome pamphlet of eighty pages, composed of essays, monographs and cases, labored reviews, brief and spicy book notices, hospital records, and a chronicle of medical progress, got up in each department, by the professor who has that department in the college. N.

EXTRACTS FROM CORRESPONDENCE.

Dr. G. V. Armington, Greensburgh, Ia. Feb. 27, '54, writes: "The cause is on the advance in this place, and is still growing in favor with the people."

Dr. A. L. Kimler, Finlay, O., Feb. 27, '54, writes: "I must declare myself wholly in favor of the Eclectic School of Medicine, and wish to become a constant reader of your Journal."

TO THE FRIENDS OF NATURAL SCIENCE.

It is contemplated by the FACULTY OF THE ECLECTIC MEDICAL INSTITUTE, OF CINCINNATI, OHIO, to connect with the Anatomical and Scientific department of that Institution, a *Cabinet of Natural History*, and to carry out their contemplated design, respectfully solicit the aid and co-operation of naturalists, and friends of the Institute, by the contribution of Minerals, Fossils, Shells, (land, fresh water and marine,) Insects, Reptiles, Birds, and Mammalia, Botanical specimens, and every thing, in every department of Natural Science, and sent to the address of Professor R. S. Newton, Cincinnati, Ohio, who will pay all reasonable expenses in the same. Insects, Reptiles, skins of Birds and minor animals may be sent in jars or casks of spirits, (alcohol or whisky) and other specimens, carefully wrapt in paper, and closely packed, in soft grass or saw dust in Boxes will come uninjured, as perfect specimens as possible, are desirable. We say to all send on the specimens.

Respectfully,

R. S. NEWTON, M. D.

OUR SCISSORS AND CLIPPINGS DEPARTMENT

OUR TEACHERS.

If we would have intelligent citizens we must have well conducted schools, and if we would have well conducted schools, we must have intelligent teachers.

Few people place a proper estimate either on teachers as a class or their influence on society. Nearly as much as parents they mould the moral character of the young; and their influence is probably even more felt in developing the intellect and giving it direction, throughout an extensive portion of society. Ridicule of teachers constitute one of the stale jokes of literature; and its caracatures have not been without their influence on those whose dictums have weight in assigning both literary and social position. Prejudice against this occupation, in our country, is as unjust as it is impolitic. In no State in the Union has teachers, as a class, been found more moral or intellectual than in *O*hio.

Whatever the State does to add to the influence and positions of teachers, adds immediately to the wealth and reputation of the State. The more a man knows the greater is his wheat crop, and the greater the wheat crop the better for every body.

LIBEL SUIT.

Dr. L. E. Jones, of this city, has been sued for libel. The action was brought by a young lady of high moral and intellectual character, who is the plaintiff in the case. The charges are of the most degrading character, and the damages laid at twenty thousand dollars. This suit will elicit much interest, for the character of one of the most unexceptionable ladies in the country is involved, and the question is frequently asked can any man be guilty of even wishing to destroy the character of any lady?—*Express.*

☞ The salary of the Lord Lieutenant of Ireland is $100,000, four times that of the President of the United States.

☞ France produces annually 900,000,000 gallons of wine.

GOOD ENOUGH TO BE TRUE.—The Lynn *News* tells the following of the incredulous young man, whose father had promised, before his death, to hold "Spiritual communication" with him:

The spirit of the old gentleman, (who by the way, had been somewhat severe in matters of discipline,) was called up, and held some conversation with the boy. But the messages were not at all convincing, and the youth would not believe that his father had anything to do with them.

"Well," said the medium, "what can your father do to remove your doubts?"

"If he will perform some act which is characteristic of hm, and without any direction as to whatiit shall be, I shall believe in it."

"Very well," said the medium, "we wait some manifestations from the spirit land."

This was no sooner said, than (as the story goes,) the table welked up to the youth, and without much ceremony *kicked him out of the room!*

"Hold on! stop him!" cried the terrified youth, "that's the old man! I believe in the rappings!"

Our hero has never since had a desire to ttir up the old gentleman.

A DARK DAY COMING!—There will be an extraordinary eclipse of the sun, on the 26th of May next, such a one as none but the oldest inhabitants have witnessed in this vicinity. It will be similar to the great eclipse of 1806, since which there has been none resembling it, nearer than that of 1830, when eleven-twelfths of the sun was obscured.—*American Courier.*

SIMILAR VIRTUES AND VICES.—People will despise their own virtues, and censure their own vices in others. No body laughs at the folly of another so much as a fool; no man believes another so little as a liar; no people censure the talkative more than great talkers. Misers daily condemn covetousness; and squanderers rail at extravagance in others. If one lady calls the chastity of another in question, she gives suspicion of herself.

☞ One million two hundred and thirty thousand letters passed through the New York post office on Saturday, January 21st. It is said to be the largest number known to have been received in one day.

☞ "What are you writing such a big hand for Pat?" "Why, you see, my grandmother's dafe, and I'm writing a loud lether to her!"

TALE OF A PIN.

In an early month of the year 1778, with a tolerable education, and with many natural qualifications for a financial life, Jacques Lafitte was seeking for a situation as clerk. He had high hopes and a light heart, for he brought with him a letter of introduction to M. Perregaux, the Swiss banker. But with all his sanguine anticipations and golden day-dreams, he was bashful and retiring. It was with a trembling heart that the young provincial appeared before the Parisian man of bonds and gold. He managed to explain the purpose of his visit, and presented his letter of recommendation. The broker quietly read the note. "It is impossible," said he, as he had laid it aside, "that I can find room for you at present; all my offices are full. Should there be a vacancy at a future time, I will see what can be done. In the meantime, I advise you to apply elsewhere, as it may be a considerable period before I shall be able to admit you." Away went sunshine and prosperous visions! Disappointed and gloomy, Jacques left the presence of the politic banker. As he crossed with downcast eyes the court-yard of the noble mansion, he observed a pin lying on the ground. His habitual habits of frugality, amidst his disappointment, were still upon the watch. He picked up the pin and carefully stuck it in the lappel of his coat.

From that trivial action sprung his future greatness; that one single act of frugal care and regard for little things opened the way to a stupendous fortune. From the window of his cabinet, M. Perregaux had observed the action of his rejected clerk, and he wisely thought that the man who would stop to pick up a pin, under such circumstances, was endowed with necessary qualities for a good economist; he read in that single act of parsimony an indication of a great financial mind, and he deemed the acquisition of such a one as wealth itself. Before the day had closed, Lafitte received a note from the banker. "A place," it said, "is made for you at my office, which you may take possession of to-morrow." The banker was not deceived in his estimate of the character of Laffitte, and the young clerk soon displayed a talent and aptness for his calling that procured his advancement from a clerk to a cashier; from a cashier to a partner; and from a partner to the head proprietor of the first banking house in Paris. He became a deputy, and then a president of the Council of ministers. What a destiny for a man who would stoop to pick up a pin!--*French Paper.*

AN EXAMPLE FOR YOUNG MEN.

The Messrs. Harpers, of New York, who recently lost about $1,000,000 by fire, but who are still in independant circumstances —able to recommence operations on an extensive scale—commenced life poor boys. The New York Times furnishes the following brief history of the career of the Harpers:

"The establishment of the Harpers was founded by James Harper, the oldest of the four brothers who now constitute the firm. He came to the city in 1810, a lad fifteen years old and served an apprenticeship of six years to Paul & Thomas, the leading printers of that day. His brother John soon followed him, and learned the trade of Mr. John Seymour, a printer in John street. In 1849, with a capital James had saved, the brothers opened a small book and job office in Dover street. The first book they printed was Seneca's Morals: the second was an edition of the Methodist Catechism. The first book they published on their own account was Lock's Essay on the Human Understanding. They toiled with unremitting industry, and maintained the highest character for enterprise and integrity. In 1820 the third brother, Joseph Wesley, joined them, and six years later, Fletcher became a member of the firm. From that time until now, they have carried on the publishing business with a degree of well directed energy, which has few parallels.—They removed to Cliff street about 1820, and have added one building after another to their establishment as the demands of their business required. The amount of books they have issued is almost incalculable. For the last few years they have published, on an average, twenty five volumes a minute for ten hours a day:—and from three to four thousand persons have obtained a livelihood from their employment."

☞ Pretty woman is a brilliant poem, full of rhyme, sentiment, and all manner of illustrations. When "bound" in one's arms, she increases to several volumes.

☞ "What's whiskey bringing?" inquired a dealer in that article.

"Bringing men to the gallows, was the reply.

The French newspaper, the Journal des Debats, has only 9,000 subscribers, yet it is estimated to be worth $280,000. One-fourteenth of it sold for $20,000 a short time since.

Gaming, like quicksand, may swallow a man up in a moment.

THE

ECLECTIC MEDICAL JOURNAL.

THIRD SERIES, Vol. II. | MAY, 1854. | WHOLE SERIES Vol. XIII.

Part 1. Original Communications.

CASE OF ENLARGED SPLEEN.

BY G. L. PURDY, M.D.

Mrs. Schell, æt. 35, soon after the birth of her youngest child some two years and a half ago, perceived a swelling in her left hypocondriac region, which had gradually progressed until the time of her death, March 11, 1854.

I was called for the first time to attend her for an attack of acute rheumatism of the left leg, sometime in December, 1853, and then had the privilege of examining the tumor as it was called, for the first time. From the manner in which it commenced, and its location, I pronounced it a case of enlarged spleen. At that time it occupied the space from about the ninth or tenth ribs to the crest of the ilium, and from the spleen to near the linea alba, the enlargement appeared dense and hard, and gave no pain on pressure. For the last year she had been very much troubled with an exhausting bilious diarrhea with a good deal of mucous and matter mixed with it, and accompanied with a distressing tenesmus. Previous to my being called to see her, she had been treated by several physicians but no benefit resulted; rather the reverse from the irritating and exhausting influence of the remedies made use of, to disperse the tumor. She quickly recovered from the attack of rheumatism, but the diarrhea above mentioned again set in, which I kept controlled as well as I could by enemas and other remedies, but I could not cure it by all the means recommended for ulceration of the bowels. Her constitution being completeworn out, there was no foundation upon which to build, and continued growing weaker notwithstanding the most supporting treatment, she at last succombed to the force of the disease.

She could assign no cause for this enlargement never being affected by intermittents; unless it was produced by a cold, taken shortly after her accouchment. I performed a post mortem ten hours after death.—On laying open the abdomen, the spleen was found occupying the whole anterior space of the left half of the abdominal cavity, greatly compressing the neighboring viscera; the mesentery glands were in a state of chronic inflammation, and many of them ulcerated. The liver was greatly enlarged, and on the under side of the left lobe was a cyst of yellow thin fluid, the cyst was ruptured when I turned up the lobe of the liver; the lower portion of the liver was of a very dark color.

The mucous membrane of the rectum being in a state of chronic inflammation, with quite a number of patches of ulceration.

The spleen was found to weigh seven and a half pounds avordupois, its longest diameter thirteen and three-fourth inches, its shortest diameter eight and one half inches, thickness through its body three to four

inches, circumference at largest part seventeen and one fourth inches. The spleen appeared natural in color, density, &c., with the exception of the lower portion, which was of a dark bluish color, and conjested with very dark grumous blood; on the side next the parites, in the upper third of the spleen a cicatrix about the size of a silver dollar. There was also an effusion of about a quart of fluid in the abdominal cavity.

Haysville, Ohio, March, 1854.

CANCER OF THE STOMACH.

BY HENRY OSBORN, M. D.

E. M. æt. 59, of a nervous sanguine temperament but a predominance of the nervous, dates the commencement of his disease as far back as the year 1844, at which time, from his own statement, he was the subject of acute lancinating pains which were confined to the epigastrium. These pains were of an intermittent character and aggravated upon eating. Several physicians was consulted and all but one pronounced him to be dyspeptic. The dissent ing one called the disease neuralgia of the stomach. He was treated however for dyspepsia, but so far from there being any amelioration of the symptons, the change was gradually for the worse, in so much. that the attending physicians were discharged and the case left pro. tem. to nature. He continued in this condition, sometimes worse, at others apparently gaining but most of this time extremely costive, with loss of appetite, sickness at the stomach, vomiting at times of a glaring mucus, white clammy tongue with hardness upon pressure on the Epigastrium, till the spring of eighteen hundred and fifty-two, at which time the symptoms had assumed a formidable character. I was sent for and found him in the following condition. Pulse quick and very small and quite irregular. tongue clammy and covered with a white mucus in the middle through which a few of the papillæ circumvallatæ projected in bold relief, showing irritable edges and contraction of substance. Mucous membrane of fauces quite red. The severe vomiting which had kept up till now had ceased and was followed by copious evacuations from the bowels, of a dark color and very offensive to the smell. There was also present great emaciation with loss of appetite diminished renal and hepatic secretions, soreness upon pressure on the epigastric region with tumefaction above mentioned, together with that hypochondriac state of mind which so often results as the consequence of diseased action of the stomach or liver. I am inclined to think with Dr. Buchanan that this state of mind is brought about by the sympathy which exists (pathologically speaking) between the stomach and liver, and organ of melancholy or despondency in the brain.—That the sympathetic irritation thus established, is in accordance with the old Latin principle of *ubi irritatio ibi fluxus*, that where there is an irritation there is an increase of fluids to that part, thus we have melancholy as the result of irritation of one organ propagated by the irritation of another. I came to the conclusion without much hesitation. that the disease was cancer of the stomach. but whether it belonged to the scirrhous, encphaloid or colloid varieties was not so easily determined.—Neither would a knowledge of the class make any difference in a practical point of view, for the treatment applicable to the one is applicable to the other, for in avoiding all sources of irritation (by withholding everything which if taken into the stomach would prove irritating,) and by the administration of such substances as will quiet nervous irritability and relieve pain.

I gave a powder every two hours composed of

℞. Tannin, grs. ij
Geranin grs. x,
Sulph. Morph. gr. ½

with an infusion of the bark of Quercus Albi, but it did not answer the indication. The mucous membrane at the pyloric orifice of the stomach. was in all probability destroyed by the ulceration, which gave place to the diarrhea—hence its obstinacy. I next gave putamen ovi pulvis

(powdered egg shells) in tablespoonful doses every three hours, which soon had the desired effect. As soon as the diarrhea was checked vomiting returned. I now had recourse to

℞. Hyosciamus ext. gr. j
Sulph. Morph. grs. 1-12

made into pill and given three times a day. Counter irritation over the region of the stomach by means of an irritating plaster, and as nothing of a cholagogue nature could with propriety be taken per os, I directed that the nitro-muriatic acid should be used as a bath to the feet and also over the region of the liver by means of sponging. Nourishing substances to be used as enemata three times a day, such as beef soup, chicken broth, arrow root, lapioca, milk diluted, etc. Attention was paid to the surface and the alkaline bath was used three times a week. For colliquotive sweats which occurred toward the close of the disease a decoction of the Quercus Albi to which was added a small quantity of Acetas Plumbi, in the form of a bath. By a continuence of these means he was made comfortable until the time of his decease which occurred in the September following. Death in this case occurred from the exhauting of combined irritation and deficient nutrition. A post mortem examination was instituted which revealed extensive disease of the stomach. The peritoneal investment was but little altered in appearance, perhaps if anything a little thickened. The greatest force of the disease seemed to be almost wholy exerted on the mucous muscular and intervening cellular coats, all of which were much thickened and in a scirrhous state. A brown mucous in considerable quantity lined the diseased portions of the mucous membrane. The stomach was greatly enlarged, as was also the pyloric orifice, the mucous membrane of which as I had anticipated having been destroyed by ulceration. The liver was functionally not organically diseased. The close analogy which exists beween this disease and chronic sastrelis should lead the physician to weigh the case well before he make up his mind diagnostically as the treatment of one (chronic gastritis) is curative while that of the other (cancer of the stomach) is merely palliative, and aggravated by all medicines of an irritant nature. The most certain diagnostic symptoms of cancer of the stomach is a tumor in the epigastrium, and when this is associated with vomiting of a glaring mucus, or at the close of the disease of a coffee ground substance, and in connection with these symptoms a cachectic countenance and complexion of a peculiar yellowish white waxen appearance, there can be but little doubt as regards the nature of the disease. In the majority of cases the bowels are obstinately constipated until near the close when if ulceration takes place to the extent of destroying the pyloric mucous membrane, the constipation is followed by diarrhea.

Fulton, Wisconsin, March 1854.

PRESERVATION OF HEALTH.

BY R. E. CABLE, M.D.

A human being, supposing him to be soundly constituted at first, will continue in health till he reaches old age, providing, that certain conditions are observed and no injurious accident shall befall. This is a proposition so well supported by an extensive observation of facts that it may be regarded as being established; it becomes of course very important to ascertain what are the conditions essential to Health, in order that by their observance, we may preserve for ourselves what is justly esteemed as the greatest of earthly blessings, and dwell for our naturally appointed time upon earth.

A general acquaintance with these conditions may be easily obtained by all, and to pay them obedience is much more within the power of individuals, than is generally supposed.

The leading conditions essential to health may be thus enumerated: 1. A constant supply of pure air. 2. A sufficiency of nutricious food slightly taken. 3. Cleanliness. 4. A sufficiency of exercise to the various organs of the system. 5. A right

temperature. 5. A sufficiency of cheerful and innocent enjoyment, and 7. Exemption from all harrassing cares.

Pleasant Hill, O. Jan. 1854.

CASES IN PRACTICE.

BY J. H. SHORT M. D.

I was called June 17th 1853, to see Judge G.'s little daughter aged 10 years, who had been bitten some three or four hours by a poisonous snake, (the kind was never ascertained) she was bitten in the garden while plucking flowers bare-footed. On examination, I found about the middle of the second and third metatarsal bones of the right foot, two distinct incisions made by the teeth of the snake, from which a few drops of blood was oozing; the foot and ankle were painful, and tensely swollen, she was very restless.

TREATMENT.—Gave her whisky 'till she was *drunk*, which condition was kept up during the night. I also scarrified and cupped the place bitten, but owing to the swollen condition of the foot, it had but little impression. I then resorted to cauterization and an elm poultice over the cauterized parts. I also gave internally the common yard plantain (plantago major) simmered in sweet-milk. Dose, table spoonful every 30 minutes 'till the pain subsided, then at longer intervals.

18th. Swelling still ascending the leg. I now applied Tinct. Iodine, completely painting the leg.

19th. Swelling ascending slowly, the out side presented very much the appearance of rapid decomposition, but knowing this to be peculiar to snake bites, I pushed the treatment. In my absence the application of the Iodine had been slackened; I had it again renewed every three or four hours.

20th. Swelling had reached the body—whisky and plantain continued; intervals lengthened.

21st. Swelling rapidly subsiding, expectorating some blood, (hemorrhage is a common symptom, frequentlyproving fatal) secretory organs kept healthy and active. Continued to improve 'till she became hearty and stout.

The whisky or brandy treatment commenced in time and persevered in will cure nine-tenths of the snake bites.

MAMMARY ABSCESS.—I was called March 8th, to see Mrs. W. æt. 20, who had been confined six months previous with her first child. A few days after her confinement she commenced suffering with severe pain in her left breast, and finally a physician was called and the breast lanced; the lance was directed from left to right, (instead of toward the nipple,) this cut was suffered to close, and when I saw her, the breast presented the following appearance: gland very much enlarged and very painful; five or six openings, some of them discharging a sanguinous matter, others a thin acrid watery fluid excoriating the suface. These openings increased to the number of eight or ten, gland of a leaden color, knotty throughout, save a small portion near the sternum, pain intermitting, nipple completely bruised within the breast; auxiliary gland of same side enlarged and painful; general health very much impaired; portal torpor, very nervous and timid. Three different physicians had treated the case within the six months above specified, without relief.

TREATMENT.—Ordered alkaline bath with friction to the whole surface, then

℞. Alterative Syrup, O j.
Podophyllin, grs. v.
Iodide Potass, 3 j

Dose, from one to two drachms three or four times a day; this was continued during the whole treatment, but suspended for a day or two when the bowels became too active. The sesq. carb. potass. in solution was freely injected into the orifice, and tents rolled in powder of same, introduced as deep as possible into the same. It was with difficulty that I could induce her to submit to the treatment, from the fact of having already suffered very much without relief. Over all this I applied an elm poultice to be renewed and continued as long as there was active inflammation,

she was restricted to a light but nourishing diet. After pursuing this treatment for eight or ten days owing to the accumulation of matter I made two incisions, and two subsequently, each one giving temporary relief. I applied a poultice of lobelia seeds, made into proper consistency by flour of elm. This had a good effect, but owing to its nauseating, had to be discontinued, yet it made a favorable and lasting impression. At this stage of the treatment the patient had an attack of bilious fever, but with the usual Eclectic treatment in such attacks it was soon removed, but left her quite feeble. Patient became discouraged. I ordered a poultice made by simmering fresh peach tree leaves in sweet cream, and applied warm, to be renewed three or four times a day. This had a fine effect, and was continued until she was cured. In three or four weeks from the first application the breast had become much smaller than when first seen, and has remained sound and healthy ever since. I visited the patient for several weeks professionally. The alterative was continued several weeks after the disease seemed to have disappeared.

Shelbyville, Mo., March 1854.

CLINICAL REPORTS,

At Newton's Clinical Institute.

SERVICE OF PROFESSORS NEWTON & FREEMAN.

REPORTED BY PROF. E. FREEMAN.

(Continued from page 167.)

SPRING SESSION.

PROF. NEWTON remarked—

Gentlemen: It was not a pecuniary consideration that induced the proprietors of this institution to establish this clinic (for these halls could have been arranged into rooms for the accommodation of patients, &c., which would have paid us a better per centage,) but a desire to give the students of the Eclectic Medical College as good and a better chance for obtaining clinical instruction, than can be obtained at the Commercial Hospital of this city, making them familiar with disease, and capable of coping with the members of the other Colleges in clinical knowledge and observation. It has been more a matter of pride with us than profit, and though we have not, and may not be able to show so many surgical operations (as amputations, &c.,) as may be seen in a Hospital where, whether the patient lives or dies it makes no difference to the attending physicians and surgeons, for they receive their salary the same in both cases; yet, we have shown you a great variety of interesting cases, and have treated them successfully, and expect to continue as we have done. We show you *how to cure*, and this is more to you than any other course that could be pursued by us. Surgical operations are uncommon with a young physician, but the routine of every day's practice is demonstrated in our clinic, and you must necessarily become familiar with it. Most of you were with us last session: we hope to make this session much more interesting, and desire your cooperation. No pains will be spared to make the clinic one of the most interesting features of the course of instruction given by us, as connected with the special attractions of the college.

CASE XXXI.—N. Woland. Opthalmia and Pterygium.

The inflammation and ulceration are arrested—distal vision has improved more than proximate, feels but little pain at any time. I never knew a case like this to improve so rapidly. If any of you should succeed in curing a case like this in from three to five or six months, you should be proud of your profession. If a prescription is doing well, continue it; you cannot force the system with impunity, it is not like a machine, but has its peculiar laws, and they must be regarded. Any debilitating or iritating treatment may derange the eye to its former condition; therefore, we should be cautious in our treatment. To be capable of treating diseases of the eye successfully will acquire you much reputation.

Continue the collyrium, also the elm poultice.

March 14.—Yesterday dissected the re-

maining portion of the pterygium from the right eye. The pterygium was increasing in size, the blood vessels were becoming distended, and the cure of the eye seemed suspended; to-day the eye is inflamed from the operation and is rather painful. He has been using the cold water dressing since yesterday.

Treatment. Apply the elm poultice at night, and use the comp. aconite collyrium upon the eye during the day.

March 17.—Eye better to day, not so much engorgement of the blood vessels.

Continue the treatment.

March 24.—Not so well to-day, the cold air irritates the eye.

Treatment. Omit the collyrium, use the Zinc ointment to the eye-lids.

March 28.—Improving. Continue the treatment.

March 7.—Case xciv.—Goodham. Strabismus. Operated upon by Prof. Freeman. The normal parallelism of the eyes is restored.

Treatment. Apply cold water dressing to the eye retained by the circular bandage.

March 14.—Eye perfectly straight, slightly ecchymosed at the internal canthus.—Continue the cold water dressing.

Ecchymosis disappearing. Eye continues straight. Discharged cured.

March 14.—Case xcv.—John Shay. Sciatica and Spinal Irritation.

Has been affected for two months, tenderness over the lumbar region and sciatic nerve; has felt a little pain previous to last Saturday, but more since, pain most at night in bed. In sciatica alone there would be most pain in the morning; I have observed this last symptom as prominent in my practice. We diagnose this disease by pressure. In sciatica there is most pain below the knee, and physicians may mistake this for disease of the knee joint.

Treatment.—Irritating plaster over the lower lumbar vertebra. Tonic treatment. ℞ Quinine grs ij, Prus. Iron grs ij. *m.* Give one three times a day before eating. Quinine affords a more permanent relief than opium.

March 17.—Continue the same; will take some time to relieve him. Continue the treatment.

March 21.—The irritating plaster has induced iritation and suppuration. The atmospheric changes affect him; has some pain, more when the weather is variable, most pain in the morning. Continue the treatment.

March 24.—No pain, has symptoms of soreness, is influenced by the change of the weather. Prof. Newton mentioned some similar cases in practice and the method of treating them. Continue the treatment.

March 28.—Improving. Continue the treatment.

March 14.—Case xcvi.—J. Gordon. Opthalmia and granular eye-lids.

Was prescribed for a few days since; his eyes at that time were much inflamed and conjested; much intolerance to light, eye-lids edematous and thickly studded on their internal face with large florid granulations.

Treatment.—℞ Dry sesq. carb. potass. to the granulations after everting the eye-lids, elm poultice at night, and the comp. aconite collyrium through the day; also bathe the surface three times a week.

To day he is better. Not so much intolerance to light. Continue the treatment, excepting omit the elm poultice and use the mild Zinc ointment.

March 17.—Improving. Continue the treatment.

March 21.—Eyes cleaner, eye-lids less conjested, vision a little dimmer, omit all but the comp. aconite collyrium.

March 24.—I applied the sesq. carb. potassa yesterday to the lids, eyes inflamed to day and more dim. Tongue coated.

Treatment.—Comp. cathartic pill, two at night and three in the morning until they operate. Continue the collyrium; use the elm poultice at night.

March 28.—Much better, eyes not so painful—is wearing green goggles. Continue the former treatment.

March 14.—Case lxxxv.—Catharine Gaffney. Opthalmia and Nebula.

Has some pain near the external canthus (in the temple.) Severest in the morning.

Treatment.—Continue the treatment as directed previously.

March 17.—Pain in the temple subsided entirely; some redness of the eye-lids.

Continue the treatment, excepting omit the poultice and use the mild Zinc ointment to the lids twice a day.

March 28.—Improving. Continue the treatment.

March 14.—Case xciii.—Mary Shay.—Opthalmia and Nebula; incipient Staphyloma.

Improving. Can bear the light better, blood vessels leading to the nebula engorged, pain through the head; stomach acid; tongue white.

Continue the treatment, and in addition use comp. powder of senna ʒ j, as a cathartic; use the Zinc ointment to the eye-lids.

March 17.—Improving.

Treatment.—Cut the blood-vessels leading to the engorged nebula. ℞ Hydrastin grs xx, tinct. Aconite ʒ j, Water ʒ ij, *m*. Use through the day, and the elm poultice at night.

March 21.—Eye inflamed and painful from the cutting of the engorged blood-vessels. Continue the treatment.

March 24.—Not so well, I had applied the sol. argent nit. to the incipient ulcerated spot on the cornea, and it increased the inflammation.

Treatment.—℞ Poultice of elm and Hyd. Canadensis through the day and night.—Change it often.

March 28.—Much improved. Continue the treatment.

March 14.—Case lcvii.—George Janeman. Edematous or swelled leg.)Incipient elephantasis.)

Had fever sore four years since, the result of a fever which settled in the left leg, was erysipelatous last winter. Is in a bad condition. the absorbents are diseased, while exhalation is taking place in the cellular tissue. This condition of the limb will soon mature into ulcers.

Keep the limb in in a horizontal position—apply the cold water roller and favor the absorptive process.

Constitutional treatment.—℞ Comp. syr. Still. ʒ vi, Iodide Potassa ʒ j, *m*. Give ʒ j three times a day. By pressure we expect to carry off the serum and overcome the edema. It will not do to give him much iodide potass.

March 14.—Case xcviii.—Eliza J. Harvey, æt. 10.—Strumous Opthalmia Tarsi.

Had an attack of Scarlatina in 1848, which induced edema of the eye-lids and opthalmia tarsi,—eye lids considerably indurated and swollen, red and irritated, the cilia have nearly all been shed, meibomian glands enlarged and indurated, eyes rather lachrymose, with considerable epiphoria. A number of physicians have attended her—no better.

Treatment, local.—℞ Hydras. Cana. ʒi. Sesq. carb. Potass. grs. xxx, water ʒ ij, *m*. Apply to the eye-lids twice a day. Follow in a half an hour with the Zinc ointment, and use cold wet cloths at night.

March 17.—Improving—continue the treatment.

March 24.—Improving; nearly well; continue treatment. Press up the lower lid often through the day, for it is depressed at the internal canthus from irritation.

March 31—Discharged cured.

March 14.—Case xcix.—Marcellus Kelly. Dyspepsia and Hepatic Torpor.

Took a cold three weeks since—has pain in the right side more severe in the left.—Coughs some in the morning, some soreness in the epigastrium, appetite indifferent, perspires freely but at night, bowels costive.

Treatment.—℞ Comp. cathartic pill two night and morning until they operate. Sinapism over the epigastrium every night, and warm pediluvia.

March 17.—Improving; continue the treatment.

March 14.—Case lxxxiv.—Lucy McGuire. Scrofulous enlargement of the lower Jaw and Impetigo.

Have been using comp. syr. styll. inter-

nally. Bathe and use freely sol. oxalic acid to the impetigo; is nearly well.

Treatment.—Continue the same treatment.

March 17.—Has pain in the ears and some bronchial blennorrhea.

Treatment.—Continue the Syr. Styll. and use fomentations of hops to the head over the ear.

March 21.—Discharged cured.

March 14.—Case c.--Will Carrens, æt. 10 Subacute inflammation of the mesenteric glands, (Incipient Tabies Mesenterica.)

Has been affected twelve months,—has some cough, and pain in the stomach,—has had night sweats for four months, tongue coated a little, headache, good appetite, and pressure upon the spine over the dorsal region causes pain. Had a fever for eight weeks—during the commencement of the fever, he took much medicine from an old school physician.

Treatment.—℞ Ferri phosp. grs v, twice a day in a little water; also, stimulating liniment to the spine followed by an irritating plaster.

March 31.—Improving; continue the treatment.

March 14.—Case c.—Mary Carroll. Two encysted sebaceous tumors of the scalp.

They have been removed twice ten years since by puncturing the sac and letting out the contents; the sacks have refilled. Tumors two inches in diameter.

One of the tumors was removed by Prof. Freeman, the sac dissected out and the edges of the wound approximated and retained by straps.

March 17.—Wound closed and healing by first intention, not painful; redressed before the class.

March 21.—Healed; discharged cured.

March 14.—Case liii.—Simpkins. Epilepsy.

Discontinued the internal treatment, and used the oleum tiglii. I think the vesication gave him the most relief. I discontinued the vesication and the symptoms of disease as pain in the head, spasms, &c.; returned in proportion as the vesication subsided.

Treatment.—Irritating plaster to the back of the neck for months.

℞ Ferri phosp. grs x, three times a day.

Diet—avoid grease. Is improving rapidly, and will leave the city in a few days.

March 17.---No convulsions since. Discharged; suppose he is cured or in a fair way for it.

March 14.—Case cii.—Caroline Wright. Amenorrhea, caused by cold and exposure.

Treatment.—℞ Tinct. Ferri Mur. gtts xx, three times a day, also warm pediluvia at night.

March 17.---Improving.

March 21.—Case ciii.—Bridget Kennedy. Intermittent fever, (tertian type.)

Been affected for six weeks; had chills one year ago for the period of five months. Has been taking quinine, no better, and there is considerable derangement from her long illness.

Treatment.—℞ Tinct. Gelseminum gtts xx three times a day. "I think the Tinct. Gelseminum a relaxant."—Newton.

March 21.---Case civ.—Bridget Fallan. Chronic Opthalmia, assuming the purulent form.

Eyes have been sore for four weeks; the inflammation is confined mostly to the lids —eyelids reddened, puncta enlarged; pain in the eyes and temple; has been using water to them.

Treatment.—Hydrastin ointment applied to the lids night and morning.

March 21.—Case cv.—John Lawless. Intermittent Fever.

Has been affected for nearly a year. This approximates the Michigan ague. "It is said that they do not have the ague in Michigan until they have shaken for two years." Been treated for five days by Dr. Burke.

Treatment.—℞ Quinine, Pruss. Iron, a a grs ij, three times a day. Also, tinct. Capsicum and Myrrh aa ʒ j, syr. Ginger

℥ iv. Give ʒ ij three times a day. The Quinine may break the chill, but it needs the Iron to sustain the constitutional vigor. as the patient's countenance is pale and the blood thin. Use alk. bath at night.

March 24.—Better, no chill since last clinic. White tongue denotes acidity of the stomach. Continue the treatment.

March 28.—Discharged cured.

March 21.—Case cvi.—Francis McGuire. Scrofulous Diathesis, and Impetigo of four inches diameter on the right fore-arm. Incipient empetigo on the left arm.

Treatment constitutional.—℞ Comp. syr. Still. ℥ vi, Iodide Potass. grs xxx. *m.* Give ʒ ss, three times a day. Alk. bath at night.

Local treatment.—℞ Oxalic acid ʒ ss, Water ℥ j. *m.* Apply twice a day.

March 24.—Improving. Impetigo less distinct. Continue the treatment.

March 24.—Case cvii.—John Brown.—Intermittent Fever (quotodian type) and Hypertrophied Spleen.

Has been affected for six months. Some soreness of the bowels; pain across the abdomen and back, has chill and fever every day. pressure on the upper lumbar vertebra causes pain in the left side, had diarrhea for one week before the soreness commenced. urine high colored. bad taste in the mouth.

Treatment.—Quinine grs iv, make powders iij, and give one before each meal, respectively. Also ℞ Tinct. Gelseminum gtts xx, three times a day. Sinapisms over the abdomen, followed by irritating plaster on the back; alk. bath three times a week.

March 24.—John Sylvester. Scrofulous Otorrhea, Scrofulous Diathesis.

Had an ulcer on the face below the ear four years since; when it healed the ears commenced discharging pus—discharge very fetid. Hearing obtuse. much pain in the ear, and pressure on the ear is very painful.

Local Treatment.—℞ Sesq. carb. potass. grs x, Water ℥ j. *m.* Inject into the ear twice a day, after washing out the ear with castile soap-suds. Next day increase it to grs x, next day to grs xx, and next day to grs xxx, water ℥ j, use it to the ear. Half hour after the injection drop tinct. aconite gtts v, into the ear.

April 4.—Better than he has been for years. Discharge from the ears not so fetid or profuse, sleeps better at night, ear not so painful. Continue the treatment.

Constitutional treatment.—℞ Comp. syr. still. ℥ iv. Take ʒ j, three times a day.

March 24.—Case cix.—Thomas Page, æt. 83. Phymosis.

The prepuce has been continually contracting for the last fourteen years; the opening through the anterior part was about a half a line in diameter; the urine on being voided distended the prepuce excessively and painfully before any could pass through the narrow aperture. The prepuce from the constant irritation was half an inch in thickness, and adhesions had taken place between it and the anterior inferior extremity of the glans. It was with difficulty we could pass the head of a small needle through the opening in the prepuce.

Operation without chloroform by Prof. Freeman. An incision was made through the prepuce on each side of the frænum an inch in length and the edges trimmed symmetrically—also the adhesions were dissected up, this exposed the glans and left the opening sufficiently large—sutures were taken attaching the mucous membrane, and integument together. and the parts dressed with cold water dressing. I prefer the lateral incisions to the vertical, for the latter leaves the glans unprotected.

March 28.—Is doing well. Prepuce edematous; voids urine freely.

March 31.—Improving. Continue the cold water dressing.

March 28.—Case cx.—Patrick Malone. Intermittent Fever.

Has had it ten months—had it broken a number of times, but it returned in three weeks.

Symptoms—Headache, bowels costive, acid stomach, tongue white, pain in the loins, between the shoulders and in the right

side, tumid epigastrium after eating, some night sweats.

Treatment.—℞ Comp. cathartic pill, three at night until catharsis is produced, also at the same time use tinct. gelseminum gtts xxv, three times a day. Alk. bath night and morning.

March 28.---Case cxi.---R. McGrew, æt. 25. Varicose veins of the leg. Blood knots over both external and internal saphenic veins. No pain excepting some soreness over the veins. Caused by cold and straining at play when a boy.

Treatment.---℞ Tinct. capsicum, tinct. myrrh aa. Bathe the limb and apply the roller equally from the toes to the knees.

March 31.---No improvement, use the cold water dressing, as wet roller.

April 4.---Less soreness about the veins, not so red. Continue the treatment.

March 31.—Case cxii.--Michael Fanning, æt. 26, Chronic Nephritis and Spinal Irritation.

Caused by a fall two years since. Pain in the hip, back and chest, urine red and scalding, purulent sputa, cough, tenderness on pressure in the loins, bowels costive, appetite indifferent, pain in the back on trying to straighten up.

Prof. Mussey kept a discharge from the loins with the actual cautery for three weeks, then applied caustic and then the seaton. Prof. Newton suggests that he should have given him a dose of salts according to the caracature in Harper's Magazine. This aping after the French methods is not so good practice in such a case as using the irritating plaster, for I have taken patients from under the caustic and cautery treatment as exhibited by Prof. Mussey and cured them with the irritating plaster.

Treatment.—Irritating plaster over the loins. Constitutional treatment, ℞ comp. syr. stil. ʒ vii., iod. potass. ʒ j *m.*; give ʒ j three times a day. We give the iod. potass in those cases for its alterative and diuretic effect.

April 4th—Does not feel much better, though less pain in the back,---has not had time to improve yet.

Take com. syr. stil. ʒ ij and iod. potass every four hours, if gives no head-ache; use ʒ ij every four hours.

March 31—Case cxiii—Miss. M. æt 20, Chronic Hypertrophy and induration of the thigh.

Lymphatic temperament, scrofulous habit. She fell twelve months since and hurt her knee; it did not pain her much at the time but in a few days commenced swelling, and continued swelling to three weeks since, when I first saw her. Her thigh above the knee measured thirty inches in circumference, and was swelled even to the hip; was hot and painful, was hard resembling a swelled bone. I was puzzled in my diagnosises to whether it was osteo sarcoma or induration; menstruation irregular.

Constitutional treatment.—℞. Quinine phos. iron. and wine and tinc. macrotys restored her menses.

Local treatment.—Irritating plaster over the whole of the thigh. Now, the swelling is irregular and subsiding, has three spots of enlargement, one under the lower part of the thigh, and one on the anterior face, and one in the middle, the rest of the thigh is small or rather flabby and atrophied. Her general health is not so good as it was, but that is owing to the excessive discharge from the irritating plaster. I feel assured that nothing could have reduced the swelling equal to the irritating plaster. I have another case similar to this.

April 4th—Case cxiv.—Franklin Hoyland. Fistula Lachrymalis.

Has been operated upon previously not successfully.

Operated upon by Prof. Freeman successfully and the "style," introduced through the *ductus ad nasum*. The edge of the wound was protected from irritation from the head of the style by a piece of adhesive plaster. I prefer the use of the style to the canula.

April 4.—Case cxv.—John Burke. Morbus Coxarius. (Hip Disease.)

Fell five months since,—pain commenced three days afterwards, sometimes in the hip, sometimes in the knee and sometimes in the ankle joint; pain also along the inner face of the lower part of the thigh, pain in the hip joint on pressure; also upon pressure opposite the third lumbar vertebra —cannot bear full weight on the right leg, neither can the limb be rotated far without pain; patient bent forward and cannot walk erect.

Treatment.—℞ Comp. Syr. Still. ʒ vi, Iodide Potass. ʒ ij. *m.* Give ʒ j, three times a day; if this does not induce its peculiar symptoms, as head ache, etc., double the dose. Irritating plaster three inches square over and anterior to the trechanter major.

April 4.—Case cxvi.—A. E. Encysted tuberculous tumor over the external jugula vein (malignant) of the size of a large walnut. Commenced two years since—enlarged rapidly the last few days, hard, has been under treatment with ointments, etc.; no better. Prof. Newton opened it with a scalpel, filled the cyst with sesq. carb. Potass., and covered it with adhesive plaster.

April 4.—Case cxvii.—Levi Casey. Laceration of the Leg.

In attempting to check a raft opposite this city, his leg was caught in a loop of the rope and torn off about the middle of the calf, leaving the leg in the boot on the raft, and pitching him into the river. He was rescued and brought up in the city, and although the anterior tibial posterior tibial and peroneal arteries were torn off, there was but slight hemorrhage, not exceeding half a pint. Chloroform was administered by Dr. Youart, and the leg amputated by Prof. Z. Freeman, about four inches below the knee joint. (Flap operation.) Sutures and adhesive straps were used, and the stump dressed.

April 7.—Patient free from pain—doing well; left the city for home.

(TO BE CONTINUED.)

Part 2. Miscellaneous Selections.

PALSY AND APOPLEXY.

A month or two ago, these diseases and the frequency of death by them, were the subject of very serious remarks in the public papers.

Their greater prevalence and fatality were, we recollect accounted for, at least in one paper, by the intense intellectual activity—the constant strain upon the mental faculties--by which our community--especially the citizens of a city like New York, are distinguished. The explanation struck us at the time as unsatisfactory. Intellectual activity is not injurious to men, but the reverse: and this is proved by the fact, that the most unintermitting and intense thinkers generally reach a good old age, or if they die early, as often die of other diseases, as other men. Besides, it is not those only, or those mainly, that think most who die of palsy and apoplexy; they whose intellectual powers are less tasked, being even more frequently the victims of these diseases, than men whose faculties are continually on the stretch. We must find, therefore, some other cause for the prevalence of these fearful agencies of death; and we incline strongly to the belief that in a majority of cases, in all cases, indeed, where there was no constitutional predisposition, and where there was no excessive use of food, nor indulgences habitually of highly seasoned food—the habit of using stimulating drinks, has been the cause of attack by them. Drinks which so act on the brain as to upset the faculties at any time, and inevitably lead to *delirium tremens* at some time, may be supposed without absurdity, to produce even when moderately used, palsy and apoplexy. These diseases are states of the brain to which the use of these stimulating liquors, aided by the deleterous, poisonous drugs they are known to contain, directly and powerfully tends.

In this view, the following letter, which came from the pen of one of our most distinguished men—venerable for years and character, and position—and remarkable for accuracy of observation, and sobriety of judgement, deserves serious consideration.

"My Dear Sir—You must have seen the enquiry, 'Why do so many people die with palsy and apoplexy?' This question you answer. Could the dead speak, their testimony would appal the living. And yet, how powerless on the inebriate ear falls the voice sent back from the sepulchre!

Were the victims—I do not say of alcohol—for the name of the poisons, mingled

alike in the drunkard's and in the temperate drinker's cup, is legion;—were the victims of the poisons, mingled in in this cup—collected in one great Aceldema. it would horrify the nation. Be it yours to displace those elements of death, with the pure water of health and life.

Yours truly."

But the tendency of alcoholic drinks to cause the diseases of the brain of which we are speaking, is not a mere matter of surmise; we have positive testimony to the fact from physicians and physiologists. In another column of this paper, we have inserted an extract from Youman's on "Alcohol and the Constitution of Man," in which will be found evidence bearing on this point, and to which we earnestly direct the reader's attention.—*Prohibitionist.*

THE USE OF WINE AND OTHER INTOXICATING DRINKS BY WOMEN.

It is a curious circumstance that while men claim the privilege of periodical and habitual potations, they are unwilling to concede it to the other sex. It is true that they are excessively fond of saying, "Madam, shall I have the pleasure of a glass of wine with you?" But if Madam should each time, when so gallantly invited to hob and nob, fill an empty glass and toss it off, instead of simply touching her lips. these gentlemen would soon begin to stare; and should they succeed in suppressing their disgust until they retire from the table, it would then certainly break bounds and find utterance. Yet if this provoked their spleen, what would they say, if they saw a woman habitually going to the side-board or closet, in the morning before breakfast. and again before dinner, to decant each time a half-gill of brandy, for the stomachs sake? And still more, what would they say if a coterie of women should resort as men do to the bar of a saloon or hotel, or a private room in either, and call for a rummer each. and perhaps a succession of them? Why, we think they would say a good many things; and some pretty hard things. The truth is, that a women known to drink even wine habitually, much more spirits or beer, would be disgraced and ruined; and to drink it occasionally, in a quantity exceeding a thimbleful, would be regarded as a serious breach of female propriety. But why is this? If intoxicating drinks are, as these gentlemen would have us believe, "good gifts of God," why should not women be permitted to use them as freely as men, without incurring reproach? The cause is obvious. Every man is conscious of the utter fallacy of the reasons which he employs to justify his own use of intoxicating drinks, the moment those reasons are appropriated by women. He is obliged to acknoweledge *then*, that the use of these drinks is incompatible with delicacy purity, virtue; and he is as sure as he is of his existence, that if his daughter, or his wife, should drink as he does,—dilate as he may on temperate drinking,—neither would be fit to enjoy the company of a decent man!

We regard this fact as a crushing refutation of every argument we have ever seen in favor of the emperate use of th se liquors.

What men justify in themselves, they refuse as improper and criminal, to woman; yet, if their reasoning has any force, woman should be permitted, without remark, to use these drinks as freely as themselves.

We have said, this distinction, in the use of wine and other intoxicating drinks, between man and woman, is a curious circumstance. It should be observed that it is not the peculiarity exclusively of our times.—Pliny, in his Natural History, tells us, and also Lactantius, that wine in their day was prohibited to women. Ælian too informs us, that "it was unlawful for a woman to drink wine, and to drink much, still more;" and he takes particular pains, to enumerate various nations that interdicted by law the use of wine to their women.

Those facts imply that the modern views of the impropriety of the use of intoxicating drinks by women are not a caprice of fashion but are founded in the moral instinct of man; who every where and in all ages thus testifies reluctantly to the incompatibility of their use with delicacy of sentiment and purity of nature and of manners.—*Prohibitionist.*

THE SMALL POX.—RELIABLE VACCINATION.

Dr. Dickson, the editor of a Medical Periodical of this City, called the *Scalpel*, in an article just published, attributes the great prevalence of the Small Pox in New York, to the ignorance, carelessness, and want of honesty on the part of physicians, in not applying the right kind of vaccinated matter, and he warns the public against being imposed upon in believing that they or their families are vaccinated when they really are not. He defines the sore of the true "Cow Pox," as follows:—On the seventh or eighth day from the insertion of the lymph, there should appear a "brown centre, of an oval shape. surrounded by a little circle of pearl colored dots, or vesicles, containing the lymph, and outside of this a rose-colored blush, fading away gradually in the skin of the arm." Where there is only an irregular brown spot of a single color, with no pearly circles of dots, and no areola, it

is spurious. Vaccination discovered by Jenner, is derived from *vacca*, a cow, and vaccina lymph is the virus or lymph of smallpox, elaborated or changed by the cow's system; although it differs entirely from the eruptions of smallpox, it is unquestionably capable of preventing that disease for a number of years. It receives another element, (what we do not know,) from the cow's system, that makes it protective, although it cannot produce the smallpox in the persons vaccinated--that is to say, it cannot go back-wards and produce the appearance of the sore from which it originated in the human being. If a former vaccination is not worn out, and the system is still sufficiently saturated with the virus. the pock will not appear even from vaccination, with the true lymph; but it should be tried three times, as sometimes on the third trial, the pock appears, and the vaccination, according to Dr. Dickson, ought to be repeated till the true cow pock appearance ceases. He says:---"The fact is, every intelligent, rational being, should make himself acquainted with a subject so important; learn to distinguish the vaccine vesicle at a glance, and insist upon being repeatedly vaccinated, as long as the result shows any appearance of the brown centre, the pearly circle of dots, and the rose leaf areola; or if done three times with good lymph, and it do not take at all, he may rationally conclude the infatile or subsequent vacciuation to be still protective. Why do not intelligent teachers provide themselves with lymph, and teach this knowledge, and ask permission to vaccinate their schools? It would be worthy a noble calling like theirs. *Prohibitionist.*

CASE OF RECOVERY AFTER COMPOUND FRACTURE OF THE FRONTAL BONE, AND CEREBRAL SUBSTANCE.

BY GEORGE MALLETT, of Bolton.

Speaking of this case, the author very aptly says, that *nil desperandum* ought to be the motto of the surgeon.

CASE.—R. Booth, æt. 60, a stonemason, was struck on the forehead by the handle of a windlass in rapid motion. He was taken up by his fellow-laborers quite insensible, and conveyed to his house, about a quarter of a mile from the spot.

The medical gentleman residing in the neighborhood soon saw him; and considering the case to be utterly hopeless, and that life could not continue many hours, he came to the conclusion that nothing could or ought to be done.

The accident occured in the afternoon; and on the following morning I was requested to visit the man, as he was still alive.

Upon examination, the frontal bone was found to have received a compound fracture and to be much shattered. The entier breadth of the bone, and from one inch to an inch and a half of its height, were driven into the brain. A very considerable quantity of the cerebral matter was adherent to the adjoining parts.

The man was quite insensible; the breathing was slow and almost stertorous; the pulse slow and full.

I had formerly seen some deperate cases of cerebral injury which recovered; an account of which was published in the seventh volume of the *Association Transactions*. I therefore resolved at once to remove the fractured pieces of bones, and give him a chance.

Mr. B., the medical man who had seen the case on the preceding evening, was sent for; but he not being at home, I, with the assistance of a medical friend, proceded to remove the shattered fragments of the frontal bone, some of which were found deeply imbedded in the substance of the brain. Twelve pieces of various sizes were removed, and still the man remained insensible to our operations; but on the extraction of the thirteenth, and, as it proved, the last, which was a large piece and more deeply imbedded than the others, he started up in the bed and uttered—no doubt from his accustomed habit, and quite unconscious of what had been going on—an oath. Water-dressing was applied, and the head was directed to be kept cold by the application of that fluid to the scalp.

I saw him on the following morning, and found him quite sensible, and exhibiting no unfavorable symptoms. I left him in charge of the neighboring surgeon, requesting that his bowels should, if necessary, be occasionally relieved by a little castor oil; and we agreed that if any unfavorable symptoms should arise, I should be immediately informed. The only intelligence I had was, that he was gradually advancing towards a restoration to health; and after a few weeks I heard no more of the case, and therefore concluded that all was well.

About three months after the accident, I was greatly surprised and pleased to see the man enter my surgery, having walked from his own home, the distance being from three to four miles. The wouud was completely healed by granulations, but had left a most frightful deficiency of bone. The pulsations of the brain were seen immediately under the newly formed skin.—

His intellect, as far as I could judge, was unimpaired; and the muscular power not at all paralysed. In fact, I may say, as he did, that he was quite well. I never saw him afterwards—but I was quite convinced, and endeavored to convince him, how precarious his existence must be without great care, from the very delicate and insufficient protection which the anterior portion of the brain possessed, being deprived of so large a portion of the frontal bone, no reproduction of which was to be expected.—*Assoc. Med. Journ.*, July 1853.

INSTRUMENT FOR CAUTERIZATION OF THE LARYNX.

We find a communication from Dr. J. G. Adams, of New York, now in Paris, in the pages of the Gazette Hebdomadarie, of that city, under date of Jan. 27, 1854. We are indebted to Dr. Adams for a copy of the Gazette, and present our readers with the following translation of the article alluded to.—*Bos. Med. & Sur. Journal.*

"Mr. Editor.---Through the kind instruction of M. Robert. I had the honor of presenting to the Surgical Society, at its session of the 4th December, 1853, a specimen of a tri-branched sponge-holder, the exact counterpart, *in form*, of those in general use at present in New York, with the additions of Dr. Buck, surgeon of the New York City Hospital, and the further improvements of M. Charriere, Jr. Permit me to say a few words respecting the historical and practical details of the same.

"It has been a disputed question, to whom the merit of the invention of this instrument is to be awarded, and likewise to whom belongs the priority of its use in the laryngeal cavity. After careful and conscientious research, I find that the first idea of such an instrument was conceived by Dr. David Green, for the purpose of applying a solution of nitrate of silver, to the larynx, pharynx, and œsophagus. He at first made use of a male catheter, to which a piece of sponge was fastened by a thread. After several experiments, he at last adopted a whalebone stem, curved to the segment of a circle at its extremity, to which a sponge was attached, with strong twine or wire. One incovenience attended this instrument; the twine or wire, became worn or corroded in a short time, and consequently the posibility that the sponge might become detached. Should such a thing occur whilst cauterizing the larynx, a fatal accident would be the consequence.—Beside, it was necessary to have a great number of instruments, in order to avoid using the same sponge for different patients. To obviate these difficulties, Dr. Buck attached to the stem a pair of silver nippers, provided with a sliding ring which secured the sponge. Recently, having had occasion to order an instrument with Dr. B.'s addition. Mr. Charriere, Jr., suggested that it would add to the utility and perfection of the instrument by making the nippers with three jaws; that it would hold the sponge better, and preclude the possibility of its becoming disengaged. In the instrument thus constructed, one of the jaws is furnished with a stopping-peg; over which a compressing ring passes, by the aid of a notch (as in the bayonet). When the ring is placed over the rest, it is made to take a half turn; it cannot then possibly fall back, and the sponge is secured in the firmest manner.

"As regards the first person who made use of such an instrument for applying caustic solutions to the larynx, Dr. Horace Green, of New York, asserts, in the introduction to his work on Brochitis, that in 1841, two years previous to the publication of the English translation of the works of MM. Trousseau and Belloc, he was accustomed to use cauterization to the larynx; but the practice of MM. Trosseau and Belloc was known long prior to that time in America, for Prof. J. M. Smith mentions it in his lectures delivered at the University of New York, in 1828.

"The possibility of introducing the sponge into the larynx has been doubted in France. I have, however, thrice proved its feasibility in the clearest manner. Dr. Green goes much further, and affirms he had penetrated *into the trachea to its bifurcation*, and that with comparative ease. It is my duty to repeat the assertion. Yours, &c.

John G. Adams,

Late Secretary of the Academy of Medicine of New York, and Ex-Editor of the Med. Times."

ALCOHOL A POISON *vs.* ARSENIC A POISON.

"If I kill a man," one may say, "by vending arsenic, I will be hung: if I kill a man by vending alcohol, I may ride in a coach, be mayor of a city, member of Congress, or even a President of the United States."

Why should this difference be? There is no reason, under heaven, for it, except that men are blinded by the fact, that arsenic kills quickly, and alcohol slowly; or to the fact rather, that, as the two are usually taken, the one does its work quickly and the other slowly; for arsenic can be taken, and in some countries, is taken habitually, in quantities which are as slow in producing fatal effects, as the use of alcohol among us.

Both are poisons; both destroy; because one, as taken, is fatal in a day, and the other,

as taken, is fatal only perhaps at the end of years; men, forsooth, fail to perceive that the man who administers the one is a murderer and deserves to be hung, as truly as the man who administers the other! !---- *Prohibitionist.*

QUARTERLY REPORT ON FORENSIC MEDICINE, TOXICOLOGY, &c.

BY W. B. KESTEVEN, M. R. C. S.

Medical Jurisprudence in Great Britain has no distinct organ whereby to vindicate its condition and progress. In Paris, in Berlin, and in Vienna, journals devoted thereto preserve all the most important facts relating to continental forensic medicine. On this side of the Channel these topics must be sought throughout professional journals, or ordinary newspaper reports of trials, coroners' inquests, &c. It is not our object to trace the cause of this blank in British Medical literature. Our aim will be (so far as the space can be spared for the purpose in this journal) to supply the deficiency, by selecting from other periodical publications all cases of importance or interest in a medico-legal point of view. We shall necessarily be restricted to brief abstracts of extended essays. It is hoped, however, that our quarterly record may supply the material for occasional retrospective reports, to mark the advance of this branch of medical science.*

Detection of Blood and Blood-stains in Medico-legal Investigations.—by Prof. Rose, of Berlin.†—The recognition of blood-stains when unmixed with other substances. or in sufficient quantity, is not difficult. The case, however, is different when the quantity is small and the blood is mixed with the fibres or tissue of clothes, &c., as in an instance mentioned by Prof. Rose, wherein the specks of blood could only be detected on a cloth coat by means of a lens and a strong light. The greatest care was required in their removal, whereby also the quantity was diminished, and they were intermingled with fibres of cloth. The traces thus obtained were macerated in a few drops of cold water, till the solution was of a reddish color; it was then poured off the fibres of the cloth. The solution was then boiled, a coagulum formed, which on being treated by heat and caustic potash, presented a greenish solution presenting the phenomena of polarization, being of a green color to transmitted, and red to incident light. Chlorine water produced white flocculi. Dilute nitric acid and tincture of gall have a feeble violet color.

The discrimination of dried blood-spots from rust-spots on the surface of metalic iron is often still more difficult. Prof. Rose quotes the observations of Vauquelin and others, that iron-rust contains ammonia, applying this test in the case of iron-rust by comparison with the peculiar empyreumatic odor caused by burning blood. The presence of blood with the rust is further detected by the addition of muriatic acid, and the production f Prussian blue.

When blood is spilt on a polished steel surface, it dries, and is readily washed off again without leaving any mark on the surface; rust, on the contrary, cannot be removed without leaving a stain. A knife was submitted to examination by Rose.—It had been found in a field, where some months before, a murder had been committed. The blade was rusted, but presented no trace of blood, which was, however, detected by chemical analysis in considerable quantity in the handle of the knife; it had been washed off the blade by rain.—Professor Rose has observed that freshly precipitated oxide of iron has the property of combining with and dissolving the coloring matter of the blood. The solution thus obtained is available for the application of other tests already mentioned. Hydrated silica possesses the same property. The researches upon these substances, by Prof. Rose, and their application to the detection of blood in garden mould, are given in the article quoted from.

The subject of the detection of blood-stains was very fully investigated by Dr. Taylor (Guy's Hospital Reports, 1851, p. 371,) on the occasion of the trial of Thomas Drory, for the murder of Jael Denny, at the Chelmsford assizes in 1851. A pamphlet containing Dr. Taylor's researches has been subsequently published.

A murder has recently been perpetrated near Windsor. At the coroner's inquest the opinion of Dr. Taylor, respecting the date of certain blood-stains on the clothes of the accused, formed one of the most important links in the chain of circumstancial evidence which led to a verdict of "wilful murder." We reserve further notice of the facts in this case until the evidence to be adduced on the trial of the prisoner shall be before us.

Diagnosis of Injuries by Sulphuric Acid

*It may be stated that an unsuccessful attempt was made, about two years ago, to establish an English journal of Medical Jurisprudence. The Legal Examiner and Med. Jurist was set on foot by E. H. J. Crawford, Esq. M. P., Barrister-at-law; the medical department having been superintended by G. W. Hastings, Esq., Barrister. Not having, the advantage of a medical editor, and its sale not having been promoted by the interests of a medical publisher, the hopes of its founder, that it would embrace all topics common to the two professions, were frustrated. The Legal Examiner still flourishes; the Medical Jurist has been some months defunct.

† Casper's Vierteljahrsschrift, Oct., p. 294.

*from Burns of Red-hot Coals**—The opinion of Dr. Masclika, of Prague, was required upon the cause of death in the case of a child apparently burnt by accident. On the examination of the body, indications appeared of the internal administration of strong sulphuric acid, and these were confirmed by chemical analysis. The questions were raised—whether the effect of red-hot coal on linen could be distinguished by chemical analysis from the results of the corrosion of concentrated sulphuric acid?—whether sulphuric acid would not be formed during the process of such combustion?—what would be the changes on the human body produced by the action of concentrated sulphuric acid?—and what from the effect of a red-hot body, as coal?

The experiments of Dr. Masclika showed that the moist, paste-like characters and color of the edges of the holes burnt by sulphuric acid distinguish them from holes burnt by hot coals, so long as the texture is undisturbed; but that after washing in water these characteristics disappear. It was shown that in the combustion of a linen fabric with red-hot coal, sulphuric acid is formed. With regard to the effects of the two on the human body, it was stated that, besides the differences in appearance of the two forms of corrosion, the action of a red-hot coal would give rise to phosphoric acid in greater quantity than sulphuric acid, which is not the case when linen is burnt. In the case under examination, it was made clear that death was caused by the internal administration of concentrated sulphuric acid and that certain external burns were produced by fire, and were insufficient of themselves to have caused death.

Medico-legal Examination of suspected Spots on a Towel in a case of Infanticide.† By Dr. Wistrand.—A soiled towel having been found under circumstances supposed to throw some light upon a case of infanticide, it was submitted to examination by Dr. Wistrand. A stained portion was cut off and macerated, blood globules were discovered by the microscope and by chemical reagents. Another portion, on examination, presented particles of bile, epithelium and fatty matter. Epidermic cells and cutaneous glandular structure were also detected on portions of the towel. It was concluded that these several matters were stains from the blood of the umbilcal cord, from meconium, and from the cutaneous secretion of infants known as *vernix caseosa*. The proof was that a new-born infant had been wrapped in a towel.

Burns from Phosphorus.‡—Two children in Havre having picked up some pieces of phosphorus in the street, and being ignorant of its dangerous properties, but attracted by its luminosity, one of them pocketed several pieces, whence his dress became ignited; when the flames were extinguished, it was found that very serious injury had been caused thereby.

*Hysterical Monomania—Self-inflicted Wounds.**—M. Tolmouche relates the particlars of the case of a female who brought a charge of violence and rape against some persons unknown. On close investigation, it was discovered that a great number of punctured wounds, which were inflicted on various parts of her body, had been the work of her own hands, under the influence of a morbid love of notoriety.

Death from Flagellation.—The same writer records the case of a child, aged four years and a half, who suffered such severe and repeated floggings at the hand of a man who had adopted her, that congestion of the brain and death ensued.

Monomania—Book-stealing†—An Englishman in Paris having been convicted of stealing books from a stall, and condemned to two years imprisonment, pleaded monomania, or an irresistable impulse, as ground of mitigation of sentence. From the previous history, however of the culprit, it was established that he must be held responsible for his acts; the plea was therefore negatived.

Results of Wounds, Injuries, &c., as affecting capability for Labour‡—Dr. Boeker, of Bonn, has written an article extending over fifty pages of the journal, to discuss the subject of Abeitsunfahikeit. incapacite de travail personnel (Devergie.) Dr. Boeker relates several cases in which difficulty was experienced in determining the fact and extent of "incapacity." The editor, Dr. Behrend, suggests that the duty of the medical jurists is confined to determining the presistence in any organs or limbs of the consequences of an injury, leaving incapacity for work to the determination of a jury. The French code affixes punishment to the inflicter of an injury which shall cause inability for labor beyond twenty days from the date of the infliction thereof. Other German medico-legal journals contain many elaborate articles upon the medico-legal bearings of wounds, injuries, &c.; the Prussian criminal laws having recently undergone revisal and modification. The Code Napoleon has been followed with regard to wounds injuries, &c.

* Schmidt's Jahrbücher, Oct., 1853, p. 89.
† Journal de Chimie Medicale, October.
‡ Schmidt's Jahrbüttcher, Oct., p. 94.

* Annales d'Hygiene, &c., Oct.
† Annales Medico-Psychologique, Oct.
‡ Henke's Zeitschrift Oct.,

PATHOLOGICAL CONSIDERATIONS.

FROM NEWTON & POWELL'S PRACTICE.

Before entering upon the consideration of the special manifestations of disease, a few general remarks, with reference to the whole subject, appear to be called for.

We have thus far spoken familiarly of disease and diseased action, and our readers no doubt, conceived that they thoroughly understood us. and we think it very probable that they did, so far as the nature of the subject demanded; that is, they have understood us after the manner of unprofessional society. But, as we approach the Practice of Medicine, it becomes indispensable that we should be definitely underderstood as to the ideas we attach to certain words, which constitute the initial of medical study. A misapprehension of our meaning of these words will lead to a misunderstanding of all of our subsequent reasoning. A few illustrations will render this matter transparent.

At this time, the prevailing opinion in the profession is, that fever and inflammation are diseases, and upon this opinion is founded a certain medical practice; now, suppose this idea to be founded in error, then it follows that the practice founded upon it must be equally erroneous, and consequently mischievous. At this point we will make two or three citations to prove our statement to be correct.

Watson's Practice, page 94, informs us, that *inflammation* is "a special form of *disease* to which all parts of the body are liable—a *disease* that meets us at every turn."

Professor Paine's Institutes, page 464, says, that "inflammation and fever are two orders of *disease* which make up the great amount of human maladies and form the general outlets of life."

Professor Gregory says, that "fever is the most important because the most universal and the most fatal of all the *morbid* affections of which the human body is susceptible."

These quotations are made from standard and highly esteemed authorities in the allopathic branch of the profession; but, without any expression of opinion on this subject. the allopathic practice authorises the inference as to what its fundamental doctrine must be. If fever be not *disease*, then there is no warranty for bleeding, purging, and poisons.

People generally believe that if the old school physicians neither bleed nor give mercury, they are on a par with the new school—but here they are mistaken; the difference between the two is not confined to a difference between their therapeutical agents, but in the principles that guide to the use of them. Life can be destroyed without the use of the lancet or mercury—and so fever can be brought down without them.

The proper question is this: which is the *physician*, the one who regards fever as a disease, and therefore uses all the means he can command, as bleeding, purging, poisons, and starvation, to reduce and break it down, or the one who regards fever as a proper physiological act of the system to remove disease, and therefore does all he can to sustain and equalize it? It is true that bleeding and purging will equalize it, but in doing this they equalize the patient with the dust from whence he came. But the idea of sustaining fever and inflammation does not belong to their practice.

Because we sustain fever and inflammation as the two most important physiological friends the animal economy can acknowledge, and sustain our principles by a consistent materia medica—one without poisons*—we have been denounced as innovators, charlatans, and quacks. We will reverse this charge and clench it, before we have done.

Most of the modern allopathic writers on inflammation and fever refer us, for the purpose of obtaining a more thorough understanding of these subjects, to Professor John Hunter's work on inflammation.—Well, what does Professor John Hunter say?

In vol. iii, page 285, he tells us that "inflammation, in itself, is not to be considered a disease, but as a salutary operation consequent either to some violence or *disease*." It "is an action produced for the restoration of the most simple injury in sound parts, which goes beyond the power of union by the first intention."

He continues on page 293, "Pure inflammation is rather an effort of nature than a disease."

* As there has been much cavilling as to what constitutes a poison, we will present our definition of the word, as we use it. Every substance is a poison in the abstract, absolutely and necessarily, whose inorganic elements can not be digested, assimilated, or appropriated, by the function of nutrition, to any normal purposes in the animal economy.

Strychnine and hydrocyanic acid are not, in the abstract, poisons, but relatively they are, in common with all other substances which are not, in the abstract, poisons.

Under this definition, MERCURY, ARSENIC, ANTIMONY, BISMUTH, etc., are, and in defiance of all cavilling or sophistry must be, poisons; and, so long as the smallest conceivable particle of any such absolute poison is in the system, the vital force will labor to cast it out, because it is, PER SE, a foreign body—a source of irritation and cannot possibly be converted into anything that is not unfriendly to the animal tissues.

In the Western Journal of Medicine, vol. 3, page 536, Prof. Drake says that "mercury has been found in the bones, blood, brain, and nerves," and yet it cannot form a part of either of them, nor can any other substance that is embraced by our definition—they are all emphatically poisons.

On page 286, he again remarks, "From whatever cause it (inflammation) arises, it is an effort intended to bring about a reinstatement of the parts to nearly their natural functions."

Upon this doctrine we stand—a doctrine that is recommended by the most distinguished allopaths of the day; and yet, strange to tell, it is especially and peculiarly the one which they have all abandoned. Who are now the innovators, the charlatans and the quacks? The allopaths recommend this doctrine, and yet, practically, denounce it—we believe it and practically conform to it—which, then, is the most consistent?

Now, suppose we try the Hunterian doctrine of inflammation by a few illustrations.

A mechanic has a splinter forced under his finger nail, and so broken that he cannot extract it. Is not the first observable result in the part inflammation, and then follows suppuration, granulation, and cicitrization? Is not the whole of this process normal, under the circumstances? Could the part originally have been in a normal condition if these phenomena had not succeeded to the accident? Was not the inflammation absolutely essential to the expulsion of the splinter? Now, suppose the patient to have been b'ed to such an extent as to have prevented the inflammation, would the splinter have been expelled?

As a further exemplification of this subject, we extract the following illustration from "Simon's General Pathology:"

"A man has a sudden and severe pain in some part of the surface of his body, accompanied by a rush of b'ood to the painful spot, and by a disposition to the pouring out of serum there. This, obviously, is not a condition of health. But, if you knew that a quantity of boiling water had just been dashed on the part, you would be disposed to transfer the term *unhealthy* from the effect to the cause—from the man to the kettle. In fact, the man would have been unhealthy if this redness and vesication had not occurred." Then, as they did occur, they were right actions, under the circumstances, and cannot, therefore, under any definition of disease, be called diseased actions.

Doctrines as sound as this have been proclaimed by several of our living allopathic professors, but they appear only as luminous rays that occasionally flitted across their minds—they were not maintained with consistency, nor followed by practice. In proof of this, we will select a few illustrations: Professor Paine, in his Institutes, page 465, teaches that "inflammation takes its rise in purely physiological conditions and holds its progress and decline under the same great natural laws of the constitution." The professor could not have expressed himself in language more compatible with truth, but he certainly did not understand the import of it, or he would never have written the following: on page 464, he says, "Inflammation and fever are the two orders of disease which make up the great amount of human maladies and form the great outlets of life."

In inconsistency Professor Watson has more than equaled the preceding. He says, Practice, page 94, that "It is by inflammation that wounds are closed and fractures repaired—that parts adhere together when their adhesion is essential to the preservation of the individual, and that foreign and hurtful matters are conveyed safely out of the body." This doctrine is correct, but that he should administer calomel to break down inflammation, and, when down, to expect it to carry such a "hurtful matter" is much more than we can conceive to be possible with a rational man. But we will hear him again: on the same page, he teaches that "inflammation is a special form of disease, to which all parts of the body are liable—a *disease* that meets us at every turn." Upon which of these principles did he found his practice? upon the latter, and in aiming his blows at fever and inflammation he destroyed many of his patients, no doubt.

It is not our purpose to discuss at length, this question—we only wish to make our pathological position known, that the fundamental principle of our practice may be understood. We will not, therefore, pursue it further than to present two cases to illustrate the two systems of practice which are founded, respectively, upon its two horns.

In 1837, the writer had the inferior extremity of the right fibu'a fractured—his general health at the time was, perhaps, never better—it was treated by a Philadelphia graduate, who subsequently devoted a year or two to the surgical wards of the Parisian hospitals. In the course of the treatment he was duly bled, purged, nauseated, calomelized, and starved, and what is equally worthy of note, he approved of it. In four months he left his room by the aid of a crutch, but very much reduced in flesh. In 1841, he had both bones of the left leg fractured; but, let it be remembered, in the meantime he had changed his opinion of inflammation, and of course his views of practice. In the treatment of this fracture, he was neither b'ed, purged, nauseated, nor starved; but upon the supervention of fever,

he took in two days, twenty grains of quinine; this was all the treatment he had, except plenty of palatable and nutricious food. In thirty days, by the aid of a crutch, he left his room, weighing some ten or twelve pounds more than when the accident happened.

These two cases, in our judgment, perfectly illustrate the two systems of practice. In the first case, the efforts that were made to break down, and to keep down, the inflammation and fever, kept the patient down. In the second instance these manifestations were received as friends, who had come, expressly, for the purpose of mending a broken limb, and, therefore, instead of trying to bleed, purge and starve them out of existence, they were fed on quinine. In the treatment of this second case, it will be perceived, furthermore, that he had a thorough faith in this doctrine, notwithstanding the force of education to the contrary. It may be interesting to add, that he had with him a fellow graduate who manifested much concern for his condition—he frequently implored him to abandon his course—that he was risking not only his leg, but his life; but he gave no ear to him, because he saw that he could not see well—that he was still wearing the old foggy-looking spectacles that were given to him by the university.

Although we have perhaps sufficiently illustrated our position, we have not specifically defined our understanding of the words, disease, fever, inflammation, physiology, and pathology.

Disease we understand to be that condition of a part which disqualifies it for the performance of its function.

Fever is a manifestation of an effort of the system to remove disease—a physiological action under the circumstances—a general or constitutional indication of disease.

Inflammation is an evidence of local disease—an action produced for the restoration of a diseased part—an effort of the vital force to remove disease.

Physiology is the science of life in all its modes of being, but is now usually restricted to life in a state of health.

Pathology is the science of life in a state of disease—it is physiology under abnormal circumstances.

We may be asked, what is gained by these views, definitions, and explanations? We answer, everything that can be gained by having the truth, instead of a fiction or a falsehood. There is a wide difference between considering ourselves as called upon to treat fever as a disease, instead of a physiological action, or an effort of the system to remove disease—as much difference as there is between bleeding and purging on the one hand and the administration of antispasmodics and tonics on the other. There is, we conceive, a wide difference between supporting the vital force under the inflammation of a broken leg, by nutritious diet and tonics, and such bleeding, purging and starving as will break down the inflammation and defeat a restoration of the part. There is a wide difference between setting up, by the use of means, a new pathological action, that is always hazardous and frequently fatal, and that of aiding and regulating a pre-existing one. Finally, we think that there exists a wide and an irreconcilable difference between assisting nature—the vis *medicatrix naturæ*, to affect a desired physiological change, and that of crippling all of her efforts and energies.

It will be conceded by all, that without vital force there is no manifest life—death only exists. And it will readily be admitted, that without blood there is no life, and that death can be easily produced by bleeding, and that to the extent of any abstraction of this fluid is the vital force reduced. It is equally well known, that purgatives and poisons will diminish and even destroy the vital force; and, finally, we think, that it would be difficult to prove that an animal can have too much vital force.

Now is it not absolutely true that a very large majority of physicians do pretend to cure disease by bleeding, purging, and the administration of poisons? Do they not sometimes, yea, frequently, bleed and purge to reduce, or else to equalize vital action, and then, in a short time, give stimulants and tonics to sustain the vital force? Do they not bleed in cholera and then presently inject salted water into the veins to supply the place of the blood they had just abstracted? But we will be more special.

Dr. Armstrong, speaking of scarlatina maligna, says, "the vehemence of the attack and the intensity of the excitement rapidly exhaust the vital energies." And what does he recommend to support them, and to prevent their destruction? "Emetics followed by brisk purgation." Is not this equivalent to bleeding a man to keep him from fainting? A disease must be very violent when it can exhaust vital energy with more rapidity than "brisk purgation." A patient must certainly have a vigorous vital force to sustain himself under both. Professing to be the friend of the "vital energies," he gives aid to the disease; but this is not the only glaring inconsistency of his practice. When he visited the patient, he found the "vital energies" struggling to force the

poison upon the surface, or, in other words, to remove the cutaneous obstructions, and he immediately countermands the effort and orders "brisk purgation," to force the "vital energies" to retreat to the bowels and to leave the disease in possession of its stronghold. Great must be the "vital energies," when they can successfully resist a malignant disease, reinforced, as it usually is, by bleeding, purging, and poisons.

Next to the lancet, mercury is most prized in the treatment of inflammatory affections, and perhaps on account of that quality which Professor Harrison assigns to it, "a most powerful depressor of the energies of life." According to our definition, it is a poison, and Hooper's Dictionary teaches, that "all our most valuable medicines are active poisons."

Now, inasmuch as all epidemics are produced by a poison of some kind, and as the "vital energies are frequently incapable of expelling it," would common sense suggest the propriety of introducing into the system another poison, on the plea that two poisons are more easily expelled than one, more especially as one of them is unalterably a poison, and "a depressor of the energies of life?"

This specimen of practice, by Dr. Armstrong, is a pretty fair illustration of allopathic practice in general—it was once our own—and as one illustration is enough to expose its hideous deformity, we will drop it, and proceed to the consideration of more agreeable subjects.

Having disposed of such physiological matter as became suggested to us, with reference to our leading object, it yet remains for us to indicate and illustrate that fundamental law or principle that will guide our practice. We say fundamental law or principle, because, maintaining as we do, that disease is but one—a unit, there can be but one fundamental change, which is to, or from, health; and, as the leading object of this work is to teach how we may, with the most facility and certainty, effect the first—a change to health, it becomes the paramount duty of students to discover, as far as possible, the processes which living organized systems establish for their own preservation, under the various contingencies incidental to existence. So far as they shall accomplish this, they will find that they have nothing to do but to aid, and every dose of medicine they shall administer, during their ignorance of the intentions, or the character of the efforts the system is making, will be done empirically.

It will not, we presume, be disputed, that the vital force is a unit, if not in fact, at least in its action, as much so as steam—neither of them can accomplish anything, without appropriate apparatuses to act upon; and we are so constituted as to believe that all living organizations have been so arranged and endowed as to act, under existing circumstances, not intelligently, but in harmony or in accordance with the laws of intelligence—that the various organs that constitute the system cannot and will not act, except as they are compelled by the vital force, and that when they do act, it is with the wisdom of that intelligence which designed them, and assigned to each its peculiar mode and range of action. A denial of this conclusion is a virtual denial that science does or can exist; it is equivalent to admitting that a living organism, in a state of disease, may become as perfectly a mass of confusion—a chaos—as a mere mechanical aggregage.

We do not know that any one ever doubted that living organizations act in harmony with the laws of a predetermined wisdom; but it will be seen, before we have done, that physicians have practiced, and now do, with either a shameless ignorance of, or a careless indifference to, the laws or economy of the living system. The man who has not an intelligent, a fixed, and an abiding faith that every action that takes place in a living system, is, under circumstances, wisely directed—because directed by the provisions of that wisdom which is SCIENCE—which admits of no errors—no accidents in the measureless bounds of the universe, is unfit for the profession.

The physician who is thus constituted, and thus qualified, never bleeds and purges to support the "vital energies," but removes impediments--the causes of abnormal actions—and aids the vital force to maintain such movements as shall be in harmony with the living *norma*.

In a state of health, the vital force is adequate to the maintenance of an equilibrium of action in all parts of the system, but under the influence of a local injury, this is not the case—it is indispensable that a major action shall be sustained in the injured part. In the case of a fractured bone, constipation immediately supervenes, or else a diarrhea, which is inevitably an unfavorable symptom—and these remarks are equally true of small-pox. All agree that constipation in this malady amounts almost to a pathognomonic symptom; and when diarrhea happens to appear in its stead, it is regarded by all writers as unfavorable.

Now, the fact that constipation attends all inflammations of the animal system, cannot be regarded as an accidental circumstance—it should teach us something in

reference to the agency of the vital force, under the existence of such forms of disease as we have alluded to. During the inflammatory stage of small-pox, purgatives are positively prohibited; now, we would be pleased to know why they are not prohibited in fractured bones and gun-shot wounds? If no valuable reason can be given for this difference of practice, then it is empirical.

Let it be remembered, then that in fractures and other wounds, something more is required of the vital force than barely to maintain repairs; and to afford an additional force to the injured part an equilibrium of force must be effected in the system; and, as it cannot be taken from the animal under the circumstances, it is taken from the vegetative, and constipation results, and continues until the work of recovery has fairly become established.

If, in such a case, a cathartic be administered before the thorough establishment of inflammation, the recovery of the part is retarded—and how often has it been retarded by a rigid antiphlogistic treatment?

In the case of the small-pox, the unmistakable purpose of the system is to become relieved through the cutaneous surface—to it the vital energies are directed, and the obvious effect of a purgative is to counteract the vital force, and to expend as much of it upon the mucous membrane of the alimentary canal, as might be sufficient to force the disease or its cause upon the surface.

Observation, during many years, has satisfied us that cathartics are used too much by every branch of the profession. our object is a sanative course of treatment in all the manifestations of disease, and we are sure than an injudicious use of cathartics is as far removed from such a practice, as the use of the lancet is. In fevers and inflammations, cathartics become indicated when the fecal contents of the alimentary tube become a source of irritation. Health cannot be restored, in any form of disease, until secretion becomes re-established, and when it is, we have always observed the alvine excretion to return with promptitude, and to continue with more health, than ever follows the use of cathartics.

In diseased conditions of the tissues and organs of animal life, they are not properly indicated, not even when the brain and lungs are invaded, because more legitimate means of equalizing the circulation can be employed. Except for the purpose of dislodging sources or causes of irritation, and this irritation must become manifest, we have no more use for cathartics—purgatives, than we have for the lancet. When the intestinal contents are producing no irritation, is it not better to let them alone, than to introduce into the bowels a certain cause of irritation?

In the most confluent forms of small-pox there is no danger so long as an equilibrium exists in the irritation and circulation of the system, and if this equilibrium cannot be maintained without purgatives, then there is but little probability that it will be with them, because they cannot be administered without producing more or less of inequilibrium. In most cases of constipation, to the extent of mischievous irritation, the want of action is most generally confined to the large intestines, and more particularly the rectum; consequently, it can be relieved by enemas, and nothing further is needed. When disease invades the system of vegetative life, cathartics become indispensable, but not to the extent, even then, of Dr. Armstrong's idea of sustaining the "vital energies," by "brisk purgation."

In dangerous forms of disease, our allopathic friends resort to what they call "heroic remedies," which consist of bleeding, purging, blistering and mercurialization.—Now, it will be admitted, that it is impossible to draw blood without reducing the vital force, purging will do the same, and as to mercury, Professor Harrison says, that it is "a most powerful depressor of the energies of life."

Cholera wastes life as rapidly as bleeding and purging, and it is as great a "depresser of the vital energies of life," as mercury. In view of these facts, it is exceedingly singular that an attempt to cure it by bleeding and the administration of a pound of mercury, more or less,* should ever have been seriously entertained by a well-informed physician.

We have also our "heroic remedies," but they only reduce spasm or constriction, equalize the circulation, promote secretion, and thus remove disease by depuration; and they do all this without imposing a tax upon the "energies of life," and without the establishment of another form of disease, as a mere sequel, that may prove as fatal as the one it supplanted.

Although, in the case of inflammatory fevers, the arterial action is very greatly augmented, yet we are not to conclude that there has been an increase of vital power, or of the energies of life, because disease is not creative—it can neither produce nor augment life—it can only occasion a suspension of its manifestation in some functions, and an accumulation of it in others. When that quantity of vital power, which, in health, maintained the functions of se-

* We cannot prove that more than eleven ounces were administered to the same patient in a case of cholera.

cretion, excretion and nutrition, is again returned to these functions, fever ceases to exist. The increase of vital manifestation, in fevers, is not universal, nor even general, for while there is an exaltation of vitality, in some parts, there is a deficiency in others, as is most clearly evinced by a loss of appetite, the wasting of the body from an absence of nutrition, by the weakness of the muscles, in many instances, and by a sense of prostration. When we can equalize this vitality, we restore health; but if we abstract vitality, by bleeding and purging, we just so far incapacitate the system to repair the lesion that disease has inflicted; for this end, then, it is absolutely essential that we should carefully husband the vitality and its resources.

We have shown that neither fever nor inflammation is disease, but are accumulations of vital force for the removal of it—that disease is an incapacity, in a part, or parts, to perform their function; and we now add, that this incapacity depends upon chemical mechanical or vital impediments or obstructions, and when it is of the third character, it is a result of defective or suspended depuration.

Now, suppose the skin to have failed to perform its function, and that the failure has resulted from suspended secretion, and therefore replete with obstructions from arrested or suspended depuration; how is it possible for bleeding or purging to remove the obstruction? By reducing the vitality, they reduce the energy of the effort that is made for its removal, but the obstruction still exists, and the power to remove it is diminished. Is it not obvious that every effort that is made to remove the disease, by such means, only tends to confirm it?

Suppose the lungs to fail in depurating the venous blood, and tubercle shall result, will bleeding and purging remove it? Suppose, again, the kidneys to fail to eliminate to a sufficient extent, the urea, and rheumatism shall result, will bleeding and purging remove this urea, and thereby remove the rheumatism? Has not experience proved that they cannot?

If, then, disease consists in obstructions, and that they result from suspended depuration, is not the indication of cure a re-establishment of the depuration? Do not the hot-springs of Arkansas, cure rheumatism by establishing secretion and depuration?

It will now be understood that our "heroic remedies" consist of those articles, and of that mode of practice, which are the best calculated to equalize the circulation, promote secretion, and consequent depuration. Is it not equally perceptible that we may do all this without the least intention of reducing the absolute quantity of the vital force? Nay, more, that the less we waste of it, the greater our success? Is it not, furthermore, obvious that we may, by producing hypersecretion, injudiciously weaken or exhaust the patient? And is it not equally clear that our antiphlosgistic treatment consists in removing disease, and not the vital powers of the patient, or both of them indiscriminately?

The preceding views have been advanced with reference to those forms of disease in which the allopathic branch of the profession would bleed and purge; but there is another form, in which they would not resort to the same practice, and yet, it would be equally rational; it is that, in which there is less equality between the amount of the obstruction and the power of the vital force—a case of congestion in which there is not existing sufficient power to effect a reaction. In these two forms of disease there is no similitude in the treatment by the allopathic physicians, and yet the two forms are essentially the same—differing only in degree—the vital power in the one, or the obstruction in the other, predominates. In the former, there is more demand for antispasmodics, and the latter, for revulsives. When the circulation shall become equalized, secretion will follow—depuration will take place—the obstructions, and, of course, the disease, will be removed.

While, as eclectics, we reserve to ourselves the right to use any and every article, now known, or that may become known, when we shall become convinced that it is the best we can do for the patient—that we entertain no prejudice against any one—that so long as a *proper* use can be made of any one, we advocate it. But, as observation has taught us, that the indigestible medicines act unkindly upon the system, and frequently do irreparable mischief; and, as the same great teacher has most thoroughly convinced us that we have a digestible materia medica that is adequate to achieve all that is desirable, in a higher degree, too, than the indigestible, we hold it to be humane, wise and philanthropic to discard from our practice all indigestible medicines—that is, all poisonous elements—indeed, we hold this course to be, on the score of justice, absolutely imperious.

But, after all, more depends upon correct principles, in practice, than upon the agents used. Nothing but mischief can follow the application of a false principle.

Those who contend that fever is a disease, would do about as much present mischief with purely digestible medicines, as they now do, the difference being only in the sequelæ. Those who practice consistently, upon false principles, do more mischief than those who have no principles, because the latter may sometimes be right, while the former never are; it becomes, then, a matter of the first importance, that we should be certain that our principles constitute the expressions of truth; when this is the case, so long as we are consistent, we can never be wrong, though we may be ignorant.

There exists throughout the length and breadth of the medical profession, an opinion—for such it merely is—which we think to be an error, and, as such, is attended with much mischief—we allude to the opinion that some forms of disease are hereditary. If the truth of this opinion was ever questioned, or doubted, we have not learned it; and yet, if there be in the profession an error more clearly exposable than it, it has escaped our notice.

In the first and second Books of this treatise, we have used the word *hereditary* in its common acceptation, because, as yet, we had afforded us no proper opportunity to expose the error of it; but now, as we are about to commence the consideration of the special forms of disease, it becomes proper that we should make known our opinions upon all leading subjects—and this one is of that character.

As the hereditary character of phthisis pulmonalis is not doubted, we shall make a principal use of it in the illustration of our views.

In table, page 20, we have, by measurement, and we may add, the observation of twenty years, shown, that consumption is associated with a certain relative development of the medulla oblongata and the cerebellum. When we consider the functional relation which these parts bear to the lungs, we must conclude, that if the coincidence we have pointed out between the disease of the former and a certain development of the latter be uniform, that they hold the relation, primarily, to each other of the cause and effect.

We have found that those who are liable to phthisis have generally a large medulla oblongata and a small cerebellum, relatively, and the exceptions to this law come under the reverse of these organic conditions, through the instrumentality of very different exciting causes. Because of these peculiar organic conditions, as to development, it does not follow that there existed either active, passive, or latent elements of disease, nor even the most remote possibility of a predisposition to it.

Peculiarities of both size and form are transmissible from parents to their children, and each form, under causes of excitement, must and will represent its identity in its mode of action, which, of course will be modified by influencing circumstances. In other words, no two different forms can manifest the same mode of action under the same cause of excitement and the same attending circumstances. Every one form of disease, therefore, is as vulnerable to the charge of being hereditary as phthisis.

In one peculiar form of organization, there exists a liability to rheumatism, to gout, to cancer, and perhaps to some other forms of disease; in another, there will be found a liability to passive congestion of the brain, phthisis pulmonalis; and other kindred forms of disease; depending upon different degrees of development, different, or even the same, causes of excitement and attending influences.

A large proportion of society are so nearly balanced as to have no preponderating liability to any particular form of disease, and yet may be liable, under the force of exciting causes, to any one.

The truth of the doctrine we have here taught, can be, we think, amply sustained by a reference to well known facts.

Take a case of what is called a "hereditary predisposition to phthisis,"—tell the patient that this is his condition, and what becomes his conclusion? Nothing less, inevitably, than premature death—he considers himself fated—doomed irrevocably to such an end. With such a conclusion preying upon his mind, how is it possible that he should recover from any form of disease that has become constitutional?

Perhaps this physician may send him to the island of Cuba, in order that he may possibly recover under the peculiarities of such a climate. But what is the principle that actuates him in sending him to the south? If any one has discovered the principle, we have not seen it. He is sent there, so far as we have learned, empirically; he is sent there under the hope that he may be as fortunate as some who had preceded him. But if his disease be *hereditary*, how should any one expect him to recover by a change of climate, of diet, or of anything else?

In Boston, a given measure of atmospheric air contains more oxygen than the same measure does in Cuba, and yet the Boston patient breathes as though he was struggling for more oxygen, and he really is. If then, he obtains, in Cuba, less of

what he wants than in Boston, why send him there?

A simple illustration will explain why he should go south: A horse is breaking down under the weight of his load, although he receives regularly a full measure of food. Now, can he not stand the travel better with one-eighth less food, if one-half the load be taken off him? Every reader, we think, will answer in the affirmative.

The lungs perform two functions—by inspiration they receive oxygen, which is indispensable to the production of animal heat (to say nothing of other purposes;) but in Cuba he requires less animal heat, and therefore for this purpose he requires less oxygen. The other pulmonic affection is that of expiration—an elimination of carbon from the system. Now, while in Boston, the lungs had no aid in the performance of this function—they had to perform the whole duty—that is, they had to carry the whole load; but in Cuba, the high calorific temperature so excites the skin and liver that they take from the lungs half their load. In view of this explanation, we can understand how it is that a young man, before any disease occurs in his lungs, by going to the south, although organized for consumption in the north, will far more probably die of some billious form of disease than any pulmonic one.

It seems, then, that the patient had not inherited a predisposition to phthisis pulmonalis, but that he had inherited a peculiar organization, which was not compatible with a continuance of life under certain circumstances. It is possible, however, that, by such training as would develop his cerebellum, he could so have changed his organization as to have adapted it to its native situation.

It is possible that his organic condition may have been just the reverse of what has been previously supposed—his medulla oblongata may have been feeble, and the cerebellum large, and consequently, he may have been obese; but the nutritive process, in this relation, may have become arrested, and hence the lungs have to eliminate as much more carbon, than usual, as the system had been in the habit of converting into adeps, which, proving more than they can do, they finally generate tubercles in themselves, or cause them to be deposited in other parts. We do not believe that consumption is often produced under these circumstances, but it does happen—that is, men have become obese, and subsequently died of phthisis pulmonalis. But in this case, as in the other, proper training in youth—such as will produce an equilibrium between the medulla oblongata and the cerebellum—will prevent the disease.

No age, it seems, is exempt from this fatal form of disease, and the reason why it is so must now be obvious. Some children are born so feeble, in one or other of the above named organs, as to render it impossible for them to live to maturity—some have such an endowment of them, in connection with circumstances, as will sustain them even to old age; but as the cerebellum begins to decline at the meridian of life, it finally becomes too feeble to sustain the lungs against disease; hence the cause of consumption at a very advanced age.

It is well known, that many men have lived to an old age whose parents had died of consumption, and we have no doubt that they would have died of the same disease if they had lived under the same influences. It becomes, then, our duty to investigate the influences by which such persons were saved, so that we may do for some, by design, what accident has done for others.

We do not doubt the accuracy of our premises—we believe them to be easily and satisfactorily demonstrated, and if so, there can be no doubt as to the proper prophylaxis—exercise of the muscular system, particularly of the superior extremities and chest. This will force a developement of the muscles—increase and strengthen the circulatory and the respiratory systems, and, as a matter of course, those portions of the encephalon which preside over them.

By this course, those organic forms which have been transmitted from parent to child for numberless generations, are broken up—an improved modification has been effected, and the further transmission of a phthisical liability arrested.

We shall now make a few extracts from "Simon's General Pathology," for the purpose of showing how little is known upon this subject, and how impossible it is to reach a sound conclusion by reasoning from a false position. He is treating of the hereditary character of the tubercular diathesis, and especially about the tuberculous nature of a rabbit's liver that was sent to him.

1. "On inquiry of a *candid* poulterer, I found that these 'turbecular' livers are common—very common; that they will be found often in almost every tame rabbit cut open, and in litter after litter; and, strangely enough, that they do not appear incompatible with good health, or at least with sufficiently good for market purposes."

2. "In continuation, I made various ex-

periments to see if I could produce tubercle artificially, and various other examinations to see if I could find it in rabbits dying under other circumstances. The result may be told in a word: I have never seen a tubercle in a rabbit."

3. "One sort of experiment does apparently tend to develop tubercle. As we often stay the process of phthisis in the human subject by transferring our patient to a tropical climate, so, conversely, we can facilitate the development of our experiment from warmer to colder latitudes. It is said, that among the beasts of the Zoological Society's Gardens, tubercle is a frequent cause of death; and especially those that come to our climate from a higher temperature. From my own knowledge, I will only venture to confirm this statement in regard of monkeys; as they have the dignity of standing next to man in form, so they have the inconvenience of this very humane liability: when transferred from the hotter climates to England, and when surrounded by the artificial circumstances of a menagerie, they are apt to die with tubercles in their lungs, mesentery, and spleen."

5. "Here, however, let me detain you on the subject of *hereditary transmission* of scrofula, and explain to you what I mean, when I speak of its being continued in this manner from generation to generation; I do not mean that, in the process of impregnation, actual tubercular matter passes from the system of the scrofulous father into the germ of the infant to remain latent there, till circumstances call for its development; nor that, during uterine life, the blood of the child is poisoned by its mother's blood, as occurs in small pox or syphilis. What I mean is this: that the scrofulous diathesis—that the *disposition to form tubercles* is transmitted; that the child inherits an imperfect pattern of development."

6. "I must explain this more fully, for the inheritance of *dispositions to disease* does not belong to scrofula only; it forms a very important problem in the pathogeny of cancer, with its allied disorders (for they are hereditary,) of gout, and rheumatism, for they too are heirlooms in families; and it, consequently, constitutes one of the most important questions in the study of General Pathology."

7. "Every one recognizes in the process of generation a certain amount of that influence by which a parent becomes the pattern of the formation for his child. No man expects to become the father of an armadillo, or a flying-fish, or a stag-beetle. But more than this, it is expected, and, on the whole, very generally realized, that the child shall be more like its father than its god father. So far the case is clear; but I wish to observe the tendency further.—Follow the child in its ulterior development, for that is the point, and mark how exactly, in various exterior and noticeable signs, he repeats the developements of his father; how, in arriving at the age when his father got corpulent, he acquires the same figure; how, at the age when his father became gray, or bald, he, too, becomes gray, or bald, and with the same succession of parts—vertex first, or temples first, or forehead first, as the case may be; how his teeth decay, or drop, or protude, just as his father's; how his pulse is of the same character—even, as we have often noticed, to the degree of copying an intermittent rhythm; and how his habits of sleeping and waking follow the same direction."

8. "Now, observe, for the distinction is one of great importance, that these things are not *connate;* the child is not born a copy of the father as he begat him; but he is born, having his father's past development as a type for his own future development, so that he shall be developed as his father was developed, and shall hereafter become like him. In addition to that general law of human development, by virtue of which he is destined to be a mammal rather than a bird; and a man rather than an ox; and to reach puberty, manhood, old age, and death in a certain defined succession; he is further possessed by an inherited *personal and particular law* of development, which affixes a something peculiar and individual to his passage through each period of his existence."

9. "If my meaning in all this has been intelligible to you, you will readily conceive that diseases affecting the development of the body are peculiarly those which transmit themselves in the line of hereditary succession; that the disposition to a disease would be hereditary, where the disease consisted of a faulty type of development, affecting limb, or viscus, solid or fluid, in the body; and that no disease would be hereditary, except in so far as it might be developmental."

10. "Accidental mutilations do not become hereditary; for many centuries the Jews and the Mahommedans have undergone circumcision of the prepuce; but the local deformity has never transmitted itself; the new-born Jew or Mussulman offers probably as much foreskin to the knife, as the immediate successors of Abraham or Mahommed."

11. "And, if you transfer these arguments to the several varieties of disease,

you will know, on the one hand, in what diseases to anticipate hereditary transmission; and on the other hand, what peculiar character of disease, to-wit, its developmental character, may be inferred from the fact of its hereditary succession. Of a disease like scorbutus or ague, dependent on the presence or absence of a certain exterior accidental conditions, you would anticipate that it could not be hereditary, any more than a wound or dislocation. Of those accidental accompaniments of scrofula—the morbid processes which arise in defective nutrition, the ulcerations of the cornea or intestines, for instance, which depend on insufficient or inappropriate nourishment, and which, as I have said, are essentially co-extensive in their duration with the exterior causes which produce them—you would know that they have no natural tendency to perpetuate themselves in this way. Of another disease, on the contrary—one like plethora, relating essentially to the rate or degree of development in an element of the body, you might predict that it would tend to become hereditary. And whereas it is in the blood, more strikingly and more constantly than in any ingredient of the organism, that the development is ever in progress; whereas, it is eminently in the blood, that we have at each moment an epitome of the whole development of the body, and find the earliest rudiments and the latest relics of every organized tissue, nascent or in decay; so surely it would be in this fluid—the scene or the subject of so many developmental metamorphoses, that one would expect to find the material explanation of many hereditary diseases.—One would expect that an inherited disposition to form, at various periods of life and in a number of different organs, certain special and characteristic materials bearing definite relation to the normal products of the body, would indicate a peculiarity in the developement of the blood, whereof those deposited materials would be the result and the expression."

12. "Such is the state of the case in regard to scrofula; and therefore it is, that I have analyzed this question of hereditary tendencies to disease. Strict experiment would not, I think, justify me in telling you, *as a certainty*, that the scrofulous diathesis has it explanation in such grounds as we have gone over."

13. "But, though we are short of absolute demonstration on the subject, (14) I may tell you this with confidence: there exists many facts rendering it highly probable that tubercle has its rise in disease of the blood; that this disease of the blood is one affecting its development; and that it is as a developmental disease of the blood that scrofula acquires its tendency to hereditary succession—its tendency to perpetuation as part of a family likeness. I shall presently give you other evidence in support of the same view."

15. "Meanwhile, to return for a moment to the narrower ground from which we started, remember, that what is meant in calling scrofula a hereditary disease is—not that the tubercular material is to pass from parent to child—not that the child is to be born with tubercle already in its body—but that the disposition *to form blood in a manner which shall give tubercle as a collateral phenomenon*, exists as a clause in the child's charter of life, and forms a part of its type of development, as truly as any exterior resemblance which he may bear to the configurative growth of his parents."

16. "I may illustrate to you the importance of these considerations, in quoting the result of some statistics collected at the Consumption Hospital, by the officers of that institution, and published by them in their last year's Report. They find that, among their female phthisical patients, thirty-six per centum report their parents to have been consumptive. If you consider this statement simply, you will be struck with its importance, and with the magnitude of its consequences; and, in order to do full justice to it, you must further remember, that, in the remaining sixty-four per centum, there may have been another considerable proportion whose parents had not indeed suffered from tubercular phthisis, but may have suffered from tubercular deposit predominantly in other organs than the lung—in the lymphatic system, perhaps, or elsewhere; and that there may have been a second considerable proportion, in whose family the parents may, perhaps, have escaped tubercular disease in their own persons, but may yet have transmitted the predisposition from their own immediate predecessors to those latter inheritors of the disease: for it is notorious, in many matters of family likeness, that some very characteristic feature, healthy or morbid, may develop itself only in alternate generations, or may at least remain latent during a single generation, unless many circumstances conspire powerfully to favor its evolution."

We have made the preceding long extract, to give our readers the best and most labored argument we have ever seen in support of the hereditary pretensions which has been claimed, from time immemorial, for certain forms of disease, and will now

proceed to notice it in detail in the order of the numbers we have attached to it:

1. The poultry and rabbits, of which he speaks, had been fed to great repletion without exercise, and as, in such cases, there is but little waste and little necessity for repair, the food they took being more than enough for these purposes, the surplus was stored away in the form of adeps, but in this process too much duty had been imposed upon both the lungs and liver, and as a consequence tuberculation would fall upon one or the other part. A similar result is common to our hogs and cattle which are treated in the same manner. The general health of the animal is good, and whatever of disease that may be discovered to exist, is local, and confined to some glandular structure—but this is not always the case—in a few instances the muscles are all full of tubercles.

2. Why should he expect to find tubercle in rabbits under other circumstances? It may be reasonably supposed, that rabbits, in a state of liberty, would live in accordance with their organic laws.

3. We think it much more than probable, that monkeys imported into England, and set at liberty, would, for several generations, if not perpetually, escape from tubercle; but that they, or any other animal, should acquire tuberculous forms of disease, after years of confinement in a close cage, with even tolerable feeding, is what we should certainly expect. It is certainly very improbable that they acquired the disease by *hereditary* entail, and if they can, under certain circumstances, spontaneously, acquire the disease, then it may, in a similar manner, obtain in human society.

We have shown in the beginning of this paper, and incidentally in several other places, how tubercle originates under certain circumstances, with certain organic conditions. A modification of the same principles accounts for it in these monkeys and other animals similarly circumstanced —as the poultry and tame rabbits. (See answer 1.)

In all cases of phthisis pulmonalis in our northern latitudes, the lungs are incapable of depurating the venous blood—tubercle or obesity is the result; and should the latter result become arrested or distributed, tubercle will or still may result. In the case of the monkeys and other confined animals, a surplus of carbon is accumulated in consequence of insufficient exercise—their lungs, though adequate to all the ends of normal existence, become under the confinement, as in the case of feeble development, incapable of adequate venous depuration, and the consequence must be the same.

4. If he had possessed the most remote idea of the cause of tubercle, he would never have written this paragraph. The poultry and rabbits were not rendered tuberculous by "deficiencies in air, in exercise, (and) in diet."

5. We perfectly agree with him in this statement, with one qualification, he should have added, under circumstances; and we also admit his final conclusion, but we claim the same in every instance where there is any kind of imperfection or weakness of constitution. But, in the beginning of this paragraph, he promised to explain what he meant by "*hereditary transmission*," and concludes by a simple admission or statement of the fact, which is not an explanation. "The child inherits an imperfect patern of development."—When was there one born that did not?

6. We hope he will, for as yet he has certainly failed. We admit that all these forms of disease do appear in families in succession, and we admit that a *liability* to them, under circumstances, is inherited—just as a liability to bilious fever or any other form of disease is inherited by those who have have had it, under the circumstances of their exposure to the proper exciting causes.

7. And, he might have added, he has, like his father, a thick lip, a pug nose, or red hair. We admit the whole of this paragraph—every word of it. Under the peculiarities of the child's organization, all is normal—in nowise blended with disease, and, so far as we know, entirely beyond the reach of any modification—no change of place will change the color of his hair or the thickness of his lips; hence we can see no similitude between these organic conditions and a hereditary transmission of a tubercular disposition.

8. We admit the whole of this paragraph, except so far as it involves the kind of disease of which he may die. The father may have died of phthisis pulmonalis, but the son may have avoided the necessary exciting circumstances, or his pursuits in life may have proved a complete protection against it, or he may have gone to the south when young, where he could not have phthisis, but would, under the circumstances of organization, most probably have some form of disease peculiar to the digestive system. By the laws of procreation, the child could not be anything else than human, and by the same laws he was forced to follow the type of his parents, no matter what his pursuits may be, or into what country he may travel. He

may enfeeble or strengthen his system, but the elements of it will still be the same. Neither disease, nor a predisposition to it, was incorporated into the organic laws; on the contrary, a strict obedience to these laws constitute a certain prophylaxis.—Hence it is seen, that the moment we leave those organic forms which are essential to humanity, the necessary similitude between parent and child ceases.

9. We do not admit that there are any organic predisposition to disease, but we do admit that a faulty type of organization or development must occasion a liability to certain forms of disease, under appropriate exciting circumstances. Our last comment furnishes a reply to the closing portion of this paragraph—nothing can be hereditary except that which is essential to the organism of the animal; but all the organic forms may be faulty, and then, as a natural consequence, liable to deranged or morbid actions.

The existence of any disease indicates the existence, also, of a "faulty type of development;"—in what other way can we explain the fact that some men live to an old age without having been sick, while other individuals cannot escape from the most common forms of disease incidental to the climate in which they live. All forms of disease are developmental, except those which exhaust the susceptibility of the system by one or more invasions. In other forms of disease, one seizure increases the liability to a second, a second to a third, until it finally becomes incurable, except by a change of residence. This is as much the case with ague as it is with phthisis.

10. We admit the whole of this paragraph, and for the reason that such circumstances were not provided for in the laws of procreation in mammals; and it is upon the very same ground that we deny that any cause of disease, exciting, predisposing or otherwise, ever becomes a part of the organization.

A disposition to disease, such as it contended for, is just as much a lesion as an incised wound or an amputated arm. The whole arrangement of the organic laws contemplates an exemption from both, and not a disposition to them. A disposition to disease, is not a disposition to health—then, so far as it extends, it is a *disease*—there cannot be established a point of indifference between health and disease, and if, therefore, the disposition be to the latter, can it be regarded as anything less than a lesion?—and let it be remembered that lesions cannot be transmitted.

11. There are in Charleston and New Orleans, as many persons consumptively constituted as there are in Boston, in proportion to the population of these cities, respectively; how does it happen, then, that there are no cases of consumption among the native population of the south? Simply for the reason that a change of temperature and other minor circumstances have transferred the major action from the lungs to the digestive system, which is manifested by diarrhea, dysentery, ague and fever, bilious fever, etc. Defective nutrition is not only the cause of the accompaniments of scrofula, but of scrofula itself. He has labored through the preceding pages to show that the hereditary transmission of disposition to tubercle is a part of that great law which determines that the child's platform or model of life shall be that of its sire; and as that operation of the law is peculiarly incomprehensible, he resorts to the blood for the purpose of finding a solution for the whole subject.

Now, if we admit that we find the "earliest rudiments" and the "latest relics of every organized tissue," it becomes essential to his argument for him to show that the hereditary matter in question is so organized that it can furnish to the blood a rudiment, or a relic—the transmissibility treated of, must inhere in something, and that something must be a tissue, or it cannot be under the influence of the blood. All the organs of the body and all its tissues, hold suitable relation to the blood, and it is true that the blood contains rudiments and relics of all the organs and tissues of the body—but does it contain rudiments and relics of the peculiar transmissibility for which he contends? He may find it in an "epitome" of the nose, eyes and possibly of the whole body—but can he find the epitome of this hereditary transmissibility of disease? This is the question.

The blood is an elaborated fluid, and therefore it must represent the materials from which it was elaborated and the apparatus that elaborated it; and, we think, it is about as possible for him to discover in the blood, the imperfections of the apparatus that elaborated it, as it would be to discover in a mug of beer the imperfections of the beer-shop.

12. We admit that he has labored assiduously in the *analysis* of this question, and so did the mountain in *labor*—it brought forth a mouse, and he nothing. And we grant, furthermore, that he is correct in his "certainty," that the scrofulous diathesis has its explanation in the grounds he has passed over—that is, in the human system; but we deny that he has discovered it.

13 In the forepart of this article, he ap-

peared quite certain that he would conclusively develop this mysterious subject, but now he admits that he has not found a demonstration for it.

14. When he first cast his eyes into the blood, and found the rudiments and relics of all the tissues, and even an epitome of the whole being, he appeared quite sanguine that he would accomplish his object, but now his confidence and lengthened argument are reduced to a high probability that "tubercle has its rise in disease of the blood," and in this wise it becomes to constitute a part of the "family likeness." He assures us, that in favor of such a probability there are many facts. We would like to have one fact to show why it should be in the blood, rather than in the nervous, serous, mucous, fibrous or osseous tissues; but, unfortunately, he has omitted to give us one.

15. We now understand him—the blood is the great agent through which all family resemblance and hereditary transmission of certain forms of disease is perpetuated. It is a very pretty hypothesis, but there exists one serious objection to it, which is this: it is not consistent—and, therefore, it is not true. Any number of boys may be taken to Charleston, S. C., and while each one will retain his family likeness, the whole of them will lose their parental liability to a certain form of disease—and yet there may be no change in their respective organizations. Now, in this case, the blood must undergo a very peculiar change to maintain all the elements of the child's charter of life, except one—the disease and mode of death. The man who can conceive of the pssibility of such a change, has, we admit, a very different capacity from ours.

16. We admit it to be very probable, that thirty-six per centum of consumptive patients were of consumptive parentage; but if we believed the disease to invariably originate in such parentage, we should begin to doubt the truth of our hypothesis if we should fail to trace seventy-two per centum to such an origin; twenty-eight per centum would then be left to be accounted for in the manner in which he has attempted to account for sixty-four. We regard this table as decidedly hostile to his conclusion. But if all of them had been of consumptive parents, he would have been sustained only in the result, but not in the cause. (See Answer 3.)

If it be true, as we contend, that a certain of development between the medulla oblongata and the cerebellum constitutes a liability to this form of disease, under certain influences, as those of a cold climate—and if we shall examine all of them and find the cerebellum to be about the same in all, then the remote cause of the disease, in all, is discovered, and in a manner more satisfactorily than by the unexplainable cause contended for.

By our doctrine, we can comprehend how it is that the same organization can result in two very different forms of disease in two equally different latitudes. But the existing hypothesis explains nothing. If produced by that organic law, which determines the features, complexion, etc., then it is incurable and unalterable by any medicine or change of circumstances; or else, it must be shown that features can be changed by medication or change of place. It is now well known that neither of these positions is defensable.

We have no occasion to prove that organic forms are transmissable—it is admitted; and, with reference to those who may become afflicted with phthisis, in the north, it is well known that they have in common a similar outline of person, and we only extend the idea a little further. and contend that this morbid condition finds its origin in certain minor or subordinate forms and and their relations, under certain circumstances. It follows, then, that by changing the forms and relations, or by changing the circumstances, a security is obtained against the malady. This, as a fact, no one will question at this time.

If this form of disease be heredity, science can offer neither a remedy nor a prophylaxis, nor any solid foundation for an indulgence of hope, the great sustainer of life—the patient's doom is well established in this respect, as with reference to the shape of his mouth or nose. But, under our views, science dictates a prophylaxis—a certain exercise or change of place or both, and, consequently, a rational foundation for a useful hope.

But the most remarkable circumstance connected with this subject is, that the doctrine should be as old as the profession. and still in good character, without a single claim to respectability.

We shall continue the use of the word *hereditary*, as hitherto, because it is convenient; but we shall understand by it the transmission of certain organic forms and relations (and when used with reference to disease), which may result in certain forms of disease under certain circumstances.

CASE OF OBESITY.

A physician of Savannah, sends to the Journal of that city, an account of an unparalleled case of obesity. He says:

"I must put in a slip, to give you a singular instance of death from the rapid accumulation of fat. We had a young man residing eighteen miles from this place, who was one of the miracles of nature. at the age of twenty-two he weighed 565 pounds; he continued gradually to increase in flesh until he reached a little over 600 pounds, he was able to get about with tolerable ease and comfort to himself. and attended to his planting interest. He had a fine estate, and looked after it with care and interest. Some four weeks ago, he commenced increasing in flesh very rapidly. and gained at first 1½ pounds per day, then it was found that he gained a little over 2 per day. Last week he died suddenly on his chair, I think from an accumulation of fat around the heart. Three days prior to his death, no doubt, he would have gone over two pounds. I have often seen him, and visited his family a month ago, professionally."

NEW METHOD OF OPERATING FOR STRABISMUS,

BY A TEMPORARY LIGATURE.

BY M. TAVIGNOT.

In a memoir recently presented to the Academy of Science at Paris M. Tavignot explains a new method of operating for squinting. This new operation is founded on the following idea, that, instead of lengthening a muscle supposed to be too short, you must shorten a muscle in reality too long. Instead of leaving the eye to oscillate with difficulty. and sometimes sluggishly, between two muscles, one of which is mutilated by a section, and the other remains always more or less powerless, my method of operating. says the author, attacks the longest muscle and not only shortens it by a sufficient length to equal that of its antagonist, but it furthermore acts by increasing its physiological contraction.

First operation.—The longest muscle—that is to say, that one which is opposed to the deviation being exposed in the ordinary manner for strabotomy, the operator proceeds in the following manner:—A blunt hook, with an eye at its extremity, is passed underneath the muscle, so as by lifting it up to detatch it from the globe of the eye. The hook is then carried forward, so that its concavity embraces the muscle at a little distance from its aponeurotic expansion. A thread of silk is then passed through the eye of the hook, then the hook itself is brought towards the operator, leaving the ligature under the muscle. By a double twist of the ends of the thread on one another. a simple, yet very resisting knot is obtained. There only then remains to finish the operation, to tighten the knot, and cut away one of the ends of the ligature. The other end is brought to the corresponding angle of the eye and fixed to a spot on the circumference of the orbit.

The first effect of this ligature is to render the lateral fibres of the muscles more central, and thus to bring about a shortening of this organ. The second effect is to develop an adhesive inflammation, which not only fixes permanently the abnormal juxtaposition of the muscular fibres, but also establishes adhesion between the muscle and subjacent sclerotic membrane.

The ligature not being intended to produce division of the muscle, must consequently be only temporary. Towards the end of the second, or beginning of the third day, it can be easily taken off by means of gentle traction carefully applied to the end which remains.

This first operation may not in all cases produce the effect which we have described. Very severe strabismus will no doubt prove refractory. It is at least with this idea that I have devised a way of making it more efficacious.

Second opertion.—The hook having been passed over the muscle, as in the preceding case, the ligature is passed, not directly under the muscle, but under the hook, so as to embrace the muscular expansion.

Before going further, it must be discovered by a momentary constriction if the globe is perfectly restored to its normal position. To prove experimentally that the ligature has effected the required degree of shortening, we must proceed, during the operation, in the following manner:—The ligature being passed once under the hook, a different colored thread must be passed through the loop thus formed, then constriction is made by means of the first-mentioned ligature, but taking care to make only one knot, and to make it a single one only. The hook is then withdrawn, and the eye left to itself. The changes in its direction can now be judged of accurately. If the globe is not brought back sufficiently, a larger quantity of muscular tissue must be embraced by the ligature; if the globe is too much brought back, a lesser quantity of muscular tissue must be enclosed; but in either case the ligature already put on must be withdrawn as soon as possible. Owing to the precautions we have adopted with this view nothing is more easy; the eye being fixed, one end of the ligature is drawn with one hand; while the other hand pulls the thread passed through the loop of this same ligature. The knot gives way immediately to this opposed extension. There only then remains to pass the hook again

underneath the muscle (if it has not been already done before taking away the ligature,) and recommence the operation, keeping in mind the data furnished by the first trial.—*Dublin Medical Press*, July 1852.

POISONING FROM ARSENIC AND CHROMATE OF LEAD—RECOVERY.

Dr. R. H. Thompson, of Liverpool, relates a case in which, as nearly as could be guessed, from half a drachm to two scruples of arsenious acid, and the same quantity of chrome yellow, were taken. Symptoms of poisoning did not appear until five or six hours afterwards. Calcined magnesia, to the extent of eight ounces in two hours, the stomach-pump, mucilaginous and oily fluids were administered—subsequently opiates and external applications. Recovery was complete in about three weeks. Arsenic was detected in the urine, but no lead, which Dr. Thompson observes, was probably owing to the insoluble form in which the latter was taken.—*Lancet Nov.* 29.

PHYSICIANS.

This class of men, as such, form as disinterested, philanthropic, and noble a band as can be found in this world. More than any other, they are the friends of the poor: few know the extent to which they contribute to the wants, health and happiness of this suffering portion of the community. Yet no boast is made of it. The rills of their charity are always purling, but amid the din of the world, few, very few, hear the sweetest of earth's music which they make as they run "sparkling and bright," to refresh and bless the lowly and unhappy. Mr. A. will draw forth his portmonnaie, and taking therefrom ten, twenty, thirty dollars, will send it to the poor man's house. and it will be the town's wonder and admiration for nine days, of twenty-four hours each; but Dr. B. shall bestow medicines to that amount. and perhaps to four-fold that amount.—and it may be money besides—and it will not only not get into the papers, but we dare say, it will not be heard of next door! Excellent man! May God's benedictions rest on you, and all who, like you, so far walk in the steps of the Good Physician, and make you otherwise his humble follower, that after the day of doom you may walk with him forever!

But we began this article with the intention of speaking of even a finer characteristic trait of physicians than their charity to the poor. A selfish turn may be given to this, however unjustly; it may be said, these charities are after all a profitable investment: they help to business: they secure repute. Well, so they should; and we are thankful that God has made it *policy* in this sad world of ours, as well as *duty* to be good and do good. But it will be found, we surmise, that the same view may be taken of the charities which other men bestow, as truthfully as of those which proceed from the physician; while his have this more evangelic circumstance attending them, that he does not blow a trumpet when he performs them; but, in fact, keeps his left hand ignorant of the good deeds done by his right. What most men do is, in the main, known by every body; but what the good physician does, will, for the most part, first be heard of in the day of judgment: at least, by the generality.

But there is another trait of physicians, as we have already intimated, to which the most ingenious fabricator of selfish motives, will find it difficut to ascribe a sinister aspect. It cannot be doubted that at least one-half, and probably three-fourths, and not improbably eight-tenths of the diseases which afflict community at the present day, proceed from the temperate—so called—intemperate use of intoxicating drinks. If this be so, it must be obvious that physicians, as a body, have a large and appreciable interest in the perpetuity of those drinks and both their use and abuse; nay, they are directly interested in a pecuniary sense in the indefinite increase of the quantity consumed, and in their adulteration; for the greater the quantity and the worse the quality, the more prevalent will be disease, and consequently the larger the incomes derived from their treatment. In fact, the manufacturer and seller of these intoxicating liquors have no larger pecuniary stake in averting legal restrictions on their use in the shape of a prohibitory law, than this class of men; indeed, not so large; for the manufacture and seller invest their capital, under such a law, in some other pursuit equally profitable; perhaps, more. But prohibit the sale of these liquid poisons, cause them to fall into disuse, and thus remove one-half of the disease or more, which afflicts the commuity, and what becomes of the physician? His trade—the only thing on which his livelihood depends, and which he cannot change at pleasure—becomes a profitless pursuit; or to say the most, is only one half as profitable as it was before.

Yet these men, with their very subsistence involved in the perpetuity of drinking usages, and their greater abuse, *come forth before the community almost to a man, and voluntarially declare that these intoxica-*

ting drinks in whatever quantity they may be taken, are never necessary, and always injurious to a man in health! How disenterested! how noble! What unselfish devotion to the welfare of humanity! What a contrast between these men and the heartless slave of his appetites, who will not give up even a solitary glass or his social, at meals, to save the thousands who are going down to dishonored graves, the victims of rum! and how great the contrast between them and the traffickers in liquor, who rather than forego their vile profits will gladly see generations perish before their eyes!

Physicians you command our profound admiration and esteem. You have won, without seeking, a title to the applause of all mankind. Your country and the world owe you a debt of gratitude too great for either to pay. For ourselves, and for all others engaged in the cause of temperance, we thank you; and were our means equal to the bulk of our wishes, to-morrow would behold us laying the foundations of a monument to commemorate your worth, which should enclose and overtop pyramids on the shores of Nilus.—*Prohibitionist.*

FATAL POISONING FROM ARSENIC TAKEN TO INDUCE ABORTION.

Mr. Brown, of West-on-Trent, relates the particulars of a case in which a young woman, twenty-four years of age, was supposed to have died from peritonitis after premature delivery. On examation of the body it was discovered that she had been the subject of ulceration of the stomach, produced by the action of arsenic, which was detected in that organ by chemical analysis.—*Association Journal, October 7th*, 1853.

A REMARKABLE GUN-SHOT WOUND

IN WHICH THE BREECH OF A GUN REMAINED IMBEDDED IN THE CELLS OF THE ETHMOID AND SPHENOID BONES FOR A PERIOD OF EIGHT YEARS.

This remarkable case was communicated to the New Castle and Gateshead Medical Society, in the last session, by a military surgeon, whose name is not given.

An officer, 32 years of age, serving in the island of Ceylon, in the year 1828, while in the act of firing at an elephant with a cut-down musket of the old description, was knocked down by the bursting of the piece. He lay insensible for some time; but, being alone, was uncertain how long; and, on the return of consciousness, found himself wounded in the forehead, the *debris* of the musket lying about him. He was, however, able to get on his feet; and, on assistance arriving, and search made, most of the shattered fragments were forthcoming, but the breech, which was nowhere to be found, until after the lapse of several days, when it was ascertained to have been the cause of the wound, and that it actually remained imbedded in the skull. In the course of about three months, the patient had recovered sufficiently to resume his duties: the wound in the forehead remaining open, but being protected by a covering of black plaster. So matters rested for a few months more, when the pointed portion of the iron breech made its way through the palate, together with the head of the screw by which it had been secured to the stock, and which was still loosely inserted through its proper hole in the iron, as they had together been torn from the woodwork. They had continued to descend gradually lower and lower, so that the point of the iron was almost in constant contact with the tongue, by which its edge was worn smooth and polished. As will be naturally concluded, a profuse secretion of pus was kept up; this was generally most offensive, requiring the greatest attention to cleanliness, and a consumption of lint and tow somewhat enormous; despite all which the discomfort of the sufferer was occasionally added to the engendering of maggots within the wound. It was on one of these occasions, eight years after the accident, that I first saw the case, and had, from the officer himself, a statement, of which the preceding is a summary. The worms were at this time got rid of by stimulating injections, but not without great pain. The wound in the forehead was triangular, with a base about half an inch long, just above the ossa nasi, and from its center to the apex was a full inch. Within was seen, horizontally placed, and level, or nearly so, with the base, the circular end of the iron; while, as before mentioned, the other end, with the head of its connecting screw, had now descended very low through the opening of the roof of the mouth, the small end of this screw being situated in the right nostril, and easily twirled by the thumb and finger, applied to the opposite one in the mouth. There had been a great desire to get away this screw; but, though so loose, there was not space to admit of its being withdrawn; to obtain which, an ingenious attempt had been made, some months previously, by Mr. Elliott, a young surgeon to saw off about half an inch, thus reducing its length to an inch and a half; and he had nearly succeeded, when obliged to desist, from the suffering caused to the patient, but who

expressed his intention to submit to a further trial at some subsequent date. The attempt, however. was never repeated. On the evening of March 25, 1836, after the excitement of a mess dinner, with much conversation; and some rather loud singing, in which this officer bore a conspicuous part, while leaning over to one side, his chair slipped from under him, and he came to the floor in a sitting posture, but did not at the time appear to have sustained any hurt; though it was scarcely to be expected that such a concussion, with a large foreign body in the head, and in such close proximity to the brain, could take place without consequences of a serious and dangerous tendency. The next day, headache and general pyrexia came on, and rapidly increased with evident vascular determination to the brain, delirium ensued, and death closed the scene on the 2d April—the seventh day after the fall. Eight hours after death the head was examined. The brain and its membranes were in a high state of vascularity, and a small abscess was found in the anterior lobe of the right hemisphere, very thinly separated from the arbitar plate of that side, and connected with a dense membrane that supplied the deficiency occasioned by the absorption of a triangular portion of the cribriform plate of the ethmoides; this adventitious membrane being. of course, the only medium of separation between the brain and the cavity containing the iron, which, on removing the membrane, was brought into view, but was only fully exposed by a horizontal section of that part of the os frontis, below the superciliary ridge and orbitar plate, with the necessary verticle one to complete the separation. The cavity formed of the ethmoidal and sphenoid cells, the inner bony structure of which had been removed by absorption, had a black appearance, and a fetid sulphurous odor; the iron was now removed without difficulty by the bullet forceps; had a black charred appearance, with a strong odor of gunpowder, and, when cleared of its adherent impurities. weighed (including screw) within a drachm and a half of three ounces; length, 2½ inches; and its greatest transverse diameter 1 and three sixteenths of an inch. The screw was exactly 2 inches in length.—*Medical Times and Gaz., Sept.* 10, 1853.

Poisoning from Laburnum Berries.—Several children having eaten laburnum berries in the Hull Zoological Gardens, were found lying on the grass vomiting severely. and in a state of stupefaction. Through medical assistance they all recovered.

Medico-Chirurgical Review.

CURIOSITIES OF MEDICAL SCIENCE.*

It does not require a microscopic ken to detect the fact, that the science of medicine holds as it deserves, the most exalted position in civilized society—standing out in bold relief among the profession, the decided friend to humanity, and affording the only hope that mankind will be taught to regard life, health, and thought, as existing under the supervision of laws, as clear and definable as those which relate to the solar system. When we comprehend the extent of the science, its intricacies and peculiarities, we shall not fail to observe why so many gifted intellects have chosen the profession of medicine as the business of their lives. The student of Nature finds ample material for the mind to digest, while the humane and benevolent are furnished by it with a never failing mine of wealth with which to succor and relieve the most unfortunate of earth's inhabitants—a diseased humanity. Medicine is, emphatically, the science of man----it is Anthropology, and therefore claims our earnest consideration. There is nothing narrow or contracted about it; all is not told in a day that may be conceived of any of its parts. The Professor who speaks ninety hours (which is about the average time in a course of lectures at any of our medical schools) on Anatomy, endeavoring to teach the location, structure, &c., of this complicated organism, and winds up by saying, "Gentlemen, I have only briefly noticed the most important facts in anatomical science, upon which your professional skill is to be based," is certainly not dealing with a simple subject, easy of comprehension, and unworthy of serious thought.

But Anatomy is not the only part of medical education; Physiology, Pathology, Therapeutics, Surgery, Obstetrics, Materia Medica, Botany, Chemistry, Medical Jurisprudence and Practice. In most of our medical colleges, we have eight professorships----giving seven lectures each day, of one hour each; or in the aggregate no less than six hundred and seventyt-wo lectures in each course of sixteen weeks. Now in an hour, a fluent speaker would say as much as might be written on thirty pages of an octavo book; so that if what is taught in one of our medical colleges in a single course of lectures, should be reported and printed, it would make forty volumes of five hundred pages each! This certainly argues that the studies of the physician are anything less than trifling. But even this amount of information is not thought to be

*The Eclectic Practice of Medicine; by Wm. Byrd Powell, M. D., &c, R. S. Newton, M. D., &c., Cincinnati: H. W. Derby, 1854.

sufficient, for the *Faculties*, almost without exception, contend that more time should be allowed them to explain, illustrate, and impress the truths of the several branches of medicine. To remedy this, they mostly require of a student an attendance upon four courses of lectures, or study equivalent thereto, before they will acknowledge him eligible to become a candidate for the honors of the institution.

But our *non-medical* friends, for whose information we are writing, you will likely ask, "what is the necessity of all these branches taught in the schools?" We will endeavor to answer this, presuming that the profession will forgive our inability, or rather our non-inclination to go into details, and also any seeming want of scientific arrangement, in our attempt to speak popularly of the science.

Anatomy teaches the location, structure, composition, &c., of the various parts of the human system—Physiology teaches the functions of those organs in health-----Pathology considers them in a diseased condition----Therapeutics teaches how to substitute a Physiological for a Pathological or a healthy for a diseased state of those same organs----Materia Medica describes the various agents used in fulfilling the indications brought to light by the science of Therapeutics----Botany enables the medical man, the Therapeutist, to cull from the forest the vegetable agents of the Materia Medica—Chemistry treats of the chemical composition of the agents employed by the physician, and also explains the great phenomena of Nature which influence human life and health—Practice is divided into several departments, such as Surgery, Obstetrics, &c., and applies the great principles taught by the other departments.

It will thus be seen that the science of medicine covers a large area, and affords the expanded mind abundant material for digestion. But collaterally it stretches its arms out still further, pointing out to the legislator certain natural laws presiding over the human race, which if interfered with by civil enactments, will seriously retard the development of mind and body, and increase crime and misery to a limitless extent. It invades the province of Geography, and studies the ethnographic peculiarities of the race. By the light of Geology it invades the remote antediluvian ages, and gleans important facts, easy of application, and essential to a medical education. It studies Political Economy, so as to determine what features of society benefit, and which prove injurious to man's well-being. Agriculture, Architecture, Music, Religion—all are scrutinized by the medical philosopher, from all of which he gathers important data from which to reason.

This is the science of sciences, because it has to do with that which has most to do with our happiness—our health, life, social being. It is no wonder, then, that it should occupy such a high position in society; nor is it a matter of suprise that some of the first intellects in every age should have been so devoted to this "*ars artium*." Medical men nowhere contend that the science of medicine is perfect, though judging from the slow progress made by it for many ages previous to the beginning of the present century, we should be led to suppose that its advocates had began to suspect as much, or that they had despaired of unravelling the mysteries of the complicated human organism. But occasionally, from time immemorial, a new impetus has been given to medical research by some original thinker. We might cite the names of Æsculapius, Chrysippus, Hippocrates, Erasistratus, Herophilus, Acron, Celsus, Archagathus, Temison, Thepalus, Areteus, Archigenes, Galen, Sextus, Ahrun, Serapation, Alkhendi, Razes, Albucasis, Avicenno, and the more modern names of thousands, to catalogue whom would fill our space.

Almost every great name in medical history deserves the respect of mankind,—because each has learned us something. The very nature of medical science would beget *sects*. Hence we find from the earliest ages that there have been *parties*, and *schools*, arrayed in hostile attitude to others. All these schools, from Cos and Cnidos down to the modern Hydropathic movement, have aimed at one great object—the most successful mode of treating disease; but we must say that, unfortunately, the object has not been attained, as we find the medical world still divided as in former times, quarrelling about the merits of their respective systems.

Hippocrates, Archigenes, Galen, and Alkhendi, have the honor of founding, in reality, if not in appearance, the prominent schools of modern times. While what is known as the Allopathic system of the present day, claims to have the science of all these men, the Episynthetic or Eclectics follow, in a measure, the teachings of Archigenes, and the Homœopathists, though reccognizing Hahnemann as the founder of their system, must admit that Alkhendi applied geometrical proportions and musical harmony to the science of medicine.

While we denounce none of the schools of the day, so we do not advocate any of the "*pathies*" and "*isms*" to the exclusion of others. There is no doubt much true science taught by these systems---*Allopathy*,

Eclecticism, Homœopathy, Physopathy, Hydropathy, Chrono-Thermalism, Galvanopathy, Electropathy, Thomsonpathy, Sarsaparillapathy, &c. &c.; but it must strike every one as a fact worthy of note, that a conscientious physician must choose from the doctrines and agents of all these "pathies" and "isms" that which he believes best. This, we believe, is claimed by all the schools, and the question is, what then is to be the name of the physician who does this? Episynthetic or Eclectic, it seems to us is a fair appellation by which to distinguish him. The name would then amount to "*a selecter*," and this was what we had formerly supposed was claimed by the fountain-head of modern Eclecticism, the Faculty of the Eclectic Medical Institute of this city. But it seems that we were mistaken; a knowledge of which fact has led us to speak more at length of the book before us. Neither *Episynthetic* nor *Eclectic*, it seems to us, convey a true impression of the character of this school, and we would suggest to the Faculty that a more descriptive word might be employed—for certainly they have stepped beyond the limits of mere Eclecticism, in their teachings, if we may judge by several works lately issued by them, of which the one under consideration is, perhaps, most important.

We have made the above remarks, because we find that instead of the work of Drs. Powell and Newton being a mere *selection* from the writings of others, it is entirely new and original—advocating *new theories* and *new treatment* for disease. Indeed we are informed, that everything taught in the school is claimed to be either new or more perfectly developed than what had been taught at a previous period.

Be that as it may, the new work before us certainly embraces a number of features, which we have not seen in any medical book. The theory and doctrine of the temperaments, as laid down by Messrs. Powell and Newton, are certainly the result of much observation. They show most clearly the production of the temperaments and how it is that a certain temperament or combination will have a predisposition to a certain class of diseases and no other. They also show how and why certain medical agents may be administered with impunity to one class, but which would prove fatal in another temperament or combination. The philosophy of marriage is thoroughly canvassed; and it seems to us the task has been executed with a master hand. The period for marriage eligibility is said, by the authors, to be when the party shall be capable of sustaining the responsibilities of the relation. They say that the early decay of American female beauty does not arise from early marriage, but from artificial modes of existence. They say: English women, as well as men, can, and always do, find time to eat, to laugh, to rise early, to be cheerful, and to take exercise in the open air, while American women, we allude to the young ones, have no time for early rising, no appetite when they have risen, no time to be cheerful, except in spasms, or upon exciting occasions, and no time to take exercise in the open air. English women delight in walking four, five, or six miles at a time; but American women fancy that such walks would kill them. * * * * *. Marriage with some women is premature, no matter at what age it may take place."

"The question," say these gentlemen, of marriage eligibility, "then, should be one of health, of constitutional stamina—not of age." Speaking of entailed qualities, they say: "There has become, broad-cast, in our country a predisposition to drunkenness, more fatal than consumption or insanity. A drunkard is almost sure to be the grandfather of drunkards, through the female part of his children, and it is probable that he may also be the father of them." But it is beyond our power, in a brief space, to even point out the *peculiarities* of this book.—The authors have traced the influences likely to affect the race, through all the stages of existence. Much of the pathology is to us almost entirely new, and will greatly modify the practice of medicine. That part of the book which treats of diseases more common to adults, is equally as interesting as the first part, and will amply repay perusal, whether by medical or non-medical readers. It is not every man who writes a book that deserves our thanks; but he who writes a book telling us something not before told, is a real contributor and benefactor to his race. There is something to be learned by perusing this work; and just in proportion to the new knowledge imparted, is it valuable.

It is unimportant from whence a good thing may emanate—we equally relish the gift, and what we have said of this masterly production, we should have said if it had come from any other source. Medical science can boast of many improvements and acquisitions since the opening of this century, and we hazard nothing in saying that another fifty years will still more enrich this fairest of human investigations. A remodelling of our schools, some legal enactment to protect the people from pretenders, and a high standard of ethics, together with a more brotherly feeling among physicians, will dispel many of the checks heretofore besetting the progress of medicine.—*Parlor Magazine*, April, 1854.

OHIO DEAF AND DUMB ASYLUM.

We have for some days had upon our table the Annual Report of the Board of Trustees for the Ohio Deaf and Dumb Asylum. The Institution is shown to be in a flourishing condition; a condition highly creditable to the superintendent and his assistants. Ther, are now one hundred and fifty deaf mutes in the Asylum, and it is supposed that there are now in our State at least one hundreds perhaps one hundred and fifty, deaf mutes besides those in the Institution, who are of a suitably age to receive instruction in it, and who are entitled to receive the benefits of it. Should these apply for admission, they could not be received. The building is already crowded to an excess which is both uncomfortable and unhealthy.

It is proposed to erect a building sufficiently capacious to lodge and educate the deaf and dumb children of the State. If built according to the plan of the architect, the cost, the Trustees say, would be $120,000. But the Legislature appears unwilling to incur the expense and certain legislators suggest that the State sell the present building and grounds, which would brin? at least $50, 000, and then purshase a farm, one or two miles from Columbus, on which suitable buildings might be erected, and the pupils be enabled to contribute materially towards the support of the Institution.---- That plan is a good one.

"The expenses of the institution for the past year are reported at $16, 906 32. For the present year the appropriation asked is $16,900, as follows:

For salaries of the Superintendent, Stewards and Matrons	$2,000
For salaries of Teachers and Physicians	6,900
For current expenses	8,000
	$16,900

ON THE DIET OF INFANTS.

We have had considerable experience in directing and observing minutely the rearing of infants upon a substitute for mother's milk. We never allow a healthy infant, for the first two months, to have any other food as a substitute for its mother's milk than cow's milk diluted with two-thirds of water, and well sweetened with fine sugar. Of this fare we sanction *an unlimited supply*, at intervals of from one and a half to two hours during the day, and three or four hours at night, provided it be sucked from a teat. Upon this simple fare, we have seen children grow up in the plenitude of health and strength. If the food be as thin as we have described, no evil can arise from over-feeding; and by allowing an interval to relapse between the times of feeding, digeation goes on better, and fretfulness is averted. To weak or scrofulous infants, the addition of a little mutton suet is good, or the same benefit may be obtained by giving two tea spoonfuls of cod-liver oil daily. Oatmeal, and all farinaceous foods, are unsuitable and unnatural for the first two months, and are certain to induce fits of feverishness and griping pains. After the second month, rusk melted down in the sweetened milk and water, is useful; but the food must still be thin, and sucked from a teat by the infant. The exertion of sucking is, for many reasons, very salutary.—*Association Med. Journal, Aug.* 12, 1853, *p.* 714.

POISONING WITH NUX VOMICA, RECOVERY.

The patient, a laborer aged twenty, was admitted to the Royal Free Hospital, under the care of Dr. Hassall. Three quarters of an hour before admission, he had taken about one drachm and a half of powdered nux vomica. When admitted he was in a profuse perspiration; the skin of the face, neck and chest, was greatly congested, the eyes suffused, the pupils slightly contracted, the pulse hard and excited. A few minutes after admission a tetanic paroxysm came on suddenly, the man was thrown into a state of opisthotones, all his muscles became rigid, and respiration was for a time suspended. The fit lasted about half a minute, when the muscles became relaxed, and he was again able to answer questions. He had had several of these fits before admission. The first occurred about ten minutes after he had swallowed the poison. They gradually decreased in severity; altogether he had five. On the following day crampy pain in his limbs were complained of.—Emetics were given without effect. The stomach-pump was used, and removed some greyish powder. Aperient and saline medicine was given. On the second day he was discharged well.

The exact quantity taken could not be ascertained. Enough, however, evidently was swallowed to produce serious symptoms. Dr. Alfred Taylor* quotes an instance where five grains were fatal: and another instance, of recovery after half an ounce had been taken.—*London Lancet.*

* "On Poisons," p. 775.

Part 3. Editorial.

PHYSIOLOGY, PATHOLOGY AND HYGIENE OF THE LIVER.

(*Concluded from page* 89.)

Cholagogues.—The liver is acted upon and the secretion increased by a variety of substances, some by a nervous impression, others by being absorbed and discharged through the liver. The latter is supposed by Budd to be the method with the majority of cholagogue agents.

The knowledge of the profession upon this subject has been remarkaly scanty.—The following is the list given by the ablest work upon the subject, "Budd on the Diseases of the Liver."

Mercury,	Leptandrin,
Iodine,	Podophyllin,
Murate of Ammonia,	Apocynum,
Taraxacum,	Iridin,
Rhubarb,	Sanguinaria,
Peper, Ginger and other hot spices,	Berberis,
	Rumex,
Euonymus,	Taraxacum,
Aloes,	Rhubarb,

Contrast with this the ample and well understood hepatic agents of the Eclectic practice. Our *Leptandrin* is the only cholagogue known. *Podophyllin* is more than equivalant for Calomel and Jalap. *Apocynum* is in some respects nearly its equal. The *Iris* and *Iridin* are entitled to a place in the same group. *Sanguinaria* combines with many other properties an efficient cholagogue power. In addition to *Taraxacum* we have in the *Berberis* an agent of similar character and value as a tonic cholagogue, in which class we may also rank the *Euonymus*. In *Aloes* we have a valuable cholegogue which perhaps we have used less than would be desirable on account of our other efficient resources. The cholagogue of Rhubarb and Ipecac is so moderate in comparison with the more efficient cholagogues, that we scarcely mention them in that class. It should not be forgotten too, that we have in the *Juglandin* and other cathartics, agents which if not active cholagogues are at least valuable depletives for the congested liver, by their action upon the sources from which its blood is derived.

The influence of mercurial cholagogues upon the liver is less congenial than that of the podophyllin and leptandrin, &c. Owing to its more irritative action it may exhaust and destroy the secretive power of the liver, to such an extent that mercurial cathartics cease to produce their usual effect, although the organ will still respond to vegetable cholagogues. Attacks of jaundice sometimes occur according to Budd during a mercurial course given for syphilis.

Jaundice.—The suppression or retention of bile is indicated by the yellow tint of the countenance, which we should avoid confounding with the sallowness of anemia or the peculiar tinge called sunburnt.—This color indicates the actual presence of bile in the blood, and of course becomes universal as the blood carries it to every portion of the body. The countenance in some cases, especially in the old, acquires finally even a greenish tint. This color of the skin depending on the retention of biliary matter in its tissue, continues even after the removal of jaundice, until by perspiration and perhaps by atmospheric action it is removed. Alkaline baths, vapor and warm baths will do much to clear the skin even during the continuance of jaundice. It may arise from any serious obstruction to the evacution of bile through the common duct, as by gall-stones, by adhesive inflammation, by cancerous disease of the liver, by spasm of the gall ducts or pressure upon them, (from congestion or inflammation in the liver, or even from distention of the colon,) or it may arise by simple failure of secretion, while the opportunity of discharge is unembarrassed. Any great cause of abdominal distension, even pregnancy, may obstruct the discharge of bile. When arising from obstruction and retention of bile, both veins and lymphatics are concerned in the absorption, as has been demonstrated by Tiedemann and Gmelin and by Sanders. This absorption is so efficient that when the gall bladder has been for a long time distended by the closure

of the cystic duct, the bile becomes entirely absorbed leaving only a mucous fluid with but little of the yellow tinge.

The effects of jaundice are easily comprehended by reference to the simple experiment of mingling blood and bile. The presence of a sufficient quantity of bile entirely destroys the power of coagulation, or in other words destroys the fibrin.—Hence it is certain that a jaundiced condition will be accompanied by diseases not of the imflammatory but of the congestive type. In other words we shall have all the consequences of defibrinized blood, such as congestions, softening of tissues and organs, hemorrhages, profuse evacuations and general debility and prostration. Congestion affecting the brain will necessarily oppress every cerbreal organ, and every vital function must be more or less oppressed during this condition of the blood in proportion to its intensity. Debility, languor and drowsiness commonly accompany attacks of jaundice, and the pupils are frequently enlarged, indicating the congestive tendency of the brain.

Whether in jaundice, fully formed bile exists in the blood, or whether it be only an inchoate condition of the elements of bile, the noxious effects are none the less distinct. Indeed, pathologists regard this inchoate condition produced by the suppression of the secretion, as more noxious to the brain than the retention of perfect bile which has been secreted by the liver. The action of the liver is supposed to render it less noxious, and fully organized bile is discharged by the kidneys to an extent which gives great relief.

The biliary matter is injurious to the globules and the fibrin, hence the globules are almost always below the standard of health when jaundice has continued sometime, and the fibrin was never found above the normal standard in Andral's analyses of the blood of the jaundiced.

Bile diffused through the blood seeks to escape by every outlet. The skin sometime discharges by perspiration enough to give a yellow stain to the linen. The urine also gives this yellow stain, and is of a bright yellow color or in excess displays the dark, somewhat greenish hue of bile. When nitric acid is added to this bilous urine there is a prismatic play of color, which makes a very convenient test, and when sulphuric acid is added, the color becomes dark green and afterwards purple. This testing of urine is quite important as an indication of suppression of the secretion, and will often reveal the fact when the complexion does not—the countenance being kept fair by the vicarious action of the kidneys. The kidneys are liable to be injuriously affected by the bile during their bilious secretion, and if there should be some degree of renal congestion and albuminuria the cause is obvious enough.

Bile is discharged in the serous fluids, but rarely present in any mucous secretion, and the mucous membranes are very little discolored in jaundice. The milk becomes tinged with bile and the mammary gland has been known to discharge pure bile.

The evacuations from the bowels become quite pale if the secretion is suppressed to a great extent, and frequently become very offensive. Nutrition is also diminished from the imperfect digestion. But it is remarkable that in some cases, notwithstanding the suppression of the biliary secretion for a great length of time, nutrition is not materially disturbed. *Dr.* Budd gives an instance of this in a sailor in whom for four years decided jaundice had existed, and no bile appeared to be discharged by the intestines.

Hepatic Sympathies.—*The sympathetic relations of the liver* produced by sanguinous connexion and functional relations are

1. With the brain and nervous system, by nervous connexion, functional control and the influence of the bile.

2. By peculiar nervous sympathy with the base of the tongue and fauces.

3. By nervous sympathy with the right shoulder.

4. With lungs by proximity, by mechanical pressure, by nervous sympathy and by the antagonism of function.

5. With the right side of the heart and the lungs by the hepatic vein.

6. With all medicinal and dietetic influences in the stomach and bowels, by the portal vein and by nervous connexion.

7. With the lower end of the alimentary canal by the portal vein.

8. With the peritoneum by the portal vein.

9. With the kidneys by analogy of function.

10. With the skin by the general circulation.

11. With general nutrition and the adipose tissue.

12. With the abdominal muscles.

1. *With the brain and nervous system.*—This sympathy is shown by the fact that a healthy action of the liver in the discharge of bile is essential to the proper action of the brain. The retention of bile not only has an injurious influence upon the globules and fibrin of the blood, but, interferes with the action of the *higher portions of the brain, and thereby diminishes the action of the whole brain.* It is a very important proposition that the organs of cephalic determination are those of the upper part of the brain, and that, consequently, every influence that diminishes the activity of our higher sentiments diminishes the activity of the whole brain. Biliary matter in the blood has this influence, it diminishes the cheerful and pleasant emotions, producing a gloomy, irresolute and irritable character while it increases the action of several basilar organs, particularly disgust or nausea, melancholy and irritability. All disturbances of the biliary function appear to produce this depressing influence, the source of which is so well indicated by the word *melancholy* (literally black bile;) whether it be simple congestion, irritation, inflammation, atrophy, hypertrophy, or any other cause producing an excess of bile, either secreted or retained in the blood, the common effect is to produce depression of spirit, and nausea, and in extremes or when suddenly brought on, vomiting. This symptom does not necessarily occur because in many it requires a very strong nauseating influence to produce vomiting, and because we may gradually become accustomed to any morbific influence—enormous doses of tartar emetic can be borne when it has been gradually introduced.

Such being the influence of the liver in the human body, we recognize it in studying the sympathetic powers and relations of the human constitution as the centre of a depressing sickening and somewhat morbific influence, the relation of which to all our organs is unfriendly to their activity and power.

The question naturally arises, why any locality in the human constitution should be the seat of such an unfriendly influence. I would reply that the introduction of dead matter from the exterior of the body necessarily accumulates foreign, anti-vital morbific influences in the body, as it is only a part of the foreign matter which can become vitalized and the remainder is incompatible with vitality and health. This matter accumulating in the blood produces a diffused poisonous influence, which by the action of the liver is concentrated to a single locality. Hence, that locality is regarded as the centre of this morbific depressing influence. A large developement of the liver indicates a great amount of this morbific depressing influence, and a small developement in a healthy constitution indicates a less amount, and consequently a higher or more active temperament, such as we see in birds. If the bilious condition of the blood is produced by hepatic action, (without discharge for the bile,) the liver is clearly the cause of our nervous depression, but if it is merely a necessary consequence of digestion, which the liver removes, the liver is still the centre of the bilious influence if not the source, and it is still a source as it contributes important aid to the process of digestion.

Without, however, referring to all these considerations, the relation of the liver to the brain is easily determined by referring to the organs of the brain which coincide with, and those which antagonize the functions of the liver. We find that the most immediate cerebral relation to the liver lies in what may be called the hepatic organ,

located at the lateral base of the middle lobe, the excitement or activity of which produces an increase of the flow of bile. This organ and its adjacent group—all of which have a depressing character, (gloomy sickening and irritable) represent the character of nervous influence with which the liver is associated, while the antagonistic group—the region of Fortitude, Firmness, Energy, Patience and their associates, represent the nervous influence to which the liver is antagonistic. A large developement and great activity of the liver, therefore is quite unfavorable to the elevated traits of character—to energy and to happiness.

The tendency of pathological irritation of the liver to affect the brain is well displayed in cases of softening of the liver which produce severe hepatic symptoms, such as stupor, coma, delirium, spasms and congestion of the brain.* A number of cases of this kind are given by Dr. Budd in his valuable work on the liver, and Rokitansky describes this condition as *yellow atrophy* as follows: "The yellow atrophy is distinguished by a deep yellow color, inbibition of the whole tissue of the organ with bile; great relaxation or softening; loss of the normal lobular structure, rapid diminution of volume and flattening. Appears generally in early life, in adolescence in the prime of life. Is distinguished, during life, by its acute course; extreme pain of the liver, nervous symptoms and jaundice, and finally a fatal issue, amid fever symptoms of blood poisoning, *irritation of the brain and its membranes*, hydrocephalic softening of the brain; exudation and softening processes generally, and especially of the mucous membranes, pneumonia, &c. The blood in the larger vessels of the liver is thin, fluid, of a dirty red brown, the coats of the vessels stained yellow. The peculiar glandular substance is melted away, and lost in the biliary colliquation. In the intestines there is a deep yellow biliary matter, sometimes black and tarry from the escape of the poisoned blood through the mucous membrane."

In these, as in all cases of hepatic disease, we are authorized to expect hyperemia or congestion at the base of the middle lobe in the locality corresponding to the liver, and consequent pressure upon the superincumbent mass, which must either diminish the fulness of its vessels, or, if the congestion become diffused, which is quite probable as a consequence of any congestion at the base of the brain, we may expect absorption, first of the serum in the ventricles, and afterwards of the cephalic substance (which would permanently increase cerebral excitability and irritability).—Let us examine the ten cases reported in in the work of Dr. Budd.

In the first, a German sailor, the liver was small and yellow. The last two days before death were passed in delirium, terminating in coma, dilated pupils and stertor. In the brain bloody parts were "somewhat more numerous than usual." There was about half a drachm or less of serum in the left lateral ventricle, less in the right, none at the base of the brain, "which appeared somewhat vascular." The dura mater was "rather more vascular than natural," "the other membranes dry and glistening."

In the second case, Agnes Anderson, the liver was small, soft, and brownish yellow. She was observed to stagger in walking and become rather drowsy and incoherent though not complaining of headache. She become deeply jaundiced, perfectly comatose with stretorous respiration and spasms. The brain when sliced appeared quite healthy, with the exception of the choroid plexus, "which was of a dark red color, and a vein distended with blood was seen running along each of its portions situate

*The superior surface of the liver has a much more decided and active sympathy with the brain than its inferior surface. Dr. Abercombie relates a case of a man eighty years old, who having enjoyed uniform good health, became suddenly incoherent a few weeks before his death. His mental disturbance, which was the only symptom of disease observed, was relieved by purgation, and not long after this he was found in the morning dead in his bed. "No morbid appearance could be found to account for his sudden death except that all the cavities of the heart, the aorta, and the vacuum were completely empty of blood. On the convex surface of the liver there was a tumor, about three inches in diamter, elevated into numerous irregular knobs; on cutting into it a cavity was exposed, capable of holding about eight ounces and full of opaque ash colored fluid, which could be drawn out into strings: the liver in other respects was perfectly healthy."

in the lateral ventricles." There was no "effusion" under the arachnoid or at the base of the brain, and "but a small quantity of yellowish serum was contained in the ventricles."

In the third case, Sarah ——, the vessels, sinuses, substance of the brain, and dura mater were remarkably congested; the ventricles "unnaturally dry" and about the normal quantity of serum (quite, yellow) under the arachnoid between the convolutions. The liver was small soft, flaccid and mottled of a yellow and dark-red appearance.

In the fourth case a German girl, æt. 18, there was violent delirium and restlessness, ending in coma and dilated pupils. The liver was "unusually small" and yellow. The cavities contained an unusually small quantity of serum and that was not tinged with bile, (which proves that there was no effusion since the jaundice.) "The quantity of serum throughout the whole brain was decidedly deficient." No vascularity of the brain or membranes is mentioned, and no structural lesion existed either in this or the preceding cases. For the dryness of this brain I would suspect that some vascularity must have existed and been overlooked.

In the fifth case, (Abdul, a Lascar,) the liver was *large*, soft and flabby, (4 lbs. 4 oz.) He was in a partial stupor with contracted pupils, but this was owing to opium, and accordingly nothing morbid was noticed in the brain but the jaundiced appearance. This was evidently a different case from the others. Dr. Abercrombie relates a case of black softening and atrophy of the liver with jaundice and vomiting, but no cephalic symptoms.

Dr. Griffin relates four cases of jaundice with vomiting, running rapidly into coma and death, except in one that was relieved by purging, which are probably similar to those above. Dr. Haulon relates a case of jaundice with vomiting, coma, restlessness, screaming and convulsions, terminating in death. None of these five cases were examined.

In the eleventh case, Mrs. C. B., jaundiced, with headache, intolerance of light, restlessness, dilated pupils, screaming and convulsions, stupor and death, the liver was of natural size, yellow and soft. In the head "Pacchionian glands preternaturally vascular; venous turgescence generally over the surface of the brain, with increased vascularity of the middle, and especially of the left anterior lobes. Substance of the brain much more vascular than usual; great vascularity of the choroid plexus; none of the optic thalami or corpora pyro midalia. The entire surface of the base of the brain highly vascular, particularly at the *crura cerebri*, *pons varolii*, and *medulla oblongata*. No fluid found in the ventricles."

It would appear that in this case the motor tract was comparatively bloodless, and composed by the surrounding congestion—the proper condition for the production of convulsions.

Dr. Budd remarks of the foregoing cases generally, that the liver was diminished in size, whereas in jaundice it is generally increased. The vomiting, delirium, coma, and convulsions he considers almost a sure indication that the secretion is suppressed, and not merely retained. Pathologists believe that biliary matter which has not been removed from the blood-vessels is much more injurious than that which has been secreted, and affects the liver more seriously. Coma he concludes may be frequently averted by active purging.

If then, we conclude that biliary matter floating crude in the blood is the source of formidable cephalic symptoms, and that a suppression of biliary secretion accompanied by an atrophied or anemic state of the liver is most formidable to the brain. Let us enquire into the cause of this anemic state of the liver, to which those of course are most liable, who have naturally small inactive livers. Reverting to general principles, we find that anemia of the liver may be produced by strict temperance, fruit diet,* and over active habits, giving the heart and lungs a preponderance over the liver, and withdrawing its blood too rapid-

* Grapes are considered beneficial in hepatic disorders in France, and fruit is often in this country a cause of dysentery following hepatic inactivity.

ly: in those cases, however, the patient does not become jaundiced for the lungs make up for the deficiencies of the liver, but when with such habits, intense and painful emotion suddenly reduces the play of the lungs, jaundice may come on.

Dr. Budd remarks, "It would seem that this suspension of the secretory process and disorganization of the liver may result from *powerful and depressing emotions;* but that it is far more frequently produced by some poison, introduced from without, or generated in the body, by faulty assimilation or digestion." Again, "so many instances have been recorded, in which jaundice immediately followed a sudden alarm or shock, or other strong and depressing mental emotion, that no doubt can remain of the influence of such emotions in producing it. Dr. Watson in his admirable lectures after relating some striking instances of this sequence of events, observes, "there are scores of instances to the same effect; and this is observable of such cases, that they are often fatal with head symptoms; convulsions, delirium or coma supervening upon the jaundice." Morgagni in his thirty-seventh epistle has related several cases in which jaundice, soon followed by delirium, and fatal coma came on after mental distress or fright."

It may be remarked, however, that in the great majority of cases of jaundice produced by mental distress, no serious effects are produced on the brain.

Let us next enquire what state of mind or in other words what cerebral organs may be concerned in the suppression of bile in either case, whether the liver be congested or atrophied. It is not true as a general rule that depressing emotions diminish the flow of bile. On the contrary, diarrhœa and cholera very commonly result from excited fear when such diseases are prevalent, and fright alone will cause an evacuation of the bowels, and an attack of diarrhœa. Annoyance and fretful irritation is commonly regarded as a cause of the flow of bile—an exhibition of temper is spoken of as a discharge of bile.

We may observe however, that in all cases in which the depressing emotion produces jaundice, there is a severe exercise of our fortitude. The individual is struggling against trouble or grief, and concentrates all his mental energies to resist the depression. In such cases then, the region of fortitude in the brain is in extreme preponderance, and this paralyzes hepatic action just as intense mental application which depends upon a neighboring organ tends to paralyze the action of both liver and stomach by direct antagonism.

2. *With the base of tongue and fauces,* the liver maintains a direct sympathy.—This is the region of nausea as we discover, when we insert a finger or spoon in the examination of the throat, and nausea is associated with biliary secretion. It is a corresponding fact too, that biliary matter leaves an impression at the fauces and base of the tongue when tested, and that the foul, furred condition of this part of the tongue indicates the condition of the liver and lower bowels.

CONCLUDED IN OUR NEXT.

NEW AND IMPORTANT MOVEMENT.

For a long time we have felt the necessity of cooperation and vigorous unitary labor among Eclectic Medical Reformers. We have addressed the public through the Journal, and our lectures at the Institute, have developed our views in detail. The suggestions which we have made, have at last led to corresponding action, and a society has been organized, which, if rightly sustained by those whose interests are involved, will prove one of the most important organizations ever instituted, second only to the Institute itself, in its beneficial influence upon Eclecticism.

The society to which we allude, is the "Central Eclectic Medical and Statistical Society," the constitution of which is herewith published. To illustrate the character and importance of this movement, let us consider the difficulties and embarrassments in the way of medical reform, and the most efficient means by which they may be overcome.

The first and greatest difficulty in the

way of the progress of an Eclectic physician, is the fact that the public generally, are not acquainted with the characteristics and the merits of the American Eclectic System. If its reputation were everywhere established, or in other words, if its true character were known, every graduate of the Institute would meet with a welcome reception, and be at once established in a successful practice, overriding all competition. But while the public mind is so much in the dark upon this subject—while the name and the doctrines of the Institute are in many regions entirely unknown and often grossly misrepresented by medical opponents, the Eclectic physician who is striving for a place in the confidence of the public, finds himself often surrounded by obstacles, which nothing but the most untiring energy, and the most convincing demonstrations can overcome; and even then, the prejudices with which he contends are not entirely vanquished, but have sufficient strength, to deprive him of more than half the credit which is justly due.

The maintenance of a Medical College of a high reputation, and great numerical success, will do much to overcome these difficulties, as the diploma of such a College may give its bearer, a very respectable professional standing, But this respectability, though an important advantage, does not give him a hold upon the affections and confidence of the community, sufficient to maintain him in practice, unless the merits of his method of practice are understood. Hence, there is nothing so urgently needed throughout the country, as a system of medical propagandism, by which we may be enabled to reach the minds of the entire community, and convince them of the scientific superiority of our system of practice. Upon this conviction in the public mind, the Eclectic practitioners of America depend for their very existence. To extend and strengthen this conviction, should be their leading object, for which no sacrifice should be considered too great, and to which, all expense and labor given will be amply repaid.

How is this important object accomplished at present? Almost solely by the individual labor of practicing physicians. The Eclectic Journal, is a publication for the profession, not expected to obtain a popular circulation, and we have had no publication of the character necessary for popular propagandism. How tedious a labor must it be for the solitary physician, surrounded by a skeptical public, and jealous rivals, to impress the public mind with the superiority of his system of practice, when he is recognized as the interested party, and his statements therefore received with suspicion, as well as flatly contradicted by others, who have to a considerable extent, secured the confidence of the community. Under these circumstances, the first dictation of common sense, to an enterprising mind, would have been to address the public mind efficiently, by means of publications, lectures, tracts, pamphlets, books, etc., until it was satisfactorily enlightened upon this subject. If Eclectic Reformers had from the first pursued this course, the cause would have been far more advanced at the present time—would have been more firmly established in the public mind, throughout a much larger extent of country—its principles would have been embraced by a much greater number of practitioners—its institutions might have been more prosperous, and it would have presented altogether, a much more imposing front before the public.

Why have not these obvious measures been accomplished? Partly, we believed because the movement of medical reform, has been of rather a democratic character, arising from the masses of the profession, rather than its leaders, and hence, has not been conducted by efficient and recognized leaders, or indeed has scarcely had any leaders, each man being too much engaged in his own pursuits, and no one in a position to give all his time efficiently to managing and propelling a revolutionary movement; but mainly because we have not yet got beyond the aristocratic and contracted policy of the old school profession, which scorned an appeal to the public, and regarded medical tracts for popular distribution, as

a great violation of professional dignity, and medical ethics. Such ideas are, or should be by this time, obsolete among medical reformers; and it is time that we should bestir ourselves, to take possession of the popular mind, by means of that honorable instrument, the press, which our opponents have haughtily scorned to use.

We have an immense advantage over our opponents, in the fact, that our medical creed does not require us to abstain from scientific and literary appeals to the popular mind; and it must be confessed that we have been guilty of great neglect and oversight heretofore, in not making use of that advantage. Let hunkerism fold its arms, and fall back upon its antique dignity,—there is nothing to prevent us from using all honorable means, in addressing and enlightening the public mind. If it is important to address the public mind, and circulate far and wide that information which is so much needed, it is equally important that the documents prepared, for popular distribution, should be of a judicious character, presenting in a brief and lucid manner, the characteristics of medical reform, and at the same time, not disturbing unnecessarily, the prejudices of society, or exciting too much of an angry and controversial spirit, by denouncing allopathic errors.—The preparation of such documents, should be conducted with the utmost caution and discretion, and when rightly prepared, they should be scattered far and wide, and reach and impress the public mind, wherever the Eclectic practice goes.

It is necessary that the profession at large, should be aroused as to the importance of circulating such documents. It is not an affair of patriotism, like contributions to the Washington Monument, or to some society for the promotion of learning, but a plain and important business matter, in which every one has a deep interest at stake on his own account. If every Eclectic physician in the country would spend at least fifty dollars per annum, in purchasing and circulating medical tracts and pamphlets of the proper character, that expenditure would prove the most profitable outlay of money that he could make. It is remarkable that physicians should be so apathetic upon this subject, while popular nostrum venders, will without hesitation, spend one thousand per annum in advertising their medicines, and find themselves well repaid by the circulation of their compounds through the community, with a success far beyond their intrinsic merits, due entirely to their incessant appeals to the public. It is remarkable that Eclectic physicians, with ample resources and solid merits, should contentedly remain comparatively unknown, and unappreciated by the public, sometimes not even spending $5 per annum to enlighten their patrons and the public, with reference to their merits. What makes it still more remarkable, that this powerful engine should be neglected, and left to the management of quacks, for mercenary purposes, is the fact, that if Eclectic physicians act upon these suggestions, they have the field almost entirely to themselves, free from competition, since the other class of the profession, not only carefully abstain from the class of publications referred to, but hold it as an essential portion of their ethics and policy, to avoid the use of such means. We therefore, invite our readers to reflect upon the proposition which expresses our deliberate opinion, that every Eclectic physician in the United States, will find it to his interest, to expend at least fifty dollars, per annum, in the circulation of appropriate medical documents. If by such means, one can build up a moderate and barely living practice, into a practice of two or three thousand dollars per annum, the outlay will be a very small per centage upon the profit. The mere distribution of fifty dollars worth of documents, upon the first location of a young physician, would, in a short time, bring him a very considerable amount of practice, which he would probably retain through receding years, during every year, a rich harvest from his first outlay. By this method, he would reach the most intelligent minds of the community, and secure as friends and patrons, individuals who might otherwise have been misled by his

opponents, and converted into enemies.

In addition to this propagandism by the press, we need a system of organized cooperation, among Eclectic physicians throughout the United States, partly for the purpose of mutual aid, intelligence, and friendship, but mainly for collecting those decisive facts, by which convincing demonstrations of the superiority of the Eclectic system are to be made impressive upon the public mind.

Why is it, that the public do not at once lay aside the pernicious errors of the old school system, when it is brought into contact with a rational practice? Simply for the reason that, the requisite statistics, and well authenticated facts have not yet been laid before them. The contrast between the two systems of practice, is so extreme, as to be almost incredible, to those who have no personal knowledge of the matter; hence, the most indisputable evidence is necessary; yet, such evidence has never been laid before the public, except in one instance---the treatment of Cholera in Cincinnati. The signal contrast presented during that terrible epidemic, in the records of practice, produced an immense effect upthe public mind, in behalf of our cause. But a solitary fact of that kind, does not cover the whole ground. We need to establish distinctly, and impress upon the public mind by careful and unquestionable statistics, the fact that the mortality attendant upon the Eclectic practice, is less than one half the mortality attendant upon the old school practice, and consequently that the prevalence of the new system, is a blessing to every neighborhood into which it is introduced,---that it increases the average duration of life, and constitutes an immense addition to the national health and happiness. By systematic cooperative efforts, such statistics can be obtained; and such records can be made, as will not only convince the public mind of America, and modify the course of the profession, but will even be felt in Europe, and recognized as a demonstration, of another triumph of the American mind.

To accomplish these purposes, it is necessary that each physician should keep a faithful record of his practice, and send every year to the officers of the Central Society, a certified statement in regular form, showing the results of his practice---which statement, when arranged for publication, will, in a few years, constitute a mass of documentary evidence, of overwhelming force. In a few years we might thus accumulate accurate statistics of the Eclectic practice, in half a million of cases---a record sufficiently extensive, to carry irresistable weight in the minds honestly enquiring for truth. Our principal difficulty will be to procure the records of a sufficient amount of old school practice, for the purpose of comparison and contrast; for excepting from hospitals and public institutions, required by law to make regular reports, it is difficult to procure statistics of old school practice; and there is great aversion in the profession to make such records which shows how unsatisfactory are the facts they reveal.

A central society, accumulating and arranging such statistics, would be able to lay them before the public, in a very efficient manner, and to secure their extensive circulation. Having then placed Eclecticism in a lofty and impregnable position, and by means of popular publications reached and revolutionized the popular mind, there are some additional duties for such a society to perform.

One of the most important is, the establishment of cooperative relations among the members, and the diffusion of private and practical information among them.---It is therefore, proposed that, each member shall make an annual report of his success in practice, of the condition of Eclecticism in his vicinity, of the state of public opinion and general progress of the cause, the demand for Eclectic practitioners, and the inducements opened for physicians to locate in particular regions. Each report of this character, which should be written as a private and confidential communication to the members of the Society alone, should be regarded by all, as strictly a private letter; and it should never be published under

any circumstances; but a sufficient number of copies should be printed, for the supply of the members of the society alone

As the members of the society would be scattered over a very extensive region, these reports would give a periscopic view of the state of the profession almost every where, and would be of incalculable value to a young physician in search of a location, or to an established practitioner, who wished to change his residence or to sell out his practice. If, for example, the society contained five hundred members, each member of the society, would have the benefit of five hundred confidental letters, from physicians throughout the country, informing him where was the best field for practice, where the public were anxious for his services, or where an established physician wished to obtain a partner, or to abandon the field to a well qualified successor.

By membership in such a society, each would have, not only the pleasing consciousness, that he was contributing to establish rational reformed medicine in an impregnable position, for the benefit of mankind, but would be enabled by the publications of the society, to make a powerful impression upon the public mind, in his own vicinity, for his personal benefit, to procure assistance and cooperation if necessary in his own region, and to find the best sphere for his own labor, whenever a change of climate or location become necessary, without the delay and expense of traveling in person throughout the country.

Such are the views which we have repeatedly presented in public addresses;—and in accordance with these views, a society has been organized among the graduates of the Eclectic Medical Institute. At the close of the Winter session of '52-53, a similar Society was proposed by members of the class, and some steps were taken to organize it for operation; but, owing to the very late hour of the session at which it was introduced, and other causes of delay, it was postponed as impracticable at that time. At the close of the session of '53-54, the subject was again taken up by the class, and a society organized; but as the meeting for organization was held on nearly the last day of the session, no subsequent meeting was held, and no other steps taken, but the adoption of a constitution, and the appointment of officers,—future operations being left in the care of the executive committee. The constitution was signed by a majority of those present at the meeting, and the society now only awaits the addition of a sufficient number of members to render it an efficient organization. We would, therefore, respectfully call upon every physician, who approves the objects of the society, who wishes to be recognized as an active friend of medical reform, and who desires to circulate the proper documents among the people, to send in at once, his subscription as a member of the Society, accompanied by the fee of membership,—and to proceed at once to keep a record of his practice, with a view of reporting its results.

The remittance should be made to Dr. J. King, Treasurer of the Society, though if made to the editors of the Journal, or to any member of the society, it will be attended to, and the subscriber will be entitled to a copy of the confidential private report and to whatever documents the funds of the society may enable it to print for gratuitous distribution among its members, as well as to procure a larger quantity of the same, at the lowest prices at which they can be furished. The saving in expense in procuring superior documents for distribution, such as cannot be obtained elsewhere, would more than pay the small amount of the annual subscription.

In remitting the subscription fee of the society it would be well for members to signify at the same time, the amount which they would be willing to appropriate in addition to the purchase of documents for distribution.

—

Central Eclectic Medical and Statistical Society.

Cincinnati, Feb. 23, 1853.

At a meeting of the Eclectic class in the hall of the Institute, a committee was appointed to draft a Preamble and Constitution for an Eclec

tic Collegiate Society the object of which will be found set forth in the Preamble and Constitution.

On the evening of the 24th instant, pursuant to adjournment, the committee reported the following:

Report of a Committee appointed at a meeting held at the Eclectic Medical Institute, Cincinnati, Feb. 23, 1854, to draft a Constitution for a Collegiate Society.

Whereas it becomes needful to form societies upon a systematic basis in order to promote effectually the interests of humanity, and whereas it appears at the present time absolutely necessary to consolidate the interests and unite the efforts of Eclectic reformers, and especially to sustain their Collegiate respectability, therefore, we the undersigned do resolve ourselves into a society, adopting the following Constitution:

CONSTITUTION.

Art. I. That this Society be called, "The Central Eclectic Medical and Statistical Society.

Art. II. The objects of this Society shall be to promote friendly intercourse, and correspondence among the graduates and friends of the Eclectic Medical Institute of Cincinnati,—to advance the interests of that Institute, and Collegiate interests generally—to obtain and circulate Medical statistics—and to issue publications adapted to the promotion of popular and universal knowledge on the subject of Medical Reform.

Art. III. Every person who is a Graduate of the Eclectic Medical Institute of Cincinnati, or who is a friend thereof, shall be eligible to become a member of this society.

Art. IV. Every member shall be required to pay annually three dollars, commencing from January 1st, 1854, and send in a statistical report and other interesting matters at the close of every year, and faling to do this for two successive years, the name of that member shall be erased.

Art. V. The officers of this society shall consist of a President, Vice President, Treasurer, Secretary, and a Council of three, who shall form a quorum.

Art. VI. The officers of this society shall be elected annually at the Annual Meeting, and the members of the society shall have the privilege of voting by letter or *viva voce*, in the election of the officers.

Art. VII. The annual meeting of this Society shall be held in Cincinnati every year, on the third Wednesday of November in each year.

Art. VIII. This Constitution shall not be amended or altered, except notice of the amendment or alteration proposed, be given at the previous annual meeting, and the members shall have the privilege of voting thereon either by letter or *viva voce*, and said amendment or alteration shall not be passed except by a majority of two-thirds of those voting.

Art. IX. The Executive Committee shall be empowered to transact all the necessary business of this society, and shall present a report of their proceedings at each annual meeting.

Signed by the Committee.

Art. X. The code of By-Laws of this Society shall be adopted by the Executive Committee in accordance with the principle and objects of this Constitution, and shall also be presented at the next annual meeting in 1854 for its approval.

E. WOOLLEY,
T. L. FAULKNER,
W. S. LATTA.

On motion every article of the Constitution was taken up separately and adopted as now amended.

On motion the following persons signed the Constitution and the society was formed.

J. R. BUCHANAN,
R. S. NEWTON,
WM. SHERWOOD,
H. H. HUDGINS,
W. BEADLE,
GEORGE ROOT BENTON,
JOHN FRENCH JUDGE,
H. C. RICE,
T. L. FAULKNER,
EDWARD WOOLLEY,
JAMES W. F. GERRISH,
AUGUST J. EMEIS,
N. T. ISGRIGG,
JOHN CONNAWAY,
BERNARD STUVE,
W. S. LATTA,
ELIAS H. MERSHON,
P. T. GANS,
J. W. YOUNG,
E. J. COATES,
L. H. NEELY,

ANDEW GULLETT,
U. T. SULLIVAN,
SAMUEL M. WORK,
J. F. WUIST,
J. TURRENTINE,
JOHN CARMAN,
JAMES MCFATRICH.
H. WOHLGEMUTH,
HENRY G. AVERDICK,
H. E. ZIMMERMAN,
L. VANBUSKIRK,
A. J. R. MURPHEY,
WM. C. DIAL,
J. A. LEEPER,
JOSEPH E. RUHL,
D. H. THOMAS,
W. B. SAMPLE,
JOSEPH FIREBUGH,
J. EVEIRNGHAM,
L. W. BROWN,
JAMES A. SMITH,
J. M. SWIFT,
JOSEPH G. CAMPBELL,
ENOCH LAGORE,
J. L. SPRINGGATE,
H. R. POTTER,
O. P. CHUBB.
J. W. JAY,
T. E. ST. JOHN,

On motion, then the following resolutions were presented by the committee and adopted by the meeting.

The Committee also suggest the following; resolutions:

Resolved, That the following gentlemen be appointed as officers of this society:

Prof. J. R. BUCHANAN, President,
" R. S. NEWTON, Vice President,
" J. KING, Treasurer,
" W. SHERWOOD Secretary,
" G. W. L. BICKLEY, } Council.
" Z. FREEMAN, }
" J. W. HOTT. }

Resolved, That this Constitution and resolutions, and the names of the members, be published in the Eclectic Medical Journal.

Resolved, That the Executive Committee issue as soon as possible an Address or Circular to Eclectic Medical Reformers, on behalf of this Society.

Resolved, That we deem it advisable to publish immediately a Tract on the subject of Medical Reform; that said Tract be No. 1 of a series, and be stereotyped, and that special subscriptions be solicited at once to enable the Committee to issue it, and that each subscriber receive the amount of his subscription in said publication.

Signed by the Committee,

E. WOOLLEY,
T. L. FAULKNER,
W. S. LATTA.

On motion of Dr. J.W. Young, of Bloomington, Ia., a member of the society, the Faculty of the Eclectic Medical Institute and Board of Trustees were petitioned to confer upon Dr. J. J. PERRY, of Indianapolis, Ia., the honorary degree of the Institute; and that a copy of this resolution be presented by the Secretary to the Dean of the Faculty and the President of the Board of Trustees.

After which the Society adjourned *sine die*.

W. BEADLE, *Pres't.*
BERNARD STUVE, *Sec'y.*

BOOK NOTICES.

We are indebted to H. W. Derby for a catalogue of the Medical and Surgical publications of Messrs. Lee and Blanchard, of Philadelphia, all of which he has on sale at 145 Main street, Cincinnati.

We have also received from Messrs. Lindsay and Blackiston, of Philadelphia, a copy of their Literary Register containing a list of Medical works recently published by them.

Messrs. S. S. & W. Wood, have furnished us with a very extensive catalogue of both new and standard Medical works, for sale at their extensive establishment 261, Pearl street, New York.

We desire to invite the attention of the profession to a "Manual of the active principles of indeginous and foreign medical plants, as prepared at the American Chemical Institute, New York, a copy of which has deen forwarded to us by B. Keith & Co., Proprietors, 582 Houston street, New York. A copy will doubtless be furnished to any member of the profession who will write for it to the above address. N.

THE

ECLECTIC MEDICAL JOURNAL.

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NATURE AND TREATMENT OF PULMONARY CONSUMPTION.

BY WM. TELL PARKER, M. D.

[We have much pleasure in laying before our readers the following admirable essay on Consumption, by Dr. PARKER. Dr. P. is one of the early graduates of the Eclectic Medical Institute, and with his fine natural abilities, we fear he has but little excuse to offer for not having been more active heretofore in behalf of Eclecticism.—We hope his present effort indicates that he will not be backward or idle hereafter, in the use of his pen. The essay of Dr. P. relieves us from a duty, which we have often felt demanding our attention, of preparing for the Journal an essay upon this subject, developing the views which we have inculcated in our lectures in the Institute. The task of presenting this subject, however, has been so well performed by Dr. P., that nearly all we would feel it necessary to say, has been clearly developed by him, and we deem it unnecessary to to make any addition at present. Dr. P. remarks in a private letter, "I am aware that nearly all the facts and principles mentioned entered into your course of physiological lectures, when I attended your instructions," and we allude to this matter now, because upon this subject the course of instruction in the Eclectic Medical Institute, has presented a very marked difference from that of other medical schools; and as this constitutes one of the important points of superiority of the Eclectic system, we wish it to be distinctly understood—especially as we have taken considerable pains in elucidating—and teaching this more rational and hopeful view of the pathology and treatment of phthisis pulmonalis.

The important practical suggestion of Dr. P. as to the use of ammoniacal inhalations we adopt without hesitation. We have taught the importance of inhalations as a mode of applying remedies to the lungs, and the great value of alkalies as the natural solvents of tubercle—the combination of these two ideas by *alkaline inhalation*, is self evidently an important suggestion. As to its practical results, Dr. P. speaks encouragingly of a few cases and states in the case of the late Dr. P. C. Dolley who used it a few days before his death, the post mortem examination "showed not a particle of solid tubercle." We think that the inhaling apparatus introduced by Mr. Lyman and Mr. Whitney of St. Louis which has valves and tubes to regulate the inhalation by the nostrils will be found a most desirable assistant in the ammoniacal treatment.] B.

Of all chronic diseases, scrofula is the most common and the most fatal.

Tubercular consumption is that manifestation of scrofula which fastens upon the lungs, destroys their tissues, and slowly but almost invariably, destroys the life of the victim.

The relative frequency of pulmonary

consumption, as compared with other diseases, is much greater in some countries than in others.

Prof. J. B. Williams, of London, affirms that among the Europeans in British India, phthisis does not cause one in five hundred deaths, while among the Maylays, Caffres, and Indians it causes from an eighteenth to a seventeenth of the mortality. In London nearly one third of the deaths are caused by this disease, and in Paris the proportion is not much less. In the West Indies, among the negro troops, it constitutes one half of a large mortality, (see Williams and Clymer on the Respiratory organs, page 275.)

In the City of Boston, during the year 1852, the deaths by consumption constituted eighteen per cent., or one in every five and a half. This is, I believe, the largest proportion hitherto observed in the United States; but there are few places, even in our favored country, where this insidious destroyer does not frequently come to demand its victims.

When we add to the bill of mortality, caused by consumption of the lungs, all the deaths resulting from other forms of scrofula, as tubercular disease of the brain in children, marasmus, and bowel complaints, kept up by tuberculous deposits in the mesenteric glands, and the peritoneum; besides others less common, we shall obtain a result truly appalling. This view of the subject is still more startling, when we reflect, that scrofulous diseases are on the increases, if not in the world at large, at least in our country and in England. Sir James Clark by carefully studying the London bills of mortality, from the years 1700, to 1830, finds that the proportion of deaths from consumption has been steadily increasing during that whole period.

How sad, and humiliating is the reflection, that these immense armies of our fellow creatures go down to the grave with scarcely an attempt made to save them, because the medical world has decided the disease to be incurable.

So little is expected in the way of cure, by medical authors, that few of them advise anything more than palliative treatment. The most that is attempted in fully established disease, is to subdue disagreeable symptoms, render the patient as comfortable as possible, and thus "smooth his pathway to the tomb."

It will be my object is this essay, to enquire how far this melancholy opinion is correct, and to investigate the claims of certain means of cure to the confidence of the profession and the public.

In the first place, it will be well to have a clear understanding of the essential nature of the disease, as it is highly important to distinguish true consumption from those less dangerous maladies, whose symptoms often closely resemble those of the genuine disease. Pneumonia, pleurisy, and bronchitis, when they assume a chronic form, are frequently mistaken for true consumption, while they lack its essential nature.

Phthisis pulmonalis or true consumption, is always produced, or kept up by the deposit of tuberculous matter in the lungs. It is an error to call any case of lung disease pulmonary consumptions where this deposit does not exist; at least the term will be used in this sense only in this essay. The nature and composition of tubercle has been carefully studied, and described by several close observers. It is found to consist of degenerated fibrine and albumen, the nutritive materials of the blood.

Coagulable lymph consists of the same material in a living healthy state, capable of being organized, and becoming a part of the living body. This matter more or less completely dead may be deposited, in almost any tissue as tubercle, where it may remain unchanged, an indefinite length of time, yet always liable to soften and become changed into purulent matter; at the same time causing irritation, ulceration, and suppuration in the tissues, with which it lies in contact.

Albumen, fibrine, lymph, tubercle, and pus have precisely the same chemical composition, differing from each other in mechanical condition, and capacity of organization rather than in chemical constitu-

tion. (See Williams and Clymer, page 342.)

Tubercle was formerly considered as strictly amorphoeus matter, with no traces of organization. It was considered by some as an abnormal secretion from the blood, by the mucous membrane of the air cells and smaller bronchi, on by the prarietes of the areolor cells, of the parenchyma of the lungs, but recent microscopical researches have shown it to consist of molecules, granules and granulated corpuscles of various sizes; of aggregated granules without any tunic, and and of collapsed tunics without any granules. With these are mingled numerous flakes and filaments, no doubt the fragments of air cells and blood vessels.—(See Gerber's General Anatomy, Gulliver's appendix, page 87.)

Dr. M. Troy, of North Carolina, advances the theory that tubercle consists of the solid matter, of the cutaneous transpiration, especially of the sebaceous follicles, and this doctrine is supposed to be corroborated by the almost universal torpidity of the skin in scrofulous persons; but the facts above stated, respecting the integral structures of tubercle, seem to me to stand directly in the way of such a hypothesis.—They lead inevitably to the conclusion, that tuberculous matter, whatever may be its form, consists of degenerated and devitalized fibrine, and lymph-globules, mingled with the debris of those tissues among which it is deposited and which have died in consequence of its presence.

The form, consistence, quality, and color of these tuberculous deposits vary greatly, and pass by insensible gradations into organized indurations on the one hand, and collections of true pus on the other.

It is more commonly than otherwise observed in roundish detached masses, or of a cheesy consistence, and yellowish white color situated among the air cells; frequently involving the parieties of several cells and their blood vessels within its own structure. These masses are by no means always detached, but are often united together, so that frequently a considerable section of the lung will be occupied by one continuous mass of tubercle, which is merely traversed by strips and patches of the living structure.

We have besides this form the gray miliary tubercle, and the infiltrated tubercle of Laennec, which is the same as the gray hepatization of Andral.

The accounts of different observers do not very well coincide as to the order and progress of the changes in tubercle, from its first separation from the blood to its final softening and expulsion through the bronchi. Laennec, who is justly celebrated as the discoverer of the science and art of physical diagnosis by auscultation and percussion, teaches that tubercle is first deposited in gray semi-transparent, albuminous masses, which afterwards become yellow tubercle and finally begin to soften at the center.

Carswell thinks tuberculous matter is generally secreted by the mucous membranes of the bronchial tubes; that when the tubes becomes filled, it becomes solid, but otherwise there will remain a hollow in the centre which will contain more fluid matter. This explanation may be occasionsionally the true one, but cannot be the invariable mode of deposit. because we find this matter some times infiltrated through the areolar structure, intimately mixed with all the tissues of the lungs.

To me it seems probable, that the formative material of the blood, from a peculiar taint in the constitution, becomes either depraved or dead, and in either case is exuded from the capillary blood vessels into any of the tissues, as peculiar circumstances may determine. If the globules and cells of which it is composed are but little degenerated, the tuberculous accretion may be solid, albuminous or what is called crude, approaching in texture to organized lymph. If matter is more degenerated, or completely dead, it is deposited *de novo*, as dirty, opake, yellow, granular or amorphous tubercle, which will pass into softening and decay more speedily than the crude varieties.

The upper portions of the lungs are found to be more liable to be infested with these accumulations, than the middle or lower

parts, although no part can be said to be entirely exempt.

The lungs are by no means the only seat of these deposits, but the consequences of their presence in these organs are more frequently fatal than those arising from their distribution in any other part of the body.

No tissue of the human body is secure from the inroads of scrofulous disease, but tubercles are perhaps more commonly found in the liver, kidneys, lymphatic and mensenteric glands, than in any other locations besides the lungs.

The small glands found in the course of the lymphatic or absorbent vessels are peculiarly liable to scrofulous degeneration. This probably results from the attempts of these vessels to remove the morbid deposit from the encumbered textures among which they ramify. The more fluid portions of tubercle are frequently in this way carried off by the absorbents, and a concrete mass is left, consisting almost entirely of the earthy and saline constituents of the former mass.

Tuberculous matter floating in the current of these delicate channels, is very likely to become entangled in the conglobate glands, in which the lymphatic tubes pursue a tortuous and convoluted course.—When a speck of this matter becomes fixed it attracts to itself other particles of the same kind, and thus the whole gland becomes loaded and obstructed with the foreign matter.

In dissecting a subject eminently scrofulous, we find many parts of the body studded with these degenerate glands, from the size of a pin head, or smaller, to that of a hazle-nut.

As it is not my purpose to write a full description of the disease, I will say nothing of its symptoms, course of progress, or the means of its diagnosis. Information on these points is so common, and so explicit in standard medical works, that I shall not presume to throw upon them any additional light.

The means of distinguishing phthisis pulmonalis, from other similar affections, have received a great addition from the labors of Laennec, and the improvement since made on his observations; yet it must be acknowledged that in actual practice much uncertainty accompanies many cases, the patient finding it impossible to satisfy himself respecting his real condition. A friend of mine has had his lungs examined by ten different physicians, who have given him almost as many different opinions respecting the condition of his lungs.

I do not wish to undervalue the science of physical diagnosis, which although sometimes carried to an absurd extreme, is justly considered as one of the triumphs of medical observation.

Few persons acquire the necessary skill to decide with any degree of certainty respecting pulmonary disease, or to discriminate between different but similar conditions. The *science* of physical diagnosis is acquired with comparative facility, but the *art* by which it is applied is of difficult practice. When we consider the limited amount of instruction and number of opportunities for observation which fall to the lot of most physicians, it is not strange that an art to say the least, intricate, should be practiced by so few masters. Besides this, not every one has the acuteness of hearing necessary for a good auscultator. A minority only of persons who study and practice the art of writing short hand, can acquire the sary dexterity to enable them to report the words of a public speaker. So, I believe a minority only of those who practice auscultation are endowed with an ear so acute, as to discriminate properly between all the varied and confused sounds of a diseased thorax.

This want of skill, among professed auscultators, subtracts much from the aggregate value of their art. It is requisite that confidence should be placed in the diagnosis of a case, before that diagnosis can be of any value as indicating the course of treatment. I think it would be an advance from the present state of affairs, if one auscultator in a hundred could always make a diagnosis worthy of entire confidence.

We come now to speak of the curability

of this disease; and on this part of the subject, I shall not be deterred from freely expressing my opinion by the fear of being charged with quackery. I am aware that nothing is more common, than for the most ignorant pretenders to medical skill, to assume that consumption is curable, and also to boast of the numerous cures by themselves performed, yet it must be admitted, that a sincere enquirer after truth should not suffer himself to be driven from the track of investigation by the impertinence of speculating hucksters who may annoy him on the way.

My decided belief is, that pulmonary consumption is a curable disease. It has no essential characteristics which render it necessarily fatal. High authorities are not wanting who coincide in this opinion.—There is nothing to prevent perfect recovery from consumption, but the renewal of the tuberculous deposit, and in cases where this disposition to such accumulations has been changed, the softened matter is expectorated, and the cavity closes as any other abscess does.

Speaking of these vomica, Dr. Watson says, "When they occur simply, without other tubercles, or cavities, (which though a rare thing, does sometimes happen,) and when occurring thus singly, they have been emptied of the tubercular matter, they may gradually contract and ultimately become obliterated. This approach of their sides leads to a puckering of the pleura on the surface of the lung, and on the other hand a puckering of the surface indicates that beneath it there is probably a collapsed vomica. Its inner surface becomes converted in that case, into a substance resembling cartilage, and the appearance it presents is called a cicatrix, and really it deserves that name. The process which has gone on, is a process of natural recovery, and the recovery would be complete, if no fresh deposit of tubercular matter took place." (Watson's Practice, Lecture LVI.)

Prof. Gerhard, after describing a case, in which cavities were nearly or quite obliterated, says, "You see, therefore, that it is possible to cure a cavity in the lungs, however unfrequent may be the occurrence of such a result, especially in phthisis, where new crops of tubercles are so liable to form. (Clinical Lectures No. XIII.)

We have the statement of Dr. Giovanni De Vittis, that, in less than four years one hundred and seventy-six cases of phthisis were discharged from the hospital *perfectly cured*. (Williams and Clymer on sup. organs p. 387.) But it is needless to multiply quotations on this point, as they are after all but the opinions of men. I have done so thus far, only in order to dissipate that conviction of necessary fatality which has been, and is now so nearly universal.

When we come to trace consumption or *pulmonary scrofula* to its starting point, we shall find it depends upon some taint, or vice in the constitution antecedent to the formation of tubercle. This fact becomes apparent when we see two individuals equally exposed to the same morbific causes, which shall operate on the two constitutions during equal spaces of time. One of the individuals thus exposed will continue to live with undisturbed health while the other will become affected with tuberculous matter, and finally die of the same.

Two men the children of the same parents, may eat at the same table, sleep in the same apartment, work at the same shop, and one may decline and die of consumption while the other will live to a green old age. The husband is frequently called to leave the wife, or the wife the husband, and perhaps still more frequently, the child just arrived at the threshold of maturity is taken from its doating parents.

Tuberculosis is eminently a disease of debility; its essential element is a contraction of the vital power, the energy of life, the "*vis medicatrix naturæ*," that principle in the animal body, which watches over and protects every organ, so far as possible, from danger, and when injury has been done, so far as possible, repairs the damage. This will become evident by observing the causes which create and foster the scrofulous diathesis. These are known

to be, exposure to cold, and dampness for a great length of time. excessive fatigue, intemperance, veneral excesses, sedentary occupations, breathing unwholesome air, debilitating diseases, innutritious diet &c. Many persons whose health had previously been robust, when exposed for even a short time to such influences, speedily assume the scrofulous diathesis, and shortly sink under the fully developed disease.—Coster confined rabbits in cold damp situations, and gave them but one kind of food. They speedily became tuberculous.

When the vital stream runs low, the nutrient element in the blood dies, particle by particle, and becomes the same as a foreign body. These effete particles together with those partially dead, by affinity collect together, as they are exuded from the blood vessels, and become tubercles to pursue the course already described.

In those constitutions whose tide of life runs stiong and clear, slight derangements are easily rectified, by the renovating power already mentioned. If in such persons tubercles are generated by the operation of transient causes, they are removed either by absorption or expectoration, when the depressing causes cease to exert their influence, or at least as soon as the system recovers its normal tone.

If the foregoing statements respecting the essential nature of phthisis pulmonalis are correct, the indications of cure spontaneously suggest themselves. They can be no other than these, first, to remove the deposits of dead matter called tubercles from the lungs, either through the air passages, or by the absorbent vessels. Second, to raise the standard of the vital forces to such a point, as shall be incompatible with this tendency to *death in the blood*. If these indications can be fulfilled in any case by medical and hygienic means, phthisis pulmonalis must in that case be certainly cured.

Spontaneous, and accidental cures of consumption are not very uncommon phenomena, and yet the medical profession have as yet almost entirely failed to attain to the same success by artificial means however carefully directed. I think, however, that a rigid application of the inductive mode of investigation will prove as useful here as in other branches of science. It is only by closely observing nature, in her operations, in the cure of disease, that we can hope to assist, regulate and direct her energies to the accomplishment of the desired object.

Taking this plan of investigation as our guide, let us observe what efforts nature, or the powers of the living body make to relieve the loaded lungs of their burthen of tubercles.

These masses are first softened, either by the effusion of fluid around them, or by their passage into incipient decay. Ulceration then takes place in the septa between them, and the air passages, forming channels for their transit into those passages, whence they are expelled by expectoration. Much of the matter of tubercle, is also taken up by the absorbents, and thrown into the torrent of the circulation, where we lose sight of its distinct existence. It must be revivified, and appropriated again to purposes of nutrition, or eliminated by some of the numerous emunctories of the system. In any case it cannot be removed (except in certain favorable locations,) without being first broken down and rendered fluid or semi-fluid. A few of these masses may, by means of extensive ulcerations, be tumbled into the large bronchial tubes, and expelled in a solid cheesy form. Although the softening and expectoration of tubercles gives rise to extensive ulcerations in the pulmonary structure, and consequently to exhausting suppuration, it should be looked upon as an effort of nature to effect a cure by the most direct method.

It has been a matter of much dispute, whether tubercles usually begin the softening process at the center or the circumference. Laennec thought the former supposition to be correct in all cases, because it is very common to find tubercles, the centers of which are semi-fluid while their peripheries are quite solid. But this fact is explained by later observers in two ways.

Dr. Carswell supposes tubercles are usually deposited on the mucous membranes of the bronchial tubes, and of the air vesicles. In this case the air tube might remain perforate, and the small channel of the original passage might be filled with mucus more or less changed, which is incapable of becoming solid tubercle. Suppose tuberculous matter to be exuded from the parietes of an air vesicle; after it had covered the lining membrane of the vesicle with a ceiling of tuberculous matter, it could have no farther power to close the original cavity, but if the exudation should continue to take place, it must be by a distention of the walls of the vesicle thereby enlarging the chamber, to accommodate the deposit, while the original cavity will remain of its natural size, except that it will naturally fill up with some adventitious fluid.

The other explanation is, that tubercle is deposited in a semi-fluid state, and while the surrounding textures remain in a state of integrity, they address themselves to the task of absorbing the more fluid portions, so that the circumferences of the masses become solid, from this abstraction of their fluid constituents.

I will leave these explanations with the reader, and allow him to choose between them, or adopt the opinion of Laenenec, as it matters but little in a practical point of view, whether they soften from center to circumference or *vice versa*.

The inquiry is only important thus far. If it is established, that tubercles invariably begin to soften at the center, and that this change proceeds outwards, it follows that the process takes place exclusively in the mass itself, and would argue that crude tubercle continues to preserve a low degree of vitality, which for a time resists the tendency to dissolution. But, if it is clearly proved that softening sometimes progresses from without inwards, there is no question, that in these cases the tubercles consist of lifeless matter, and that softening is but a process of solution, or mixture in the fluids poured out around them.

But a removal of the morbid deposit from the lungs is not sufficient to save the life of the consumptive, a renewal of the deposition must be prevented. Here nature seems to be more at fault, as this is rarely accomplished, without some decided change in the circumstances of the patient. The recuperative powers are undoubtedly exerted to prevent, as well as to repair the mischief, but their operations are not so apparent.

Indeed we could not expect a constitution so debilitated, as to yield to the inroads of this malady, while the organs were in a state of integrity, to ward off by its own power a second attack, while the same causes were in operation which induced the first invasion.

Change of climate, of residence, of air, of habits, of diet, of dress, or a resort to successful medication have probably accompanied every case of cured consumption.

Of all hygienic remedies, change of climate appears to stand highest in the good opinion of the profession, and seems to offer a well grounded hope of permanent benefit. It is not my design to offer advice as to what countries should be visited, much less to discuss the claims of those which have acquired the greatest celebrity.

Benefit has been derived from a removal to climates of the most dissimilar characteristics, and it is now a mooted question, whether from this latitude, the invalid should emigrate north or south. The fact is, that climate is best which most rapidly invigorates the body. Renovation of the decayed vitality is all that can be gained. In some cases, where this is accomplished in a satisfactory degree, the absorbents remove the remnants of the disease, and this is the "consummation devoutly to be wished."

Many persons have recovered from incipient phthisis, while on long sea voyages, and on land, when confined to the use of salt provisions. Consumptives who cross "the plains" to California and Oregon are usually benefitted, if not cured on the route; probably from the use of salt diet,

and drinking water strongly charged with saline and alkaline minerals. The excessive use of salt produces scurvy, a disease in which the blood is found to contain less than its normal proportion of fibrin. It also strongly stimulates the absorbents, so that in the case of persons laboring under sea-scurvy, tumors, cicatrices and other adventitious growths, are absorbed, and it is reasonable to suppose, that tubercles disappear in the same manner. Indeed we are almost certain they do, because the invalid recovers from the scrofulous cachexy depending on the presence of tubercles, without any lesion in the body through which they might otherwise pass.

A residence in or near stables where the patient is compelled to breathe the fumes arising from fermenting manure, has been found in many cases to exert a remarkable influence on consumption. John Richards a resident of this county, was several years ago considered beyond the reach of relief by his physicians, laboring as was supposed under confirmed consumption. He assumed the occupation of a stage driver and spent a considerable portion of his time in stables. From that time his health constantly improved, and now, after the lapse of ten years he remains well.

Prof. Griscom of New York, in his admirable work on the Uses and Abuses of Air mentions a singular custom. "In some parts of Scotland, even at the present day, when a persons begins to complain of consumption, he is very gravely advised by his friends, or some old woman who is often the "family doctor," to live for a certain time in the *cow house*." Dr. Griscom mentions this as an instance of gross ignorance and folly, but I think a custom so disagreeable could hardly have obtained an adoption so general, had not marked benefit been observed to follow it.

Carpenter speaking of the causes of a certain class of disease in Iceland, says, "The dwellings of the great bulk of the population of Iceland, seem as if constructed for the express purpose of poisoning the air which they contain. They are small and low without any direct provision for ventilation, the door serving alike as window and chimney; the walls and roof let in the rain, which the floor, chiefly composed of hardened sheep dung sucks up; the same room generally serves for all the uses of the whole family, and not only for the human part of it, but frequently also for the sheep, which are thus housed during the severer part of the winter. The fuel employed in the country districts, chiefly consists of cow-dung, and sheep dung caked and dried, and near the sea coast, the bones, and the refuse of fish and sea-fowl producing a stench, which to those unaccustomed to it is completely insupportable. In addition to this, it may be mentioned that the people are noted for their extreme want of personal cleanliness; the same garments (chiefly black flannel) being worn for months without being taken off at night. Such an assemblage of unfavorable conditions, combined with the cold damp nature of the climate, might have been expected to induce tubercular diseases of various kinds, but from these the Icelanders appear to enjoy a *special exemption*." (Physiology p. 544.)

We have it upon the authority of Liebig, that "much relief is afforded by a residence in works, in which empyreumatic *oils* are manufactured by dry distillation, such as manufactories for the preparation of gas or sal-ammoniac." (Agricultural Chemistry chap. 3d note.)

Living for considerable time in the Mammoth cave, Kentucky, as I am credibly informed proved an effectual cure in several cases of consumption, but the proprietors of the cave having prohibited any more invalids from residing there, the experiment has not been very fully tested. Other circumstances and modes of life have been found to exert a curative influence over this intractable malady, but I will not enumerate any more, except to mention one which has lately excited a good deal of attention, I refer to the *sugar house cure*.

The attention of the medical profession, and the public generally has been directed to this subject, through the instrumentality

of Dr. Samuel A. Cartwright, of New Orleans. A very interesting article on this subject, by this veteran in medicine, was published in the Boston Medical and Surgical Journal, for September 15th, 1852, from which I have made the following extracts:

"A residence in a Sugar House in the rolling season, far surpasses any known means of restoring flesh, strength and health, lost by chronic ailments of the chest, throat, and stomach. The rolling season is the harvest when the canes are cut, the juice expressed and converted into sugar. In Louisiana it commences about the middle of Oct. and ends at Christmas, but is sometimes protracted into January. Not long after the Venitians in 1471 discovered the art of making sugar from the cane, it was observed that the laborers engaged in the process fattened and became more healthy during the cane harvest. The experience of upwards of three centuries in making sugar from the cane on this continent, proves that the negroes fatten and become remarkably healthy during the rolling season. The health and fattening properties of that season are not confined to the negro race as some erroneously supposed. This is abundantly proved by the experience of the sugar growers of Mauritius, Bengal, Java, the Straits of Malacca, the Philipine Islands, Australia, and many other places where the negro labor is not employed."

Experience proves, that this compound vapor, (that which arises from the boiling syrup) cures catarrhal, bronchial, and dyspeptic affections. There is also some evidence in its favor as a curative agent in phthisis pulmonalis. Will it be too much to hope, that farther experience may discover, that it promotes the cicatrization of tuberculous excavations, and heals ulceration in the mucous surfaces of the tracheal passages. But there is already sufficient evidence to show that it is an antidote to that acrimonious disposition of the humors, so often the cause of phthisis. It also soothes that morbid irritability, the cause of consumption in many constitutions. Andral relates a few cases, in which the absorbents of the lungs were found loaded with tuberculous matter. May not dunder and sugar, in the form of vapor, stimulate the absorbents to remove tubercles?"

Dr. Cartwright concludes, and very properly too, I think, that the curative result depends on breathing the vapor issuing from the boiling cane juice; because the hands who work in the field, cutting, preparing, and transporting the cane to the mill, receive no benefit, although they eat as much, if not more of the cane itself, than those who work in the sugar-house.

Neither of them are allowed access to the sugar or molasses, except under certain restrictions, and in this respect all fare alike. By working the negroes alternately in the field, and in the sugar-house, they all grow fat and healthy. How far this kind of treatment will meet the hopes of the public, remains to be seen. It is already known that it is not infallible, yet the evidence in its favor is sufficient to show that it offers an additional inducement for consumptives to spend their winters in warm countries, where they may have not only the mild climate, but also the benefit of the sugar-house vapor.

Negroes are more prone to scrofula than any other race on this continent, yet it is affirmed that sickly, scrofulous negroes are almost invariably made healthy, by being placed in the sugar-house during the rolling season.

Following the inductive method, let us now observe what circumstances are common to these different means of favoring a spontaneous cure.

Change of climate is an expedient of so general a nature, as to be evidently beyond the reach of strict analysis. Perhaps the advantages depend on a variety of dissimilar causes, and this is rendered probable by the fact, that a residence highly beneficial to one patient, proves prejudicial to another. I am not aware of any observations made to establish any common characteristics to those climes which have proved salutary to consumptives.

It is common to ascribe the variations in

the salubrity of different countries to differences in temperature, humidity, elevation, variability, &c, but I am unable to perceive that any of these features are common to all those countries, reputed favorable to consumptive patients, hence I conclude that these are secondary considerations, and that the real differences must consist in something of a more occult nature. Probably they have some connection with the electrical changes in the atmosphere, and the gaseous and imponderable emanations from the soil.

Our observations on this point go no farther than this; that those climates, occupations and habits, which procure for the patient the greatest amount of bodily vigor, strength and hardihood should be chosen by those predisposed to, or afflicted with consumption.

The influence of the Mammoth Cave referred to, is probably owing mostly, if not entirely, to the great amount of oxygen in the air. The soil in the cave is strongly impregnated with nitrate of lime, (calcareous nitre,) from which a superabundance of oxygen is exhaled, to mingle with the air in the cave.

As the communication with the external atmosphere is very limited, the excess escapes slowly, and consequently the air in the whole cave remains surcharged. Mrs. Childs thus describes its exhilarating effects.

"Why the air within the cave should be so fresh pure and equable all the year round, even in its deepest recesses is not easily explained. Some have suggested, that it is continually modified by the presence of chemical agents. Whatever may be the cause, its agreeable salubrity is observed by every visitor, and it is said to have great healing power in *diseases of the lungs*.—The amount of exertion which can be performed here without fatigue, is astonishing. The superabundance of oxygen in the atmosphere operates like moderate doses of exhilarating gas. The traveler feels a buoyant sensation, which tempts him to run and jump, and leap, from crag to crag, and bound over the stones in his path like a fawn at play." (Letters from N. York, second series, Letter VIII.)

Lungs loaded with tubercles are evidently incapaciated from performing their regular duty in aerating the blood. Under these circumstances the volume of the blood is diminished to accommodate the lungs. All the vital functions languish and the body wastes for want of nourishment. From this increased debility, the disease receives a new impetus, so that the train of morbid symptoms becomes self-producing. Debility favors the formation of tubercles, and tubercles produce debility. In this case the substitution of a highly oxygenated air for the common atmosphere, enables that portion of the lungs remaining sound to perform the same amount of labor in renovating the blood, which the whole organ free from disease could do in common air. The system may thus regain its normal tone, deposition of tubercles be arrested, and the deposits already made removed by absorption or expectoration.

Spontaneous cures of consumption following the excessive use of common salt have been often observed, and attempts have been made to substitute an artificial for an accidental administration of it, and it is asserted, with some success. But the plan has not proved so valuable as its projectors hoped. This article unaided seems incompetent in most cases to remove the disease and prevent its return.

Professor McDowell, formerly of Louisville, Kentucky, published some years ago a book on this subject, in which he gives the usual array of successful cases. There is no doubt that the free use of common salt is a valuable adjuvant in the permanent cure of consumption. A certain amount is necessary to perfect digestion, and to maintain calorification. Its excessive use defibrinizes the blood in common with alkalies. "This substance," says Carpenter, "occurs in nearly every part of the body, both solid and fluid, in close and intimate relation with the organic compounds, whose chemical and physical properties are materially influenced by it; this

albumen partly owes its solubility to this salt, and the differences which it presents in coagulating, are in a great degree dependent on the quantity of it that is present; pure casein, which is otherwise invaluble, is also dissolved by common salt; and if salt be added in increased proportion, it has the power of impeding the coagulation of the fibrin of the blood."

The rapid diminution of the tuberculous cachexy, in persons traveling on the great western plains, is owing probably in a good degree to the constant use of water, holding in solution common salt, carbonate of soda, salts of ammonia, and magnesia, &c.

Some of the springs are so highly charged, with these and perhaps other minerals, as to destroy the lives of the horses and cattle that drink of them in a short time, unless the effects are counteracted by the administration of citric or tartaric acid, which are carried for that purpose, by persons crossing these deserts.

The air also of these regions is highly bracing, developing the strength, and stimulating the appetite.

We come now to the consideration of those cases, in which benefit has been derived from the inhalation of vapors, such as those arising from fermenting manure, from gas, and sal-ammoniac works, and from boiling syrup in the sugar house.

Professor Espy, the celebrated meteorologist, asserts that columns of ascending vapor are always charged with positive electricity, that this is necessary for their ascent, and when they become disseminated through the air, and are dissolved by the atmosphere in a weaker solution than that constituting the column, a portion of this excess is liberated, and remains dissem inated through the atmosphere, or is gradually drawn off by bodies having an affinity for it. When the whole of the electricity necessary to suspend aqeous vapor is suddenly discharged, as in the case of lightning, the watery particles are precipitated in the form of rain.

This is the substance of his theory as nearly as I can give it from memory, and is an explanation of the phenomena of evaporation and rain, so simple and plausible as to be scarcely obnoxious to a doubt.

Assuming this hypothesis to be correct, it appears very evident that a person who breathes an atmosphere saturated with constantly ascending vapor, must receive into his lungs a considerable amount of free electricity. His lungs would not be the only part of his system exposed to the action of this agent, but every portion of his skin likewise.

Dry air is known to be a non-conductor of electricity, and moist air conducts it but feebly, consequently the excess in the surcharged air, cannot be discharged suddenly, (except by an explosion, which rarely happens near the earth,) but is parted with only as the particles of air containing it come in contact with some conducting or absorbing body. Hence the individual who breathes the most air, transmits a current of electricity through his body, from the lungs, and from every point of the surface of his body to the earth on which he stands, so long as the vapor continues to arise.

The vital fluid, which courses along the the nerves, and stimulates the muscular system is either very similar to electricity, or more probably is a compound fluid, into the composition of which electricity largely enters. In many respects galvanism may be made to act as a substitute for the nervous power.

Professor Matteucci describes experiments which prove that "the development of electricity in living animals is a phenomenon *peculiar to all organic tissues*, and principally to muscular fibres, and that it is a necessary consequence of the chemical processes of nutrition." (Silliman's Journal, second series, p. 111.) Carpenter uses this language: "We shall probably form the most correct idea of the relation, which subsists between electricity and nervous power, by regarding it as of the same kind as that which subsists between electricity and heat, or magnetism. For as a current of electricity passed through a small wire generates heat, and heat applied to a peculiar combination of

metals generates electricity—or as an electric current passed round a bar of iron, renders it magnetic, whilst conversely the magnetic force will generate the electric, so do we find that a current of electricity, passed through a small portion of a motor or a sensory nerve, will excite the nervous force in the remainder; whilst there seems reason from the phenomena of the electric fish, to consider that nervous force may in its turn generate electricity. Hence we may regard them as closely *correlated*, though not identical." (Phys. p. 357.)

The singularly sanative effects of these vapors may be partially accounted for on the ground of their feeding the decaying tissues with electricity, the pabulum of vitality, nearly in the state concocted by the organs of digestion and nutrition; but I will now attempt to show that there is another agent at work in these cases, which is perhaps more important than all others, although hitherto overlooked, so far as I know, by all former observers. I refer to *Ammonia*.

This agent is an alkali, existing in the form of gas when uncombined, but capable of entering into an immense number of combinations. It is a compound of nitrogen, and hydrogen, and enters largely into the composition of vegetable and animal bodies.

"Ammonia is capable of undergoing such a multitude of transformations, when in contact with other bodies, that in this respect it is not inferior to water, which possesses the same property in an eminent degree. It possesses properties which we do not find in any other compound of nitrogen. When pure it is extremely soluble in water; it forms soluble compounds with all the other acids, and when in contact with certain other substances, it completely resigns its character as an alkali, and is capable of assuming the most various and opposite forms." (Leibig.)

A chemical agent of so versatile a character, may well be suspected of playing an important part in the phenomena of physiological and pathological actions.

Let us now enquire whether there is any free ammonia imparted to the atmosphere along with the vapors, the nature of which we have been discussing.

There is no question that large volumes of this gas are disengaged by the fermentation of manure in stables and barn-yards. The evidence of this fact addresses itself to the olfactory sense of every one who has occasion to pass in the vicinity of such odor, in warm weather. I do not deem it necessary to adduce evidence to substantiate a fact so well known.

Considerable quantities of ammonia must necessarily be disengaged in the manufacture of sal-ammoniac, because in producing this salt from animal matters, which are distilled in iron retorts, the product is in the form of carbonate of ammonia, which is afterwards treated with sulphate of lime and common salt. The details of the process are unimportant to our present inquiry; we will only observe that the carbonate of ammonia is a volatile salt, and when exposed to the air, as it must be more or less during this process, exhales uncombined ammonia, and gradually passes into the state of a bicarbonate. (See U. S. Dispensatory, Art. Ammonia, Murias and Ammonia.)

The same phenomena occur again in the manufacture of coal-gas. According to Liebig, "The water which distills from the retorts, in the preparation of coal-gas, is strongly charged with this alkali." (Agr. Chem. c. ix.) In speaking on the same subject, he says further: "The carbonate of ammonia is volatile, and escapes into the atmosphere." Those persons, then, who are employed in gas-works, are constantly compelled to breathe an atmosphere charged with this alkali.

The evidences which I shall adduce to show that the vapor of boiling cane juice contains this same alkaline gas, are not so direct as I could wish, owing doubtlessly to the fact that the attention of chemists has not been directed to this point, yet I trust they will not fail to convince every reasonable mind. From the fifth chapter of the work, last referred to, I extract the following statements:

"In the year 1834, I was engaged with Dr. Wilbrand, professor of Botany, in the University of Geissen, in an investigation, respecting the quantity of sugar contained in different varieties of maple trees, which grew upon soils which were not manured. We obtained crystallized sugars from all, by simply evaporating their juices, without the addition of any foreign substance, and we unexpectedly made the observation, that a great quantity of ammonia was emitted from this juice, when mixed with lime, and also from the sugar itself, during its refinement. * * * * *

Similar observations were made upon the juice of the birch tree; the specimens subjected to experiment, were taken from a wood several miles from any house, and yet the clarified juice, evaporated with lime, emitted a strong odor of ammonia. * * * In the manufactories of beet-sugar, many thousand cubic feet of juice are daily purified with lime, in order to free it from vegetable albumen and gluten, and it is afterwards evaporated for crystallization. Every person who has entered such a manufactory, must have been astonished at the great quantity of ammonia, which is volatilized along with the steam. * * * The products of the distillation of flowers, herbs and roots with water, and all extracts of plants made for medical purposes contain ammonia. * * * Ammonia exists in every part of plants, in the root, (as in the beet-root) in the stem, (of the maple tree,) and in all blossoms and fruit in an unripe condition."

Sugar cane is ground, and the juice expressed in unripe condition, therefore we may reasonably infer, that ammonia enters to some extent, at least, into the composition of its juice.

The methods of manufacturing sugar from cane, and from beet-root, though differing in some particulars, must be essentially the same. Lime is used in both cases, in the process called defecation, and it is probably by this means, principally, that the ammonia is liberated. Ammonia exists in the juices of plants in combination with the organic acids, as the acetic, lactic, &c., and the lime uniting with these acids, liberates the ammonia, which being a volatile substance, is disseminated through the air.

Taking it for established, that free ammonia is present in considerable quantities in the vapors arising from animal manure, in a state of fermentation, from the water distilled from the retorts of gas-works, from manufactories of sal-ammoniac, and from boiling cane juice, the probability of its exerting a prominent influence in the cures, produced by breathing said vapors, urges itself upon the mind.

We will now inquire into the therapeutic action of ammonia upon the human organism, and its adaptation to tubercular disease. Gaseous ammonia has a hot taste and a pungent smell, and when unmixed with air is absolutely irrespirable, the glottis closing against it immediately.

It has a powerful alkaline reaction, and all salts formed by its union with acids are *soluble in water*, so that there is no danger of its forming in the body insoluble compounds, as is the case with some other alkalies. It is generally used in combination with water, in which form it is stimulant, antacid and rubefacient, and when swallowed in an over dose its effects are those of a corrosive poison. Carbonate of ammonia acts more nearly like the volatile alkali than like any other of its salts. It is a valuable stimulant, expectorant and antacid. Its effects upon the blood, when its use is long continued, are like those of other alkalies, and salts with alkaline bases. It dissolves fibrine, and consequently arrests nutrition, by destroying the nutritive material in the blood. The following case I extract from Pereira's Materia Medica (Art. Sesqui-Carb. Am.) where it is quoted from Huxam on Fevers.

"I had lately under my care a gentleman of fortune and family, who so habituated himself to the use of vast quanties of the volatile salts, that at length he could eat them in a very astonishing manner, as other people eat sugar and caraway seeds. The consequence was that he brought on a hectic fever, vast hemorrhages from the in-

testines, nose and gums; every one of his teeth dropped out, and he could eat nothing solid. He wasted vastly in his flesh, and his muscles became as soft and flabby as a new born infant, and he broke out all over his body in pustules. His urine was always excessively high colored, turbid and very fetid. He was at last persuaded to leave off the pernicious custom, but he had effectually ruined his constitution, that though he rubbed on in the most miserable manner, for several months, he died in the highest degree of marasmus."

Here we have a fair case of scurvy produced by the constant use of this alkaline salt, which shows the power it possesses to change the relative proportions of the proximate elements of the blood. Had this individual been afflicted with any albuminous, or fibrinous deposits as tubercles, or tumors, they would doubtlessly have been dissolved and absorbed before the muscular tissues suffered so severely.

These effects are nearly if not precisely the same as those resulting from the excessive and long continued use of the salts of potash and soda.

Let us now look back a few moments, reconsider the nature of tubercle, and enquire what effect alkalies will have upon it. We have already shown it to be the product of albumen, consisting of cells, cell germs, lymph globules &c., in a shattered and confused mass, thrown together without any order, or any appearance of life. (This is their condition in an advanced stage.) It is known to be identical in chemical composition with lymph, fibrine, caseine and pus. In fact it is but one form of proteine as we shall see, and all forms of proteine may be dissolved by alkalies.

"When animal albumen, fibrine and caseine, are dissolved in a moderately strong solution of caustic potash, and the solution is exposed for some time to a high temperature these substances are decomposed.—The addition of acetic acid to the solution causes in all three, the separation of a gelatinous, translucent precipitate, which has exactly the same characters and composition from whichever of the three substances abovementioned it has been obtained."—(Liebig's Animal Chem., part 2d., sec. 3.) Mulder gave this substance the name of proteine.

"The insoluble compounds, (proteine compounds) when dried are white and pulverizable, without taste or smell, without reaction on vegetable colors, and insoluble in water, alcohol, ether and all indifferent menstrua, but they are all more or less readily dissolved by alkalies, from which they may be precipitated by mere neutralization with acids." (Carpenter's Phys. page 52.)

If the substance of tubercle can be acted on by alkali for a sufficient length of time it must be dissolved, as it has not sufficient vital power in itself to resist chemical action. The absorbents are competent to take up and convey away any substance in a fluid state, no matter what are its chemical characteristics, and it is one of their principal functions to remove all foreign particles, which are unfit to enter into the composition of the tissues.

If such particles are insoluble in the natural fluids of the body, the absorbents are incompetant to the task of removing them. This is the case with crude tubercle. Indeed it requires long maceration in purulent fluid, and perhaps a species of putrefaction to prepare it for absorption. This does take place to a partial extent in all cases of phthisis where softening has set in. But when this process is not accelerated and assisted, the excessive suppuration necessary to furnish the solvent, wears away the strength, and as before shown helps to reproduce the same condition. When the blood is saturated with alkalies, this process is rendered more facile and less expensive to the vital powers.

The foregoing explanation of the *modus operandi* of these vapors in curing phthisis, appears to me so simple, and evident, *prima facie*, that it only seems strange that it should have been at all overlooked.

The direct application of ammoniacal gas to the living membrane of the bronchial tubes, of the air cells, and in many cases

to the tuberculous masses themselves, seems to be the most effectual mode of dissolving pulmonary tubercles.

There is an advantage in having the remedy in a gaseous form rather than that of a solid or liquid; it can permeate the living tissues with the greatest facility without the assistance of either blood vessels or absorbants. This property is not peculiar to ammonia but is common to all gases. Hear Liebig again; "If we consider the fatal accidents which so frequently occur in wine countries, from the drinking of what is called feather-white wine, we can no longer doubt that gases of every kind whether soluble or insoluble in water possess the property of permeating animal tissues, as water penetrates unsized paper.

"This poisonous wine is wine still in a state of fermentation, which is increased by the heat of the stomach. The carbonic acid which is disengaged penetrates through the parietes of the stomach, through the diaphragm, and through all the intervening membranes into the air cells of the lungs, out of which it displaces the atmospherical air. The patient dies with all the symptoms of asphyxia, caused by an irrespirable gas." (Animal Chem., part 2, sec. 12)

In this way ammonia, gradually inhaled, acts on the tuberculous matter, not only where it lies exposed by ulceration or otherwise, to the air in the bronchi and the pulmonary vesicles, but also in the most hidden recesses of the parenchyma. Its influence in dissolving tubercle is not confined to the lungs, but it must produce the same effect in the most remote part of the body.

Recent researches render it highly probable, if not certain, that the introduction of ammonia in this way, counteracts the tuberculous tendency in another manner, proving a preventative as well as a cure; it renders the disorganized elements of the body more easily oxydized in the lungs, thus preventing their deposition in the form of tubercle. It has been long known that the liver elaborates from the portal blood a large amount of sugar, the office of which appears to be the support of respiration, and "a new form of sugar termed *Inosite*, has been recently discovered by Scherer, in the 'juice of flesh,' where its presence is undoubtedly to be attributed to the disintegration of muscular tissue." (Carpenter's Hum. Phys. p. 77.)

These sugars, together with grape sugar, and sugar of milk, are all supporters of respiration, either in their primary state, or after being converted into lactic acid, but their affinity for oxygen depends upon the presence of an alkali. The following statement is taken from a paper on the Hygienic Treatment of Consumption, by James Turnbull, of Liverpool. (Boston Medical and Surgical Journal, Dec. 7th 1853.

"The attraction of sugar of milk for oxygen is very considerable, so much so that in certain circumstances it has the power of reducing some of the metalic oxides more or less completely. The circumstances in question are the presence of an alkali. With ammonia the elements of sugar of milk take from oxide of silver the whole of its oxygen, and with potass from the oxide of copper one-half of its oxygen. When sugar of milk is taken as food, it is either absorbed at once into the blood, or is converted into lactic acid. We have seen that the blood is an alkaline fluid. It furnishes therefore the necessary condition for the oxygenation of sugar of milk; and as we know that the oxygen absorbed in the process of respiration, combines first, and chiefly with those substances which have the greatest affinity for it, there is no reason to doubt that it at once supplies fuel for respiration, an important matter where the lungs are disabled, and thus we can readily account for the beneficial properties of those kinds of aliment, of which it forms the chief component."

Carpenter thinks there is a strong probability that the production of sugar in the blood takes place at the expense of protein-compounds, and that it is the chief means by which the products of the disintegration of muscular and other albuminous tissues are made available for the mainten-

ance of animal heat by the combustive process, and this view derives confirmation from the discovery of Inosite, already referred to. (See Carpenter's Phys., p. 77.)

Carpenter following Liebig, thus sums up the important purposes which are served by the alkalinity of the blood. "By its means the chief constituents of the blood are kept in their fluid state; the extreme facility with which the blood moves through the minutest vessels is due to the small degree of permeability of the walls of these vessels for the alkaline fluid. The free use of alkali acts as a resistance to many causes which in the absence of the alkali would coagulate the albumen. The more alkali the blood contains, the higher is the temperature at which its albumen coagulates, and with a certain amount of alkali the blood is no longer coagulated by heat at all. On the alkali depends a remarkable property of the blood, that of dissolving the oxides of iron, which are ingredients in the coloring matters of the blood as well as other metalic oxides, so as to form a perfectly transparent solution. The free alkali serves also to *promote combustion of organic compounds*, which in its presence acquire a power of combining with oxygen that they do not possess alone at ordinary temperatures; thus, milk, sugar and grape sugar, in presence of a free alkali, and with the aid of a gentle heat, deprive even metalic oxides of their oxygen. Further, it is by the alkalinity of the blood, that the metamorphosis of the mabic, citric, tartaric, and other organic acids, used as food, is promoted, and the same influence is exerted even over uric acid, which when introduced into the system from without, is speedily resolved into urea and oxalic acid." (Human Phys. p. 107.)

Now, in the case of a scrofulous subject, where the metamorphosis and combustion of the albuminous elements are incomplete, it is reasonable to infer, that the direct application of a free alkali to the blood, at the point where the combustion of respiration takes place, must help to eliminate them from the system. Ammonia offers for this purpose, the advantage of its gaseous form, which renders it easy of application, whereas all other alkalies must be inhaled in a liquid or solid form, a circumstance which must render them more or less irritating. Any redundancy of ammonia is easily thrown off or decomposed. Indeed normal blood contains no free ammonia, although its constituent elements are abundant. Potassa, soda and lime, may be introduced into the economy in various ways, but we are always in danger of overcharging the blood with them. Free ammonia, I apprehend, is not subject to this objection if cautiously introduced.

The two chief indications in the cure of consumption, have already been shown to be, in the first place, a removal of the deposits of tubercle, and in the second place the induction of such a degree of health and tone in the vital forces as to prevent the accumulation of these devitalized or semi-vitalized masses. The first indication, we have endeavored to show, may be fulfilled by gradually saturating the blood with alkalies, or salts with an alkaline reaction.

This is proposed to be accomplished by the inhalation of small quantities of ammonia in combination with the vapor of water. Ammonia, if breathed in too strong a mixture with steam or atmospheric air, gives rise to the most distressing irritation, but when diluted so as to be scarcely perceptible, it is soothing and gently stimulating to the lungs, producing free and easy expectoration. Great care is therefore necessary in graduating the strength of the inhalation.

The free use of common salt is an adjuvant which should not be neglected. In many cases, also, benefit will be derived from the use of the salts of Potassa, Soda, Lime and Magnesia. An exact analysis of the blood, in every case, might point out to us the necessity of supplying lacking ingredients, no doubt to great advantage, but such an analysis in general practice, is out of the question.

The second indication requires for its fulfillment a greater number of expedients. Much has of late years been said and

written on the use of oils, and their dietetic and medicinal value in this disease. I cannot in this essay enter into the discussion of this subject, but will venture to express the conviction, that the cod-liver oil, or some other oil of *livers*, will always be found superior to any other fatty substance, and that it is so by virtue of its being fuel for respiration in a complete state, as prepared by the liver of the fish, from the portal blood.

Saccharine substances used as diet have been thought to exert a highly salutary influence in this disease; and their action is probably similar to that of its oils. When accompanied with an alkali they are oxydized in the lungs, and support animal heat.

Grape sugar, and sugar of milk, are considered of more value in consumption than the ordinary sugar.

I think it highly probable that liver sugar, if it could be procured in sufficient quantities would be superior to either, as it stands in the same relation to ordinary sugar, that cod-liver oil does to ordinary fat.

When tubercles begin to soften, and suppuration sets in, the constitution suffers much from the consequent irritation, and measures should be taken to moderate it. For this purpose I know of no better application than an irritating plaster extensively used in the Western States, for making which, the following is a good formulæ.

Take a quart of tar, and boil it till it acquires (when cool,) the consistency of firm pitch, then add while warm but not very hot, the following roots.

Phytolacca Decandra,
Sanguinaria Canadensis,
Podophyllum Peltatum,
Arum Triphyllum,

Of each four ounces finely pulverized. The mixture must be stirred while cooling. This is to be spread on leather and applied on the sternem, or under the clavicles, or wherever the seat of pain may indicate. Renew the plaster every day, till it brings out pustules which discharge thick matter, then continue the same plaster, cleaning it every day for several weeks, and renew the plaster whenever the discharge dries up.

Emetics are valuable, where they can be borne, to excite a healthy action in the stomach and liver, and to dissipate visceral congestions.

Laxatives, where there is costiveness, and astringents where there is a tendency to diarrhea are frequently indicated. Tonics, such as iron and vegetable bitters, are generally useful where there is much debility. Cold or tepid bathing, whichever is most grateful to the feelings, is a measure not to be neglected. The cold bath where it can be borne, is perhaps the most direct, and efficient tonic in our materia medica.

Night sweats may be best checked by drinking a warm diaphoretic infusion before going to bed. Certain drugs are supposed to exert an alterative effect in this malady in some manner not very well understood. The most distinguished of these are Iodine, and Cod Liver Oil, and Phosphate of Lime.

The *modus operandi* of Cod-Liver Oil has been already adverted to, but it usually contains small quantities of Iodine and Bromine, which may exert some influence. This oil certainly has much evidence in its favor as a valuable medicinal and dietetic agent in phthisis. Sanguinaria seems in many cases to exert an alterative action, and should usually be prescribed in some form, as it effects favorably the stomach, liver and heart, as well as the lungs.

Muriate of ammonia is highly recommended by Dr. Cless of Stuttgard as a remedy in incipient phthisis, and judging by its chemical composition we would be led to expect it to have the effect represented, that of dissolving tubercles, and other "visceral obstructions."

Breathing an atmosphere containing more than the natural proportion of oxygen has a direct effect to increase the tone and strength of the body. It is at the present time attracting more attention than formerly. At one time it was expected to prove a specific, but failing to perform what its advocates predicted, it fell into undeserved neglect. It is a kind of treatment accompanied with a good deal of difficulty and inconvenience. Proper habits

of inflating the lungs and keeping the chest expanded are important, and are too much neglected by those who are predisposed to this dreadful malady. Dr. Fitch has been the means of doing much good by his work on consumption. It contains much sound instruction, although probably written more as an advertisement for his apparatus for the expansion of the chest and his accompanying medicines, than for the good of science and humanity.

I am inclined to think that much is to be gained by securing proper electric, galvanic and magnetic conditions. It is pretty evident that these imponderable agents, and perhaps others, play important parts in the vital economy, and that a diminution of vital force accompanies a diminution of these forces.

It appears to me reasonable therefore to infer that the bodily powers may be temporarily strengthened by a temporary afflux of these fluids into the system, or permanently built up by being placed in a situation where these forces are more active than where the disease was contracted.

Those persons who have visited the vicinity of lake Superior for their health, report, that they feel in that region an invigorating, revivifying influence quite incomprehensible to themselves.

It is affirmed that the intoxicating effect of spirituous liquors is greater there than in other places.

It might be supposed that the atmosphere there is more highly oxygenated than usual, but this can hardly be the case, as the constituent gases of the atmosphere rapidly diffuse themselves so as to assume their proper proportions. Besides this, the winds which blow over so large a body of water as Lake Superior, would soon dissipate any accidental accumulation of oxygen.

I would rather attribute the tonic salubrity of that region to some galvanic or magnetic emanations from the soil or rather from the decomposition of mineral beneath the soil.

The air in the mining region of California, of New Mexico and of Northern Texas, has the same exhilarating qualities, and this may be caused by the excess of the imponderable agents disseminated through it by chemical action going on in the earth.

In the absence of any more plausible hypothesis, I offer this, not as a well digested theory, but as a plausible conjecture.

I would advise every one afflicted with phthisis pulmonalis, either in its incipient or mature stages, to remove to, or remain in that climate where he can enjoy the greatest amount of strength and vigor, than to place himself in circumstances as nearly as possible similar to those in which nature effects cures.

It is the dictate of the highest wisdom, to follow the teachings of nature in all our investigations and experiments.

In order to saturate the system with ammoniacal gas, and at the same time to acquire an increment of the electric fluid, the following method of application may be used. Take a piece of quick lime as large as a playing marble, and pour over it water sufficient to slake it, so that it will fall into a fine powder. Rub this powder in a mortar with a piece of Sal-ammoniac (Muriate of ammonia,) as large as the piece of lime, till the whole powder is finely pulverized and mixed. Put the powder in a small vessel, and pour in a pint of boiling water. Set the vessel in an empty barrel or deep box, so the vapor can be inhaled at a little distance from the vessel containing the mixture. Put in the water a piece of heated iron or pebble, to make it boil and throw off vapor. Let the patient hold his head over the rising steam for half an hour. This process may be repeated two or three times a day.

My experience with this remedy has as yet been limited, but so far as it has been tried, the results are encouraging.

Birmingham Ohio.

Part 2. Miscellaneous Selections.

HAVE WE A SUBSTITUTE FOR CALOMEL?

The Journal of Medical Reform contains under its editorial head, the following appropriate answer to the oft repeated inquiry, "Have you any substitute for Calomel?"

When such an inquiry is made of us, we always feel an inclination to reply that we do not wish one; but as this mode of response does not meet the object of the honest inquirer, we refer them to the following, with the additional remark of those of our Southern readers who always feel anxious in reference to the state of the liver in summer and fall fevers, that we certainly have several agents which elicit a free disgorgement of bile, with more certainty, than calomel. Such is the case with the podophillin and the leptandrin. The first of these is an active agent, while the latter is more mild; hence in many instances they are combined. The apocynum is also a certain article to act on the liver; and when a moderate and slow action is desirable, it is a most valuable remedy, far superior to blue pills, aside from their dangerous effects.

But a few days since. in conversation with one of the largest planters in Georgia, he gave as a reason for preferring the Reform treatment upon his plantations, that his negroes were not so subject to either relapse or ultimate injury from the medicine. That under the calomel treatment the necessary exposure to dews, &c., for some time afterwards, rendered it very hazardous: He further remarked, that in pneumonia, which had been the most fatal disease his negroes had suffered from, the Reform practice had cured in every instance. We would specially invite our large planters to try these substitutes for all that is serviceable about calomel; and as to its corroding and other deleterious effects, we have no substitute.—*Southern Medical Reformer.*

"It has frequently happened, that when we have been entering our objections to the use of calomel, the friends of that article have inquired, 'Have you any substitute?' 'If you discard the use of mercury, what can you give in its place?' 'If you have anything that will produce the same effects, you may possibly get along without it; but unless you have such a substitute, how can you reject it from your list of remedies?' As it is but right that Reformers should answer such inquiries, we will make the subject the basis of a few remarks.

"When we take up the United States Dispensatory, Periera's Materia Medica, Christison's Toxicology, Chapman's Practice of Medicine, and other of the highest authorities of the Allopathic School, we expect to find there the most complete and minute description of the effects of mercurial preparations. Upon examination we learn, in these works, that calomel is a *poison*, engendering disease and weakening the power of life. It will cause swelling and ulceration of the tongue and gums; decay and ulceration of the teeth and jaw-bones; gangrene, mortification and sloughing of various bones and tissues; inflammation, abscess and ulceration of the liver; gangrene of the bowels; epilepsy; inflammation of the eyes; blindness; putrid or 'mercurial' fever; tubercle of the lungs (consumption); various affections of the heart, and enough other diseases and serious organic lesions to fill two pages of our Journal. These are set down by them as having arisen from the use of calomel, even when administered in minute quantities; and they all agree that its operations cannot be controlled; that no skill is sufficient to command its results, or give a positive direction to its operations.

"In answer to the enquiry, "Have you a substitute for calomel?' we promptly and candidly answer, No! We confess ourselves non-plussed by the question, for the article has no synonyma in Therapeutical Science. From the first to the last of the four hundred agents of our materia medica we have nothing that will at all compare with it, nothing that will produce such a quantity and such a variety of 'peculiar effects.'—But in our Materia Medica we have agents that will increase the quantity of bile secreted by the liver; others that will relax and open the gall-ducts; others that will increase the mucous secretion of the bowels; others that will cause peristaltic motion of the bowels; others that will raise the action of the liver, kidneys and skin at one and the same time; and others that will increase the flow of saliva from the salivary glands.

"And these several effects will be produced by these several medicines every time they are administered; they can be directed to precisely the points where they are wanted; their action can be controlled at pleasure by enlarging or diminishing the quantity given; they never cause any swelling or inflammation of the tongue, gums or other parts; they never engender any

disease in any tissue or organ, and their action always ceases when we cease giving them.

"And now, gentlemen of the Old School Profession, seeing that we have candidly and unhesitatingly answered your questions, give us the privilege of propounding a couple to you. 1st. Are not the above effects and peculiarities of our medicines very desirable in the practice of the healing art? 2nd. They are articles that you reject,—have you any substitutes?"

A PHYSICIAN'S INFLUENCE.

G. S., was a young man of considerable intelligence and enterprise. But, alas! influenced by evil companions, he became an avowed professor and advocate of infidelity. While this venom was operating upon the mind and heart, that flattering but fatal disease—consumption, was making its inroads upon the body. Slow but sure was the tread of the destroyer. No effort could stay his progress, or baffle his designs. The most skilful medical treatment proved utterly unavailable. Yet, although sinking rapidly, the invalid clung to life; and, hoping for a return of health, he remained incorrigible in his skeptical opinions. The voice of the pastor, and the tender expostulations of pious friends, failed to make any favorable impression; and it seemed as if the case was spiritually as well as physically hopeless.

But mark now the operation of a new instrumentality! The pious physician, convinced that he can do no more for the body, determines to try his influence on the heart. In answer to an application for further remedies and advice, and too remote to visit his patient, he writes: "I think that within a few days you will be with us no more here. But there is a world where all are well, where all are young, and where all are good. That world is worth trying for. It does not require a year to obtain it, nor a month, nor a week, nor a day. It can be had for the asking in a moment of time.—This great, this glorious opportunity for salvation is the purchase of our Lord Jesus Christ—the Friend of sinners—the Friend of you, to whom he now says, 'My son, give me thy heart.' Will you not this moment say, 'Here, Lord, I give myself away, 'tis all that I can do?'"

How beautiful! how appropriate! but how much more powerful this language coming from the Christian physician than from any one else! The prostrate sufferer, hitherto unmoved, melted at once to tears. His hope of life and health vanished, and with it his infidelity. The Saviour, once rejected, was sought. The servant of God, once spurned, was summoned. Lips that but lately moved in scorn, bespoke the language of prayer. Unbelief was fully renounced, and salvation earnestly sought. And although a death-bed repentance is uncertain, and therefore should never be anticipated by the healthy, yet there is some hope that He who promised to introduce the penitent malefactor into Paradise, did not reject the contrite infidel who spent the last few days of his mortal life in prayer for pardon and acceptance.

Physician, is not the soul more valuable than the body? Oh, then, when standing by the sick-bed, or by letter giving advice, neglect not to speak of that Physician whose skill is perfect, whose remedies give everlasting life. *Speak*—for one word from you may do good, when the most eloquent entreaties of pastors and other Christians would prove entirely futile! *Speak*—for it may be you will save a soul from death! —*Christian Intelligencer.*

ON THE DIET OF INFANTS.

We have had considerable experience in directing and observing minutely the rearing of infants upon a substitute for mother's milk. We never allow a healthy infant, for the first two months, to have any other food as a substitute for its mother's milk than cow's milk diluted with two-thirds of water, and well sweetened with fine sugar. Of this fare we sanction *an unlimited supply*, at intervals of from one and a half to two hours during the day, and three or four hours at night, provided it be sucked from a teat. Upon this simple fare, we have seen children grow up in the plenitude of health and strength. If the food be as thin as we have described, no evil can arise from over-feeding; and by allowing an interval to relapse between the times of feeding, digestion goes on better, and fretfulness is averted. To weak or scrofulous infants, the addition of a little mutton suet is good, or the same benefit may be obtained by giving two tea spoonfuls of cod-liver oil daily. Oatmeal, and all farinaceous foods, are unsuitable and unnatural for the first two months, and are certain to induce fits of feverishness and griping pains. After the second month, rusk melted down in the sweetened milk and water, is useful; but the food must still be thin, and sucked from a teat by the infant. The exertion of sucking is, for many reasons, very salutary.—*Association Med. Journal, Aug.* 12, 1853, *p.* 714.

THE AMERICAN ECLECTIC PRACTICE OF MEDICINE. By I. G. JONES, M. D., late Prof. of the Theory and Practice of Medicine, in the Eclectic Medical Institute of Cincinnati, etc., etc. To which are appended, the Posthumous Writings of T. V. MORROW, M. D., also late Professor of the Theory and Practice of Medicine in the same Institute, etc.

The first volume of the above work is already published, and on the shelves of Moore, Anderson & Co., Booksellers, of this city, and the second volume is nearly ready for the binder. The entire work will cover over sixteen hundred pages; consisting, principally, of a course of lectures delivered by the living author, Prof. I. G. Jones, of Columbus, Ohio, in the Eclectic Medical Institute of Cincinnati. The writings of Professor Morrow who had commenced the preparation of a work on Practice, but was cut off, by death, in the midst of his labors and usefulness, are given at the close of the first volume, the second volume is entirely, the production of Prof. Jones.

Having read the first volume of this work, I speak now of the lectures of Professor Jones, and having, also, had access to some sheets of the forthcoming volume, I will, at your request, give your readers some information as to the character of the work.

Whatever may be the opinion of the medical profession, and of community at large, in regard to the peculiar doctrines of the author, none. I am sure, but the most narrow minded bigot, can object to the style and general sentiment of this work. It is reformatory in its doctrines, perhaps to excess, in the opinion of many; but, then, it breathes a liberal, respectful and magnanimous spirit toward predecessors and contemporaries; and exhibits a zeal for the public good, and for professional progress, that must conciliate the opponents of the author's doctrines, and win him many friends.

The author claims for this branch of the medical profession, a position on middle ground between certain extremes; but to award him the privilege which he has, throughout his lectures, extended to those who differ from him on disputed points—the privilege of expressing their views in their own language, by making ample quotations from their writings—a striking peculiarity of this work by the way—permit me to introduce an extract from the first, or introductory lecture. After reviewing briefly, the history of the medical profession, its controversies, its parties, and its spirit, he says, vol. i. page 12.

"All who have been observers of the position of medical parties in this country, during the last forty years, must be struck with the fact, that the results, just now hastily sketched, have occurred. Never, in the history of medicine, have contending parties occupied such extremes, as have the adherents of 'regular' medicine and the ultra reformers, the 'Botanics,' during the half century just closed. On the one side, it was claimed, not only that learning is requisite to the medical practitioner, but that this learning must be gained in a particular way, and under the auspices of certain legitimate institutions. On the other, all scientific education was discarded as unnecessary, and the right of every individual to practice medicine was claimed to be as unrestricted, as his privilege to cultivate the soil.

"One party made certain irritating and poisonous minerals the leading articles of the *materia medica*, almost to the practical exclusion of vegetable agents; and contended for the lancet with a zeal which nearly cut off ordinary hygienic measures. The other rejected all minerals, insisted that the vegetable kingdom supplied us with all needed medicines, and that, with these, the bath-tub, and the steaming apparatus, any intelligent and energetic person might assume to grapple with disease, in all its forms, deprecating and discarding the extraction of blood, either generally or topically.

"Here, again, is presented the middle ground of truth between the two extremes, and here, once more, has the spirit of Eclecticism, of rational reform, summoned her votaries and displayed her ensign.—And, as Hippocrates opened out the records of the Æsculapian temple to the inspection of the world; as the Methodics, in their day, and Boerhaave, in his, culled truth from both extremes; so, now, does the Eclectic branch of the medical profession seek to gather truth from every source, from the aristocratic and peasant practitioner, from their predecessors and contemporaries: and, to enrich their store of remedies with valuable agents from every kingdom of nature, rejecting, only, such agents and condemning, only, such measures as sound philosophy and practical experience have demonstrated to be both hazardous and unnecessary."

The arrangement of the work does not conform, rigidly, to any nosological lines, yet, there is a natural grouping of diseases, with reference, first, to similarity of character, and, secondly, to proximity of location. Thus, fevers, inflammations, contagions, etc., are considered as distinct

classes, to some extent; but, in speaking of these, and especially of inflammation in the different organs, the various disorders of each organ are presented, as they shade off through the gra lations of acute and chronic inflammation, irritation, debility, etc. In brief, the author appears to have taken up the topics as they naturally presented themselves in a course of oral instruction.

The style of the author is somewhat profuse; but his language is flowing, easy, and yet energetic; and, occasionally there is an exhibition of thought, language and pathos, which reaches the heart, with the power of genuine eloquence. The book is highly "readable," even for unprofessional people, and the medical man, who commences its perusal, will find it, for the most part, truly fascinating; such at least, is my experience. I should like to furnish copious extracts to justify my opinion; but this article is already too long. You will, however, I trust, permit me to introduce one extract, selected almost at random, as a specimen of the author's style. In approaching a description of pulmonary consumption he says, Volume II. page 197:—

In considering this disease I shall confine my remarks to that form of it connected with tuberculous formations in the lungs.

The extent of its prevalence, the fatality attended upon it, the subjects generally claimed for its victims, and the sympathy elicited for them, combine to render its faithful and candid consideration a most imperative duty, and should encourage us to most strenuous efforts to stay its ravages or weaken its inroads upon society.

Dr. Clarke says. 'Confined to no country, age, or sex, or condition of life, it destroys a larger proportion of mankind in temperate climates than all the other chronic diseases taken together. In this country and over the whole temperate region of Europe, tuberculous disease of the lungs causes probably a fifth part of the whole mortality; and in some districts, and even in whole countries, the proportion is much better.

If in its fatal rounds it were confined mainly to those whose course was nearly run, or with whose brief promise of life were only associations of infirmity and decay, if it were confined to those of undeveloped intellectual and bodily powers, or if it were not that it is generally the mature, the beautiful, the talented, the gifted with genius, who fall its victims, we might not find so much occasion for the promptings of sympathy, and of an earnest anxiety to discover more successful means for staying its fatal course. * * *

The subject is of inconceivable interest to the whole human race, and though it cannot be expected that I shall be able to give to it as elaborate and extended a consideration, in all its relations, as might be done in a treatise exclusively on this subject, I wish nevertheless to be able to impress upon your minds the great leading truths as far as they are determined, hoping that they may lay the foundation for further research and observation by some member of the class, and secure at least the general dissemination of what past research and experience have effected. And I cherish a reasonable hope for the future success in treatment far beyond the present claim that the most successful have any right to make. In view of the important truths which modern improvements in pathological research and therapeutic appliances have brought to light, there is much to encourage us. While the disease was considered as merely local in its character, and while no attention was paid to those prophylatic measures which recent observation has so often demonstrated as having the effect of staying its further progress, it is not a matter of surprise that the sentiment generally prevailed, that consumption was never a curable disease. But latterly, since a more enlarged view of the subject has been adopted, and the character of the fluids as well as the solids has been investigated, and found to play an important part in the philosophy of the disease, and the remedies applied are found from experience, no less than from sound induction, to change their constituent elements, and thereby greatly modify the organic properties, not only in disease but in health, a new era in this subject has dawned on the public mind. It may not be said that consumption is an incurable disease.—I desire to impress the truth of this assertion upon your minds, I shall do so with necessary and proper qualifications, in order that too high an estimate may not be put to the account, or an unreasonable degree of expectation excited."

To Eclectic practitioners. this publication is most acceptable and opportune, being perfectly adapted to fill a vacuum in their libraries which has long been most annoying to them. They can now consult their own text book in practice, and sustain their medication by reference to a higdly respectable author; they can now answer the oft-repeated question, what is "Eclecticism," by referring to a clear and candid exposition of the doctrines of that branch of the profession; and finally, they

are now permittted to feel that "Young Physic" has contributed something to the common stock of professional knowledge in a form that must command respect, and which will go far to repay the debt so long due from liberal science to humanity.

Christian Age.

THE RELIGIOUS DUTIES OF PHYSICIANS TO THEIR PATIENTS.

To the physician who is also a professing Christian, no apology, surely, is necessary for inculcating the duties just mentioned; though all must be aware how seldom even an isolated remark appears in a medical journal, which recognizes any religious duty as devolving upon physicians in their strictly professional relations. The cause of this silence we cannot now inquire into. It is enough for the present to say, that it is not because infidelity is more common in the medical than in other professions; for this is not the fact, as we hope to show in a subsequent article.

The particular duty we now propose to inculcate, is that of endeavoring to promote the religious welfare of patients, especially in all cases in which there is reason to anticipate a fatal termination.

Many of our readers will perhaps remember the three letters upon this subject, addressed, some eighteen years ago, by Dr. T. H. Burder, of London, to a junior practitioner. To these our attention has been called anew by their publication in a pamphlet of 40 pages, by the American Tract Society; and we shall here reproduce some of Dr. Burder's ideas, while we give expression to such as we have long entertained in connection with this important subject.

It is intended, in all cases when possible, that the pages of this journal shall be addressed to the entire medical profession. Would that each member of it could regard the following remarks as addressed to himself personally as a Christian physician! Would that each were such an one, in this respect, as the writer of the letters alluded to! But let no one sneer, who does not consider any such duties as binding upon himself. This is a subject demanding at least the respect and the consideration of all.

The letters of Dr. Burder point out the difficulties of the undertaking to promote the religious welfare of patients, the encouragements to be expected, and the most eligible methods to be adopted.

It cannot be denied that Christian physicians, when incessantly pressed by a laborious practice, find it very difficult to perform those daily personal duties, with interest and regularity, which no Christian should ever omit. The sabbath may be to them a day of augmented toil, instead of repose; and any season set apart for such duties, may at any time be engrossed by the claims of others in suffering. But all this is only to be known, in order to be guarded against; and strong as is the temptation to remissness, there is no valid excuse for more than an occasional neglect of such duties. We could mention physicians of the highest eminence, from Boerhaave to the present time, whose example verifies the remark just made. But if in any instance neglect of personal and domestic duties is unavoidable, so much the more incumbent is the duty of promoting, so far as may be, the religious welfare of patients, while occupying the time with them.

And yet it is lamentable to perceive the effects, in a religious point of view, too often produced by *success*, as it is called, in practice. Not a few instances could we mention, in which a young practitioner, of the most elevated and exemplary Christian character, in twenty years became irreligious, negligent, and perhaps even skeptical because he has in meantime become a *successful* man in his profession! What a success is this! a success for which he has bartered his own soul, there is too much reason to apprehend, and those of many others he might be instrumental in saving! Young men of Christian education and Christian hopes, who are engaged in the practice of our noble art, does not this subject demand a seasonable and solemn consideration?

It is easy to say that it is enough for the physician to prescribe for the patient, and that he cannot perform his duty so well if he has also another object in view. We reply, that it is his first duty to bring all his powers to bear upon the treatment to be recommended; *having done this*, he is then as free, for the moment as any other man, to make such remarks as he may deem proper upon any subject. And a single suggestion is often more fruitful in good results than a protracted discourse, which we shall not, of course, be understood to recommend. It is easy also to remark, that all this is extra professional and trenches upon the prerogatives of the clergyman; but from the very fact that the remarks made by the physician are *not* professional, they will be received candidly, as having been prompted by a feeling of kindness and real interest in the patient's welfare, and therefore will be more likely to produce the desired effect. The physician can also best judge precisely when to speak and what to say; for he best understands the patient's

circumstances, temperament, and mental condition at the time. And besides, a few remarks from the physician secures the best possible preparation of the patient's mind for religious conversation with a clergyman.

We shall not be understood, therefore, to inculcate the duty under consideration as a substitute for the professional services of clergymen, but as the best preparation for, and the best aid to, their successful performance. Here is the point where the two highest human occupations meet; and where the minister of the Gospel and the Christian practitioner should never be found at variance. Both would save the soul of their dying fellow-being. The physician is to obtrude no sectarian efforts at such a time: how, then, can they disagree?

It is, however, the physician's prerogative to decide when it is proper for even the clergyman to perform his peculiar duties for the welfare of the patient. We have seen a soothing influence produced by a brief and appropriate prayer, which anodynes had been given in vain to procure.—But we have also seen high excitement and even wild delirium produced by similar services rendered at an improper time, or in an injudicious manner.

Nor is there any occasion for disagreement between the physician and the clergyman on this point. Both desiring the highest good of the patient, the latter must surely admit that the former can judge better than he can, both as to the proper time, and the amount of strength the patient possesses. We have, however, been too often grieved to perceive the manifestation, on the part of the clergyman, of the feeling that his motives alone—the spiritual welfare of a sick fellow-creature—is a sufficient reason for the exercise of his peculiar office at such times and in such manner as may to him seem best. If the physician is not a Christian, the minister will, perhaps, often find himself put off till it is forever too late: but in the other case, certainly has no cause to complain if any importunity on his part is checked by the medical attendant, and the proper time specified. We have never hesitated ourselves to take this responsibility; nor shall we, in any case, surrender it. Nor has it often been our lot to excite displeasure in this way. Our experience accords with Dr. Burder's belief, that "the enlightened embassadors of the Saviour, so far from entertaining a feeling of jealousy, do really hail with cordial satisfaction such auxiliaries in their trying visits to the bed of sickness and death."

2. The *encouragements* to the performance of this duty are such as arise "from the peculiar facilities which the profession affords; from the Divine benediction which may be humbly yet confidently anticipated; and from the success which has already crowned similar efforts."

The suggestions of a conscientious physician are, in the chamber of sickness, received with almost unlimited confidence. He, therefore, can say, without danger of having his motives misinterpreted, what another cannot. Whatever he may say is also regarded as a sincere expression of interest in the sick person under his care. He has, therefore in many instances, an almost unlimited influence. He also knows how to address the patient in the way most calculated to impress and least to injure; and thus will not, by producing excitement, diminish the prospect of the recovery, as another probably would. He also has constant opportunities of associating some serious remark with his professional counsel. Shall such opportunities be lost? Let us be on our guard lest "timidity, apathy, or worldly policy deprive us of the exalted privilege of being instrumental in saving a soul from death, and thus adding another jewel to the Redeemer's crown." That such efforts have often been successful, is well known. The "Village Sermons," left by her physician for a young lady soon to die of phthisis, to read—though his interest in her religious welfare displeased her friends, and thus prevented his visiting her afterwards—were yet instrumental in her conversion before her death.

3. The *methods* best to be adopted will vary exceedingly with the circumstances. But it can never be improper to inquire, as if incidently, if the patient would not like to converse with some pious friend; or if his mind, now that he is confined by sickness, does not naturally turn to the uncertainty of life, and the necessity of preparing for its close. It is never improper to allude to persons who have found a sick bed their greatest earthly blessing, since they there first found that peace which this world can neither give nor take away. But if such indirect methods do not accomplish the object, we are still bound to be FAITHFUL, and therefore, to use more direct language. We often have no time for delay, and shall regret any temporising in such momentous circumstances.

We have spoken of this duty as incumbent on the Christian physician in every case, at least of dangerous disease. But it should also be remembered that the period of convalescence is also favorable for the reception of religious impressions. Then is the patient in a condition to appreciate the goodness which has been manifested in raising him from a bed of languishing, and even

threatened death; and more grateful and more impressible in respect to these important subjects.

Let us then, realize more than we are accustomed to do, how fearful a responsibility rests upon us, as Christians, in our professional intercourse with our fellow men; and while it is our first great effort to save or, as least, to prolong life, let us remember that to others as well as to ourselves,

"It is not all of life to live,
Nor all of death to die."

—*American Medical Monthly.*

WHAT EVERY ONE SHOULD KNOW.

Accidents injurious to life may often be very successfully treated by domestic means before the advice of a surgeon can be obtained.

It is questionable, however, upon medical subjects, if the evil that is done does not predominate over the good, from the hasty and inconsiderate means often adopted in emergencies. To do something is the imperative demand, right or wrong.

We have known ice to be applied to a person's feet and hands, who was bleeding at the lungs, and without any better reason than that the attendant did not know what else to do. On being told in that case it were better not to do anything, she looked up in astonishment and inquiringly said. "What, let him die without doing anything?" Now this person knew better, but under excitement was acting from some one's suggestion, without consulting her own judgment.

When there is much bleeding from the lungs, the hands and feet usually become unnaturally cold, and the indication is to keep them warm, so as to promote the free circulation of the blood, and thus prevent the undue accumulation at the seat of the difficulty. A bladder of pounded ice or snow should be applied to the chest, or small pieces may be swallowed with advantage and above all, the patient should be kept perfectly quiet.

Drinking salt and water is a common practice, but care should be taken not to distend the stomach with anything. There are still more effectual means, but they require a physician to direct their administration.

Scalds and Burns are among the most common injuries requiring domestic management. A scald differs from a burn, inasmuch as it is occassioned by moist heat, and removes the cuticle, leaving the injury without any protection; while a burn, as by heated metal, oil, or the direct action of fire, if not very serious, leaves the cuticle hardened and insensible.

Now what surgeons always most anxious to accomplish in these cases, is to protect the injured surface from contact with the air; for strange as it may seem, it will aggravate with such an injury more than almost anything else. To do this, the part should be covered as soon as possible with some dressing best calculated to answer this indication.

There is a great variety of remedies in common use, and every person is apt to think his or her particular choice to be the best. The truth is simply this: the dressing which can be most effectually applied so as to form an air-tight covering, will be found the most useful sprinkling the part with flour from a dredging box, is an old method, and a very good one, especially when the surface is unequal, as on the neck, elbow, or when the injury is small and on a very broad surface.

When a bandage can be applied smoothly over the part, equal parts of sweet oil, and lime water applied over the dressing, twice each day, will be found very soothing and beneficial.

It will be impossible to convince some people that Dalley's pain extractor and other popular remedies have not a specific effect in "drawing out the fire," which means simply to stop the burning pain. Simple cerate, fresh lard, or any other unirritating grease, if applied so as to keep off the air will "draw out the fire" just as effectually.

Whatever the dressing may be, it should always be kept on, when the injury is not very serious, until the new skin forms under it, and then it will drop off itself.

Gunpowder injuries should always be left for a surgeon to dress, especially if upon the face, as every spec of powder buried in the skin will make a permanent mark unless it is removed. Common salt sprinkled on a slight burn after wetting the surface, will relieve the burning very much.

Croup is the greatest terrifier to mothers in this climate, during the winter and spring months. There are two, and some writers make three forms of the disease.—The two most recognized are the *true* and *false* croup, and they are often so much alike at first that it is difficult to tell the one from the other. True croup is an inflammation of the lining membrane of the *trachea* or windpipe, which produces a false membrane and obstructs the passage of air in passing in or out of the lungs.—It is unusually attended with fever, which sometimes precedes the difficulty of breathing for several days. It is a very fatal disease, not more than one in five or six recovering under the best treatment.

[We think this too large a percentage if rightly treated.—N.]

False or spasmodic croup is not generally attended with much fever and usually comes on suddenly without any premonitory symptoms. The child—for it is always a disease of children—goes to bed as well as usual, and in the night suddenly awakes gasping for breath. The symptoms are just what might be expected in a constriction of the air passage, and such is the case, consequently called spasmodic croup.

Fortunately the domestic treatment usually adopted is beneficial in both cases.

The patient should be set in a warm bath, with a woollen blanket brought close around the neck, and then allowed to fall outside of the tub, so as to keep the shoulders warm, and retain the heat and moisture. Syrup of Ipecac, or Hive Syrup, should be administered in tea spoonful doses every fifteen minutes, until vomiting is produced, and at the same time a sponge or napkin wrung out of hot water may be applied to the throat. From the bath the patient should be wrapped in a dry warm blanket and placed in bed. This management will usually be sufficient to remove spasmodic croup, and by relaxing the system will have a tendency to relieve, and retard the progress of the inflammatory disease, until a physician can arrive.—*Western Medico-Chirurgical Journal.*

[We would suggest the tincture of Lobelia in place of the Hive Syrup, believing as we do that Tartar Emetic is not a sure and reliable agent, and the profession is well acquainted with scores of cases where children have been killed with it, even when administered by careful physicians. Make equal parts of the Syrup Ipecac and Syrup Lobelia in place of the above, and administer it in the same proportion until its desired effect is produced. The Oil of of Stillingia and Lobelia applied externally acts well in these cases.—N.]

CALOMEL.

Although this subject may be considered as hackneyed, yet I shall venture a few remarks upon it, hoping I may be enabled to render some of the "darkness visible" that hangs around its destructive pathway. In the first place, then, I hold it to be one of the fixed principles of *Rational Reform*, to reject all remedies, the use of which argue a *consumption of vitality* And herein lies the great distinctive feature between Rational and Allopathic medication. The theory of the old school is depletion; it says to the patient, "Sir, you must be reduced," and the formidable battery that it brings forward in order to enforce its mandate, when brought to bear upon its unfortunate victim, soon gives evidence of its fitness, by demolishing the "citadel of the soul," in the shortest possible space of time, and in the most "scientific" and "legalized" manner. Most prominent among the "arms and munitions" to be found in the magazine of Allopathic warfare, is the article of which we are writing. This, together with a majority of the so called *remedies* of the old school, always argues a direct consumption of vitality in producing its influence on the human system. This is admitted by the Allopath when he says to his patient: "Sir, I cannot do anything for you, your system cannot withstand the operation of the medicine." Of course, the plain inference is here, that the remedy is not something that will assist the recuperative powers in resisting disease, but something that will co-operate with disease in impairing the vital forces. I am sorry to say that many Reformers hold the same language when speaking of extreme cases.—But this is all wrong; no true Reformer should ever intimate that his remedies consume a portion of the capital of life to sustain their action; for if they are selected and applied in accordance with the unerring laws which govern matter, they will not. "What should I say, then?" methinks I hear some one ask. Why, sir, if you are Nature's physician, you should say, that although remedies might succeed in arousing and directing a healthful action, that there is not vitality enough in the system to sustain the impression; for I hold that all medicine can do is to assist and direct the vital forces, and that when Nature refuses to respond to remedies, *provided they are remedies*, that it arises, *not* from a consumption of vitality by the remedy, but from an impaired condition of the recuperative powers, which are not only so far spent as to be unable to maintain a healthful action alone, but are, even with the assistance of artificial means, inadequate for the task, as a natural consequence, the sanative influence of the medicine is lost.—Medicine should be as congenial and compatible with the human system as food, and it sustains the same relations to the stomach as food; that is, the chemical condition and ability of the system to rightly dispose of it. Upon this depends the sanative power of medicine and the nutritive

power of food. Another thing to be considered, is, whether the human system is organized to receive and rightly dispose of certain substances used as medicine. This is no question with me, however. I unhesitatingly declare it to be my solemn conviction that the human system was never intended, by reason of its organic structure and chemical powers, to receive the impressions of mercury in any form, and in this opinion I think I shall be supported by every impartial, unprejudiced, independent, and philanthropic mind, after having fairly examined the subject in all its bearings. In order to support this idea, let me adduce a few facts. First, then, every one is aware that calomel is never taken into the system, without producing a diseased action peculiar to itself, and that it never passes off leaving the integrity of the system unimpaired. This alone shows that its impression is extraneous and abnormal; for the result is the same, differing only in degree, in each and every condition of the system in which it is administered. The most learned and skillful advocates for its adminstration have not yet been enabled to point out to us that peculiar condition of the system favorable to its reception.—And does it not, too, in ninety-nine cases out of a hundred, arouse more action than the physician intended; an action, too, which he cannot control? This circumstance alone renders its use uncertain and dangerous. Besides, it exercises a disorganizing influence over the fluids and solids of the body which the conservative powers of the system are totally unable to resist. Does any one doubt it? Let him ask any candid physician of any school, old or new, if he has not seen and been called to treat ulcerations of the throat, ulcerations of the liver ulcerations of the kidneys, caries, necrosis, and exostosis of the bones, eruptions of the skin, ulcers of the legs, contractions of the sinews, rheumatisms constipation, dyspepsia; neuralgia, deafness, blindness, &c., &c., &c., all distinctly traceable to the use of calomel? "But," says one, when told that his disease is of mercurial origin, "I never took but one dose," or "I have not taken any in so many years." In regard to the first proposition, we have the authority of Prof. Chapman, of Jefferson College, who says "one dose is as good as a thousand," while speaking to his class of the "dilapidated condition of the patient's constitution," resulting from its use. In regard to the second, it is a demonstrable fact, and generally admitted, that mercury is taken up by the absorbents and deposited in the tissues, particularly those of the joints, where it remains for years, keeping up a continual chemical disorganizing action. In this respect, it may be compared to a grain of musk, which will scent a room for twenty years, and at the end of that time the most nicely adjusted balance that human ingenuity can devise could not detect any diminution of its weight. So with a grain of mercury which has found its way into the tissues of the body: it will remain for years undiminished, keeping up a constant chemical and destructive action, continually polluting the vital currents; destructive, but indestructible. The recent discoveries of the German chemists also show that *calomel* (chloride mitior) is changed, after being taken into the circulation, into *corrosive* sublimate, (chloride,) one of the most deadly and *corrosive* poisons known. To this fact may be attributed many of the morbid phenomena that have puzzled the advocates of this great *Paracelsian* catholicon to account for. The advocates of mercury claim that it is always safe when skillfully administered. But I deny that it can ever be skillfully administered, and challenge the whole "faculty" to fair and open discussion on this point. The "Regulars" are always harping upon the necessity of "understanding the constitution," a knowledge which they claim as their peculiar province to understand, and which they deny to Reformers; but where is the "Regular," who can tell, even though he has scaled the walls of the temple of Esculapius, and sits perched upon the topmost pinnacle of Allopathic fame, how much mercury it will require to produce that highly scientific disease called *ptyalism* [vulgo, salivation] in each and every case? He hath no existence, except in fable. Even though he has each and every *idiosyncrasy* of the patient engraved upon the walls of his mental chamber in characters as indelible as the stars, he cannot tell. Can he estimate the amount and nature of the action it will produce? Can he guide and control the influence excited with certainty and precision so as understandingly to wield the immortal sceptre, which, in the action of his remedy he has usurped? Can he restore the image that he has shattered, so that scar nor seam remains to mar the beauty of the perfect whole which he has so boastingly undertaken to repair? Let our church yards, our bills of mortality, our hospitals, our personal experience, our firesides. decrepid age, blasted manhood, and imbecile youth, return the answer.

What folly, then, to talk of administering "judiciously" that for which the system has no affinity; that which is uncertain, uncontrollable, disorganizing, ex-

traneous and destructive; that which the physician blindly administers, blindly watches its operation (for he acknowledges that "mercury always acts in a manner unknown to him") and blindly waits for the result.

Oh, the beauties of *Allopathic science!* How dearly have thy millions of confiding victims paid to celebrate thy triumphs!—Fifty-two distinct diseases as being distinctly traceable to the use of the thirty-five different preparations of mercury, and this, too, by Allopathic authority. I said thirty-five different preparations of mercury. but I believe the indefatigable compounders of the French chemical school have recently added some new features to this hydra-headed monster.

But I have already extended this article beyond my intention, and close by warning my readers to beware of this corrupting. bone-rotting, tooth-loosening, dyspepsia-begetting, pile-creating, health, happiness, and life-destroying demon Allopathy. Shun it as you would the blast of the sirocco, the exhalations of the Bohan Upas, the sting of the asp, or the fang of the adder. Select thy medicines as thou dost thy food, from that laboratory over which the Creator alone exercises supreme control. To Nature's God and Nature's means, look alone for the sustenance of that life which he alone hath the power to give.—*Anti-Mercurial.*

LIST OF ARTICLES.

EXTRACTED FROM THE MANUAL OF THE ACTIVE PRINCIPLES OF INDEGINOUS AND FOREIGN MEDICAL PLANTS, AS PREPARED AT THE AMERICAN CHEMICAL INSTITUTE, N. Y.

APOCYNIN.—Obtained from the root of the *Apocynum Androsæmifolium.* (Common name, Dog's Bane, Bitter Root, &c.)

Properties:—Alterative, tonic, aperient, and diuretic. Used in dropsy, dyspepsia, convalescing stage of typhoid, and other fevers, dysentery, &c. It is also beneficially used in scrofulous and rheumatic affections, constipation, and chronic affections of the liver and stomach. The power of destroying the ascaris vermicularis has also been given to it. Dose, one to four grains, three or four times per day.

ASCLEPIN.—Obtained from the rhimoza of the *Asclepias Tuberosa.* (Common names, White Root, Pleurisy Root, &c.)

Properties and uses:—Diaphoretic, diuretic, and slightly tonic and laxative. The Asclepin is an excellent article in all cases where it is desirable to produce diaphoresis, especially in such acute diseases as pleurisy, pneumonia, fevers of different types, rheumatism, &c., being preceded by such antiphlogistic treatment as the nature of the case may demand. It is also beneficially used in catarrh, consumption, flatulence, indigestion, chronic rheumatism, and to promote the eruption in exantematous fevers.

The Ascelpin can be pretty extensively and beneficially used in the treatment of many chronic diseases. It is not a powerful remedy, yet it acts silently and kindly. Dose, two to four grains.

CAPSICUM, OR OIL OF CAPSICUM.—Obtained from the *Capsicum Baccatum.* (Common names, Bird Pepper, Cayenne Pepper, &c.)

The Capsicum is an oleo-resinous substance, of a reddish brown color, and readily soluble by heat, alcohol, ether, and oil of turpentine.

Properties and uses:—A powerful stimulant. Beneficially used in cases of an enfeebled or inactive stomach, dyspepsia, lethargic condition of the system, &c. In the treatment of scarlet fever, and malignant sore throat, it is a most valuable remedy, both internally, and as a gargle. As a gargle it must be greatly diluted. As a rubefacient, the Capsicum is an elegant remedy. It acts very speedily, and is not liable to produce vesication. One ounce of the oil, in from four to eight ounces of alcohol, makes a strong rubefacient liniment. In this form it is beneficially used in rheumatism, paralysis, sciatica, or, in severe cases, it may be used of full strength. Dose, as a stimulant, one or two drops on a little sugar. After thoroughly triturating it with sugar, it may be dissolved in a little hot water, if desired.

CAULOPHYLLIN.—(Obtained from the rhizoma of the *Caulophyllum Thalictroides.* (Common names, Blue Cohosh, Blueberry, &c.)

Properties and uses:—Anti-spasmodic, diuretic, diaphoretic, alterative and tonic for the genital system. Used in rheumatism, dropsy, epilepsy, hysteria, cramps, amenorrhea, dysmenorrhea, chorea, &c.—It is of great service in expediting parturition in certain cases, and has a similar effect upon the female organs of generation which the Black Cohosh has. (See Macrotin.)—Dose, as an alterative, one to three grains; for other purposes, two to five grains. As a parturient, the dose should be repeated in thirty to sixty minutes, till its effects are observed. To be given after regular labor has commenced.

CHELONIN.—Obtained from the *Chelone Glabra.* (Common names, Balmony, Snakehead.)

Properties and uses:—Tonic, aperient, and anthelmintic. A useful remedy in dyspepsia, jaundice, debility of the digestive organs, and during convalescence from febrile and inflammatory diseases. It also possesses considerable power as a vermifuge. Dose, three to five grains.

CYPRIPEDIN.—Prepared from the rhizoma of the *Cypripedium Pubescens*. (Common names, Ladies' Slipper, Nerve Root, &c.)

Properties and uses:—Anti-spasmodic, nervine, tonic, and slightly narcotic. There probably never will be an article discovered which will meet so many indications in the treatment of disease, where an antineuropathic is needed, as the different preparations of opium. Its praises have been long and well sung, and we would not detract one iota from its just merits. There are many cases of idiosyncrasy, &c., where opium does not act kindly. In these cases, and as a general nervine, the Cypripedin is very beneficially used. Those cases of hysteria, chorea, nervous headache, neuralgia, hypochondriasis, &c., which are aggregated, or not relieved, by opium, this article is used with very happy results. It is also beneficially used in all cases of nervous irritability, nervous headache, and is far preferrable to administer to children than any of the preparations of opium. There is no danger of its producing constipation, and its tonic property renders it very serviceable in diseases of debility. It may be used in all cases where it is desirable to quiet the nervous system. Dose, two to four grains.

EUONYMIN.—Obtained from the bark of the *Euonymus Americanus*. (Common names, Burning Bush, Waahoo, &c.

Properties and uses:—Tonic, laxative, alterative, and expectorant. This medicine is successfully used in the treatment of dyspepsia, torpid liver, constipation, and dropsy. It imparts tone to the stomach, and activity to the digestive organs. Dose, one to three grains, three or four times per day.

EUPATORIN.—Obtained from the *Eupatorium Purpureum*. (Common names, Queen of the Meadow, Gravelroot.)

We have been induced to manufacture the active principle of this plant, by the urgent request of those who consider it a very valuable remedy.

Properties and uses:—Diuretic, stimulant and slightly astringent and tonic.—Said to be beneficially used in the treatment of stranguary dropsical affections, hæmaturia, gravel, gout, rheumatism, urethral inflammation, and most of the urinary disorders. Dose, two to four grains.

GELSEMIN.—Obtained from the root of the *Gelseminum Sempervirens*. (Common name, Yellow Jassemine, Woodbine, &c.)

Properties and uses:—Febrifuge, antispasmodic, and narcotic. As a febrifuge, the Gelsemin is a medicine of great power. Its use is indicated in all fevers, acute and chronic pleurisy, pneumonia, &c. It has been pretty thoroughly tested by physicians, both in the city and country, and all who have given it a fair trial acknowledge it to possess great merit. The following quotation will show in what estimation it is held by those most sanguine of remedial properties. "It is, perhaps, the only medicine yet discovered capable of subduing, in from six to twenty-four hours, without the least possible injury to the patient, the most formidable, as well as most simple fevers incident to our country and climate, —quieting nervous irritability and excitement, equalizing the circulation, promoting perspiration, and rectifying the various secretions, without causing nausea, vomiting or purging, and is also adapted to any stage of the disease. It may follow any preceding treatment with safety." If the medicine possesses one hair of these virtues, it is worthy the careful attention of the profession. But the Gelsemin is not to be recklessly administered, as it has doubtless been in some cases, and with bad results. Its effects must be carefully watched. It is probably contra-indicated in all these cases where there is structural disease of the heart, and in cases of great debility. In full doses, it produces narcotism, indicated by loss and prostration of muscular power, clouded vision, double-sightedness, and inability to open the eyes. But if the medicine is here discontinued, these effects pass off in a few hours; leaving the patient refreshed, rather than debilitated. In some cases it is desirable to produce a state of semi-narcotism, and keep the patient in that condition some little length of time. Combined with Hydrastine or Quinine it is very efficacious in the treatment of severe cases of intermittent fever, and by such a combination it is less apt to narcotize. In acute diseases it is better to give it in small doses of from one sixteenth to one eighth of a grain, every one, two or three hours. In chronic diseases, a medium dose may be given three or four times during the day. Dose, one half to one grain.

CONCENTRATED TINCTURE OF GELSEMINUM. The Tincture is very convenient for administration. Dose, five to thirty drops, in a wine-glass full of water.

GERANIN.—Obtained from the root of

the *Geranium Maculatum.*—(Common names, Crane's Bill, Crow Foot.)

Properties and uses:—One of the most powerful indigenous astringents, and its use is indicated in all cases where such medicines are used. On account of its being quite free from any unpleasant taste or odor, and the small doses, it is very convenient for administering to children, and persons of a delicate stomach. It has been found very serviceable in the treatment of hæmoptysis, passive hemorrhages, ulcers, apthous, sore mouth, gleet, leucorrhea, diabetes, and all excessive mucous discharges.

The Geranin is an excellent remedial in the treatment of dysentery and diarrhea, after the use of proper evacuants, also, in the latter stages of cholera infantum.—Dose, one to three grains.

Helonin.—Obtained from the root of the *Helonias Dioca.* (Common names, False, Unicorn Root, Drooping Starwort.)

Properties and uses:—Tonic and diuretic. As a tonic it is very beneficially administered in dyspepsia, loss of appetite. It exercises considerble power over the female organs of generation, and is higly esteemed in cases of atony of the uterus, and other diseases of that organ. Dose, three to six grains.

Hydrastine—Obtained from the *Hydrastis Canadensis.* (Common names, Golden Seal, Golden Root, Orange Root, &c.)

Properties and uses:—Tonic. As a tonic the Hydrastine is only equalled by the Quinine, and the effects upon the system are somewhat similar, producing, when given in large doses, a sense of fulness about the head, and head-ache. It should not be given when the disease is of the marked inflammatory character, unless the typhoid symptoms come on, and then it can be safely administered as other tonics. In intermittent fever many physicians prefer it to Quinine, considering it quite as efficacious. The Hydrastine has an especial influence upon the mucous membrane of the stomach and bowels, and is administered with good results during the convalescing stage of inflammatory diseases, also in dyspepsia, and chronic diseases of the stomach and bowels. It may be beneficially given either alone or combined with some of the chalybeate preparations, in cases of anæmia and chlorosis. Dose, one to two grains.

Hydrastin.—Is the resinoid of the *Hydrastis Canadensis.* Its tonic properties are similar to those of the alkaloid just described, though not as powerful. It has also the laxative properties of the root, which renders it preferable to the alkaloid when there is a tendency to constipation of the bowels. It is useful in chronic hepatis, gastritis and enteritis, also in jaundice, and in all cases where the hydrastis would be indicated. Dose, two or three grains.

Leptandrin.—Obtained from the rhizoma of the *Leptandria Virginica.* (Common Names, Black Root, Culver's Physic.)

Properties and uses:—Alterative, laxative, and tonic. The Leptandrin possesses the same properties which belong to the crude root, but the harshness which sometimes attends the administration of the crude articles does not appear by the use of this resinoid. It is one of the very best medicines known, to correct and stimulate the hepatic secretions in those cases where it is desirable not to produce debility, by drastic alvine evacuations. It operates silently, yet surely. For the treatment of children and delicate females, and many chronic diseases, where there is a deficiency of the proper biliary secretions, and where, from the advanced stage of the disease, the former use of drastic cathartics, rendering their repetition inadmissible, or an inflammatory condition of the stomach and bowels, the bowels can be moved, and the secretions regulated with the Leptandrin without danger of farther prostration. It is very efficacious in the treatment of dysentery, diarrhea, and cholera infantum.—In these diseases it is usually given in small doses, and repeated every one or two hours. The marked success which has attended the use of the Leptandrin, in the treatment of summer complaints, demands for it a more prominent place in our Materia Medica, and further observations as to its therapeutic effects. It is also used with marked success in typhoid fever, intermittents, combined with hydrastine or quinine, dyspepsia, jaundice, piles, and biliary derangement. Dose, two to four grains.

Lobelin.—Obtained from the *Lobelia Inflata.* Properties and uses:—Emetic, diaphoretic, and expectorant. The Lobelin is a medicine of great power and merit, but will have to be used with caution. It is used in fevers, pneumonia, croup, asthma, and in cases where it is desirable to produce general relaxation of the muscular system, as in strangulated hernia, rigidity of the os uteri, &c. Dose, one to two grains.

Oil of Lobelia.—Properties and uses same as the Lobelin. Neither the oil or resin of the lobelia should be given as an emetic. If the lobelia is used as an emetic, the wine tincture of the plant or seeds is the preparation best adapted to

produce emesis. The oil is given in doses of two to five drops triturated with a little loaf sugar, to be repeated as occasion may demand.

MACROTIN.—Obtained from the rhizoma of the *Macrotys Racemosa*. Common Names, Black Cohosh, Squaw Root.)

Properties and uses:—Anti-spasmodic, narcotic, tonic, and emmenagogue, with a special affinity for the uterus. It is used in uterine diseases, leucorrhœa, dysmenorrhœa, sterility, chorea, hysteria, and as a parturient. In many cases it is desirable to give this medicine in such continued quantities as to produce its peculiar constitutional effects, viz: slight dizziness, fullness, and dull aching of the head, and more or less aching of the joints; and to produce these effects, in some degree, every day while the medicine is being administered. Its use is also well spoken of in neuralgia, asthma, splenetis pertussis, delirium tremens, and gonorrhea. As a parturient, the Macrotin is a remedy of considerable merit. It is quite as sure to increase the contractile power of the uterus as the Ergot, but is not as violent in effects. In those cases where the safety of the child would be endangered by the administration of the *secale cornutum*, and as a general partus accelerator, this article may be safely given.

Dose, one to three grains, three to six times per day. As a parturient, three to five grains, to be repeated in from thirty to sixty minutes, if necessary.

MYRICIN.—Obtained from the *Myrica Cerifera*. (Common Name, Bayberry.)

Properties and uses:—Astringent, stimulant, and alterative. As an alterative the Myricin is a medicine of considerable value, but must be given in combination with some laxative to obviate its constipating tendency. It is sucessfully used in scrofula, dysentery, diarrhea, and where astringents or alteratives are indicated.

PODOPHYLIN.—Obtained from the root of the *Podophyllum Peltatum*. (Common name, May Apple, Mandrake.)

Properties and uses—Alterative and cathartic. In doses of from four to six grains the Podophyllin usually acts as an emeto-cathartic, with severe griping, nausea, prostration and watery stools; two to four grains as an active cathartic, leaving the bowels in a soluable condition; and one-fourth to one-half grain as an alterative and aperient. Its action is increased by being triturated with from four to eight times its weight of refined sugar, and its tendency to gripe will be lessened, or entirely obviated, by combining with it some stimulant.

In many respects the Podophyllin acts like mercurial preparations. When given alone, its operation as a cathartic is slow, requiring from six to twelve hours for its effects. If it is desirable to produce catharsis sooner than that, it is well to combine it with Bitartrate of Potassa or Jalapin. In doses sufficiently small not to purge, if frequently repeated, will produce, in many persons, incipient ptyalism. In a few cases we have known this effect to follow the administration of a single cathartic dose; but it is always of a milder form than that produced by mercurials, without any danger of producing the secondary effects which are so often observed after the free exhibition of that remedial agent.

Its use is indicated in all cases where mercurials are usually given, and as the profession generally understand well the indications for their use, they will readily learn to use the Podophyllin by a transfer of that knowledge.

In glanular diseases, primary and secondary syphilis, dropsies, dysentery, diarrhea, disease or torpidity of the liver, and in nearly all cases where an alterative or a cathartic is indicated, the Podophyllin has been fully and successfully tested. When judiciously given it seldom disappoints the reasonable expectations of the physician. For the expulsion of ascarides from the intestines the Podophyllin has few superiors, also for the dislodgement and expulsion of biliary calculi, being given in full cathartic doses, and followed in four or six hours with from four to eight ounces of pure olive oil. This plan has been adopted in a number of cases, and large quantities of the calculi were passed with very little pain. When we consider the excrutiating suffering which the passage of calculi usually produces, any plan of treatment which will mitigate the intensity of the pain will be hailed with pleasure both by patient and physician.

Very much might be said upon the merits and various uses of the Podophyllin, but the designed limits of this Manual forbid. The various indications and modes of combination of the remedy will readily suggest themseves to the physician's mind. From the success which has attended its administration, the Podophyllin bids fair to occupy a very prominent place as a cathartic and alterative, and the appellation of "Vegetable Calomel" is no misnomer. There are many cases of primary and secondary syphillis, occurring in persons of

broken-down constitutions, where mercury has been administered as far as is admissable, or its exhibition, on account of the strumous diathesis would not be tolerated. In such, and other cases, we invite the profession to try its merits, marking its effects, and reporting to the profession, through the journals, the result of their observations.

PHYTOLACIN.—Obtained from the rhizoma of the *Phytolacca Decandria*. (Common names, Garget, Poke, Scoke.)

Properties and uses:—Alterative, and slightly narcotic and emetic. It is a valuable alterative, and an efficacious remedy in the treatment of chronic rheumatism, syphilis, scrofula, and cutaneous diseases. Dose, one to three grains.

RHUSIN.—Obtained from the leaves of the *Rhus Glabrum*. (Common names Sumach, Upland Sumach.)

Properties and uses:—Tonic, astringent, and antiseptic. A useful remedy in the treatment of dysentery, diarrhea, febrile diseases, diabetis, and leucorrhea. It is healing and soothing to the mucous membrane of the stomach and bowels, and is very useful in the treatment of chronic diarrhea, occurring in consumptive patients. Dose, one to two grains.

SANGUINARIN.—Obtained from the *Sanguinaria Canadensis*. (Common names, Red Root, Blood Root, &c.)

Properties and uses:—Emetic, expectorant, and alterative. Used in diseases of the chest, influenza, rheumatism, diseases of the liver, &c. Dose, one to three grains.

SCUTELLARIN.—Obtained from the *Scutellaria Lateriflora*. (Common names, Scullcap, Blue Scullcap.)

Properties and uses:—Anti-spasmodic, nervine, and tonic. The Scutellarin is a valuable nervine, quieting the nervous system, in many cases, where other nervines entirely fail. For children, it is better, in most cases, than the preparations of opium. It has been found very serviceable in the treatment of convulsions, neuralgia, chorea, and all forms of nervous derangement. The nervous excitability, restlessness and wakefulness attending acute and chronic diseases. can usually be controlled, and sleep procured, by the administration of this remedy.

We have manufactured the Scutellarin by request. and the above is the opinion of those who have used it. Dose, two to four grains.

STILLINGIN.—Obtained from the *Stillingia Sylvatica*. (Common names, Yaw Root, Queen's Delight.)

Properties and uses:—Alterative, aperient. Those who have used the Stillingin consider it quite equal to sarsaparilla as an alterative, and many consider it better. It is a superior alterative, exerting an influence over all the secretions, and very successfully used in syphilis, scrofula, glandular and cutaneous diseases; also in constipation, and as a general alterative. Dose, two to four grains.

SENECIN.—Obtained from the *Senecia Gracilis*. (Common name, Life Root.)

Properties and uses:—Diuretic, diaphoretic, and tonic. Used in the treatment of female complaints, especially in amenorrhea, not connected with structural lesion; also in gravel, and other urinary affections. Dose, two to four grains.

VIBURIN.—Obtained from the *Viburnum Oxycoccus*. Common names, High Cranberry, Cramp Bark.)

Properties and uses:—Anti-spasmodic. It is very useful in hysteria, asthma, cramps of the limbs, convulsions during pregnancy, &c. Dose, one to three grains.

XANTHOXYLIN:—Obtained from the bark of the *Xanthoxylum Fraxineum*. (Common name, Prickly Ash.)

Properties and uses:—Stimulant and alterative. Used in rheumatism, dyspepsia, colic, hepatic derangements, and in languid states of the system, where a stimulating alterative is required. A combination of Xanthoxylin and Hydrastin, is one that will meet very many indications in the treatment of those cases where there is great debility, either from protracted disease or *gross habits*. Dose, one to three grains.

THE CHEMISTRY OF ORGANIC CELLS

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GENERAL FORM AND STRUCTURE OF ORGANIC CELLS.—The simplest as well as the minutest forms invested with life, within our cognizance, are exceedingly minute microscopic cells. Hollow spheroid. rounded bag, or saccule, are expressions which more plainly and more definitely convey the meaning intended by the word cell. These saccules, which in general may be likened to a bladder without the neck, are, when living, filled with liquid and organized contents; the latter being sometimes, but not always attached internally to the cell membrance, and consisting commonly of smaller saccules or vescicles, of a structure on a smaller scale, apparently similar to the

containing cell. I am satisfied from unnumbered careful observations directed to that point, that living cells are never seen to be truly simple; but always to contain within them more or less organized vesicular structure. The cell which has ceased to be vitally active, like the rind of an orange, the shell of an egg, or like an empty bottle, may perhaps be entirely devoid of organized contents. But the true essential structure of living cells is no more to be learned from such, than the anatomy of the bowels from an eviscerated mummy.

Arrangement of Cell Contents.—The organized cell contents, whether consisting of irresolvable points, granules, vesicles, nucleoli or nucli, are observed in different cells, and at different times in the same cell, to present the following diversities of arrangement.

1. Aggregated together into an adherent granular or vesicular mass, and having an attachment, most commonly parietal, to the containing cell membrane.

2. Aggregated, mutually adherent, but free, having no attachment to the cell membrane.

3. Separate and free; the individual granules or nucleoli floating independently in the fluid contained in the cell.

In the progress of the performance of their different vital functions, the inducellular contents are seen to pass from one of these conditions to another. The vital force pertaining to the vesicles appears to be more exalted in the segregated or independent, and less in the aggregated or attached condition.

The foregoing statements respecting vesicles, etc., as the contents of cells, are mostly applicable to the cells themselves. They are sometimes aggregated and adherent, forming tissues; sometimes separated and free, as exemplified by blood corpuscles; and to the free cells, as blood, spermatozoa, etc., the most active and exalted condition of vitality pertains. In the aggregated state, they are frequently seen to have lost their rounded form; and by mutual pressure, to have become polyhedral.

Habitat.—If you ask me to point you out actual organic cells, by way of illustration, I say to you, bring into the field of a good microscope any portion of the vast diversity of organized and living substances abroad in nature, from the rank slime of the sickly marsh to the warm blood which courses in your own veins, at every trial you will behold the cells of which I am speaking. In nearly all natural waters upon the face of the earth, minute forms of life abound, which in all respects observable, can be likened to mere cells, floating free and independent in their native element. With them, other cells, joined end to end, forming moniliform or jointed filaments, do also abound; as do likewise others, associated together in a manner more complicated. The air we breathe is charged with cells of wonderful minuteness, the germs of alleged fortuitous growths, the spores of cryptogamic vegetation, and the prolific sources of pestilential maladies. The mold that delights in damp and darkness, the harbinger of dissolution and decay, may be seen to consist of extremely delicate cells, planted one upon another. The whole tissue of the *Fungi*, or mushrooms, is made up of organic cells, somewhat as walls are made up of bricks.—Cells constitute the principal structure in all parts of plants. In the living state they are most conveniently observable in the leaves, flowers, fruit and cambium. Cells also constitute the principal structure in the early embryonic condition of animals; and in all stages they can be observed in most of the animal tissues; best perhaps in the mucous, epidermic, glandular and cartilaginous structures.

Size.—In general, organic cells are individually truly microscopic objects, being by far too minute for unassisted vision. Larger cells are seen in animal than in vegetable tissues. In every species of organism, however, cells or utricle do abundantly occur, of a minuteness of size beyond the power of our microscopes, clearly to define. They are seen satisfactorily to be as small as 1-100,000 of an inch in diameter; and on the other hand, in vegetable structure, as large as 1-30 of an inch,* the average of vegetable cells being near 1-500 of an inch in diameter.

Human blood corpuscles, which are vital cells, are less in diameter than 1-3000 of an inch. Animal ova are perfectly well characterized cells, and they afford, us as in the eggs of birds, perhaps the largest known samples of that structure.

Chemical Composition, in connection with Structure.—In respect to the chemical composition of living cells, it may be safely said that it is complex; oxygen, hydrogen, carbon and nitrogen, being always present, and in such high proportions as to be not expressible with certainty by chemical formulæ. Phosphorus, sulphur, iron, manganese, calcium, sodium, magnesium, etc., in essential proportions, are, in different classes of cells, often met with. I think that protoplasmic, or vitally active cells, consist mainly of those complex nitrogenous substances denominated protein

* Gray's Bot. Text-Book, p. 26.

compounds. The number of the proteine and proteinoid nitrogenous substances thus naturally occuring, must be very great, although very few have as yet been chemically defined.

The primordial living cell, or vital cell lining, sometimes called the protoplasm, whether examined in animal or vegetable tissues, manifests in all respects nearly the same essential characteristics; possessing, indeed, all the wonderful prerogatives of animal life. This primordial living cell usually becomes invested, at an early stage, with a membranous covering, of a different nature and composition in different instances; a structure which, like the walls of the contained living cell, is permeable to liquid; permitting of the occurrence of the physical phenomena of endosmose and exosmose; but which, by itself, does not seem to possess vitality. This secondary non-vital cell, most frequently endures, long after its vital contents have become inert, suffered change or dissolution, or perhaps entirely disappeared by absorption. Now the chemical composition of the non-vital, comparatively permanent cells, is exceedingly various, and often comparatively simple. Of such nature is cellulose and starch; the characteristic components of most vegetable tissues. Of such nature are many epidermic epithelial and cartilaginous cells in the animal structure.

Functions of Cells.—The functions performed by organic cells may be regarded as threefold—purely physical, chemical and vital. Their most important physical function depends upon their permeability to liquids. No sensible pores exist in the cell membrane; yet a ready transit is afforded to water and watery solutions, in accordance with the laws of endosmosis.—Whatever thus traverses a cell membrane, must apparently be in a complete state of solution, and devoid of all organization. The blastema, in what condition soever it may be presented at the exterior surface of the cell, must become (if not already in that condition) apparently deorganized and perfectly fluid.* The chemical changes and transformation attendant upon cell life, are numerous, varied, complex, and highly important. Besides the principal ultimate elements, which I have already named as contributing to the composition of cells, many others of the so-called inorganic elements take part in their chemical operations. In fact, an organic cell may be appropriately regarded as a skillfully constructed and most efficient chemical apparatus; in which not merely the ordinary forces of brute matter manifest themselves, but other more exalted forces, flowing apparently from vitality, and unknown in inorganic chemistry, are brought efficiently into play, causing the union of elements in an extraordinary, and frequently complex manner, giving rise to the so-called organic compounds, which are beyond the reach of human art to imitate. These organic compounds are sometimes found as a part of the cell contents, sometimes intercellularly or between the cells, and sometimes penetrating and even replacing the cell wall. In such apparatus, and by such means, all the material transformations of organic life, so wonderful to contemplate, are said to be effected.

The vital functions of cells most important to be mentioned at this time, pertain to their development, growth and decay. The vitally active adult cells of organism are, for many reasons, presumed to be very short lived—a few days or weeks at most, unless prolonged by dormancy; the vital functions of an animal or plant being performed successively by adequate recruits of newly developed cells, the progeny of the former. The old and useless protoplasmic cell membrane suffers disintegration, dissolution and removal; its available material is contributed for the nutrition of its successors, and its effete matter returned to the earth and atmosphere, whence it was originally derived—there to be broken up into its primordial elements,—to be purified indeed by complete decay. * * * * Considering the specific difference, the vast diversity, and the wonderful functions of cells, I feel impelled to acknowledge the influence of what we call vitality, as something more refined and exalted than what we mean by chemical force; and so far from perceiving similarity or analogy between the two, it appears to me that there are scarcely points of even remote resemblance.—*N. O. Med. and Surgical Journal.*

*We can not, in the present state of our knowledge, positively affirm or deny, that invisible organized particles find transit through organic membranes. For aught we know, the intermolecular spaces occuring in the ultimate structure of the walls of cells and vesicles, may be proportionate in width somewhat, to the size of the cell or vesicle, or to its stage of development, from the minutest transcendental germ to the adult cell. If so, we might expect to find in the more minute corpuscles a more intense vital force, and a greater power of resisting chemical agents; precisely what we observe in the action of vinegar, alkalies, etc., on blood. The intensity of the endosmotic power would be found to vary inversely, while the facility of endosmotic transmission would vary directly as the size of the corpuscle. Admitting the hypothesis, which is not improbable, it would then be possible to understand how exceedingly minute organic germs could find transit through an organic membrane, floating through the intermolecular spaces, in an endosmotic liquid current. I am inclined to believe such does occur: for I have often seen diseased animal cells, seemingly entire, yet containing inducellular growths, apparently abnormal or parasitic. Malarious organized poisons may thus penetrate, and by their parasitic development, vitiate the corpuscles of human blood.

ROSA B——.

CASES FROM "OLD SCHOOL" PRACTICE, NO I.

From the period we entered the medical profession we have endeavored to analyze the various systems of medicine; to probe them to the very bottom, in order to know how much of value to the disease-stricken each possessed, and hence how far they were entitled to confidence and support.—We investigated thoroughly and closely, for we were anxious to arrive at a correct conclusion. The course toward which that conclusion directed we intended following. We felt that our interest and our duty alike demanded it.

In conducting this analysis, we have been enabled to *see* even more than our humble pen is able to tell: to witness what has contributed no little in creating the objections we now possess against a system which deals out deadly poisons for health-restoring remedies; that draws off the life-fluids, and cripples the energies of nature—for what? Why, to restore *health* and *vigor* to wasted and debilitated frames! Oh—we have seen youth and beauty, moral worth and intellectual power fall alike before the march of the accursed phantasm, "poisons are medicines!" We have seen them bring the strong man down and hasten him to the "bourne from whence no traveler returns," and again, we have seen them induce a slow and painful decay, which have turned all life's pleasures into gall. We have seen them cause the death-rose to bloom upon the cheek of the idolized daughter and the loved young wife; and the fire of hectic to burn in every nerve, consuming their vitals and drinking up their very life-blood; cut off

"When hopes were buoyant—prospects bright."

And we have seen the innocent babe, with gangrened gums from calomel, snatched from the arms of a frantic mother, and consigned to an infant's grave; and more, and worse than all we have hard *all this* attributed to disease and a mysterious Providence,

"Who doeth all things well.

Oh, how many cases of this kind crowd upon the memory, and the imagination sickens in contemplating how clearly the footsteps of what *has* been styled "medical science" may be traced *in the blood* of our fellow men.

It is night. Our family are sleeping, so too is all nature around us. All is calm and hushed and quiet, excepting within us. There tumultuous feelings throb.

We have just returned from a long round among our patients, lit our lamp, thrown ourself into our good old arm chair, which ever welcomes us back, and have picked up our pen to give expression to thoughts which burn for utterance.

An hour ago we learned that ROSA B—— was dead. But who was ROSA B—? Young and beautiful, with a form small and delicate but perfectly symmetrical: a countenance of alabaster whithness: her cheeks tinged with "rosy red;" a brow high, expansive and intellectual; eyes dark and brilliant, lighted with the fire of intelligence, and glossy raven tresses wandering with profuse luxuriance over her slender neck and falling shoulders: she was the pride of an affectionate household, and the admired and beloved of an extensive circle of acquaintances, associates and friends.

Two years ago, ROSA was led to the hymenial altar a willing bride. One year later she became a mother. Now, she is sleeping the "dreamless sleep" in the silent grave! Ah, little thought we then that thou wouldst leave us so soon—be thus cut down in the spring-time of life. We had pictured for thee a future of usefulness and good. Those retiring elements which so adorn the character of woman, and make her sex the "ministering angels" of earth, were thine. Keenly sympathising with distress and suffering, thou felt a lively interest in every movement of philanthropy and benevolence. Illy, indeed, can'st thou be spared, when the world is so much needing such as thee.

Two weeks ago we spent some hours at ROSA's home, she desiring that we should see her. It was the first we knew that she was ill. As we entered her room and met her eyes, we could scarce refrain from trembling—they were filled with such unearthly brightness; and her cheeks—the "roses of June"—were supplanted by the frosted tint of autumn. Pale, thin and emaciated, we should not have known her. Her physician was standing by her bedside with his cups and scarificator around him. At the impulse of the moment, we asked, "What are you going to do with these?" "Use them, sir; use them, of course," replied the Doctor. "What, take blood from that almost bloodless woman?" "We want to *counter-irritate*; we *must* do it; the case *demands* it." He threw back the covering from her chest, and the sight presented was horrifying. "What mean those scars, doctor?" "Oh, there is where we applied a few leeches." "What these large sores?" "Why, there we applied a blister, and that we made with tartar emetic; indeed, sir, we have tried our whole round of counter-irritants. To-day, we have concluded to cup and scarify."

At Rosa's request we had been sent for to consult with the family physician, who, upon learning our errand, frankly invited us to critically examine his patient. We did so; more, however, as a matter of form than with any prospect of changing our opinion in reference to a prognosis, for on our very entrance, the seal of death was plainly visible. Nor did we marvel when we saw her chest, and were made acquainted with the agencies brought to bear; the tortures to which this frail, confiding woman had been subjected.

Three months ago she began to feel a tickling in her throat, with a dry, hacking cough. This becoming troublesome, her husband called in their physician. At first he treated the matter lightly; but the cough increasing, and a pain of burning character following, he felt urged to the adoption of more active treatment: tarter emetic solution internally, and tartar emetic ointment externally, with a "few small doses" of calomel; then followed leeches and blisters, and now the cups and scarificator were put into requisition. Oh, such treatment, thought we; the strongest, most robust constitution could not endure it long, much less so frail a one as this. And as we sat there, and looked upon her husband and her prattling little boy, so soon to be deprived of wife and mother, we felt our heart sink within us.

Upon retiring to another apartment with the attending physician, our opinion was solicited. We gave it frankly, plainly.—We told him his treatment of the case corresponded with that which the majority of his brethren would have adopted under similar circumstances, and that as for medical authorities there were any number that would sanction it. But that *we could not approve* of it, nevertheless. In this case, all the untoward circumstances which so often encounter us, as hereditary predisposition, tubercles, &c., were entirely absent. Was depletion, reducing *of any kind* demanded? In our opinion *no;* but, on the contrary, essentially a toning, sustaining, strengthening treatment should have been adopted, and that we firmly believed that such a course of treatment would have saved her. As it is, the last golden sands are ebbing low; the hour-glass of life is turning—she *must die!* The physician was a man of feeling, for as he bade us farewell, unbidden tears were coursing down his cheeks. He did the best he knew, but oh, he has yet much to learn. For the *man* we entertain feelings of regard, but for the *treatment*—a lovely and gifted being was sacrificed to that; a home made doubly desolate.

We bade her farewell, and came home depressed in spirit, sad at heart. This evening we heard that she was dead. Peace to thy ashes, dear Rosa B—, but to calomel, leeches and their kindred never!—*Middle States Medical Reformer.*

SPIRITUALISM IN THE U. S. CONGRESS.

A memorial, signed by fifteen thousand believers in the spiritual rappings, has been lately presented to the U. S. Senate by Gen. Shields, of Illinois.

"I beg leave to present to the Senate a petition, with some fifteen thousand names appended to it, upon a very singular and novel subject. The petitioners represent that certain physical and mental phenomena of mysterious import have become so prevalent in this country and Europe, as to engross a large share of public attention. A partial analysis of these phenomena attest the existence, first, of an occult force, which is exhibited in sliding, raising, arresting, holding, suspending and otherwise disturbing ponderable bodies, apparently in direct opposition to the acknowledged laws of matter, and transcending the accredited power of the human mind. Secondly, lights of different degrees of intensity appear in dark rooms, where there are no means of generating electricity, or of producing combustion. Thirdly, a variety of sounds, frequent in occurrence, and diversified in character, and of singular significance and importance, consisting of mysterious rapping, indicating the presence of invisible intelligence. Sounds are often heard like those produced by the prosecution of mechanical operations, like the hoarse murmur of the winds and waves, mingled with the harsh, creaking noise of the masts and rigging of a ship laboring in a sea. Concussions also occur resembling distant thunder, producing oscillatory movements of surrounding objects, and a tremulous motion of the premises upon which these phenomena occur. Harmonious sounds, human voices, and other sounds resembling those of the fife, drum, trumpet, &c., have been produced without any visible agency. Fourthly, all the functions of the human body and mind are influenced in what appears to be certain abnormal states of the system, by causes not yet adequately understood or accounted for. The occult force, or invisible power, frequently interrupts the normal operation of the faculties, suspending sensation and voluntary motion of the body to a death-like coldness and rigidity, and diseases hith-

erto considered incurable have been entirely eradicated by this mysterious agency. The petitioners proceed to state that two opinions prevail with respect to the origin of these phenomena. One ascribes them to the power and the intelligence of departed spirits operating upon the elements which pervade all natural forms. The other rejects this conclusion, and contends that all these results may be accounted for in a rational and satisfactory manner. The memorialists, while thus disagreeing as to the cause, concur in our opinion as to the occurrence of the alleged phenomena; and in view of their origin, nature and bearing upon the interests of mankind, demand for them a patient, rigid scientific investigation, and request the appointment of a scientific commission for that purpose."

[It was understood by Gov. Tallmadge, who had charge of the memorial, that Gen. Shields would have the subject referred to a special committee, of which he would be the chairman, but instead of doing as he had led Gov. Tallmadge to expect, he made a speech of quite a satirical character on the subject, empracing a good deal of the old stories of necromancy, etc., gathered from some encyclopedia, and had the memorial laid on the table; for this he was rebuked by Gov. T., in the Washington papers.—The Boston Journal is mistaken in speaking of the memorialists as spirit rappers.—They are merely citizens who have fairly witnessed the strange phenomena, and, knowing them to be facts wish to have further investigation of the question of their spiritual or material origin.—B.]

DRUGGING INFANTS.

"GIVE IT CORDIAL."—"Oh my baby, how it frets and cries, and what to do I do not know!" "Give it cordial!" Thus spoke a young mother, some years ago, and thus advised her mother-in-law. The cordial was given. It acted like a charm. "Little Charlie" was quieted. The fond mother loved her little boy as all mothers do, and the thought that the "little innocent" suffering *pain* was more than her maternal feelings could endure: and hence at every manifestation of distress she would give it cordial. We say it quieted his uneasiness, but—it quieted the normal sensibility of his nervous system, too; it destroyed the healthy development and activity of "Little Charlie's" brain—impaired his intellect. As time wore on and added month on month to "Little Charlie's" life, instead of finding him the quick, bright, active boy which in her fond dreams she had pictured him, she found him STUPID, INACTIVE, DULL. Not long since, "little Charlie" died with convulsions. His parents were healthy, and his constitution naturally a good one. He was indeed "a child of promise." Nature had done every thing for him. He *should* have lived, not only to gladden the heart of doating father and prove all maternal prayers with devotion asked, but to benefit mankind and the world by filling life's full span, by figuring largely and usefully upon the stage of action.—But alas! they "gave him cordial." His young system—a perfect man in miniature as it was—could not counteract its narcotic, *benumbing* influence. The operations which were busily at work in making him a strong PHYSICAL man, and which were laying a sure foundation for MENTAL power, were counteracted, and the result has just been told.

Mother! that cherub babe of thine, we know thou lovest it. Around it cling and cluster fond affections, brightest hopes and many prayers. To guard it from all evil and protect it from all harm thou sparest neither trouble nor care. The "great, good Goddess of Nature" hath given it the elements essential for both strength of body and mind, and unless thwarted in her designs will FULLY develop them. Is he sometimes "fretful" and "restless?" Does he sometimes manifest symptoms of "colic" and "pain?" All this may be. But we implore thee by the love thou bearest that child, never to give it "Godfrey's Cordial," nor "Bateman's Drops," nor "Paragoric," by which so many young constitutions are ruined—ruined! They all contain laudanum—OPIUM; and the mischief they have produced, and the foundations they have laid for infantile convulsions and head disorders are incalculable. Terrified mothers, with feelings bordering on anguish, see these things occur, but little dream they that the origin of all may be dated back to the time they began 'giving them cordial." That these preparations always produce these terrible effects we do not assert, but that they often, VERY OFTEN do, and that from their very nature they invariably tend to pernicious results, we no say.

Now, although we would place the ban of "prohibition" upon these preparations, we would not have your children suffer from any cause without efforts to relieve them. No—no! We LOVE children, and would do everything in our power at all

compatible with their welfare, to get them through the stage of "babydom" with "healthful ease." And too, we sympathize with the anxious, watching mother who, exhausted for want of rest and slumber, with all the soothing tenderness of a mother's voice, has even sang the midnight lullaby to her fretful child without the coming of "sweet balmy sleep." No wonder that she, ignorant of the danger, should be willing to "give it cordial." But, mother! it is neither the safest nor the best. There is a safer, better, more efficient substitute, and to tell of this we have taken our seat in our "old arm-chair" while our baby sleeps.

If mothers would always live obedient to the laws of their physical being, their nursing children would seldom NEED anything of "drop" or "cordial" kind. But when they do not—when, in connection with other violations of physiological law, they indulge in kinds of food and drink not easily digested—their children, depending upon them for nourishment and support, must and will suffer the painful consequences.

First, then, we would have mothers live as they SHOULD do; be regular in their habits; abstain from excessively acid and not easily-digested kinds of diet; and

Secondly, when an anodyne or nervine *is* needed, instead of the "cordial" or "paregoric," rely upon the WINE TINCTURE OF LOBELIA, or, which is generally preferable,

℞ Wine tincture of lobelia, ʒ j, Wine tincture of Cypripedium, ʒ j; Oil of Anise seed, gtts xxxx.

Doses from five to thirty drops, repeated if necessary. These will not only relieve constructions, but will calm and allay nervous irritability and induce refreshing sleep.—They neither stupefy nor narcotise. If the stomach is much deranged and "clogged" with foul matter, they will cause it to react, and throw it off by vomiting, which is all the better for the child.

We have said the WINE TINCTURE, from the fact that our observations and experience have taught us that sweet Sicily, Madeira WINE is much preferable to either alcohol or brandy. We use neither of the latter, excepting for the tincturing of gums, etc. We may give our opinion in reference to this point in full hereafter—that is, if any body wishes it.—*Middle States Medical Reformer.*

PREMIUM FOR THE CURE OF ASIATIC CHOLERA.

No department of medical science has been more neglected by the profession, than Organic Chemistry. Yet the importance of its study is made manifest by the repeated development of some hidden secret of practical value within its domain.—Within a few years past practical chemists have given more attention to the subject, and the benefits resulting from their investigations are beginning to be made visible to the profession. To obtain the active properties of a medicinal plant is a desirable object, as the starch, sugar and ligneous matter contained in it can often be of no possible use as a therapeutical agent. Why, then, should the stomach be required to do the labor which can be better done in the laboratory of the chemist? This operation is now successfully accomplished by art. We have already informed our readers, that Messrs. B. Keith & Co., chemists at the "American Chemical Institute," New York, have been very successful in obtaining the resinoids and alkaloids (the active principles) from medicinal plants. Samples of their preparations have been kindly furnished us, some of which we have used in our practice. We are free to say that if they all answer the purpose intended as well as these, they should henceforth universally take the place of the bulky and crude materials from which they are extracted.—*Boston Med. and Sur. Jour.*

MEDICAL CREDULITY.

BY PROF. L. M. COMINGS.

It is surprising to see how little interest is felt by the great mass of the community in reference to the preservation of their health, and how easily they will suffer themselves to be deceived by the shallow pretensions of the boasting quack. There are thousands of sensible men, who will talk reasonably about politics and trade, who understand all the arts and tricks of commerce, and whose heads are as clear as a mountain stream, on the subject of the rise and fall of stocks; but just tell such a man that he looks apoplectic or scrofulous, or that he has the liver complaint, or that his child has symptoms of the rickets, etc., and you have him at your mercy at once. You have then only to say Mr. A. has told Mrs. B. that she has heard Mr. C. say, that Dr. D. had cured his grandmother's son of "*just such a disease:*" he is caught at once. He purchases the nostrum prepared by this famous Dr. somebody, and the family become the dupes of his credulity.

While such gullibility exists, it is no marvel that quack after quack rises up to become a millionare, at our expense. The modest physician of true merit, who shrinks from the puffing, boasting, brag-

ging practice of these pretenders to medical science, stands but a poor chance among such empirics.

The only remedy for this state of things exists in the medical intelligence of the community. The moment *the people* become enlightened, this humbuggery will cease. Let but these intelligent merchants and mechanics have their eyes open to understand the simple laws of life and the physiology of the human system and they would not be so easily deceived.—*Med. Reformer.*

CALOMEL—ANTIMONY—BLEDING.

It is a very common habit of our brethren of the old school to arrogate to themselves *all* the science of medicine, that *they* are the only exponents of the true medical philosophy, and that all seceders from old medicine—the votaries of the new systems which have arisen—are ignorant pretenders and quacks. This has been the habit of the advocates of "the old" from immemorial time; these have been the epithets they have ever heaped upon the devoted promulgators of "the new." But as the running calender of Time went on, investigation and experience proved the old to be in *error* and the new to be truth. Is this so with our modern boasters of "old" medicine? Let us see.

"Scientific Medication"—what is it? That course of medication which acts in accordance with the laws of the animal economy—that course which will maintain the integrity of the constitution, unimpaired by the remedies employed—that course which is restorative and not debilitant—in short, that course of medication which harmonizes with physiological law, and thus facilitates Nature in her efforts to throw off disease. Such a course of medication, and such a course only do we conceive to to scientific. Has this been the course pursued by the physicians of the old school? What says history—what says experience? They unite in the testimony that the practice of these have been a direct warfare against nature—that the remedies employed have made the most deplorable ravages upon the integrity, health and life of the vital powers, lowering and inflicting lasting injury upon the human constitution, and increasing the "mortality of disease."

"The remedies employed"—what are they? First we would enumerate CALOMEL—an agent which the Dispensatory, the standard authority of their school, says "in extent of employment is inferior to few articles of the Materia Medica." Calomel is a compound—composed of one equivalent of mercury, and one equivalent of chlorine; and every body who has taken the pains to test the matter, is abundantly aware of the fact that it is absolutely insoluble—will not dissolve—in water or any fluid in the human body. Nor is this all. It will not act—remains perfectly inert so long as it remains calomel. How then does it produce its peculiar effects? How arouse from "masterly inactivity" calm inertia to ungovernable fury, force and power? The "why and how" are easily told. After being administered into the human stomach, it combines with the chlorine there—one of the agents assisting in digestion—and by this uncalled for, unnecessary, dangerous combination is converted into *corrosive sublimate*, which is not only very soluble, but is one of the most irritant and corroding substances known. Just in proportion to the amount of calomel converted into corrosive sublimate, which in *all* cases is dependent upon the amount of chlorine in the stomach at the time of its exhibition, is the purgative, alterative and salivating powers of the agent produced. Was there chlorine sufficient in the human stomach to convert *all* the calomel into corrosive sublimate, we assert it, and we are backed by the authority of chemical science, and that the life of every patient to whom a single grain of calomel was ever administered would have been seriously endangered, and that *all* to whom a larger dose was ever given would never have recovered. Fortunately, however, for the patients of the "calomel practice," there is often but a sufficient amount of chlorine present, in the digestive tube, to convert but a fraction of a grain into the corrosive poison, which results in a gentle purge—increased in severity in proportion to the amount thus converted. How ridiculous the idea then, ever supposing calomel were a justifiable remedy, of prescribing such large doses as so many do. But no man can possibly know, beforehand, what effect his prescription of calomel will produce, from the fact that he cannot ascertain the amount of chlorine with which it may meet. When the quantity is unusually large, which is often, very often the case, salivation and all the terrible effects of comple mercurialization follow.

"——— sufferable ills are but removed,
That life-long miseries, which unfold
More anguish far—as *stiff, aching bones*,
And *pains rheumatic, foul, rotting teeth*,
Corroding ulcers and *running sores*."
This "unclean" progeny of Calomel
May enter in and like vampyres feast
Thus left to grope on through life awhile
They drop in the grave before their time.

However vauntingly our erudite neighbors of the "mercurial practice" may call *this* science, *we* cannot refrain from borrowing the "thunder" of their late departed CHAPMAN, and pronounce it "horrid, unwarrantable *muderous quackery*."

Secondly—We would mention TARTAR EMETIC—an agent which stands second in rank, and is doubtless more employed than any one of their whole catalogue of depleting and depressing agents. In all cases of fevers, inflammations, or wherever there is vascular excitement, tartar emetic—known in this section among the people by the simple name of "solution," being tartarized antimony dissolved in water—is prescribed. But is it a "scientific" prescription—a "scientific" remedy? Let facts answer. Combine a small portion of the drug with lard, and apply it to any part of the external surface, as is so often done for pains in the breast and side, and it is found to cause an eruption of painful pustules, which none but those who experience its tortures can realize. If this is the effect it produces externally, what is it not ever in danger of producing internally? It is absorbed into the blood, decomposes its constituent elements, and, until removed, effectually prevents its reorganization, thus rendering it entirely unfit for its great purpose in the animal economy,—that of building up and sustaining its every part. Can that which thus poisons the "pabulum of life" be a scientific remedy? Our answer is an unequivocal negative. Yet because its smallness of bulk and absence of taste, it is a favorite "remedy," produces its mischief without any one knowing it, believing it, or suspecting it; and when its depressing powers are felt and debilitant capabilities realized, these are attributed to the disease instead of the TARTAR EMETIC.

Thirdly—We would make allusion to BLOOD-LETTING—which has been styled "*the great* anti-inflammatory agent of the profession." But is *it* a remedy founded in the principles of science? Far otherwise. Science teaches the absolute need and importance of the blood in the body—that in the significant language of Moses "it is the life." The act of bleeding is equivalent to the assertion that the patient possesses too much life,—they take it away, weakening and impairing the integrity of nature's forces just in proportion to the amount taken.

To illustrate the inconsistency of the practice: they were called to see a young lady yesterday, found her pale, feeble, "delicate and thin." They prescribed iron, wine, and other bracing remedies to enrich the blood. Last night she took cold: to-day she shivers, has a rapid pulse, great heat of surface and violent pain in the chest—what now? To day they *bleed* her! Yesterday she had too *little* blood; the quantity has not been increased, but she has too much for her safety or recovery to-day! The surface is hot—it must be cooled; the pulse is high—it must be lowered. Tartar-emetic "cools"—it is prescribed. Be careful doctors; it may cool the body till it needs the winding sheet! Blood-letting "lowers the pulse"—they bleed her; it may lower the patient down—down into the grave. The woman that yesterday needed tonics to add to the invigorating and nutritive elements of her blood, is bled and given antimony to day, which take from and decompose those elements, thus rendering it unable to fill its great purpose. She dies—the doctors say—of "fever and inflammation," but we say of the lancet and antimony.

Calomel, tartar-emetic, and the lancet are the three "great pillars" of old-school medicine, and the physical damnation which they, like a poisonous simoon, have been sweeping over the country, disfiguring childhood, hastening manhood to "youthful old age," and despoiling womanhood of her beauty, cannot be computed. To what but these and their kindred can we attribute the tottering wrecks of constitution tumbling into premature graves all around us? To what but these can we attribute the sickening amount of nervous diseases and weaknesses which like a cloud darken a million social and family altars in our land? To what but these can we attribute the fact of not one case in a hundred, smitten by acute disease and treated by these remedies, ever seeing full joyous

"Health, the poor man's riches, the rich man's bliss"

thereafter? These are some of the "remedies," and such are some of the legitimate fruits of our "all-the-science possessing" neighbors of the old-school. We repeat it—these are the prominent "pillars" of old-school medicine, for they "own up," from the popular professor down to the humblest practioner, that to deprive them of these they must cease practice. We venture the opinion, that in case such an event should occur, humanity would be "no greater loser."

But here the question, sped with fluttering haste upon the uneasy wing of restless inquiry, comes from some *bedrugged* and doctor ridden" son of Father Adam, who has from his "cradle days" been taught to believe that man's physical salvation alone depends upon the

"Motions and potions, powders and pills."

of "venerable medicine." "If you remove these "pillars" upon *what* would you have the 'temple of medicine' stand?" Why, in the first place, we would reply that, if more durable "corner stones" cannot be found, we would let the fabric fall

"From proud Olympus down to Styx."

But be not alarmed, for in the second place, we can assure you, that a more natural foundation exists. We have substitutes, safe, harmless, innocent, well-tried substitutes; agents which have been thoroughly, rigidly, scrutinizingly tested by some thousand practitioners, in this country and Europe, and that, too, in the treatment of every possible phase of diseased action to which our common humanity is subject: remedies which produce their effects without leaving "poisonous stings" behind. These topics are far from being exhausted,—but we will allow our readers to digest what we have already "served up," before treating them to any more of "the same sort," of which we have an abundance stored away on the "back shelf" of our memory's catch-all.—*Middle States Med. Reformer.*

Part 3. Editorial.

PHYSIOLOGY, PATHOLOGY AND HYGIENE OF THE LIVER.

(CONCLUDED.)

3. Pain in the right shoulder has been observed from the earliest records of medical observation in diseases of the liver.—Owing to its absence in many cases Louis and others have been disposed to deny this sympathetic connection, but it is well established that such a sympathetic pain does exist, and when it is developed, the pain is evidently sympathetic, as it is increased by pressure on the liver, but is not increased by pressure on the shoulder.

Its absence in many cases appears to be owing to the fact that this sympathetic pain arises from an affection of the upper or convex surface of the right side of the liver. This has been the location of the abscess in those who suffered from hepatic suppuration with pain in the shoulder.

The pain in the shoulder appears to be located in a position corresponding to the fibres of the outer portion of the trapezius and the supra-spinatus.

This region is supplied by fibres from the upper portion of the cervical region—the first four nerves supply the trapezius by their posterior branches as well as by the anterior branches which form the cervical plexus. These branches from the plexus to the trapezius are connected with those of the spinal accessory. The spinal accessory is intimately connected and blended with the pneumogastric nerve, and hence if the irritation of the pneumogastric nerve by the liver be capable of producing a cough it may also through the spinal accessory and cervical plexus, affect the shoulder.—The phrenic nerve is also probably an important channel of this hepato-scapular sympathy. Connecting with the 3d and 4th cervical nerves it is in rather more immediate communication with the shoulder than the pneumogastric.

(The brachial plexus supplies nerves to the supra-spinatus from the fifth and sixth cervical, and it is possibly through the brachial plexus by its relation to the cervical ganglia, that a sympathy is established between the heart and left arm.)

There is, however, a simpler explanation than we can derive from nervous connexions, in a reference to the regions of the brain with which the liver and shoulder respectively sympathise.

The shoulder corresponds to, and sympathises with the region of Firmness and Fortitude—the antagonist of the hepatic and cardiac organs. Hence, as all antagonist organs or regions have an important reciprocal influence, the shoulder should be affected whenever the liver or heart is greatly deranged, and even the stomach, though less direct in its sympathies with the shoulder might exert some influence.

[The fact that the liver appears to sympathise with the right and the heart with the left shoulder, would indicate the necessity of a higher degree of energy on the right side of the body to counteract its depressing influence than on the left side, which requires a fearless tranquility to control cardiac excitement rather than the for-

titude which the right side requires. The region of Fortitude should therefore be better developed in the left hemisphere, and that of Intrepidity in the right. I refer to this difference because there are differences in the forms of the convolutions of the right and left hemispheres which physiological relations to the body may help to explain.]

4. *With the Lungs*, the liver maintains the direct sympathy of contiguity, evinced by the fact that inflammations at the base of the lungs sometimes affect the adjacent upper surface of the liver which is found congested and softened. Diseases of the liver also affect the lungs. A hydatid in the liver frequently produces a hydatid in the base of the lungs. In abscess of the liver a cough is noticed as a sympathetic effect in the lungs. Dr. Budd, says, "It has been remarked by Abercrombie, and by Andral, that jaundice now and then comes on in the course of pneumonia of the lower lobe of the right lung. I have witnessed this occurrence two or three times. The jaundice seems to depend on a change in the secretory substance of the liver, which is different at least from ordinary inflammation. The substance of the liver and the diaphragm is paler and softer than it should be, and the capsule can be readily stripped off, but no pus or lymph is seen there."

The position of the liver renders its engorgement a serious interference with diaphragmatic respiration which has the most invigorating effect, and deep respiration tends to prevent the liver from expanding as well as to draw a greater amount of blood from the liver to the heart and the lungs.

At the same time the liver constantly antagonizes the lungs in functional action, producing glucose which the lungs destroy, thus lowering the temperature, and also lowering the temperature by removing biliary matter which under the influence of the lungs would become calorific. The liver by its concern in digestion introduces carbon and hydrogen which the lungs destroy; it lowers the temperament, while the lungs elevate, and it increases through digestion the impurities, while the lungs remove.

5. *With the right side of the heart and lungs*, the liver is intimately connected by the hepatic vein and is necessarily congested by any obstruction to the passage of the blood through them, whether it result from debility and general prostration from organic diseases of the heart, or from obstructions in the pulmonary circulation. On the other hand vigorous action of the heart and lungs relieves the liver and in excess tends to render it somewhat an anemiac.

6. The relation of the liver to substances introduced through the alimentary canal is very important, as all medicinal substances appear to be conducted to it by absorption from the stomach and bowels, and some are disposed to be deposited in its tissues, such as preparations of mercury, antimony and copper.

In a case of pneumonia treated very actively with tartar emetic for eight days) after the fashion of Rasori,) a considerable quantity was detected upon post mortem examination in the liver. The kidneys contained a notable quantity but much less than the liver; a very small amount could be detected in the blood, and still less in the brain.

It is a very remarkable fact, however, stated by Annesley in his work on the diseases of India, that when hepatic abscess exists, calomel will not produce its characteristic effects.

The immediate reception of alcohol by the liver when we drink ardent spirits is a well established fact. Dr. Percy found that when alcohol had been administered to dogs, the liver contained much more than any other organ. The effect of this diffusion of alcohol in the liver, is shown in the fact that free spirit drinkers are peculiarly liable to attacks of adhesive inflammation of the substance of the liver called *cirrhosis*, in which the body of the liver is filled with fibrinous tisue, which contracts and gradually reduces or obliterates its glandular capacities. Spirit drinking is regarded by Dr. Budd as the only important cause of this condition of the liver.

Every medicine or article of food intro-

duced into the alimentary canal affects the liver, not only by absorption, but by its sympathy with the local effects on the stomach and bowels.

7. The sympathetic relation of the liver with the lower portion of the alimentary canal, and with the pelvic region, is shown in the fact that the principal cause of suppurative inflammation and abscess in the liver, is found in the ulceration of the colon produced by dysentery. It is very remarkable that the ulceration of typhus* and that resulting from phthisis pulmonalis, which are located higher, are not productive of hepatic abscess, but ulceration of the stomach and of the gall bladder are very liable to produce that effect and a similar relation is believed to exist with the spleen, as one case has been reported. Ulceration in the duodenum is rare, and I believe we have no case recorded of this ulceration producing hepatic abscess.

This special relation is strongly displayed in hemorrhoidal diseases, which generally affect the liver unfavorably, and which like hepatic disorders are apt to produce nausea and injurious effects on the animal spirits and the brain. Operations upon the rectum sometimes produce abscess of the liver, and a case is reported by Cruveilhier, in which hepatic abscess was caused by prolapsus ani and a painful reduction of the bowel. Operations for strangulated hernia are also liable to produce hepatic abscess.

On the other hand excessive action of the liver, greatly increases the action of the lower bowels, and bile affects them principally; congestion or obstruction of the liver is a frequent cause of piles. Suppression of bile greatly diminishes the action of the bowels or produces constipation, and a healthy secretion of the bile has the happiest effect in dysentery. In fact we should consider the liver and colon mutually necessary to each other and look for derangement of one whenever the other is not in a healthy condition.

* Dr. Budd says, "I have never seen abscess of the liver noticed in conjunction with ulcerated intestine in typhoid fever."

The cause of the abscesses in the liver following dysentery may be found in the fact that the globules of pus either developed by inflammation of a vein, or finding their way into the veins are arrested first in the superficial capillaries of the liver, as the blood of the colon passes through the portal vein. The lungs are not affected by this blood of the colon, but maintain a similar relation to the blood of the extremities. Hence we should bear in mind that the liver has the same sanguineous sympathy with the defecating apparatus, which the lungs maintain with the limbs—more especially with the arms.

The rationale of these connections was demonstrated by the experiments of Cruveilhier. He inserted mercury in one of the mesenteric veins of a dog, and in 24 hours it produced death, with numerous small red spots of incipient inflammation on the surface of the liver, each of which contained a minute globule of mercury. He also introduced mercury into one of the small veins of the omentum in a dog having umbilical hernia. Ten weeks afterwards, the animal being killed, its liver was sprinkled over with an immense number of abscesses with albuminous margins.

It is an interesting fact that this ulcerative process although called inflammatory, and presenting considerable redness at first does not develope sufficient fibrin to produce any general firmness of tisue, such as we have from the true inflammation which produces the drunkard's liver; on the contrary the substance of the liver from the first is soft, although a cyst is ultimately formed to contain the pus. This illustrates the tendency of disease to propagate identical conditions, the soft condition of the ulcerating colon produces the soft ulcerating liver. The quantity of pus formed is sometimes enormous. Dr. Budd reports one in which the abscess contained two quarts and another that contained thirteen pints.

8. *With the peritoneum* the liver is connected by the fact that obstruction to the

hepatic circulation tends to produce ascites and that a free course of the blood though the liver, is necessary to permit this dropsical effusion to be absorbed.

9. *With the kidneys* the liver is associated by vicarious action. The liver when the urinary discharge is suppressed as in cholera, has been found to contain urea, and the urine generally contains bile to a sufficient extent to enable the patient to live for some time and retain his mental faculties after the secreting structure of the liver has been destroyed. They are also connected by the fact that animal food and high living generally tend to develope to the liver and kidneys by giving them increased action, and that low diet reduces both. They are both necessary to that purification of the blood which may permit cerebral action and relieve the nervous system.

10. *With the skin*, by the general circulation the liver maintains an active sympathy. Coldness of the skin as seen in cholera and ague, tends to produce congestion of the liver and renders the bowels sometimes loose, sometimes torpid. Warmth of the skin tends to relieve all internal congestions, and hence warm weather is very beneficial to those whose hearts are not sufficiently vigorous in action to impel the blood to the surface, and whose temperature is not sufficient to resist the cold weather and maintain superficial warmth.

This sympathy is of course greatest with the skin just over the liver, (where cupping is highly beneficial to the congested or inflamed liver) and with the right shoulder, the region antagonistic to the liver.

The liver also tends to produce clearness of complexion when acting healthfully, or a yellow complexion when it allows the bile to be retained. The approach of jaundice is sometimes indicated by an itching of the skin, and the jaundiced patient is sometimes troubled by attacks of this itching. Jaundice is also according to Dr. Graves, sometimes followed by urticaria, when it attacks a patient suffering from arthritis.

11. *With the general nutrition and adipose development* the liver is intimately connected by its fat digesting powers, and in consequence, emaciation is one of the effects of its deficient action or torpor.

12. *With the abdominal muscles*—Rigidity of the abdominal muscles and especially of the rectus is one of the characteristic symptoms of abscess of the liver and of cancer of that organ. I know not what can be the channel of the sympathy unless it be through the solar plexus, and the dorsal region of the cord. Possibly it may be the mere effect of instinctive and habitual compression of the abodomen to relieve pain or diminish the distention of the liver.

CORRECTION.

By some accident between the printers and editors, the first portion of the essay on the liver in our last number, escaped the proper revision in proof reading, and consequently presents a very absurd appearance. The list of cholegogues as given by Budd on the liver was contrasted with the cholegogue resources of the Eclectic practice, but the names were printed without any distinction in the two lists. They should have been printed as follows:

Cholegogues enumerated by Dr. Budd.	Cholegogues used in the American Eclectic Practice.
Mercury,	Leptandrin,
Iodine,	Podophyllin,
Muriate of Ammonia,	Apocynum,
Taraxacum,	Sanguinaria,
Rhubarb,	Taraxacum,
Pepper Ginger, and other hot spices,	Iridin,
	Berberis,
	Euonymus,
	Aloes, Rhubarb, &c.

In the list of Dr. Budd, Mercury and Taraxacum are the only articles entitled to be called decidedly cholegogues. The cholegogue power of Rhubarb, Iodine, and Muriate of Ammonia does not exceed that of many other cathartics and alteratives. If Pepper and other spices are to be called cholegogues, roast-beef may present equal claims to the title. A very extensive list might be made by including every agent that makes a slight impression on the liver.

JONES' PRACTICE.

We have the pleasure of announcing the publication, by Moore & Anderson, Cincinnati, of the second volume of the work on the American Eclectic Practice of Medicine, by Prof. Jones. A review of the work which we anticipated giving in this number is necessarily postponed to the next month. The price of the first and second volumes is $3,50 each. Address the publishers, Moore & Anderson. B.

CAUTION.

For certain reasons many persons in different parts of the country, are passing themselves off as having attended the lectures or graduated at THE ECLECTIC MEDICAL INSTITUTE of Cincinnati, when at the same time they know such is not true.—The Institute grants no tickets until the student has attended the lectures, and those persons who have graduated or attended lectures can produce the evidence at once, and those who have not been students possess no such evidence. N.

Morrow Monument.

We send herewith to our readers a circular inviting contributions to erect a monument to the memory of Prof. T. V. Morrow. This matter has frequently been thought of by the friends of Prof. Morrow, but no one has heretofore found it convenient to take the responsibility and trouble of getting up a subscription and carry out the design. We are therefore gratified that Dr. Avery has engaged in it, and we can assure our readers, that whatever they may forward to Dr. A. will be faithfully applied to its object. In the little band of reformers who have struggled for the improvement of medicine, there should be no lack of gratitude and honor to all true reformers living and dead who have faithfully served humanity. Prof. Morrow was not only a courageous defender of medical freedom, but a true reformer and improver of medicine, in no narrow and sectarian spirit. His death was a misfortune, and his memory should be cherished by all Eclectic physicians. B.

Circular.

DEAR SIR:—The time has arrived when the friends of Medical Reform should do something to perpetuate the memory of our lamented friend, Dr. T. V. MORROW.—Your acquaintance with him renders it necessary for me to say that he has claims upon you, as well as upon every one that can appreciate his many virtues, his extensive knowledge, and energetic manner of teaching the Science of Medicine. We now call upon you to contribute what you think you can conveniently spare for the purpose of erecting a suitable MONUMENT to his memory. We think in justice to his surviving family it should be done, and we feel satisfied that this appeal will be responded to cheerfully by every friend of Medical Reform.

Your donations may be sent to Dr. I. J. AVERY, Richmond Wayne county, Indiana. He will keep a correct account of all moneys received, and when a sufficient amount is received, notice will be given to the friends to meet and appoint a committee to select the Monument, and likewise a suitable inscription for the same. You will please forward such inscriptions as you may think suitable, that one may be selected to suit as near as possible the views of the friends.

☞ Please forward your donations as soon as convenient, and when a sufficient amount shall have been received, a report will be published.

THE GEORGIA BLISTER AND CRITIC.

We have received the third number of this Journal, and hope the editor will give us at least two more applications in the the way of the first and second numbers, and so on as long as the plaster may continue to act. One great object which the editor appears to have in view is, the suppression of "Regular Quackery," and if he continues until this is accomplished, we opine that Methusela will be to him in age only a small specimen of the genus homo. We hope, however, the Dr. will not confine himself entirely to regular quackery, but apply a few blisters to what some call "irregular quackery." We like the way he speaks out in regard to some of the Picayune medical editors. We extract the following from the Journal:

"We do not pretend to say those Medical and Secular papers which have not sent in their exchange, are unworthy of patronage, but we think the stupidity incident to the stinginess of the Medical part of the press is so well developed that a Blister can never relieve them of it. We send the Shylock gentry no more of our monthly issue. All secular papers desirous of an exchange, will please send in their numbers,

and we will notice them upon our exchange sheet. We return our grateful thanks to the secular and medical presses, who have so generally noticed our bantling. We do not belong to the *picayune* crowd, and we hope none of our medical cotemporaries of that crew, will exchange with us."

This reminds us of a circumstance which is a striking illustration. We subscribed and paid five dollars a year for a Medical Journal for twelve years, after which time we proposed to the editor an exchange of our Eclectic Medical Journal—or to discontinue us as a subscriber. He choose the latter, notwithstanding, he, at the time we were a medical student, and attending lectures and paying out our money, were 'some' in his estimation. So, he lost a subscriber and we saved our Journal. We know a few more of the same sort. N.

BOOK NOTICS.

A Treatise on Veneral diseases. By A. Vidal. (de Cassis,) Surgeon of the veneral hospital at Paris; author of the Traitte de Pathologie Externe et de Medicine Operatoirie, etc. etc with colored plates. Translated and edited by George C. Blackman, M. D., Fellow of the Royal Medical and Chirgical Society of London; formerly one of the physicians to the Eastern and Northern Dispensary, New York.—New York: Samuel S. & William Wood, 261 Pearl street 1854.

We have received a copy of the above work from the Publishers, and from a slight examination, consider it one of the best works on this subject that has been published; the illustrations we find to be perfect. The treatment is not of the non-mercurial character. We would however, advise all of our readers and the profession at large to place this book in their library. We copy the following section shewing the state of the blood in Syphilis.

STATE OF THE BLOOD IN SYPHILIS.

I have already proved, and shall again demonstrate, that certain morbid products, during an attack of syphilis, are innocuble; as to the normal secretions, these will be considered when we come to treat of the causes of infantile syphilis. We shall find that syphilis may be inherited from the father, by a certain alteration of the semen. I shall also discuss the question, whether a nurse can by her milk infect the child.

We are now to consider the state of the blood in syphilis. According to Waller, the *deglobulization* of the blood during the syphilitic diathesis would seem partly probable, from the aspect of the patients, and certain other accidents from which they suffer; but a demonstration based upon the analysis of the blood has not yet been made. Doctor Serch, at the request of Waller, subjected to a quantitive analysis, the blood of several venereal patients, without arriving at any positive results. M. Grassi, however, is said to have made analyses which showed that in the blood of subjects affected with consecutive accidents, the proportion of globules is diminished, and sometimes, in a very notable manner, the contrary obtains when the patients are under the influence of the primary accidents. The proportion of albumen was inversely to the quantity of the globules. This has led M. Dourvault, who has published the experiments of M. Grassi, to say: "In proportion as syphilis infects the system, the nutritive fluid gradually loses its strength, by the resolution of globules into albumina." I can only say, that subjects laboring under primary symptoms are sometimes very debilitated, and their blood is not rich in globules, whilst others whose systems are fully saturated, are plethoric.

The question has been considerably agitated whether the virus is only mixed with the blood, its connection being only physical, and therefore its properties remaining unmodified, or whether its properties are modified and changed. According to Waller, the idea of the simple mixture of virus with the blood, is opposed to the principles of physiology, and experience disproves it, by demonstrating that inoculation made with the blood is incapable of reproducing a primary chancre, whilst secondary syphilis may be thus communicated to sound subjects. Carmichael mentions two facts in confirmation of this; and they are also corroborated by Waller. The latter physician besides, has performed a most conclusive experiment, the details of which I will relate. According to Hunter the blood possesses no contagious property. "Could a syphilitic inflammation be excited in a previously healthy wound, no person in whose blood the veneral poison circulated, that is who had constitutional syphilis, could escape a veneral ulcer whenever he was bled or received a scratch of a pin; the little wound thus inflicted, would become transformed into so many chancres. Indeed, if the point of a pin or lancet should be dipped in veneral pus, their punctures would become chancres.† Here is a doc-

trine, that has singularly obscured the question of the inocubility of secondary accidents. Hunter maintained that the virus combined with the blood, produced the same effects as the pus from a chancre; of course, it would produce chancres on the patient himself. Such being the case, it follows that it would produce the same effect when inoculated on a sound person. Waller has already responded to Hunter. Moreover, the question should be differently framed. It should be not whether the blood may transmit such or such a form of syphilis, but whether it can transmit syphilis under any of its forms. If not thus enlarged, it amounts to nothing.

Those who deny the possibility of transmitting anything by the blood, base their belief upon the facts showing that wounds on patients whose system is completely contaminated with syphilis, have been seen to heal like those on sound subjects, and on the immediate union which has followed after certain operations performed on persons infected with syphilis. This only proves that blood which, to a certain extent, has been changed, or which mixed with a morbid poison, may supply the means necessary to cicatrization. This, moreover, had already been proved by the very numerous cases of union by the first intention, after the extirpation of a tumor, and during the existence of a decided cancerous diathesis: as, for example, after the palliative operations for cancer, when there can be no doubt as to the alteration of the blood. But these facts, furnished by pathology, and which I once undervalued, do not prove that the blood of a syphilitic subject cannot, under any circumstances, act even upon the individual himself, and produce syphilitic accidents in a certain order, and that this same blood may not be the vehicle of the poison, in transmitting the latter to the fœtis, through the mother. No one has ever denied the first; the second, which Hunter seems to reject, is now proved by carefully observed facts: thus, the mother's blood is the medium of communicating to the child, to another being the syphilitic poison. Both analogy and facts afterwards lent their aid to prove that syphilis may be transmitted by inoculating a sound person with the blood of one diseased. M. Diday, who among the first in France, started the question of transmitting syphilis by other humors than pus of chancre speaks of the inoculations of glanders, of carbuncle, and of hydrophobia.

"Nothing," he observes, "goes to prove that the blood of a syphilitic subject, when inoculated on a sound person, will not commuicate to the latter disease." Returning to the proofs furnished by Hunter of the non-transmissibility by the blood, in a note M. Diday adds: "Hunter's argument proves but this, that he has here confounded the primary chancre with constitutional syphilis. Because the blood does not produce the former, is it right to inter *a priori* that it cannot produce the latter?"* I have already mentioned that Waller is in the possession of two facts of contagion from the blood, and that he has made an experiment that has not been answered; here it is:

"*Experiment with the blood of an individual with secondary syphilis.*—F., a lad, æt 15, entered No. 5676, in infancy, had been troubled with the rickets, and for the last seven years, had been affected with *lupus exfoliativus* on the right cheek and beneath the chin; this lupus, of the diameter of a little more than half a dollar (American) piece, with the exception of a small space on the cheek, had been cured, after long treatment, by cauterization and the hydriodate of potassa. This lad had never had syphilis, and, being a proper subject for inoculation, it was performed on the 27th of July, 1850, on the left thigh. I took the blood from a female (Frennd,) in whom secondary syphilis had been developed under our observation. This young girl, in other respects in most excellent health, had lately several times contracted primary sores, without having been affected with secondary syphilis. But during the treatment of the two last chancres, which succeeded each other after a fourteen days' interval, she began to become emaciated and pale, and, when the last chancre was healed, and there remained only a uterine catarrh, tubercles appeared on the face, and spots on the surface of the whole body.

"The inoculation was made in the following manner; the skin was scarified with a new scalpel, and, by means of a cupping glass from three to four drachms of blood were abstracted. Notwithstanding the rapidity with which the latter was done, the blood was still partly coagulated before in could be carried from the patients chamber to that of the person inoculated. The wounds from the operation (performed on the child as in the preceding experiment)† were carefully cleansed and cleared of the bloody clots by warm water; the blood for the inoculation was then inserted into these wounds, partly by means of

*Extract from the Gazette Medicale, Sept. 28th, 1850, first article on Prophylaxy, by M. Diday.

†Waller alludes to the experiment mentioned at the end of the first section whilst treating of the mucous tubercle. Small wounds were made with the scarifier.

a small piece of wood, and partly by charpie saturated with the blood, which was applied and secured on the scarified parts. Neither inflammation nor suppuration followed; at the end of three days the wounds were completely closed. The patient continued well.

"On the 31st of August, thirty-four days after the inoculation, I observed the left thigh, at the point of inoculation, two distinct tubercles, of the diameter of a pea, of a pale reddish tint, dry on their surface, and attended with neither itching nor pain. In a few days they increased in size, became united at their base, and covered with scales, and both were surrounded by a dull red areola. The base of the tubercles, that is, the subjacent skin, and subcutaneous cellular tissue, became firm, tense, and an ulceration formed on the surface of the tubercles, which became covered with a thin and brown crust. In this manner, about the 15th September, an ulcer had formed, the diameter of which equalled that of a pigeon's egg, a coppery-red areola surrounded its borders, and it was covered with the crust above mentioned. This crust having been removed, the base of the ulcer became visible; it was of a funnel-shape, lardaceous, and bled easily at its edges. For some days previously an isolated tubercle had appeared on her right shoulder, as large as a pea, of a red color, and covered with thin scales. The patient could not tell the time of the first appearance of this accident. The general health remained good.

"On the 26th Sept., and the two following days, F. complained of a want of appetite and sleeplessness. On the 1st of Oct., sixty-five days after inoculation, and thirty-two from the appearance of the first tubercles an exanthematous eruption was observed in the lower part of the abdomen, on the back, chest and thighs; this we pronounced a well-marked syphilitic roseola. The spots were precisely like those above described (in the first experiment,) only at certain points they were somewhat more elevated. The ulcer on the thigh had acquired the breadth of a thaler (little more than the American half dollar,) and still preserved its funnel shape, its lardaceous base, and coppery edge. A few days afterwards these spots became so numerous, that the entire body, not even the face excepted, was covered and appeared speckled. There was neither itching nor pain, nor symptoms of catarrh, nor fever. On the 6th Oct. several spots, particularly on the inner aspect of the thighs and on the abdomen, became raised into pimples or tubercles, and thence the diagnois of the eruption, even without knowing the antecedents, was attended with a little difficulty as in the preceding case."

It will have been remarked that the wounds were covered with charpie saturated with blood, and that this dressing was secured. The wounds were therefore removed from the influence of contagin.—Moreover, the period of incubation was so long that no one could for a moment suppose the intervention of the pus from chancre, for it is known that after the inoculation of this pus, the local phenomena are not slow in their manifestations. M. Ricord maintains that there is then never a period of incubation.

On Rheumatism and Rheumatic Gout and Sciatica, *their Pathology. Symptoms and Treatment, by Henry William Fuller, M.D, Cantab, Fellow of the Royal College of Physicians, London; Assistant Physician to St. George's Hospital, &c., &c. New York: S. S. & W. Wood*, 261 *Pearl street*. 1854.

The same publishing house has laid upon our table a copy of the above work, which we also take pleasure in noticing and recommending to the profession:—we find the author treats the subject under the following arrangement:

I. Introduction.

II. On the Rheumatic Diathesis, and the causes which influence its development.

III. On the seat of Rheumatism, and the classification of its different varieties.

IV. On acute Rheumatism, or Rheumatic fever.

V. On the treatment of acute Rheumatism, or Rheumatic fever.

VI. On the causes of Rheumatic affections of the heart.

VII. Rheumatic inflammation of the heart.—Its pathological effects.—Its symptoms, progress, and terminations.

VIII. On the treatment of Rheumatic inflammation of the heart.

IX. On the statistics of heart disease in connection with Rheumatism.

X. On affections of the brain, inflammation of the lungs and pleuræ, and disorganization of the joints, as complications and consequences of acute Rheumatism.

XI. On Rheumatic Gout.

XII. Chronic Rheumatism.

XIII. On Sciatica, and other forms of neuralgic Rheumatism.

We consider the publishing house of S. S. & W. Wood entitled to a full share of patronage from the medical profession, for their great industry and outlay of capital, in bringing out so many medical works of value. N.

THE

ECLECTIC MEDICAL JOURNAL.

THIRD SERIES, Vol. II. | JULY, 1854. | WHOLE SERIES Vol. XIII.

COMMENCEMENT OF ECLECTIC MEDICAL INSTITUTE.

The commencement exercises of the Eclectic Medical Institute at the close of the spring session of 1854, were held at the Melodeon Saturday evening June 10th, according to the following programme:

Programme of the Commencement of the Eclectic Medical Institute at the Melodeon, held Saturday evening, June 10th, 1854.

Overture by Ochestra—(Gazza Ladra.)

1. Prayer—Rev. W. P. Strickland.

2. Music (from the Opera of Fra Diavolo,)—Columbian Orchestra.

3. Report of the last session—From the Dean of the Institute.

4. Music—(La Prima Donna Waltz)—Columbian Orchestra.

5. Graduation—Degrees conferred by the President, Rev. W. P. Strickland.

6. Music—Overture, (Italien in Algieri, by Rossini,)—Columbian Orchestra.

7. Address to the Graduates—by Prof. W. Sherwood.

8. Music—(Air from the Opera of Falstaff, by Balfe)—Columbian Orchestra.

9. Valedictory in Behalf of the Graduates—C. Cropper, M. D.

10. Music—(Echo Polka, by Julien)—Columbian Orchestra.

11. Address—Medical Colleges, the Medical Profession and the People—Prof. J. R. Buchanan.

12. Music—(Overture, "Jean de Paris," by Boieldieu)—Columbian Orchestra.

Committee of Arrangements—H. H. Hudgins, J. M. Swift, D. H. Thomas, P. T. Gans, J. G. Campbell.

The Report of the Dean embraced the following statistics of the present session of the Institute. The graduation of the young ladies was referred to with the remark that the experiment of female education in medicine had thus far proved quite successful, and that the character and attainments of the present and preceding female graduates enabled the faculty to present them to the public with cordial approbation and confidence.

Graduates of the Spring Session of 1854.

Henry Georgius Averdick, Ohio.
Leroy Wood Brown, New York.
Moses Whitridge Bonebrake, Ohio.
Mary Eliza Croshaw, N. Y.
Charles Cropper, Ohio.
Orville Patterson Chubb, Mich.
Joseph Gibson Campbell, Ohio.
Erskine Dennis Curtis, Conn.
Jeptha George Dolley, N. Y.
August Julius Emeis, Illinois.
Joseph Everingham, Iowa.
Christopher C. Ferguson, Ky.
Philip T. Gans, Pennsylvania.
Howell Harper Hudgins, Miss.
Oliver Chase Joslen, Indiana.
Enoch Lagore, Ohio.
John A. Leeper, Iowa.
Andrew J. K. Murphey, Ohio.
George Washington Noble, Ohio.
Joseph Eugene Ruhl, Pennsylvania.
Abraham Russell, Ohio.
Sarah Smizer, Ohio.
John Marcus Swift, Michigan.
Jeremiah Shotwell, Ohio.
Courtland Curtis Stowell, Mich.
David Hamilton Thomas, Tennessee.

Landy Van Buskirk, Ohio.
Henry Wohlgemuth, Illinois.
Peter Nesbit Woods, Ohio.
Handforth W. White, Ohio.
Hiram Ettinger Zimmerman, Penn.

Honorary Graduates.

Ira Morris Allen, Michigan.
Grover Coe, New York.
Isaac Shelby Taylor, Texas.
Daniel N. Mead, New Jersey.
J. J. Perry, Indiana.
Jos. S. Burr, Ohio.
W. H. Whitaker, Alabama.

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Regular Graduates winter session '53-4,	84
Honorary " " " "	4
Regular Graduates spring session 1854,	31
Honorary " " " "	7
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Prof. Sherwood sketched in his remarks the duties of Eclectic physicians, and the peculiar position in which they were placed by the organized opposition of a party governed by a medical despotism.

Dr. Cropper illustrated the principles of Eclecticism and progress, to which in behalf of the class he avowed his devotion, and advocated the cause of reform and reformers, alluding gratefully to the services of the Faculty of the Institute. The lecture of Dr. C. was written in a polished style. We are pleased to learn that he designs locating in Cincinnati.

The exercises were concluded by the lecture of the Dean, which was received with profound attention, and the audience dispersed about eleven o'clock.

MEDICAL COLLEGES--THE MEDICAL PROFESSION AND THE PEOPLE.

[A lecture delivered by Prof. J. R. Buchanan, in the commencement exercises of the Eclectic Medical Institute at the Melodeon, Saturday evening, June 10, 1854.]

Medical colleges are commonly regarded by the people as peculiar institutions located remotely on the verge of their horizon, with which they have little to do, and in which physicians alone should feel an interest. But I hope to-night to show you that the non-professional public have even a deeper personal interest in these institutions than physicians themselves.

There are several erroneous impressions in reference to medical schools, which the present may be a suitable occasion to notice and correct.

It has been very common of late to denounce medical schools in a jocose way for pouring upon the community a host of candidates for medical practice—inexperienced, half educated young men, who are unfit for their assumed duties. If the schools are guilty, this is a very serious charge, even if advanced in jest, and ought to dishonor them; but any rate the charge deserves investigation.

In behalf of the young men thus assailed, I would remark that such a charge does not harmonize with the fact that the medical profession is continually improving and becoming more scientific. Neither does it harmonize with the fact that the ignorance and degradation of the profession is found among those who are not regularly educated—consequently so far as collegiate graduates are concerned, the remark is unjust.

As a representative of a medical college, I pronounce the charge essentially erroneous. The number of persons who enter the medical profession does not depend upon the facilities afforded by medical schools. Each young man in our country generally selects his profession for himself, in accordance with his own taste, and his idea of his own capacities. If there were no medical schools at all, we should still have an abundant supply of physicians. The demand always creates the supply. In other pursuits in which collegiate training is not given, men are not deterred by the fact that they have no college to teach the profession or occupation. Architecture and agriculture require systematic instruction as well as medicine, but the lack of proper instruction never keeps away applicants from any pursuit in which their services will be remunerated. When the western country

had no medical colleges and the eastern schools were too remote, owing to slow communication—we had physicians in sufficient abundance, as many adopted the profession without any collegiate assistance. Among the pioneers of western medicine. I could mention at least two distinguished professors, who prepared themselves by prevate study alone for their duties. One of them, however, did after a while make out to attend a single course of lectures in Philadelphia, but no more.

The number of physicians which a country will have depends upon the number that its medical business will support—not upon the mode in which they are educated. Hence to hold medical schools responsible for the numbers in the medical profession, is as absurd as to hold steam mills responsible for the abundance and low price of flour and meal when farmers have produced too much grain, or grain of an inferior quality. Medical colleges are not responsible for either the numbers, or the intellectual capacities of those who enter the profession. They are not entitled to claim the honor shed upon the profession by men of genius; and if a weak minded, ignorant or unsteady young man should choose the medical profession, the college should not bear the discredit—it can do nothing but educate him as well as possible. It cannot turn him away from its halls to engage in the profession without collegiate training, and thus reduce him to a still lower position. It must receive all, and then do its best to teach them as much as possible. If colleges were abolished the numbers of the profession would be about the same, but its intellectual character and scholarship would be greatly lowered.

Instead then of denouncing the colleges for every presumed fault of the profession, even if it could be proved that such faults existed among graduates, we should honor them as the conservators of its learning and dignity, and we should seek to elevate the character of the profession by elevating the character of the colleges—by securing men of commanding talents for professorships—by honoring and rewarding their services, and by furnishing libraries and all other proper apparatus of a dignified institution. At the same time we should as zealously discourage and frown down the inferior institutions, occupied by inferior men, without resources, reputation, talents, or dignity, which merely encumber the field, withdraw young men from better institutions and present to their pupils so very humble and shabby a specimen of professional attainments and character as to lower the ambition, and vulgarize the sentiments of those who fall under their influence. The establishment of a new medical school in the vicinity of others which are not adequately sustained, lowers the resources of all, and cannot as a general rule be justified unless it be undertaken for the purpose of furnishing something better in the way of collegiate instruction, than what was previously enjoyed.

Let us then not denounce medical schools in general, which are the great *foci* of professional learning, but only those inferior and superfluous *parvenu* establishments, in which the skill, learning and dignity of the profession are lowered.

I shall not undertake to decide whether the general character of the profession has been lowered or not, for I do not know precisely what is its present condition,—yet I am disposed to think it better now than it ever was before, but if such degradation should occur, whom should we hold responsible—clearly it would not be the colleges for they do not hold the keys, or control the gate by which men enter the profession—there are in this country neither walls, nor gates nor keys—every man practises medicine who pleases, and no one can hinder him. Hence if inferior men enter the profession, the fault rests first with the public in not paying enough to attract men of better abilities, and secondly with the practising physicians and friends of the student, who urge him or encourage him to adopt the profession. If they select ignorant, weak-minded men, the colleges can only mitigate the evil by requiring thorough study and preparation before graduating, and even then, they may fail and find

their half-fledged pupils engaged in full practice without waiting for a diploma.—The colleges then being powerless, I would respectfully recommend to the sovereign people to take this matter in hand and apply the true corrective.

1. Resolve never to employ a physician who has not so far completed his professional course, as to have graduated in a respectable medical school.

2. Give no encouragement whatever to men of inferior capacity, inferior general intelligence, and *inferior success in practice*, but remunerate liberally the skilful and *successful* physician.

These rules observed by an intelligent public would speedily elevate the profession, and drive from its ranks every ignoramus and quackish pretender.

Having vindicated medical colleges from a common and careless satire, I would urge their claims and merits in a most distinct and emphatic manner, as the fountains of learning and benefactors of mankind.

The people are not aware of the faithful servants to whose silent and untiring labors they are indebted for life and health. To-day the professors of a medical school are pursuing their arduous and secret tasks, they are exhausting their frames, perhaps in some house of the dead, in pursuing amid the human decay and corruption, the secret track of the pestilence in the veins and nerves, the brain and viscera of the victims of the epidemic—or they are sitting with languid frames and aching brow by the midnight lamp, seeking by all the lights of modern science the nature of prevalent diseases—the truth among conflicting doctrines, and the clearest practical doctrine which may be presented to the rising generation of the profession; or they are subjecting the detected errors of authors to the searching analysis of reason and deducing order and truth from chaos, or they are watching by a hundred bedsides the physiognomy of disease and the success of new remedies, with which they have just discovered how to steal a march upon the great conqueror death, and snatch an expected victim from his grasp—or they are spending weeks or months of laborious research—chemical, anatomical and literary, to determine the truth of some important fact, which, when ascertained, may be expressed in five lines, but which is of high importance to the welfare of a large class of the sick, and may be potent to save the lives of millions who will never hear the name of their benefactor.

Thus in a silent and humble way is that science prepared to be impressed upon the receptive minds of students which is to be the shield of the community in the hour of danger. To-day a few learned men are in their closets, in the dead-house, the laboratory and the sick room; and a few unpretending young men, pale faced students, are spending their days in preparation for the conflict with disease—ten years hence, a thousand of these pale faced students are spread abroad through the land, as successful physicians, and by carrying out the principles which they acquired in their pupilage, five thousand lives are annually snatched from the graves to which they were destined, but for scientific interposition, and fifty thousand are relieved from protracted suffering and confinement. I speak in round numbers, but I know that I speak far within the truth. Such are the results of a medical college, performing its duties in the proper manner, and meeting with proper success; and of the five thousand who are every year blessed and saved through the labors of its faculty, how few ever think of their unknown benefactors, who toil away their lives that others may live hereafter in health and happiness.

Beneath the surface of the tropical ocean silent and unknown millions of the coral zoophyte are slowly constructing their coral beds and reefs—ages hence that coral will be reared above the water in the sunlight and air—covered by plants, forests, and flowers and inhabited by human beings; but the coral foundation on which they live, and its builders, will be forgotten.—Such is the fate of medical faculties, silently and secretly as the coral, they labor

for humanity often dreading a barbarous popular prejudice, tumults, or mobs, if their secret and unpleasant researches were known, laboring too without even the just protection of the laws; slowly laying the eternal foundations of the science which upholds the lives and health of myriads of people remote and unknown; the lying down with the blessings of a few, unknown to the multitude, who rather prefer to worship the politician who cheats them, or the military hero who scourges them, and leaves the bleaching bones of his followers upon the battle field.

So let it be!—if the medical philanthropist was better paid and honored, he would lose a portion of his true glory. I come not to plead for empty honors, but to urge the importance of the services of medical colleges, with reference to enlarging the sphere of their utility.

In this practical age and among the intelligent class who sustain medical colleges, such institutions would not be so extensively patronized, were they not beyond all doubt extremely useful, and capable of rendering an equivalent for the fees they receive.

I propose to calculate the value of their services, and show to what extent such services should be extended to the community.

I maintain that of all educational institutions now existing, our medical schools present the most perfect models, of practical efficiency, and do impart a greater amount of knowledge in a given time than can be obtained by any other institution or plan now in operation. Experience shows that a medical session of four months imparts a greater amount of knowledge, than is usually obtained by twelve months of private medical study; the reason of this three fold efficiency is the superiority of the living teacher to the book—the clear concentrated and impressive style of a lecture being contrasted with the diffuse minuteness and verbosity of books, the power of eloquence and earnestness to invigorate the mind of the auditor—the advantage of suitable illustrations and experiments, and the regularity and industry of collegiate habits and regulations.

If then, one who attends a session of four months saves in fact eight months of labor and expense, finding himself as far advanced at the end of four months as he would otherwise have been at the end of twelve; he who attends three sessions gains thereby as much as twenty-four months of time, labor and expense economized. Medical schools are therefore, among the most remarkable labor saving apparatus of this age of steam. The saving of time, labor and expense, renders a medical college actually the cheapest route by which to enter the medical profession.

Let us calculate the exact economy. If sixteen weeks of the medical session are equivalent to fifty-two spent out of college, there is a saving by each session of thirty-six weeks,—what are they worth? To make the most moderate calculation—the time of a young man is certainly worth a dollar a day or $216 for the thirty-six weeks. During the same time he saves also the cost of subsistence, and this on a very economic scale would not be less than four dollars a week or or $144. The saving therefore by one session amounts to $360 in the time and money economized. He is enabled to commence the practice of his profession eight months sooner, and it is a very low estimate to calculate eight months income of a physician at $360, when many make twice that amount in their first eight months. The saving then effected by attending three sessions, amounts at a very moderate estimate to $1180 dollars to each student, and the saving in time and money is not all. He goes forth with an exalted mental energy and ambition which tells with the happiest effect on his subsequent career. He escapes that feebleness and irresolution of character produced by a long course of private reading. During this course of private study, his mind droops from the want of intellectual stimulus and association. His habits become languid and spiritless, he loses much of his energy, efficiency and ambition, he commences the profession without zeal or con-

fidence, without a proper sense of his own dignity, and without the habits of promptness, regularity, and economy of time which are acquired in college.

If my estimates are correct, the most expensive medical schools in our country do not charge more than about one third of the actual value of their courses of lectures to the students who receive them, and hence it must be a miserable and false idea of economy in the student, which leads him to spend the greater part of his time in private study to the neglect of collegiate attendance. The greatest possible economy is to spend all the time possible at college, and the most expensive course possible is to neglect its advantages. If he is so utterly indolent or helpless that his time is worth nothing, and he has no prospect of success in practice, and if at the same time his subsistence is without expense, while his labor is without value, he may have some excuse for neglecting collegiate opportunities, but he who enters the profession without collegiate attendance, really takes the most expensive plan by a thousand dollars and withal wears a permanent badge of inferiority.

It is then a false and deceptive economy to attend the smallest number of sessions possible, or to resort to any college that may be convenient, because it is near, or because it is cheap. True economy dictates that we should seek the college of the highest character, no matter in what part of the country located, and no matter what the price of its tickets, for, to the ambitious student the tickets are in reality worth twice the amount that is asked for them.

Our first conclusion then is, that it is the duty of every medical student to attend collegiate lectures of the highest character, as early and as long as possible without regard to expense.

Early attendance is of great importance. Three years of the time of an adult are worth fully $1800, but three years of the time of a boy is worth scarcely one third of that amount. One of the principal causes of ignorance in the medical profession (aside from a false economy) is found in the general neglect and postponement of medical education to too late a period. Students in the prime of life feel that they cannot afford to sacrifice so much as they lose by giving up years to study; they must do every thing in haste because their time is too precious, and sometimes they get engaged in a lucrative practice with family responsibilities, before their education is finished, and concluding that they cannot suspend their business for even a few months, their education is never finished. The only remedy for this is to commence early in life. The student of medicine should begin at the age of 16 or 17 years, and then by the time he had attained 21 years of age, he would be thoroughly familiar and experienced in science and practice. If this course were adopted, colleges could seldom be reproached with the unfinished scholarship and professional verdancy of any of their pupils.

There is yet another important suggestion necessary to enable medical schools to fill the measure of their usefulness. If we were governed entirely by selfish considerations, medical schools might be urged to demand even higher fees than they do at present, so as to compel every one to pay a full *quid pro quo* for the benefits conferred. But in reality this full pay doctrine is unsound. Nature does not demand it of us; the most important necessaries of life, light, air and water, she gives us without price. The State imitates nature in making education like air, free from expense. There is a most unanswerable reason why it should be as free as possible from expense.

Education is not a mercantile investment for the pecuniary benefit of the individual educated, but is rather a religious duty performed for the benefit of mankind, a tax paid to the great commonwealth of humanity by those who live for elevated aims. The community is benefitted by having educated men, but well educated men are less successful in pecuniary matters than those who have given less attention to literature. They may be enlightend and prepared for

duties—but they are not always commercially shrewd and prepared to make money. In fact the special pursuit of literature or science is generally incompatible with the pursuit of money.

One physician devoted to his profession will spend years to acquire it, and give all his spare hours through life to its study. It is the interest of the community to have many such physicians. Another will hurry through his studies, commence practice half prepared, relying upon tact and management, and spend all his spare hours in business or speculation, remaining all his life a professional ignoramus, but often dying rich. It is the interest of the people to have fewer such men. But at the present there is a premium in their favor. They save the heavy outlay of time and money made by the conscientious physician, and the expenses of education fall heavily upon a young man at the commencement of life. It is the interest of community that every physician should be well educated; and it is the true interest of society not to tax the student, but to give him rather a bonus, a high premium for his faithful studies. Therefore, I contend, medical education should be made as cheap as possible, and if "*we the people*" understand our interests, we will yet make it cheap or gratuitous.

It is much cheaper to educate than to bear the consequences of neglected education. If we neglect the education of the young, we have to bear the cost and the depredations of a large number of criminals. The average cost of the education of the young by the State is but about three cents per head per diem:—the average cost of a criminal in England is near y 2000 dollars. Of about 30,000 criminals in New York, but one in two hundred had a good intellectual education.

If we neglect to promote the education of physicians, society must pay a terrible penalty of disease and death. It is not the medical profession who are most interested; whether skilful or not they must be employed—but to the community the question of skill is a matter of life and death.

An enlightened community for its own interest, should give to its medical schools an ample endowment; should render medical education entirely free of expense, and then, should positively prohibit any individual from practicing medicine, who had not honorably obtained his diploma. Medical schools would then have some power to uphold the medical profession.

In these views I have the support of high authority. Prof. J. K. Mitchell of the Jefferson Medical College of Philadelphia, occupying the chair of practice in the leading medical college of the United States, and guiding by his instructions the practice of a larger number of physicians than any other teacher, said in 1850, in his charge to the graduates, after showing how many physicians were needed:

"A great number, perhaps a tenth of the existing practitioners of the United States, who are among the enumerated thirty-one thousand two hundred and fifty doctors, are by ignorance totally unfit for the duties they have assumed. They have never seen a college, and many of them have scarcely entered a school of any kind. To supercede such men would demand the creation of at least three thousand graduates in medicine. To say therefore that 2500 physicians should be annually created, would be to make an assertion much within the bounds of truth. A reference to the statistics of the medical schools of the United States, made by an able committee to the National Medical Association in May last, shows that the mean number of graduates for the last five years, was 1283, the greatest number being in any one year 1421, and the least 1031. Thus you perceive that scarcely half as many persons receive a degree in medicine as the wants of the country demand, and that the growth of empiricism is unhappily on the increase, *because the expenses of a medical education place its proper attainment beyond the reach of most of the practitioners of the country*, or because the masses are not yet sufficiently educated to perceive the priceless value to the community of a well instructed physician."

We have been laboring to bring a medi-

cal education within the reach of all, and thus elevate the profession, but we may well ask what have Prof. Mitchell and the flourishing wealthy institution to which he belongs, done to meet the demand which he acknowledges?

So much for medical schools as belonging to the medical profession. I would next consider medical schools as belongs not to the medical profession, but to the community at large. I wish to present a new view of their position and usefulness to society at large, independent of their functions as the *alma mater* of medical practitioners.

If not a single physician were to be educated in the schools, I contend that they would still rank among the most important educational institutions in the country. The positions I assume may be new—but I invite your strictest scrutiny of their truth. I maintain the broad and unequivocal doctrine that,

EVERY INDIVIDUAL ASPIRING TO A LIBERAL EDUCATION SHOULD ATTEND A COURSE OF LECTURES IN A MEDICAL COLLEGE, and no education should be considered complete or satisfactory without *embracing the science of medicine.*

To determine the claims of medicine as an essential part of the liberal education of every *man* and *woman*, let us compare medical science with other branches of science and literature, which are commonly considered useful or necessary.

The collegiate course considered essential still to a finished education, embraces ancient and modern history—a pretty extensive course of mathematics—the Latin language and Greek language. It would require too much time to discuss the exact value of each of these studies. Let us merely compare the value of the dead languages with the value of medical science. If it shall appear that the knowledge of medical science is worth more than the knowledge of the dead languages, and that the science of medicine can be mastered in as little time as those languages, these facts will establish the proposition that medical science has a higher claim than the dead languages to a position in the programme of a system of education. And if the time of the student be not adequate to the mastery of both, the languages should be rejected rather than medicine. Nay more, I acknowledge no secondary position for medicine—rather than exclude this practical science, I would reject history, mathematics, metaphysics, languages, rhetoric, logic, and every other element of the existing collegiate course—no one nor all of these can be compared in value with the science of medicine. Nor would it be very extravagant to assert that every day spent in a medical college under the best circumstances would be worth in fact more than a week spent in the studies of academic institutions, as they are and have been organized and conducted.

In the medical college, all is life and movement; every hour has its own interest and excitement—every hour teems with great facts of vital importance to mankind—worth more in many instances than all that we might obtain in a month of common collegiate study. One who is suddenly transferred from a medical to a purely literary institution—from the intellectual life, the concentrated attention, the deep interest and the momentous questions of one, to the quiet tasks, the passionless themes and verbose minutiæ of the other, feels somewhat like a soldier transferred from a battle field to a parade ground---or like a great manufacturer transferred from his city emporium and his heavy daily transactions, to the quiet pastures of a shepherd, in view of rural scenes.

I do not wish to discourage or abridge any species of collegiate studies, but when the time of the student is necessarily limited by the shortness of life and the absence of wealth, if *any studies* are to be dropped, it should be those which are least useful, not those which are most important. Instead of abridging the time spent in medical studies, I would lop off the dead languages or the higher branches of mathematics.

The objects of colleges of all kinds are to impart valuable knowledge and mental dis-

cipline. That a larger amount of useful knowledge is imparted in medical schools than in other collegiate institutions, in the same length of time is a very obvious fact; but it is commonly supposed or claimed that academic institutions, although they may impart less useful knowledge, give a great amount of superior mental discipline.

But what is a desirable mental discipline? The best mental discipline is found in those processes which increase the general activity of the brain, increase the power of acquiring knowledge, and increase the logical correctness of the judgment. The best influence to increase the general activity of the brain is oral instruction, examination and discussion---the best plan to increase the power of acquiring knowledge is to listen to the most impressive presentations of truth or science, and subsequently review or recall the lectures. The best plan to cultivate the judgment or reasoning faculties, is to engage in the close study of important themes in an animating manner with living teachers, endeavoring to solve the mysteries presented and to form correct conclusions on debateable subjects---all of these requisites to mental discipline we find in medical colleges rightly conducted; and so effectually do they rouse and discipline the intellect, that the brain of the student is often taxed to its utmost capacity, and his physical vigor reduced by the extraordinary exertion of his intellectual faculties. His intellectual power is greatly increased, although often at the expense of his physical constitution, as we may discover by the pale, thin faces which are so common at the end of the session, and by the fact that some are compelled to suspend their application. Yet if the same amount of knowledge and mental discipline had been obtained by the common mode, the exhaustion of health would have been much greater. Oral instruction, as in the medical college, is the most healthful, pleasant and inspiring mode of obtaining knowledge—it enriches and developes the mind to the greatest possible extent, with the least exhaustion and injury of the body.

For these reasons, I claim that the exercises of a properly conducted medical school, with its seven daily lectures and other exercises, are entitled to a pre-eminent rank as a means of mental discipline. The young man who undergoes this mental discipline early in life, acquires a permanent clearness and activity of mind, but he who postpones it to a late period in life, generally makes a very unfavorable contrast in the mental discipline and facility of apprehension to those who underwent this discipline at an earlier age. It is a notorious fact that practitioners of medicine who have never attended college, if they should be induced to attend a course of lectures, do not compare favorably in their mental progress and aptitude to learn with younger men who have previously attended a session of lectures.

Regarding medical schools, then, as admirable institutions to rouse, cultivate and develope intellect, the question recurs, whether in the years of collegiate education there is or can be any better occupation of four or of eight months than to give them to the lectures of a medical school? It requires but little more time to master the science of medicine than is necessary to make a thorough classical scholar in the Latin language. Certainly it requires as much time to make a *finished* Greek scholar, as to make a respectably educated physician. And will any one contend that the trivial accomplishment of speaking a dead language, which in a few years fades in the memory, and which never answers any very important purpose in life except to a translator or a schoolmaster—will any one contend that this single accomplishment can be at all compared with that knowledge of medical science which is not merely a beautiful accomplishment, but a guide and saviour in the most important emergencies of life? If a conscientious father had his choice, would he prefer that his son should be thoroughly acquainted with the conjugation of one or two Latin verbs, or that he should be thoroughly acquainted with the progress of the human constitution through consumption—that he should understand a *dead word* for the verb *to be*, or

that he should understand a great living fact of being—the causes, the cure and the prevention of a disease which in our cities sweeps off about a sixth of the entire people, and which may yet in the great majority of cases be prevented by scientific knowledge and training?

Really, it seems to me like a solemn mockery of common sense to inquire whether literary accomplishments or positive knowledge essential to the lives and health of millions of men and women, should be considered more important and should be the more prominent in a course of education?

A father who would send a son on an overland journey to California, and take great pains in his outfit, that his clothes should be fashionable—his boots well polished and his horse handsomely equipped, yet not take care to have his clothes sufficiently substantial and warm to last through the journey, and to protect him from freezing to death in the mountains, would be no more absurd than he who takes great care to have his son proficient in the common academic culture of Greek and Latin, metaphysics, mathematics and literature, but leaves him so profoundly ignorant of himself—of his physical constitution—the laws of its health and disease, that he is unable to reach the natural end of life, and perishes miserably in five or ten years of some disease which might have been avoided had he been blessed with a *practical* as well as *ornamental* education.

If the constitution of a youth is delicate, rendering it doubtful whether he can attain longevity, without extraordinary care, I would consider a thorough medical education more valuable to him than every thing else that he can be taught—for the simple reason that life and health are worth more than all the accomplishments that beautify life.

In the hour of danger, "All that a man hath he will give for his life," but the wise teacher or parent does not need present danger to teach him his duty, and he willingly sacrifices literary accomplishments to gain the science which may preserve and prolong the life of his pupil. As for myself and my own children I would rather that they should understand thoroughly the constitution of man with all its laws of health and disease, with no other academic education whatever, than that they should have all that colleges could give them, and be deprived of this knowledge.

If it is so essential to each individual for himself alone, how much more important when he has the direction of many whose health depends greatly upon his superintending care. If he is a military officer, commanding an expedition, a captain of a steamboat or ship, the manager or proprietor of a manufacturing establishment, employing many hundreds, a southern planter employing a large number of slaves, the superintendent of a prison or hospital, or a city councilman or mayor, how easily may his ignorance in these responsible stations be fatal to hundreds of lives. A few years since we had an account of the actual suffocation of a number of persons on board an English vessel in consequence of ignorance of the laws of ventilation. Thousands of children die in our cities from absurd modes of building and the disregard by city authorities of drainage, cleanliness and ventilation. In the last great epidemic of cholera in Cincinnati more than two thousand perished, whose lives could have been saved by a very small amount of knowledge and care.

I feel that I cannot speak too strongly on this subject. No young man should consider himself competent to take charge of the happiness of a wife when he is profoundly ignorant of her constitution, and of the causes that determine her weal or woe for life—nor is any woman fit to become a mother who does not understand how to protect the life and health of her offspring.

In these matters our customs are so entirely barbarous, that this plain announcement of the truth must to many sound as an extravagance—nevertheless the time is rapidly coming when the man who controverts those propositions will be considered barbarous and antiquated himself.

In contending for a medical education, I

would not insist that it should be precisely the same which is given to physicians:—there is nothing that physicians know, that ought not to be known to the people at large, but the common medical education is too exclusively directed to the nature and treatment of disease; it gives too little attention to the science of health and the prevention of disease—hygiene and prophylaxis—Our medical schools should have a new department of Hygiene, embracing dietetics, gymnastics, medical topography and meteorology, as well as personal regimen and training.

To such institutions the entire community should resort—young and old, male and female alike, until they had learned their own natures—learned that disease was not an inscrutitible dispensation of Divine will, but was in reality a Divine punishment inflicted upon our culpable ignorance, to compel us to learn and perform our duties.

We cannot logically escape the conclusions that disease results from a violation of the Divine laws of health, and is therefore the punishment of an offence of which we should be ashamed. Long and severely have mankind suffered—and obstinately still do they persist in disobeying the law and refusing to learn the nature of those laws which they have disobeyed. The true man of science is the student of these laws, and the truly religious man is ever ready to learn and to obey them.

Let us then begin boldly with the proposition that every man or woman who has not mastered the science of life and health, has been guilty of a great neglect or violation of duty, and should as soon as possible perform this violated duty. If, however, we are too indifferent to reform ourselves, it is easier to use our consciences in regulating others, and we should at least forbid the repetition of our errors by our children. Let them master in all its breadth and depth the science of man in health and disease—that science of all sciences—ANTHROPOLOGY—in this they will find a guide to the performance of a thousand duties previously neglected for want of knowledge—they will learn to lead a harmonious and happy life—to perfect their own natures. They will learn too the universal nature of man, the philosophy of history, and the nature of social revolutions, which are to dawn in the future, in consequence of the innate laws of the human mind.

This science is properly within the sphere of the medical college especially—and intense as is the intellectual life of the college, in nothing does the glowing warmth and brightness of the soul and the higher intellect so illumine the votary of knowledge as in this sublime science—the science of God's master-piece, the body and the soul of man, in which we see a faint and remote image of Divinity itself, as the sun is reflected to our eyes in the delicate dew-drop—and from this image receive an illumination and inspiration, which, however, distant from the Divine, still hallows and ennobles its recipient. They who have inhaled this Divine *aura*—have drawn into their souls that empyrean air which Plato, Shelley, and Milton breathed—which filled the inner sense of Shakspeare and Byron, of Homer and Demosthenes, of Copernicus and Kepler—and in the future movements of mankind, this Divine science with its attendant train of sciences, now taught in medical colleges alone, shall be the guide and guardian of humanity—the Moses of our Exodus—the prophet of our destiny—the builder of our future homes—the consummation of Divine Benevolence rewarding our faithful pursuit of duty and of Wisdom.

CLINICAL REPORTS,

At Newton's Clinical Institute.

SERVICE OF PROFESSORS NEWTON & FREEMAN.

REPORTED BY PROF. Z. FREEMAN.

(Continued from page 191.)

SPRING SESSION.

Case 31.—(Continued,) N. Wooland; Opthalmia and pterygium.

March 31.—Improving; eyes are better than they have been since his attendance

at the Clinic; can distinguish between individuals, can read large letters, sees objects at a distance best, is pleased with the progress towards a cure.

Treatment.—Continue the mild zinc ointment to the lids; use internally, ℞. comp. syr. still., ʒj., three times a day.

April 4.—Eyes stronger; vision improved, conjunctiva less injected; continue the treatment.

April 8.—Opacity of the cornea nearly removed; eyes improving much, less conjunctival injection.

Treatment.—℞. Hydrastin ointment to the eyelids instead of mild zinc ointment.

May 2.—Not so well, weather is cold and rainy now.

Treatment.—Change to the zinc ointment; omit the comp. syr. still.

May 30.—Vision improving; much better, less conjunctival and corneal injection.

Treatment.—Cut some small blood vessel at the internal canthus leading to the cornea; continue the zinc ointment.

Case 95.—John Shay; Sciatica and spinal irritation.

April 11.—Improving, attending to his business; continue the treatment.

April 11. Discharged cured.

Case 96.—Jas. Gordon; Opthalmia and granular eyelids.

March 31. Improving, continue the treatment.

April 4. Improving; less conjunctival injection, lachrymosis less, thinks that he will get well now.

Treatment.—Omit the collyrium, correct any active symptoms that present themselves with elm poultices and cathartics.

April 7. Discharged cured.

May 30. Has taken cold by exposure, eyes a little inflamed, palpebral granulations enlarged and irritate the palpebral.

Treatment.—Sesq. carb. potasa to the granulations, rubbed in strong. Comp. Aconite collyrium to the eyes three times a day and wet cloth at night.

Case 85—Catharine Gaffney; Opthalmia and nebula.

March 31. Improving, continue the treatment.

April 14. Discharged cured.

Case 93.—Mary Shay, Opthalmia and Nebula.

April 11. Improving, continue the zinc ointment to the eye.

May 12. Discharged cured.

Case 97.—George Juneman; Edematous or swelled leg, (incipient elephantases.)

April 31. Improving, discharged cured.

Case 98.—E. J. Harvey, Strumous Opthalmia Tarsi.

Marsh 31. Improving, discharged cured.

Case 99.—Marcellus Kelly; Dyspepsia and hepatic torpor.

May 12. Discharged cured.

Case 100.—Will Carrens; æt. 10, Subacute inflammation of the mesenteric glands. (Tabies mesenterica.)

May 12. Discharged cured.

Case 102.—Caroline Wright; Amenorrhea.

April 2. Discharged cured.

Case 103.—Bridget Kennedy; intermittent fever.

April 7. Discharged cured.

Case 103.—Bridget Fallen; Chronic opthalmia.

May 12. Discharged cured.

Case 109,—Francis McGuire; Impetigo.

April 14. Discharged cured.

Case 308.—John Sylvester; æt. 7; Otorrhea.

April 18. No pain in the ear; discharge slight, rests well at night, secretion not fetid now. Improving more rapidly than I expected. Continue the injection of the sesq. carb. potass in solution; use internally the comp. syr. still.

April 20. No pain in the ear, doing well; continue the treatment.

May 2. Discharged cured.

Case 109.—Thos. Page; æt. 83; Phymosis.

April 7. Improving.

April 21. Parts healed, is pleased with the success of the operation and discharged cured.

Case 110.--Patrick Malone; Intermittent fever.

April 12. Discharged cured.

Case 111.—Robert McGrew; Varicose veins of the left leg. Blood knots on the same.

April 7. Improving, slight eruption on the leg, part itches.

April 21. Improving, use a cotton compress dipped in a decoction of oak bark; apply with the roller.

April 28. Continue the treatment.

May 12. Improving; much better, the swelled veins are reduced to nearly their normal size; continue the treatment.

May 30. Discharged cured; the normal color and size of the leg is restored.

Case 112.—Michael Fanning; Chronic nephritis and spinal irritation.

April 7. Some tenderness in the loins, not so much pain, urine not high colored, nausea at times, heart burn, some dyspeptic symptoms.

Treatment.—Discontinue the iod. potass. Use, ℞. hydrastus canadensis 3j., water ʒ xij; drink through the day.

April 11. Improving, continue the treatment. He says that he has paid one hundred dollars to Old School physicians and has not received as much benefit in return as he has received here.

April 14. Improving, tongue clean, bowels still costive, does not vomit after eating, general health much improved.—

Treatment.—Comp. cath. pills, two every night until they operate; continue the former treatment.

April 10. Eyes clearer, still improving; take only one cathartic pill at night.

Case 113.—Miss M.; æt. 20; Chronic hypertrophy and induration of the thigh.

April 11. Improving; discontinue the irritating plaster; can bend the knee a little more than formerly, is confined to her bed from debility; continue the treatment.

May 2. Improving, enlargement less, discharges pus freely from the surface; continue the treatment.

May 12. Improving, continue the treatment.

May 30. Improving, swelling much less; continue the treatment.

Case 114.—Franklin Hoyland; Fistula lachrymalis.

April 11. Improving, the tears pass into the nose by the side of the style, epiphora relieved, inflammation of the eye less.

May 2. Still improving, continue to wear the style.

May 30. Improving, appears well, continue the use of the style; may have to wear it two or three months longer. Discharged from the Clinic.

Case 115.—John Burke; Morbus coxarius, (hip disease.)

April 11. Improving, feels less soreness in the hip, but some pain in the knee; continue the treatment.

May 12. Discharged cured.

Case 116.—A. E.; Malignant tumor (Tuberculous) of the neck.

April 7. Tumor less disorganizing; suppurative discharge free.

Treatment.—Continue to fill the cyst daily with sesq. carb. potass until the next clinic.

April 21. Tumor disappeared, a little induration left.

Treatment.—Use sesq. carb.potass a few days to keep it discharging.

April 29. Discharged cured.

Case 118.—John Clarke; Incipient staphyloma of the right eye, caused by opthalmia.

Took cold four months since, which induced corneitis, which resulted in opacity and incipient staphyloma; do not expect to cure it but will try the effect of stimulants on the absorbents; some pain over the left eye-brow.

Treatment.—Apply to the right eye comp. zinct ointment, and to the left the comp. aconite collyrium.

April 14. Cornea clearer, mycocephalon disappeared, eye improving; continue the treatment.

April 25. Improving, eye clearer; continue the zinc ointment. Has symptoms of intermittent fever, pain in the head &c., for which his comrade cupped him on the temple. Treatment for intermittent fever, ℞. quinine, grs. xx, prus. iron grs. xx, m., make powders x; take one powder three times a day.

May 30. Discharged cured.

Case 119.—James Jorden; Dyspepsia and Hepatic torpor. Been affected for three months; caught cold at work in a livery stable; breathing difficult in walking up stairs, thirst, tongue furred white, sensation of pressure at the precordia all the time, vomits after eating, bowels costive for a week, then he uses cathartics,—burning in the palms of the hands and soles of the feet, some cough, has taken much medicine.

Treatment.—Alkaline bath friction.

℞ Pulv. Hydrastus Canadensis ʒ iij, Primo Vertie ʒ iij, Sesqui carbonate Soda ʒ j, m give ʒ j, three times a day in half a tumbler of water.

April 11. Weak, tongue looks better, feels no better except a little stronger, not so much distress in the precordia, costiveness obstinate, I do not want to catharcise him severely.

Continue the treatment, also one compound cathartic pill every night until they operate.

April 14. Quite ill to-day, vomits after eating. Bowels rigidly costive; proposes going to the hospital.

Discharged.

April 21. Ruturned; has been using the comp. cathartic pill, is no better, no soreness in the stomach now. He thinks he will get better. Pills produced watery evacuations from the bowels.

April 28. Improving, soreness sometimes less; some nausea. Use the irritating plaster over the precordia, and continues the use of the tonic decoction, omitting the Sesqui Carb. Soda. The result of this case is uncertain, as he has indifferent nursing.

May 2. Much better, cough less. Yet he may not recover.

Continue the treatment.

April 4. Case 120. William Morrison. Subacute inflammation of the cervical lymphatic glands. Been affected two weeks. Glands much enlarged, otherwise he seems well.

Treatment. ℞ Comp. syr. still. ʒ vj, iodide potassa ʒ j. m. Take ʒ j three times a day; apply oleum tiglii night and morning over the enlarged glands.

April 7.—Swelling less by half, skin over the glands vesicated. Improving.

Treatment.—Take half the quantity of still. comp. three times a day.

April 11.—Improving. Left side well, right side soft, nearly well.

April 14.—Discharged cured. Continue the still. comp. for a few days.

Case 121.—Julia Brown. Ulceration of the cornea. The right eye has been affected for two years; was much inflamed at the commencement. Cornea opaque and ulcerated, vision nearly obliterated. Eye lachrymose, not painful, can distinguish day from night with the affected eye, in this case as others the blood-vessels leading to the ulcer are enlarged and engorged. Left eye weak from sympathy.

Treatment.—℞ Mild zinc ointment applied to the eye night and morning. As soon as you disorganize the surface of the ulcer, the inflammation will subside. In a few days we will cut the blood-vessels leading to the ulcer.

April 11.—Cornea clearer; ulceration disappeared, blood-vessels leading to the ulcer less in size, vision improved. Continue the treatment; think the eye may be restored.

May 2.—Discharged cured.

April 7.—Case 122. Mary Barnard.—Tinea Capitis, (Favosa) scalp scaly. Disease quite extensive.

Treatment.—Shave the head, cleanse it with Castile soap suds, apply zinc ointment night and morning for three days;

then wash off and use ℞ oxalic acid ʒ j, water ʒ j, m apply to a part of the diseased scalp at one time, lest it produce too much inflammation.

May 2.—Has not followed the directions or used the medicines.

April 7.—Mary Duffy. Tinea Capitis. Case similar to the former. Treatment the same.

May 2.—Has not returned to report the result.

April 11.—Case 124. Bridget Brown. Subacute Periostitis of the Tibia and Nodes.

Twelve months since was salivated severely by calomel; since that time has had a constant and severe pain in the leg, no ulceration, tongue white furred, (peculiar.)

Treatment.—Compound cathartic pills two every night until catharsis is induced; irritating plaster over the seat of the pain in the tibia.

April 18.—Some pain and soreness from the use of the irritating plaster; also a discharge of pus from the vesicated surface.

Treatment.—Continue the irritating plaster, but omit the pills.

May 5.—Discharged cured.

April 11.—Case 125. Will Berry, æt. 69. Debility and Bronchial irritation.—Been confined to bed for several weeks, coughs nearly all night, also some during the day, sputa yellow or white,—appetite indifferent.

Treatment.—℞ Syr. squills ʒ ij, Tinct. lobelia ʒ j, Tinct opii. comp. ʒ ij m. Take ʒ j three times a day when there is much cough.

June 1.—Discharged cured.

April 11.—Case 92. Thomas Kiser.—Granular Opthalmia.

Improving, granulations disappeared entirely.

Treatment.—Apply the mild zinc oitment to the eyelids at times.

April 14.—Discharged cured.

April 14.—Case 126. Arthur O'Conner. Abscess of the cornea.

Injured the eye fourteen days ago. Abscess commenced three days since; eye very painful. Conjunctiva injected strongly.

Treatment.—Cornea punctured by Prof. Newton; discharged some thick tenacious pus. You should be cautious in an operation of this kind lest you allow the aqueous humor to escape.

Treatment.—Use the cold water dressing to the eye.

April 18.—I have opened the abscess twice since, and let out the pus. Cornea is a little flattened, eye painful and intolerant to light.

Treatment.—Use the compound aconite collyrium often through the day.

April 21.—Eye improving; cornea clearer, think it will get well, although it may leave an albugo The cornea has been opened three times. Continue the treatment, and in addition use the hydrastin ointment to the eye twice a day.

May 5.—No pain, cannot see much with the affected eye. Ulceration and inflammation subdued; is doing well.

Treatment.—Omit the collyrium and use the hydrastin ointment.

May 5.—Discharged cured.

April 14.—Case 127. John McGuire. Scrofulous abcsess of the scalp. Compound syr. still. forced out the eruptions, the sore and secretion fetid, the abscess is about three inches in diameter, the scalp over it is covered with small holes leading to the abscess, the hair is matted.

Treatment.—Shave the hair from over the sore, cleanse daily with castile soap suds.

April 25.—Improving. Treatment. ℞ Ses. carb. potass. ʒ ss, water ʒ viij, m. Apply to the sore four times a day.

Also use internally ℞ Comp. syr. still. ʒ vj. Take ʒ j, three times a day.

May 12.—Improving; pus runs freely from the holes in the scalp; four holes now an inch apart, the scalp seems excoriated at the diseased part.

Treatment.—Inject into the openings ℞ Sesq. carb. potass ʒ ss, water ʒ iv, m.

April 18.—Case 128. Mary Fullerans; Amenorrhea.

Menstruation has never been established. Took cold four months since, some cough, pain in the right side extending from the angle of the ribs to the shoulder, vomits at times, quick exercise as going up stairs induces coughing; Cannot tell whether the coughing induces amenorrhea or *vice versa*.

Treatment.—℞ Tinct. macrotys racemosa ʒ ij, syr. senega ʒ ij, *m*. Take ʒ ij three times a day.

April 21. Improving in some respects; less cough, stronger and warmer. Continue the treatment.

May 2.—Cough little, no catamenia.

Continue the treatment. Also use ℞ Ferri phos. grs. x, three times a day.

May 30.—Continue the treatment.

April 18.—Patrick McDermot, æt. 43, Intermittent fever. Has been affected ten months; has been rid of the chills during three weeks of that time. Fullness and pain in both sides; tongue foul, coughs much, appetite indifferent.

Treatment.—℞ Tinct. gelseminum gtts. xxx, three times a day.

April 20.—Had no chill since, appetite improved, feels none of the symptoms of gelseminum, tongue coated.

Treatment.—Alkaline bath and two comp. cathartic pills every night.

April 25.—Improving; no chills since, appetite not good.

Treatment.—Continue the gelseminum; feels none of its specific symptoms. I think the gelseminum preferable to quinine in many cases, for it fulfills many indications, and as the profession becomes more acquainted with its good qualities it will be used more;—as yet we use it empyrically, (Newton.)

May 2.—Had a return of chills during this cold and wet weather. Has been taking of tinct. gelseminum 3 iiij during the day, did not feel its specific effects upon the brain and nervous system.

Treatment.—Tinct. gelseminum gtts xxxx, three times a day.

May 20.—Discharged cured.

April 18.—Case 120. Foley, (infant,) æt. 6 months. Hydrocephalus. Had inflammation of the bowels four months since, inflammation arrested at the time, then commenced subacute arachnitis and hydrocephalous. The vertical diameter from the right meatus-auditorus-externus to the left was twenty-one inches, the circumference measured close above the ear over the frontal sinus and occipital protuberance twenty-nine inches, the sutures were open and the parietal bones along the sagital suture were separated four inches; the eyes were prominent and skin pale, but the child appeared healthy otherwise, blood-vessels of the scalp much enlarged, turgid and blue.

Part 2. Miscellaneous Selections.

CHLOROFORM IN PUERPERAL CONVULSIONS.

BY DR. VAN BUREN.

At a meeting of the New York Medical and Surgical Society, held in April last, Dr. Van Buren reported a case of puerperal convulsions, in which he employed chloroform with advantage. The case was the first confinement of a lady twenty-five years of age.

During gestation she had enjoyed her ordinary health, except on the evening preceding the attack, when she had retired with a headache. Her physician, who was sent for at half-past one o'clock A. M., had found her in a convulsion. Labor had not commenced. At an hour later Dr. Van Buren was called, and found her in her third convulsion. On examination per vaginum, it was ascertained that the os uteri was beginning to dilate. Chloroform was immediately given, and after a time her convulsions were relieved, when it was "let up," and the convulsions again returned. Its use was again resumed, and she was kept under its influence until about six o'clock A. M., at which time the os uteri was found to be sufficiently dilated to admit of interference. The forceps was applied, and the delivery speedily completed. The patient was then left in a comfortable condition. Another convulsion, however, came on shortly afterwards, and they returned every twenty minutes, except when chloroform was given, which controlled them. Other appropriate remedies were resorted to, but the anæsthetic was mainly relied upon. Its use was continued until a few hours before death, which occupied fifty-two hours after the first seizure. During all this time there was no secretion of urine. The child is alive and doing well.—*Am. Quar. Jour. of Med.*, July, 1853.

REDUCTION OF A SCROTAL HERNIA,

WHICH HAD BEEN FOR NEARLY SIX MONTHS IRREDUCIBLE.

On April 23d, 1853, Alfred Kemp, aged 24, a farm laborer, was admitted to Guy's Hospital, on account of a large scrotal hernia, which had, for nearly six months, baffled the persevering attempts at reduction made by his medical attendants. He stated, that for two years he had been subject to a small swelling in the groin, but that it had never occasioned any trouble, until about six months ago, when, during an effort at lifting, it suddenly increased in size, and passed down into the scrotum. Immediately afterwards he suffered severe pain, with some sense of dragging in the abdomen and back, but no symptoms of strangulated bowels manifested themselves, either then or since. The inconvenience which it occasioned him had, however, quite prevented him from attempting to resume his work. The treatment pursued in the country had consisted in the exhibition of purgatives and of mercurials, with partial confinement to bed. Cold water had been applied to the tumor. On examination, there was found in the left scrotum, a large movable, irregularly nodulated mass (omentum,) which was soft, flaccid, and free from tenderness. Nothing like intestine could be felt. The neck of the tumor at the external abdominal ring appeared to be tightly constricted. The bowels were ascertained to have acted regularly each day. Having made careful and persevering, and ineffectual attempts to effect the reduction of the tumor, Mr. Hilton directed—

1st. That the man should observe an undeviatingly recumbent posture.

2dly. That the man should have solid food, with not more than a half a pint of fluid in twenty-four hours.

3dly. That a bladder of ice should be kept constantly applied to the scrotum, the latter being elevated on a cushion placed between the thighs.

4thly. That a draught, containing sulphate of magnesia and colchicum wine, should be administered three times daily.

Mr. Hilton remarked to those present, that to a young man who had to earn his livelihood by hard labor, it was a matter of very great importance to be relieved, if possible, of such an affection as the present, which, apart from the inconvenience necessarily attendent on its bulk, would perpetuate a liability to the occurrence of strangulation. He pointed out, that the important obstacle to reduction was probably offered by the loaded condition of the blood-vessels of the protruded part, and that consequently, the indications for treatment were—1st. To decrease the quantity of the circulating medium generally, as far as might be done without unduly depressing the vital powers; and 2dly, by local means to constringe and unload the congested vessels of the incarcerated omentum.—The one was to be accomplished by purgation, diuresis, and abstinence from fluids; the other, by recumbent posture and application of pressure and cold. With respect to the last mentioned agent, Mr. Hilton further remarked, that, in the case of tumors within the scrotum, the use of cold, by exciting constant and powerful contraction of the dartos, insured the application of the best and most uniform kind of pressure which could possibly be exerted. The effect of purgation was also extremely valuable, since not only did it unload the vascular system generally, but that part of it especially involved in the existing lesion, the omental veins being with those of the intestines, tributary to the vena porta. It was just possible, also, that, by keeping the stomach and transverse colon comparatively empty, the contraction of those organs, to both of which the omentum is attached, might exert some little influence in tending to drag upward into the adominal cavity the displaced portion of omentum. To return to our case. After the afore-mentioned treatment had been rigidly pursued for a few days, it was noticed, that the man's belly had lost its rounded contour, and become pinched in and narrow; the tumor also had diminished in size, and felt soft and loose, having lost its plump and definite form. The bowels had been very freely purged.

On the 28th, Mr. Hilton again examined the tumor, and, with very slight pressure, succeeded in passing it up into the abdomen.

On the 30th, the man was discharged, quite free from all the inconvenience of his complaint; and wearing an efficient truss, the hernia had not again protruded.—*Western Lancet.*

SPLEEN REMOVED.

Dr. Crisp exhibited, at the Physiological meeting of the Medical Society of London (Nov. 14, 1853,) a dog, the spleen of which was removed two years and a half since by Dr. Leared, of Finsbury-circus. The animal was in good condition, and did not appear in any way to have suffered from the loss of the organ. The blood, which was exhibited under the microscope, presented no abnormal appearance.—*Med. Times and Gazette*, Nov. 19, 1853.

RADICAL TREATMENT OF HYDROCELE,

By the local application of Lunar Caustic.

BY W. PARKER, M.D., PROF. OF SURGERY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

A great variety of methods have been proposed to effect the radical cure of hydrocele, such as, *incision* to lay open the sac, *excision* of a portion of the sac, *caustics* externally applied, *tents* passed through the sac, *injections* of various stimulating liquids, &c. The design in the practice of each of these operations is either to excite such a degree of inflammation as shall cause adhesion of the opposed serous surfaces of the tunica vaginalis and thus obliterate the sac, or so change the character of these surfaces as to diminish the secretion to its normal quantity.

The operation by injection of a stimulating fluid was one of the earliest proposed, and is now more generally practiced than any other, not so much for the ease with which it is performed as the certainty of its effecting a cure. For a long time, wine and water composed the mixture employed and Sir James Earle, who introduced them, stated that he scarcely ever failed in obtaining a radical cure. But this confidence in injections does not accord with the experience of other surgeons, and Sir Astley Cooper, who used a solution of sulphate of zinc, remarks that it is quite contrary to his own, though he preferred it to any other method then followed. More recently, however, the tincture of iodine has come into use, and having proved more safe and efficient than the liquids previously employed, it has nearly superseded all others. In eleven hundred and forty-eight cases it is stated to have failed but three times; and in ten cases, where both wine and the sulphate of zinc had been used unsuccessfully, it failed but once. Injections, however, of all kinds require tact in their employment, and time in their preparation and administration.—When unskilfully used, they are often attended with serious consequences. I have not myself been in the habit of resorting to them for the cure of hydrocele in many years, preferring the simple evacuation of the water with scarifications of the internal surface of the sac, especially in children, or the introduction of a tent. More recently, however, I have resorted to the local application of the solid nitrate of silver to the internal surface of the tunica vaginalis in the manner described below, and have every reason to be satisfied with this method of treating hydrocele. It is at once easily and safely performed, and, as far as my experience goes, has been attended with entire success. It does not seem to induce so great a degree of inflammatory excitement as most other methods. The following may, therefore, be stated as its advantages over operations:—1. The ease and safety with which it may be performed. 2. The less liability to severe inflammations. 3. The certainty of success. The following cases illustrate the mode of operating:

CASE I.—Mr. J., aged about 60, an Irishman, waiter by occupation, unmarried, had always enjoyed good health until April last, when he discovered an enlargement of the left scrotum. It had never previously been the seat of any difficulty. The tumor increased so rapidly, that within three weeks it had become a great annoyance, and prevented him, simply from its size, from continuing at his business. At this time I first saw him, and such had been the rapidity of the growth of the tumor, that it had been mistaken for hernia, and he was wearing a truss. On examination, however, its true character, that of hydrocele, was made out without difficulty; a trocar and canula were accordingly introduced, and a large quantity of water withdrawn, and the patient dismissed. In about three weeks he again applied for relief, and I proceeded to operate for his radical cure in the following manner:—After drawing off the fluid contents of the tumor in the ordinary way, I introduced through the canula a common probe, the end of which was coated, for half an inch or more, with nitrate of silver. This extremity, thus charged with the caustic, was carried lightly over the serous surface of the tunica vaginalis, in various directions, and then removed. The patient complained of some pain during the operation. He was directed to keep quiet for the pain and swelling consequent on the application of the caustic, and apply cooling lotions, should the inflammation be at all severe. He returned home, but as he suffered but little pain, and the swelling was slight, and as his services could not well be spared, he continued about his business without any interruption. The pain lasted three or four days, when it ceased altogether, leaving the scrotum of its natural size. In this condition it has since remained, with no symptoms of a return of the hydrocele, the cure having been complete.

CASE II.—Mr. ——, aged about 50, a farmer from Long Island, has always enjoyed good health, and been able to perform the active and laborious duties of the farm. For nearly two years he has suffered from a slowly-enlarging hydrocele, the origin of which is attributed by the laborers on the

farm to the water which they use; for, singularly enough, several of them began to suffer from the same disease at the same time with this patient. The water is stated, by an intelligent person acquainted with the facts, to have a strongly diuretic effect upon those who use it, but no analysis has yet been made of it, which would lead to an explanation of this peculiarity which the water seems to possess. In this case, the tumor had been twice tapped during the last year, and about a pint of fluid was removed at each time. The first operation was performed about six months, and the last nearly three months, previously to the present operation. The tumor rapidly regained its former size after each operation, as no means were employed to effect a radical cure. After withdrawing the water I proceeded to operate in a manner precisely as above described. The application of the caustic produced severe pain, much more so than in the former case. The patient was placed in bed, and an antiphlogistic regimen prescribed. The pain continued without any diminution of its severity for fourteen hours, when it began to subside. The inflammation excited by the operation was considerable, with swelling of the scrotum and some febrile excitement; he was confined to his bed three or four days, until the inflammation had subsided, when he returned to his farm.—The swelling of the scrotum continued about a month, when, on the application of a spirit lotion, it returned to its natural size, and a permanent cure was effected.

Case III.—Mr. B., of Pennsylvania, aged 55, of very intemperate habits and enfeebled constitution, applied for treatment of an old hydrocele. The operation was performed as in the preceding cases. Considerable pain was experienced at the time of the operation, and the subsequent inflammation and swelling was greater than in either of the former cases, doubtless owing somewhat to his unfavorable condition of system. It progressed favorably, however, and he was soon able to leave for home. I have recently learned that the operation was successful, there being no return of his difficulty.

Case IV.—Mr. J. F., bookseller, aged 26, very intemperate, first noticed an enlargement of the scrotum seven months previously to the operation. The caustic was applied, as in the former cases, on the 6th of last August. The pain was considerable, and the inflammation as severe as in the last; it subsided rapidly in the course of four or five days, and he returned to his business. There has been no return of the disease.—*N. Y. Journal of Medicine.*

ON THE COMPARATIVE MORTALITY OF LARGE TOWNS AND RURAL DISTRICTS,

AND ON THE CAUSES BY WHICH IT IS INFLUENCED

BY JOHN SNOW, M.D., F.R.S.

The following is an abstract of a paper read before the Epidemiological Society:—

The shorter average duration of life in large towns, as compared with rural districts, depends on the greater mortality in early childhood, and the smaller number of adults who attain to old age. In Liverpool and Manchester, half the children born die before they are five years of age, the numbers being 52 and 51 per cent. In Birmingham 48 per cent. of the deaths occur before this age, and in London rather more than 40 per cent., but in Wilkshire and Surrey only 31 per cent. The greatest number of deaths in any decennial period, after the age of five, takes place in Surrey, —from 65 to 75 in males, and from 75 to 85 in females. In Manchester, Liverpool, and Sheffield, the highest mortality after early childhood is from 35 to 45 in males, and from 25 to 35 in females or 40 years earlier than in the same sex in London. In Leeds, Blackburn, Preston, Stockport, Macclesfield, and some other towns in which textile fabrics are manufactured, the greatest mortality in both sexes, after infancy is passed occurs from 15 to 25; although in two registration districts, not more than 20 miles from Leeds, the highest mortality, is from 75 to 85, or 60 years later than in these towns. In London, however, the mortality, at the period immediately succeeding to puberty, is lower even than in the rural districts, more especially in the female sex. On comparing some of the worst districts of London, such as St. Giles's and Clerkenwell, with more distant and rural parts of Surrey, the advantage of the town over the country, in the small number of deaths at this period of life, is more striking. In St. Giles's, the annual mortality in the seven years, 1838 to 1844, between the ages of 15 and 25, was 59 males and 68 females to 10,000 of each sex living at that period of life; while, in the Guildford district, the numbers were 77 males and 99 females. On examining the Tenth Annual Report of the Register-General, all the chief diseases of infancy are found to be more fatal in London than in adjoining rural districts. Convulsions hydrocephalus, and diarrhea, probably owe their greater fatality to improper food and general treatment; while the constant presence of various infectious diseases in London increases the mortality, by affecting chil-

dren at an earlier average age than in the country, where they pay only occasional visits, and thus enable many of the children to escape an attack till a later period, when certain of them, as hooping-cough and measels, are hardly ever fatal. A proof of the frequent later attacks of these diseases in the country is the fact, that the deaths from scarlet fever in the South Midland district, from the age of 10 to 20, are much more numerous than in London, although, under 5 years, when the chief mortality occurs, it is greatest in London. The diseases which cause the mortality of the rural districts to exceed that of London, from 15 to 25 years of age, are phthisis and typhus, which are more fatal at this period of life in the country than in London. Typhus, indeed, is more fatal at all ages and in both sexes, and phthisis is much more fatal in the female sex, in whom it occurs also at an earlier period of life than in London. The probable cause of the great fatality of consumption among young females in the rural districts, is deficient nourishment, consequent on the difficulty of obtaining employment. Typhoid fever is probably less fatal in London than in the country, on account of the numbers who gain an immunity from it in after life by passing through it in childhood, when it is less fatal, and generally goes by the name of infantile remittent. It is chiefly to phthisis that the great mortality of both sexes between the ages 15 and 25 in certain manufacturing towns is due. The above circumstances show that the high mortality which prevails in most large towns is occasioned more by the habits and occupations of the people, and some other causes, than by mere influence of living in towns.—*Med. Times and Gazette, May* 28, 1853.

ADVANTAGES OF THE STARCHED APPARATUS

IN THE TREAMMENT OF FRACTURES AND DISEASED JOINTS. By *J. S. Gamjee, Esq.*—The following notice of Mr. Gamjee's essay, for which the Council of University College have awarded the Liston Clinical Medal, we copy from the *Brit. & For. Med-Chir. Rev.*

This is a practical work, intended to show the beneficial effects of the treatment of fractures by the starched apparatus, as employed of late years by M. Seutin. This apparatus is very simple; splints are made from pasteboard soaked in water, and are then covered, both inside and out, with a thick coating of starch; the limb is bandaged with a roller covered with wet starch, and the splints are then moulded on the limb, all depressions and tuberosities in which are filled or protected with cotton-wool. An outer bandage, also covered with starch, is then applied, and the limb is kept quiet until the whole is dry, which occurs in about 36 hours. When dry, the bandages are slit up in order to see that the application of splints has been properly performed, and if any swelling of the limb requires a little loosening of the bandage, or if any shrinking of the bandage requires a little tightening. This being done, a bandage starched on the outside is reapplied and after this the patient may leave his bed. The great advantages of this plan are, that uniform pressure is applied, reduction is maintained and confinement to bed for a long period (as common in fractures of the leg, thigh, and femoral neck, treated on other plans) becomes unnecessary. Mr. Gamjee also states that swelling from extravasation of blood, or from inflammation, need not prevent the application of the apparatus if it be judiciously used; and that if the fracture is a compound one, the only difference of treatment is that the wound may be left uncovered by cutting a piece out of the splint. In support of these assertions, 17 cases treated in University College Hospital are related, and some judicious remarks are attached to each. Without going into their analysis, or into the details of the manipulation required for each particular fracture, we may observe that the evidence, as far as it goes, is satisfactory.—*Nashville Jour. of Med. and Surg.*

THE POLICY OF THE GOVERNMENT TOWARDS THE INSANE.

Dr. Holt, of Lowell, made an elaborate speech upon this subject in the Massachusetts House of Representatives on Monday of last week. About twenty-three years ago, he said, the State built a Hospital at Worcester, a central location, and it was then supposed this would answer the wants of the State. It was now found, that although a new one had been erected at Taunton, on a much improved plan, still that want was not yet supplied. The Hospital at Worcester needs improvement or rebuilding, as it is not on the most aproved plan for the purpose for which it is designed, and the lands, about one hundred acres, are very valuable for other purposes. Dr. H. urged the inquiry, whether it would not be economy as well as benevolence to re-organize this institution. He thought that the prospective wants of the Commonwealth should be regarded; and as there

are some 2000 insane persons in the State, there should be built, within a few years, two new hospitals, one in the western and the other in the north-eastern sections of the State, in addition to what we now have. Two hundred and fifty was about the number of patients which could be well treated in one hospital. Although, at first view, this might alarm gentlemen on account of expense, yet he argued that these establishments would nearly or quite support themselves, from paying patients.—Formerly, when a person became insane, he was treated at home or kept in confinement, and the cure was protracted or doubtful, and attended with much expense and trouble. Now the custom is to send such immediately to a hospital, where recent cases are generally cured in from three to six months. Hence, one reason for the apparent increase in the number of insane persons. Dr. H. urged upon the Legislature the adoption of a liberal and enlightened policy towards this unfortunate class of our fellow citizens, in making ample public provision for their wants, and favored the passage of the *resolves* which were under consideration, for the appointment, by the Governor and Council, of commissioners to take the subject into consideration, and report to the next Legislature upon it. Other gentlemen coincided with these views, and the resolves were passed.—*Boston Medical and Surgical Journal.*

ANTI-PERIODIC PROPERTIES OF THE HUMULUS LUPULIS.

As a substitute for quinine is a great desideratum on account of its enhanced market value, I have thought a brief notice of the anti-periodic virtues of the humulis lupulis, or common hop, might not be unacceptable to the profession. I am not aware that any author has ascribed to this plant any such virtue. Having used it for nearly two years, I can confidently state that its anti-periodic properties equal, if they do not exceed, those of any other article of the materia medica with which we are acquainted, quinine alone excepted; and, indeed, in my experience, it has often succeeded in arresting intermittents after that remedy had failed. It is harmless in its effects, and will often be borne by patients who cannot take quinine.

Every practitioner is aware of the advantage of combining an anodyne with anti-periodics; and by reference to the works on materia medica, the reader will see that hops possess these properties. When administered alone, the infusion is preferable, and should be made of double the strength prescribed by the Dispensatory. One ounce infused in a pint of boiling water may be taken during the interval, or a larger quantity if necessary. If the secretions are properly regulated, and there exists no enlargement of the spleen, it will rarely fail to effect a cure of tertian or quartan ague. It has not succeeded so well in the cases of quotodian type as in those of more protracted intervals. The tincture was used alone in three cases successfully. The following combination is worthy a trial by all who desire a safe and efficient substitute for quinine:

℞ Tinct. hops, tinct. Peruvian bark, aa ʒ 4
Pulv. black pepper, ʒ ℈,
To be given in doses of half an ounce every two hours during the interval.

My limited experience will not justify an opinion upon the anti-periodic virtue of lupuline, not having used it, except in combination of quinine alone, on account of its soothing effect upon the nervous system. The hop is indigenious to this country, growing abundantly in almost every garden; and if I have not over estimated its anti-periodic virtue, it will prove a blessing to the poor, in whose welfare the physician should always feel a special interest. —*Western Journal of Med. & Surgery.*

MEDICAL PATRONAGE IN EUROPE AND THE UNITED STATES.

There are vast numbers of persons qualified by law to practice medicine and surgery in Europe; but the majority of those who depend exclusively upon their professional efforts, find it difficult it is believed, to sustain themselves in the country. Cities offer better prospects, and one or two in a hundred rise to distinction and affluence. Were it not for the standing armies of nearly every government on the continent, requiring surgeons of all grades, the field would be too small for the multitude who would be contending for a livelihood. As it is, with the navies and regiments to take up thousands, the numbers who abandon the profession, and turn their attention to industrial pursuits of a different character, would make quite a respectable force for an emergency, were they brought together.—With us, there is no encouragement for government patronage. A man would accumulate more as a farmer, and save it for old age, than he would be likely to lay aside when on a salary. This is decidedly the best country for a private practitioner.—Those in cites have the advantage over their brethren in country towns, on account

of receiving larger fees, and there being more service for somebody to perform. City practitioners of Great Britain and the continent are in the average receipt of far larger incomes than those similarly located in the United States; while those of the interior towns and villages there, fall below the corresponding class with us. London pays the largest sums to practitioners, but Paris, according to our recollection, gets advice and operations cheaper than New York or Boston. The majority of physicians are poorly paid in all civilized countries; so that the inducements for entering upon professional duties and responsibilities are hardly strong enough to warrant the undertaking, if an individual has high aspirations for property or position.—Both of these are attainable, by various avenues, in half the time that they could be acquired by the fatiguing labors of a mixed medical practice.—*Boston Medical & Surgical Journal.*

CHANCES OF WAR—LIFE INSURANCE.

The English Life Insurance companies have already prepared a set of tables, wherein are carefully calculated the probable chances of a person being killed in an action on the battle field. The probabilities of sickness, and death from ordinary causes, have long been the study of men engaged in the matter of life insurance; but latterly, they have given more attention to the chances of accidental death, from railroad traveling, violence, &c. A new field has recently been opened to the English companies, by the occurrence of the present European war. We cannot well understand how, with any degree of certainty, they can calculate upon the chances of being transfixed by a Cossack's lance, or a Russian bullet; but such is the fact, and the *premiums* to be paid by those who are engaged in this campaign are already decided upon. For instance £3 5s. on the £100 per annum, is the sum to be charged; and if to include the payment, in the case of the loss of a limb, of half the sum insured and payable on death, £3 3s. extra. We should judge, from reading these terms, that it was expected the Russians were to fire very low, and that a man was twice as likely to lose one of his legs as his head.—It may be a very good expedient to resort to, for engaging men for the service, but we opine that the surviving relative will have a very small chance of obtaining the bonus, in case of the death of a friend or relative.—*Boston Med. and Sur. Jour.*

ON SCARLET FEVER.

BY HAMILTON ROE, M.D.,

Senior Physician to the Westminster Hospital.

These remarks formed the substance of a clinical lecture. They are given in Dr. Roe's own words:—

The case I shall first notice is that of Samuel Stanford, a boy of thirteen years of age, who was admitted into King William ward on the 16th of October, and is now fast convalescing. He was a blear-eyed, scrofulous-looking boy, but not weak, and resided at Little Peter Street, an unhealthy locality in this neighborhood. There was no evidence of his having had communication with any one similarly affected. He said he had been seized with fever and sore throat three days before his admission, and from that time had been gradually getting worse. He was covered with a scarlet eruption, most marked over the abdomen, and complained of great difficulty of swallowing from the state of his throat, which was red and swollen. His tongue was coated at the base, red at its tip, and on its edges; his respiration was easy; pulse quick, heart's action accelerated, but unaccompanied by any unusual sounds; his skin was hot; his bowels had not been opened for three days; his breath was offensive; his urine high-colored; his senses were dull, and heavy without taking notice of any one.

Now it must be evident to you, that before we can form a correct notion of the treatment that is likely to prove useful for any disease, we must have ascertained its causes, and its consequences or terminations; for, unless we have done this, we have nothing to guide us in selecting remedies. The opinion now generally entertained by the medical profession respecting scarlet fever, is, that in common with typhus fever, small-pox, cholera, and other epidemics, it is caused by the introduction of some poison into the system, from inhaling air in which miasma is suspended, or some noxious gas mixed; that when the poison is got rid of pretty soon, recovery takes place; but when it is not, that it induces disease of one or more vital organs, which often destroys life. The kidneys, bronchi, and lungs, are most frequently affected, and, therefore scarlet fever may be said to terminate in Bright's kidney, bronchitis, or pneumonia. Rheumatism also has been observed, by Dr. Golding Bird, to come on occasionally after it.

The first indication of treatment when a poison has either been taken or entered into the system is, to give an antidote for it, and this we should do in all cases of

epidemic disease, if we could; but we are not acquainted with any medicine which possesses the power of destroying an animal poison within the body; we are therefore, obliged to direct our efforts towards counteracting its effects, and assisting the system towards throwing it off through some of its emunctories. The symptoms or effects which are usually first observed are chilliness, rigor, oppressed circulation and a torpid and depressed state of the nervous system, which sometimes prove speedily fatal. I have known scarlet fever to cause death within twenty-four hours after the eruption has appeared, and small-pox has frequently done the same. To counteract the effects just enumerated it is considered by many medical practioners advisable to give emetics as early as possible after the disease has set in, as having a tendency to cool and soften the skin, and to induce it to perspire; they also divert the blood from the internal organs to the surface, and help the system to rid itself of the poison. The medicines usually next given are intended to fulfill one of the following indications according to the view of the practitioner—to increase some of the natural secretions, in the hope of their carrying off the poison—to strengthen and support the system under the efforts it will make to get rid of it—or to destroy its power by chemical action. Dr. Hamilton, of Edinburgh, advised purgatives with the first view; carbonate of ammonia, bark, and stimulants have been recommended by others with the second; hydrochloric acid and chlorine, with gentle aperients, have long been used in this hospital and elsewhere with the third view. The chlorine mixture is made by mixing ten grains of chlorate of potash with one drachm of hydro-chloric acid, and when the chlorine is all evolved, adding water to it by degrees, until it is taken up. Diluents and liquid nutriment are also given freely, and, under this mode of treatment, a large majority of patients affected with epidemic disease recover. Scarlet fever is to be treated on similar principles, for we have no antidote to its poison; belladonna has been asserted to be one, and a prophylactic also against it, but on no better grounds than that it causes the same symptoms and appearances; you will, therefore, not be surprised to hear that its frequent failures prove that it does not possess the power of either one or the other.

In Stamford's case the principles of treatment were partially carried out. An emetic of sulphate of zinc was first given him, then a mixture of antimony and ipecacuanha. He was directed to drink freely of warm rennet-whey, which, as you know contains much of the nutritive matter of milk, and is readily taken up by the veins, and absorbed without requiring much effort on the part of the stomach to digest it, and a diet of weak beef-tea and veal broth, was ordered for him. This plan of treatment had been commenced when I first saw him, and as he was progressing favorably I did not alter it. A piece of flannel, soaked in a saturated solution of camphor in spirits of wine,—a valuable stimulant by the way,—was put round the throat, with very good effect, according to the suggestion of Mr. George, of Kensington, who has lately written a very interesting book on its utility in small-pox. On the 23d, an infusion of cinchona was substituted for the former medicine, and he left the hospital well on the 2d of November. His urine was examined several times during his illness, but on no occasion did it exhibit a trace of albumen.

The next case was that of Clara Glover, aged five years and a half, who was admitted into Adelaide ward on the 21st of October. She resided in a house in Lower Gardiner street, which was reported to have been examined and pronounced healthy a few days before by the Sanitary Commission. Her parents had seven children; two of them were lying dead at home when she was brought in, and the other four were sickening, in all probability with the same disease under which she was herself laboring. She looked to be a strong child, and was said to have been very well until the day before, when she began to be very feverish. On the morning of the 21st a scarlet eruption appeared all over her body; her throat was very sore, skin hot, pulse quick, respiration natural, and tongue very red, but she had no alarming or unusual symptom. One grain of tartar emetic was directed to be given immediately, and afterwards the chlorine mixture, with a gentle aperient; rennet-whey and broth were her drink and diet. Under this treatment she went on very well until the 23d, when she appeared languid, her pulse feeble, her eyes sunken, and her color of somewhat leaden hue, and the eruption paler than it had been; but she had no cough, movement of the alæ nasi, difficulty of breathing, nor other symptoms to show that the lungs were becoming diseased. Under the impression that she was sinking, and wanted support, wine was given her with arrow root, and her throat was sponged internally with a stimulating gargle. On the next (Sunday) she was still more depressed when I visited her. I gave her immediately some warm wine; but after swallowing a few tea-

spoonfuls, apparently with pleasure, she turned her eyes up as if going to have a fit, and expired. That was the fourth day after the eruption had appeared. Many of the gentlemen now present saw the post-mortem examination. No doubt you noticed that the artyenoid cartilages were in such close opposition that air could not pass between them, and, therefore, you must feel convinced that this child died from suffocation; the trachi and bronchi were healthy, but here and there throughout the lungs were portions congested with blood; the head was not examined; the heart and kidneys were natural.

The important questions in reference to other cases in which similar symptoms may hereafter be observed is,—Had the state of the lungs been superinduced by the narrowing of the operation into the trachea, or had that been caused by the congestion of the lungs? On the former supposition, tracheotomy might have saved this child's life; on the latter, that operation would have been useless, and active measures to relieve the lungs might have been attended with a similar result. The progress and termination of the next case show which of the diseased states was probably the antecedent one, and also what mode of treatment was most likely to be successful.

Henry Walsh, aged eleven years, was admitted into King William ward; from Yalding, early in September, suffering from great difficulty in breathing. His countenance was blue; his respiration loud and wheezing; his chest moved very little during an inspiration, and sounded tympanitic generally, but in some parts a degree of dullness was perceived; loud rales of various kinds were heard over the chest; his heart acted feebly, but its sounds were not unnatural. It was stated that he had the affection of his breathing from childhood; nauseating medicines were given him, with some relief, and he went on tolerably well until the 20th of October, when he became feverish, skin hot, throat very sore, pulse much accelerated, but his respiration was less difficult than usual. It was then observed that he was covered with a scarlet eruption, and that his tongue was very red; and as a boy in the same ward had just had scarlet fever, it was probable that he had taken that disease from him. An emetic was given him immediately: this was followed by the chlorine mixture; warm whey was his drink, and his diet was beef-tea. He went on favorably until the 25th, when he was observed to have the peculiar look which Clara Glover had when she changed for the worse,—a faint expression, sunken eye, and similar color of his skin; his pulse was very feeble, like hers, and his skin was cool, but there was no indication of any increased difficulty of breathing, nor any material or marked physical symptom to show that the state of the lungs was worse than it had previously been; but the similarity of his appearance to that of the child in whom the lungs had been congested, induced me to believe that he was laboring under a similar affection. Under this persuasion, I gave him one grain of tartar emetic every four hours, and directed that wine or brandy should be administered, lest that medicine should lower him too much. Next day (Oct. 26) he was visibly better; the sunken eye and depressed expression of the countenance had disappeared; his nervous energy was increased; his pulse was stronger and skin warmer; his color was bluish. I then directed the tartar emetic to be given only when his breathing became difficult; he took it twice in the next twenty-four hours. This plan of treatment was continued for a few days.—On the 1st of November he appeared to be suffering less, and in every way better than he had been on his admission; the wheezing not so loud, and the rales fainter; and he is now as well as usual. His urine had not exhibited any traces of albumen throughout the course of his disease.

The similarity of this boy's general appearance and symptoms, on the 25th to Clara Glover's on the 23d—the days on which they respectively became worse—made it more than probable that the same cause had produced them. That this cause was congestion of the lungs was made all but certain by the detection of that morbid condition at the post mortem examination of the girl; by the beneficial action on the boy of medicine known to be specially useful in such cases; by the absence, in both cases, of stridulous breathing, and the other characteristic signs which invariably accompany contraction of the orifice of the trachea; and, in the girl's case, of any long standing alteration of structure which could have caused sudden death. The state of the lungs, therefore, could not have been induced, in either case, by the approximation of the artynoid cartilages, or any contraction of the opening into the air passages, for no symptom of either was ever observed in the boy, nor, indeed, in the girl; it must therefore have been the antecedent affection.

In case such as these tracheotomy could not have been useful, and the only measures likely to prove so must be such as would assist in the removal of the congestion. But you will naturally enquire why

the diseased condition of the lungs was not detected at its commencement? The answer is, that there was no visible disturbance of the respiratory functions to attract our attention. Organic affections of the lungs are known to be amongst the sequelæ of scarlet fever, but are not expected to occur at the early stage of it; we were not therefore, on the watch for them; for these reasons, we did not make, in the girl's case, that minute examination of her chest which would have been necessary to detect the slight degree of congestion which existed in her lungs, and which could not have caused death had there been no accompanying fever, and it was overlooked. In the boy's case, we were put on our guard by what we had detected in the girl, and consequently made a proper examination of his chest, discovered the state, and administered remedies, which, as you saw, restored him from an apparently dying condition. In typhus fever, of a certain type, this form of congestion, unaccompanied by any difficulty of breathing complained of by the patient, or visible to the eye, is known to be a common occurrence; we are therefore always on the watch for the very first symptom of it. But not so in scarlet fever, for death in the early stage of it,—that is, soon after the appearance of the eruption,—is supposed to be caused by the shock given to the system by a poison; if it occur at a later period of the same stage, but before the eruption has disappeared, it is usually attributed to the state of the throat and the depression of the vital powers, which are supposed to be the later effect of the same cause; and it is only after the complaint is over that organic disease of the kidneys, lungs, and bronchi, are believed to occur.

Now, the occurrence of these two cases has become me to suspect that many of those instances in which the state of the throat and debility are supposed to be causing death, is congestion of the lungs that in reality is doing so, and they are merely its effects or consequences. To confirm or remove this suspicion I shall request all my medical friends who have the opportunity of seeing much scarlet fever amongst the poor, to examine the body of those who die of the disease—to note the alterations of structure they observe, and the stage at which the signs of their presence were first perceived and until statistical inquiries have removed all doubts as to the cause of the peculiar symptoms observed in the last two cases to try tartar emetic whenever they present themselves. Meanwhile the lessons we have to learn are, that in early stages of other fevers besides typhus, congestion of the lungs may take place, and that, owing to that diminished sensitiveness to the want of air which probably all fevers produce, such a condition may be unaccompanied by any consciousness of its existence on the part of the patient, or the characteristic rational signs which are always observed when there is no specific fever to mask them; and therefore that in all fevers we should examine the lungs daily.—*The Lancet, March 26th*, 1853.

THE RESULTS OF REVACCINATION AS OBSERVED IN 257 CASES.

BY W. B. HERAPATH, M.D.,

Surgeon to St. Peter's Hospital, Bristol.

Dr. Herapath arrived at the following results upon the occasion of an extensive revaccination amongst the children of two large public schools in Bristol—the Red Maid's school and Queen Elizabeth's Hospital. All the children had had small-pox or cow-pox before admission.

1. That three cases revaccinated within seven years were not again susceptible to vaccine.

2. That vaccine, after the interval of from eight to seventeen years. does not prevent the reception of vaccine again, except in 22-174 per cent.

3. That the distinctness or imperfection of the vaccine cicatrix does not materially alter these results.

4. That variola does not prevent the formation of the vaccine vessicle, except in about 23-53 per cent.

5. That the occurrence of small pox subsequently to vaccination does not destroy the susceptility of the human system to again receive the vaccine poison except in about 10 per cent.

6. That in all the previous cases, whenever the secondary vaccine vesicle assumed its perfect form, its subsequent history was the same as if the system had not previously labored under vaccine variola or varioloid.

7. It is probable that the protective influence of vaccination has diminished in consequence of repeated transmission of the vaccine matter through the human body.

8 It is desirable that re-vaccination should be extensively followed, as one means of giving additional protection to the masses.

9. That when possible, the stock of vaccine should be renewed by going back to the original source.—*Association Med. Journal, April* 15, 1853.

FACTS RELATING TO SCARLET FEVER.

BY B. W. RICHARDSON, ESQ.

The following is an abstract of Mr. Richardson's paper:—The author commenced by stating, that he should confine himself to the consideration of matters of fact in relation to scarlet fever. The *types of scarlet fever* had a brief notice. There could be no doubt that the disease showed a variety of types in individual cases; but in great numbers of cases such types became indistinct; and it would be much to the interest of science if medical men would cease to call the disease by different names, and would employ one term, "scarlet fever," to express every form or shade of disease. *The occurrence of scarlet fever at different periods of life* came next under notice. A law might be laid down on this matter, viz., that up to the age of ten years, the liability to scarlet fever is very great; but that after ten, the liability rapidly decreases. A record of 402 cases from the report-books of the author and of three other gentlemen showed, that 210 of these cases occurred in children under ten years, and only 92 in the after-periods of life. The same law might also be shown by the Register-General's returns; and the attention of the Society was then directed to a table derived from these returns, in which it was illustrated, that out of 31,744 deaths from scarlet fever, 21,469, or more than two-thirds occurred, in patients under five years of age; 7756 at five years and under ten; 1755 at ten and under twenty years; 552 at twenty and under forty years; and only 212 in the after periods of life. A percentage table on the same subject was also exhibited. In reading over the various works on scarlet fever, the author had found more than one eminent writer (among others Whithering) stating, that children under two years, and babes at the breast, were not subject to attacks from scarlet fever. This statement of time would describe a remarkable fact. It was not true, however, for in 212 cases of which he (Mr. Richardson) had notes, no less than 14 occurred in infants under two years of age. The returns of the Register-General indicated that out of 12,902 deaths from scarlet fever in patients under five years of age, upwards of 7000 took place before the expiration of the second year. The same returns also showed, that in 3796 deaths from scarlet fever, 410 were in the first year of life; and 1588 from the third to the fifth year. These results were illustrated by tables. The greater prevalence of the disease in early life does not arise from any physiological peculiarity, but from the facts, that recurrence of the disease in the same person is contrary to the general rule, that most persons are subject to the influence of the disease, and that that influence is constantly present in greater or less degree. The occurrence of scarlet fever in the two sexes was also discussed by the author. Up to the present time, every writer on the subject had asserted, that the disease was more prevalent among females than males. The report of the Register-General overturned this opinion, and showed that scarlet fever made no selection in the sexes, but attacked more males or females according to the relative number of males or females susceptible to its influence in any district where it might be epidemical. Three extensive tables were employed by the author for elucidating this point. The manner in which the seasons influence scarlet fever was referred to at considerable length; and it was shown, by reference to the general observations of numerous authors, and by extensive statistical data, that the disease was most prevalent in the last three months of the year; next so, in the months of July, August, and September; next so, in January, February, and March; and least so, in May, April and June. Mr. Richardson here took occasion to observe on the false statements which are apt to occur from making statistical tables out of small numbers of cases.

The Recurrence of Scarlet Fever.—That scarlet fever might occur twice in the same person there could be no doubt; and in addition to the written evidence brought forward in support of this fact, the author gave instances in which he had seen the disease recur, and stated, that he himself had suffered from it twice severely and a third time mildly. He believed, however, that recurrences was rare, and that the disease never proved fatal in second attacks.

The mortality of Scarlet Fever.—This question, as far as it related to age, sex, and season, has been discussed already, incidentally; but there yet remained to be considered the mortality to other epidemic diseases. As regarded locality, the author was only able he said, to speak of the disease as it occurred in this country; and he then went on to show, by tabular reference, that nearly twice as many deaths occur in towns as in rural districts; and also that the disease did not fall on the whole country at once with an equal degree of severity, but was at similar periods absent to a great degree in one locality and extensively present in another. The subject of relative mortality of scarlet fever possessed much interest; and the author had taken great pains

to illustrate it copiously by tables, derived from the Register-General's Reports. In one of these tables, the calculations were based on not less than 462,227 cases of death from seven epidemical diseases; and the results in all showed that scarlet fever was second only in its rate of mortality to typhus fever, as an ordinary epidemical disorder. After observations on the mortality of scarlet fever, Mr. Richardson briefly summed up the various conclusions to which he had been led by his investigations, and finished by remarking, that if those conclusions exhibited differences from the usual opinions held on the subject, such differences arose solely out of the mode of inquiry that had been pursued; while on the contrary, if it should be thought that some matters well known already were restated, these restatements had been based on particular evidence instead of general observation, and that—

"Truth can never be confirmed enough,
Though doubts did ever sleep."

Association Med. Journal.

ON THE ARREST OF CONTINUED FEVER BY CINCHONISM.

By (1) J. Ogden Fletcher, M.R.C.S., Surgeon to the Manchester Fever Wards; and (2) R. Gee, M.D., and E. W. Eddows, Esq., Resident Medical Officers of the Liverpool Fever Hospital.

(1) Medical Times and Gazette, April, 26, 1852; and (2) The Lancet, July 2, 1853

In an article on this subject, Mr. Fletcher thus writes:

I had long been convinced of the great good produced by the administration of quinia in the early stages of uncomplicated typhus fever. In the Manchester epidemic of 1847–48, its effects were highly beneficial; and I was led to the conclusion, that in all cases of fever where there was a tendency to bowel complication (a very general one in this district,) the early administration of quinia would certainly check, if not cut short, the disease.

Since I became aware of the views of Dr. Dundas, I have followed them out in all uncomplicated cases of typhus fever; and the result of my experience in eighty cases admitted into the Manchester Union Fever Wards is briefly as follows:—

1st. In the majority of cases, cinchonism established a permanent convalescence within forty-eight hours.

2dly. In the cases where the typhoid character was established prior to the use of the remedy, five sixths were convalescent within fourteen days.

3dly. In children and patients under puberty, suffering from uncomplicated typhus, nine-tenths were discharged cured within fourteen days.

4thly. In cases complicated with pneumonia, and attended with rose-colored spots, the latter disappeared under cinchonism; but a more active form of fever often supervened, which require depletion and other active remedies.

5thly. In all cases where the complication was well established—whether pneumonia, ulceration of the bowels, or cerebral congestion—cinchonism produced very little good.

Dr. Gee and Mr. Eddows gives the following statistical results of their experience.

Of 61 uncomplicated cases, 11 were under treatment during the first seven days; of these, 2 were free from fever on the second day after treatment; 1 on the third day; 2 on the fourth day; 3 on the fifth day; 1 on the sixth day; 1 on the seventh day; 1 on the eleventh day. In 24, the treatment was commenced during the second week: of these, 1 was free from fever on the second day after treatment; 2 on the third day; 5 on the fourth; 7 on the fifth; 5 on the sixth day; 2 on the seventh day; 1 on the eighth day; 2 on the ninth day; 1 on the twelfth day. In 26, the length of time that the fever had previously existed was not ascertained: of these, 5 were free from fever on the second day after treatment; 6 on the third day; 3 on the fourth day; 4 on the fifth day; 3 on the seventh day; 1 on the eighth day; 3 on the ninth day; 1 on the twelfth day.

The quinia was also given in 27 complicated cases, the chest being involved in 22, the abdomen in 2, and in 3 both the abdomen and chest were effected. Of the 22 cases where the chest was involved (the affection being, as before remarked, generally sub-acute bronchitis,) 15 were treated during the first week: of these, 1 was free from fever on the third day after treatment; 1 on the fourth day; 2 on the fifth day; 4 on the sixth day; 2 on the eigth day; 1 on the ninth day; 2 on the tenth day; 1 on the eleventh day; and 1 on the twelfth day. In the 7 the treatment was commenced during the second week; of these, 2 were free from fever on the third day; 2 on the fourth day; 1 on the sixth day; 1 on the seventh day; 1 on the tenth day.

The remedy employed in the above complication, in conjunction with the quinia, was a large mustard jacket placed round the whole of the chest both back and front, applied twice or thrice daily, and left on as long as the patient could bear it.

Two cases occurred with abdominal complication: of these, one was admitted on the ninth day of the fever, and recovered on the sixth of treatment; the other was admitted on the fifth day of fever, and recovered on the seventh day of treatment.

Three cases occured with abdominal and chest affections: of these, 2 were admitted on the fifth day of the disease, and were free from fever on the fifth day of treatment; 1 admitted on the eighth day of fever was free from it on the tenth.

Thirteen cases in which the quinia was given proved fatal: of these, 5 died within forty-eight hours after admission. Of the remaining eight, one was admitted on the eighth day of fever, and died on the eighth of treatment. One was admitted on the fifth day of fever, and died on the sixth of treatment: this man had persistent hiccough, congestion of lungs, and had had a severe attack of fever seven months before. One was admitted on the seventh day of fever, and died on the tenth of treatment: this patient was allowed nothing but barely-water previous to admission; tubercles in the right lung. One was admitted on the fourteenth day of fever, and died on the fifth of treatment: the quinia seemed to produce no effects. One was admitted on the ninth day of fever, and died on the sixth of treatment: this patient had two kinds of spots, the one disappearing, the other unaffected, by pressure; had been a hard drinker. One was admitted on the fifth day of fever, and died on the eighth of treatment: a woman æt. 76; this was the only fatal case where the pulse was reduced below 100. One was admitted on the fourteenth day of fever, and died on the fourth of treatment: the quinia did no good. One was admitted on the eighth day of fever, and died on the third of treatment: had involuntary emotions when admitted.

The effect of the quinia on the pulse is, in favorable cases, sometimes very remarkable: in one case it fell from 104 to 72 in twenty-four hours; but generally speaking the reduction is gradual and steady. In cases which terminated fatally, the quinia, with one exception never reduced the pulse below one hundred; it sometimes fell from one hundred and forty-eight to one hundred and twenty-four, from one hundred and twelve to one hundred and eight, from one hundred and forty to one hundred and fourteen, but not below one hundred. None of the fatal cases were under treatment before the fifth day. In complicated cases the effect on the pulse is less marked than in those which are freee from complication.

IODIDE OF POTASSA IN SOME FORMS OF CHRONIC PERIOSTEAL RHEUMATISM

Dr. W. R. Basham states that there are some cases of periosteal rheumatism in which the curative agency of the iodide of potassa is very conspicuous, while in others, having many symptoms in common with them, its effects have been doubtful or nugatory.

"From time to time he says," cases have come under observation, presenting the usual symptoms of chronic rheumatic pains, gnawing and erratic, with paroxysms aggravated by atmospheric changes; and there has been diffuse tenderness of the periosteal surfaces nearest in contiguity to the skin, as the scalp, clavicles, ulna, tibia, &c.; sometimes distinct tumefaction with exquisite tenderness; and these nodal elevations in some have been evanescent, in others persistent during the whole course of the malady. It has been frequently noticed, and practitioners of experience cannot have overlooked the fact, that some of these cases materially and rapidly improve under the administration of the iodide of potassa, while in others, with symptoms in all respects identical, no benefit has been derived or improvement become apparent till the patient has been put through a course of bi-chloride of mercury and sarsaparilla.

"I was once inclined to think that these varying results depended on peculiarity of constitution, and that the treatment of such cases by one or other of these remedies must remain, to a certain extent, empirical, and destitute of any settled principle. But a careful examination of all the precedent conditions in the histories of such cases exhibited the following facts: That in all the cases in which the iodide had been productive of benefit, the patient at some antecedent period had been salivated, in some for syphilis, in others for an inflammatory or other disease; while in those cases in which no benefit was obtained by the iodide, the patient had either never taken mercury to salivation, or had suffered from syphilis or gonorrhea, which had either been neglected or teated only locally. It appeared, then, that there were two predisposing causes to the same form of chronic periosteal rheumatism, the impregnation of the system by mercury, and the lurking and subtile influence of the syphilitic virus.

"In my clinical lectures for some years past, I have directed the attention of students to these facts, and impressed on them that the treatment of these cases of chronic periosteal rheumatism should be based on these principles; the first form of the dis-

ease requiring the iodide of potassa, the second from the agency of alterative doses of some mild preparation of mercury.—*Lancet*, 1853.

STATISTICS OF DEATHS AMONG THE ASSURED.

BY ROB. CHRISTISON, M.D., and J. BEGBIE, M.D.

Drs. Christison and Begbie have recently presented reports on this subject to the Medical and Chirurgical Society of Edinburg, of which the following is an abstract. The reports are published at length in the *Edinburgh Monthly Journal* for August.

The report of Dr. Christison is chiefly to the investigation of the causes of death as bearing on the business of life assurance; that of Dr. Begbie, while embracing this view of the subject, enters more into strictly medical detail, for which the large experience of the Scottish Widows' Fund (embracing considerable more than 1000 deaths) afforded a sufficient basis. Both reports were full of matter interesting to every medical practitioner. A large proportion of deaths in both offices had been caused by epidemic fever; and both reports testify to the fact, that the typhus of this country is not only frequent cause of death, but that it appears to select its victims very frequently from the most unexceptionable lives of the community, and to terminate these abruptly at the period of greatest activity. The same may be said of cholera, which, during the last epidemic visitation, seems to have fallen heavily upon the assured in middle life. Next to fever, as a source of loss to the community, stands phthisis and tubercular disease, which likewise finds victims to a great extent before the middle period of life. It is remarked that, in the report of the Scottish Widows' Fund, the number of deaths from phthisis after the age of 40 appeared larger than is usually observed in mortality lists, or in the general experience of medical men. In apoplexy and palsy, on the other hand, the returns at the different ages correspond closely with the table given by Rochoux. An accurate analysis of the deaths from these causes shows that, whereas in phthisis most of the lives had, at the period of acceptance presented some character which might have led to their being considered doubtful; this was not the case in apoplexy. The investigation, therefore, of the premonitory signs of the apoplectic tendency was pointed out as a desideratum by the authors of the papers.

Edinburgh Monthly Journal.

NICOTIN INJECTIONS IN PARALYSIS OF THE BLADDER.

BY ANTONIO PAVESSI.

L. R., between 60 and 70 years of age, of athletic build, but subject to attacks of gout, became affected, after nocturnal exposure to cold, with severe pains in the loins and the extremity of the spinal cord, attended with pain in the region of the bladder and strangury. After the employment of proper remedies, these general symptoms disappeared, but paralysis of the bladder remained, inasmuch as sixty hours had been allowed to pass after the first occurence of the strangury, before the introduction of the catheter; from fear, as it was supposed, of exciting inflammation. Many remedies proved of no avail, and the patient was obliged to seek surgical aid twice or thrice a day, or to wear the elastic catheter. On August the 2, he came under the care of Dr. Pavessi, who tried the effect of electricity by Daniell's battery, applied to the lumbar region, but without permanent good effect. Then nicotin was employed in the following way: Every morning a silver tube was introduced into the bladder, after its evacuation, four or five ounces of a decoction of mallows was injected to clear the organ. After a few moments the fluid was allowed to flow out, when half an ounce of a solution of nicotin (twelve grains in twelve ounces of water,) with one ounce of thin gum water, was injected. In the afternoon the injection was repeated, and in three days the quantity was increased to one ounce. While this was going on, the bladder acquired a daily increased power of contraction, so that at the end of fifteen days the catheter was laid aside. The patient did not experience any effects upon the brain. On September 22, he voided the urine in a full stream, and without straining.—*Med. Times and Gazette*, Oct. 8, 1853, from *Gaz. Lamb.*

BURNING FLUIDS.—A bill has been reported in the New York Assembly, and is under consideration, for prohibiting the use of camphene, spirit gas, and all preparations of alcohol or spirits of turpentine, for the purposes of illumination, in stage coaches, omnibuses, railroad cars and steamboats, under severe penalties. It certainly is a humane act, and ought to pass; but how far it will influence those who risk their lives by the use of these dangerous articles in private dwellings, for the sake of *economy*, is a question we are unable to answer.—*Boston Med. and Sur. Jour.*

MALE-SHIELD-FERN AS A REMEDY FOR TAPEWORM.

Dr. Robert Christisbn extols the oleo-resinous extract obtained by ether from the root of the male-shield-fern, as a more efficacious and less disagreeable anthelmintic for the expulsion of tænia, than either the kousso, the pomegranate, or the turpentine. Upwards of twenty cases, he says, have been communicated to him in which that remedy had been used, and "in every case without exception the worm was discharged after a single dose, and usually in one mass. In some it was brought away without any laxative, and occasionally in that case with very little feculent discharge accompanying it. For the most part there was no pain or other uneasiness, either before or during its action. This was the case even in an instance in which the tendency to the disease had existed for no less than seventeen years, and in which the worm evacuated was the largest and strongest I have ever seen. Several patients, who had often previously used other anthelmintics, have noticed this absence of uneasiness during the action of the male-shield-fern, as sometimes different from what they had experienced invariably before. It must be allowed, however, that several other individuals have complained of griping, sickness, or indescribable discomfort in the abdomen and sometimes even of vomiting. But it admits of question, whether these occurences depend on any direct action of the remedy on the human body, or upon the disturbed condition of worm under the poisonous operation of the remedy on it. In fact, we have yet to learn that the male-shield-fern exerts any action on the human stomach or intestines, in the course of its deadly action on the parasitical inhabitants of them."

Dr. C. reccommends twenty-four grains for a dose.—*Monthly Journ. Med. Sci. July*, 1853.

SESQICHLORIDE OF IRON, ETC., IN ERYSIPELAS.

Many instances have lately occurred in the London hospitals, in which the treatment of erysipelas by the much vaunted tincture of iron has appeared to be very successful, but none of the experiments have been sufficiently crucial in their character to warrant us in considering their results as conclusive. Still, however, the evidence in favor of the remedy is very strong. Some of the patients on whom it has been tried have been young children. With regard to local applications in this disease, it may be stated that the wrapping up the affected part in a large and thick sheet of cotton wool, appears to be very superior in its protecting influence to all others. In several severe cases of erysipelas of the scalp, lately, in St. Thomas's Hospital, Dr. Goolden had the whole affected parts smeared over with a thick coating of white paint. The patients did very well, but the remedy is not an agreeable one to use. It is, we believe, in common employment in some of the pottery districts, where erysipelas of the face and head, from the alternate exposure to cold draughts and to furnace heat is very frequent.—*Med. Times and Gazette*, Nov., 1853.

LOBELIA IN ASTHMA.

The lobelia inflata, a drug much praised and abused by quacks, and somewhat slighted by the profession, is in constant use among the out patients in the City Hospital, for diseases of the chest. In doses of ten minims three times in the day, it appears frequently to produce most admirable effects in cases of chronic bronchitis complicated with tendency to paroxysmal asthma. It is commonly given in conjunction with sedatives, expectorants, or stomachics, often agreeing remarkably well with the latter. Patients taking it frequently complain of much nausea and sense of depression during the half hour or so following each dose; but it seems, on the whole, to decidedly improve the appetite and digestion. If the nausea be excessive, combination with a few drops of dilute hydrochloric acid is often useful.—*Med. Times & Gazette*, November, 1853.

THE ACTIVE PROPERTIES OF MEDICAL PLANTS.

A communication has just been received at the State Department, Washington, from our minister at Paris, relative to the will of M. Breant, the French *savant*, who left 100,000 francs as a premium to the person who shall discover the cause of Asiatic cholera, or a cure for it. The money is left in trust to the Institute of France; but the Institute have made no regulations, as yet, for the presentation of Essays, as the heirs of M. Breant are contesting in court the legality of the legacy. As soon as a decision is declared, if in favor of the legacy, it is expected that the Institute will proclaim the regulations, &c. to be observed by the competitors for the prize. Until then, no communications will be of any avail.—*Boston Med. and Surg. Journal.*

DYING DECLARATIONS.

A case of murder was tried before the Supreme Court of the State of Massachusetts, in May, 1853, Chief Justice Shaw presiding, in which this matter was considered. The facts are thus stated in the usual summary preceding the narrative of the trial.

Angelina Taylor, at the point of death, and conscious of her condition; but in consequence of wounds inflicted upon her head, being unable to speak articulately, was asked whether it was C. (Thomas Casey) who inflicted the wounds, and if so she was requested to squeeze the hand of the person asking the question. Upon the above question being put to her with the accompanying request, she squeezed the hand of the person making the inquiry. Held that under all circumstances of the case, there was proper evidence for the consideration of the jury, they being the sole judges of its credulity, and of the effect to be given to it.

After this outline, only a few necessary explanations need be added. On the 17th of September, Taylor was found dead and his wife grievously wounded, in their house. She was alive, and continued so until the 21st. An axe, bloody, and with hair upon it, was found near the entry door.

The circumstantial facts were strongly in favor of the prisoner being the murderer. He had differences with Taylor.—Tracks, of a person running, were found in the ploughed field in the rear of the house. The shoes of Casey exactly fitted the tracks. A shirt, which he afterwards confessed to be his, was found in the wood through which he passed, rolled up, with stains of blood upon it. Indeed, he made a voluntary confession of his crime, while in jail awaiting trial.

The point of chief interest in this trial was the admission of the species of evidence noticed above. Mrs. Taylor, as has been stated, lingered more than two days, after the fatal blow was given, and retained her consciousness. The wound was such as to prevent her from speaking, except that in one instance she answered "yes," somewhat inarticulately. She was evidently conscious of what was passing round her, recognized her children and friends, and understood the questions put to her, and at the same time was aware that her chance of recovery was hopeless, and that she was at the point of death.

Upon the question, as thus stated, being put to her, she took her hand out of the bedclothes, grasped the hand of the person named to her, and squeezed it for about half a minute, and then let it go.

This was repeated to at least four physicians in succession, at different times.

The wound, according to the testimony of the attending physician, Dr. Hoyt, extended from the eyelid six inches across the head; there was a partial paralysis; the brain protruded through the wound, and in washing the wound a small portion of the brain washed away.

The court, on the objection to the admissibility of this kind of evidence, observed that all words were signs; some are made by the mouth, and others by the hands. If the injured party had but the action of a single finger, and with that finger pointed to the words yes and no, in answer to questions, in such a manner as to render it probable that she understood and was at the same time conscious that she could not recover, then it was admissible evidence.—*Commonwealth* v. *Casey*. *Monthly Law Reporter*, August, 1853.

EFFECTS OF MENSTRUATION ON THE MILK OF NURSES.

BY MM. BECQUEREL AND VERNOIS.

Upon the effect, which the occurrence of menstruation exerts in women who are suckling, there is a discrepency of opinion among authors, the majority, however, with the public at large, believing in its deteriorating influence. So great is the difficulty in obtaining true statements upon this point, that, among the great number of hired nurses in Paris, the authors have been only able to examine the condition of the milk in three women while actually menstruating. In these, the density of the fluid was found slightly diminished, as was the proportion of sugar, and the proportion of water was sensibly so. The solid parts were notably increased, especially the casein. The authors cannot believe that such changes in composition can induce any mischief beyond some temporary derangement in the digestive organs, and even this might be prevented by causing the child to suck less, and letting it drink a little sugared water, to replace the sugar and water lost during menstuation.

In the discussion that followed reading the paper, M. Roger observed that, while attached to the Office for Nurses, he had paid considerable attention to this point, and that he had arrived at the following conclusions: If the menses reappear easily, without pain or derangement of the nurse's health, while her milk is under twelve or fifteen months old, and the quantity of

blood lost is normal and moderate, the quantity of milk does not become diminished, or its qualities altered, and the child does not suffer from its use. If, however, the menses are too abundant or too frequent, the milk may diminish in quantity, or disappear. The same effect is also produced, though more slowly, in some days or weeks, when the menses are prolonged for a week, so that the loss is considerable. The milk will much more certainly dry up if the menses reappear at an advanced period of lactation—this being then the signal of the imperfection and approaching termination of the secretion.

When the milk becomes thus diminished, it rarely exhibits the physical characters of poor milk; but by its density, whiteness, and the excess in number and size of its globules, it more approaches in character and richness cow's milk. When the menstrual epochs reappear with difficulty, and are attended with pain, indigestion, diarrhea, etc., or are preceded or followed by leucorrhea, the child may suffer symptoms due to indigestion induced by the altered characters of the milk, the alteration of the milk chiefly consisting in increase in the number and size of the globules. These influences are, however, only temporary, and the milk soon recovers its normal character. The ailments which the child hence suffers are only temporary, and have been greatly exaggerated.—*L'Union Medicale*, No 70.

IDENTITY.

A very curious case under this head is related in the Monthly Law Reporter for August, 1853, as occurring in Massachusetts; but as no physical marks are pointed out, beyond the personal appearance, I shall endeavor to state the principal facts, as concisely as possible.

In February, 1852, a person named Hiram Shepardson, the keeper of a hotel at Roxbury, was arrested, indicted, and tried for obtaining a quantity of butter under false pretences. The person selling the butter, and his clerk, swore to the identity of Shepardson. They gave a description of his person, and swore positively that the defendant was this man. Two other persons, from whom it was asserted that he had purchased butter on the same day, swore as positively to his identity.

For the defence, an *alibi* was asserted, and evidence was put in to show that on the days charged he was not where the government charged that he was. The jury could not agree (seven for acquittal,) and he was discharged.

Shepardson was then charged on a second indictment. The witnesses for the prosecution spoke with somewhat less certainty, and an *alibi* was again interposed. The jury here did not agree.

These circumstances led to further examination. By means of inquiry as to the whip and sleigh in the possession of the actual criminal, another individual was discovered and arrested, and on bringing him to justice, "the witnesses who had sworn against Shepardson, when brought to see Holbrook, (the actual criminal) admitted that they were mi-taken, and that Holbrook was the guilty party."

Shepardson was honorably discharged in open court.

CASES OF HEMORRHAGE AFTER DELIVERY, ACCOMPANIED BY SEVERE AFTER-PAINS.

BY FRANCIS H. RAMSBOHAM, M.D.,

Consulting Obstetric Physician to the London Hospital.

It is generally believed, and with truth, that the more strongly the uterus contracts after delivery, the less chance is there after hemorrhage occurring; and the greater, therefore, is the safety of the patient in respect to that source of danger. This aphorism, however, only applies to those cases in which the uterus is empty; if it contained any solid body—a polypus, a portion of placenta adhering to its surface, a large piece of the fœtal membranes, or even a mass of tough, fibrinous coagula—it may contract most powerfully—indeed inordinatly—with much more pain than usually attends its action after the child's birth; and yet, at the same time, there may be such a discharge of blood flowing as to place the patient's life in imminent peril.

These cases are embarrassing to the young practitioner, especially as there exists among authorities on the obstetric science, a great diversity of opinion in regard to the treatment of floodings after the removal of the placenta; and this want of concord must necessarily tend in no small degree to confuse his judgment.—Some, as Denman, Dewees, and Robert Lee, the introduction of the hand for the purpose of clearing the cavity too harsh a measure to be admissible under such circumstances; while others, as Burns, Collins, Gooch, Merriman, and the late Dr. Ramsbotham, describes the proceedings as being not only safe in itself, if carefully performed, but as the speediest and most effectual means of averting the impending danger. Others again, as Blundell, Ingleby,

and Churchill, think it should never be attempted, unless there be "inexorable need," or "a very pressing emergency," or till "all other means have failed."

The fact that Dr. Ramsbotham saw the first seven cases which he relates in one year, is a proof that they are met with often enough to make them well worthy of special consideration.

"Case 1.—On February 2d, 1833, at five A.M., I was sent for to Mrs. S.—, æt. 32, in the neighborhood of Drury Lane. She had been in labor of her first child for two days, the membranes having broke on the first accession of the pains; and she had been rather officiously treated, for her attendant had exhausted his stock of ergot, had given her a considerable stock of gin and water; she had taken two large doses of laudanum; and he had been rubbing some extract of conium on the cervix uteri; he was about to bleed her when I arrived. I found her walking about the room, unable to sit from the pressure of the child's head, and looking weary. She had not slept for two nights. But the pulse was under 90, and there was no indication of exhaustion. The os uteri was not quite dilated, though the head was low in the pelvis; the scalp was puffy and swollen; the vagina and perineum very rigid; and the pains were frequent and irritating. I ordered her a little effervescent medicine, and directed that she should be kept quiet on the bed, and that the external parts should be fomented. At two P.M. I ascertained that the pains had been much more natural and efficient since the meddlesome practice had been discontinued; the os uteri was entirely dilated, the vagina much more lax, and the head extending the perineum. The child was born at three. The placenta was expelled naturally in fifteen minutes, but the uterus soon relaxed and a quantity of blood collected within its cavity. Pressure and cold caused it to contract; still there was a drain of colored serum going on, and the uterus was acting at intervals very strongly, with much pain. After waiting nearly half an hour, without any relief to the symptoms, during which time she became rather faint, I introduced my hand fully into the uterine cavity, and removed four or five ounces of firm, fibrinous coagula. The draining then ceased, as did the pains also; and she soon went to sleep. It was necessary to introduce the catheter once the next day; but she recovered perfectly well."

Case 2.—On April 27th, 1833, at two P.M., I was requested to see a patient of the Royal Maternity Charity, who had been delivered of her first child by one of the midwives, about two hours before, after an ordinary labor. The placenta came away without assistance, in less than half an hour; but the uterus relaxed; and she flooded much. The midwife had used cold applications and compression of the viscus; although these means had produced strong contraction, attended by unusual pains, they had not put a stop to the discharge. The patient was complaining of acute suffering each time the uterus acted, was faint, pale, and in a state of jactitation. I therefore introduced my hand at once into the cavity, and took away a mass of firm coagula, the size of a man's fist. The violent pains ceased immediately; the bleeding was stayed; and, after experiencing for a few days a pulsating pain in the head, she gradually recovered."

Mr. Ramsbotham relates the particulars of five other cases of the same kind, in all of which there was a draining of blood going on at the same time that the uterus was firm and comparatively small, and while the after-pains were frequent and powerful,—a condition of things usually described as being incompatible with dangerous hemorrhage. In all there was a considerable quantity of heavy, tough coagula within the cavity, and in all, the pain ceased immediately on the uterus being emptied, the discharge almost invariably ceasing about the same time.—*Medical Times and Gazette*, March 26, 1853.

ON THE USE OF CHLOROFORM IN HOOPING-COUGH.

BY FLEETWOOD CHURCHILL, M.D. M.R.I.A.

The following remarks and cases are addressed to Prof. Simpson in the form of a letter. Dr. Churchill writes—

You are aware that, in my work on Diseases of Children, published three years ago, I mentioned that I had tried the inhalation of sulphuric ether in hooping-cough with great benefit in about a dozen cases. After your application of chloroform for producing similar results, I tried it in hooping-cough with equal benefit in at least as many more cases. But I always found two obstacles to its full and fair administration to young children. In the first place, you cannot get them to give notice of the approach of a cough, so as to enable you to have the chloroform in readiness before the paroxysm commences, and when the paroxysm has commenced, as it consists of eight or ten expirations to one inspiration, the chloroform will have evaporated before it has been fairly inhaled. And secondly, young children have such a horror of anything near their mouths du-

ring the cough that they will resist your trying the chloroform as much as possible until they themselves have felt its power in relieving the cough. Owing to these two causes, and perhaps also to a want of clever management on the part of the mother, we shall find it fail altogether, occasionally, and in other cases only partially succeed; but when it is fairly tried, as I have already remarked, its use is most beneficial.

I have all along felt very anxious to try it in young persons of 12 or 14 years old and upwards, because with them we can avoid the two difficulties I have mentioned; but it was not until this year that I had an opportunity. Four cases have come under my care, and the results are as follows:—

Case 1.—Miss D., æt. 16, had had hooping-cough a month, when I prescribed chloroform. There was no complication, but the whooping was frequent, especially during the night. She was directed to have the chloroform in readiness, and to use it with each paroxysm, and she assures me that in two days the whoop ceased. The cough lasted a few days longer, but it was slight and not in kinks.

Case 2.—Miss A., æt. 20, had been ill with hooping cough for about three weeks, when I prescribed chloroform. The cough was not very frequent, and there was no complication. Two days sufficed with her also to relieve her of the whoop; and the slight cough which remained subsided after a week or ten days.

In these two cases the effect seemed quite magical; both had the disease well marked, and the families of both were prepared for a disease of two or three months' duration, as was the case with these other children.

Case 3.—Miss B., æt. 18, took the complaint from her brother whom I was attending, and I therefore had an opportunity of giving chloroform from the commencement. She did not whoop any time she coughed; but she was directed to use the chloroform whenever she felt the tickling in the larynx, without waiting for a cough. By doing so, she found that she could postpone the cough indefinitely, and if it came on suddenly, the use of chloroform instantly suspended it. About three weeks elapsed before the tendency to cough and the use of chloroform ceased; but during that time she lost neither appetite or flesh. She slept well, was in good spirits, and able to follow her usual occupation. She went to the country quite well.

Case 4.—Master B., æt. 16, the brother of the last case, when I first saw him, had the disease most severely. The kinks were violent and prolonged, the efforts to inspire, and the whoop excessive; it really seemed as if he would be choked, or that something would give way. He had lost appetite, sleep and spirits, although the disease had not lasted three weeks when I saw him. I tried chloroform with him, and it at once reduced the number of paroxysms one half, but without mitigating them when they did occur. He took the chloroform very freely, and as he was not readily influenced by it, the quantity seemed to give him a headache, and he begged to be allowed to suspend its use. I the more willingly agreed to this, as he had a severe attack of diarrhœa. I therefore substituted two drops of prussic acid (Dub. Pharm.) with two or three of black drops three times a day. The improvement, begun under chloroform continued under this treatment, and at the end of five weeks from the beginning of the disease the cough had ceased, and he had regained rest, spirits, and flesh.

Although this last case cannot be regarded as cured by chloroform, the paroxysms were first diminished by it, and, I have no doubt that it contributed to the beneficial effect of the prussic acid. The three first cases are, I think, very conclusive as to its value; and, if further experience confirms them, we shall possess a means of cutting short this disease in adults, who, when attacked, suffer so severely.

One word as to the mode of exhibition. In order to avoid the possibility of an overdose, I have never given chloroform on a handkerchief or by means of an inhaler, but have directed the mother (in the case of young children) or the patient, to spill a little, say about thirty drops, in the palm of the hand, and hold this before the mouth and nose sufficiently near to inhale it fully, but not so close as to exclude a portion of atmospheric air. The best time to begin is just as the patient feels the irritation in the chest increasing to a cough, but if possible before the cough commences, and the inhalation should be repeated with each return of irritation, unless headache be produced.—*Edinburgh Monthly Journal*, Aug. 1853.

DISLOCATION OF THE CERVICAL VERTEBRÆ WITHOUT FRACTURE, RESULTING FROM VIOLENCE.

BY RICH. O. H. BUTCHER, ESQ.,

Surgeon to Mercers' Hospital, Dublin.

Accidents of this nature, except in the two uppermost vertebræ, are so very rare, that the highest authorities have denied their possibility. A case is related by Mr. Lawrence; another by Mr. Liston; a third

by Mr. Norris, of Philadelphia; a fourth by Mr. Lavalle, of Charenton; and a fifth occurred in the Haslar Hospital; and these, according to Mr. Butcher, who gives abstracts of them in this paper, are the only cases on record. The following case is, therefore, one of great interest.

Michael Roche, æt. 36 years, admitted into Mercer's Hospital, under my care at half-past four in the afternoon of February 4th, 1853. The man, being employed as porter at a coach-office, was in the act of arranging some luggage on the top of a vehicle, when he slipped off, and fell upon the pavement on his head. He was quite sensible after the fall, but was instantly deprived of all power of motion in the lower limbs, and nearly so in the upper. The first complaint he made was relative to excruciating pain at the root of the neck. The accident occurred not more than two hundred yards from the hospital, and I was summoned immediately to see him; a few minutes had only elapsed, and I found him in the following condition: He was perfectly collected and sensible, the brain not being affected; he deplored his condition audibly, but the voice was feeble and could not be raised in answering questions. There was a lacerated wound in the scalp, about two inches in length, over the occipital bone, at its superior margin, and to the left side just below where it comes in contact with the superior posterior angle of the parietal bone. I examined the wound. The periosteum was slightly detached, but the bone was not depressed; he did not complain of pain here, but referred all his sufferings to the root of the neck. On examination, a manifest depression was perceiveable at about the junction of the fifth and sixth cervical vertebræ; and this was rendered more strikingly conspicuous by a traverse sulcus in the corresponding soft parts. The head was inclined a little backwards, and to the right side, and the face was also slightly rotated in the same direction.—The neck was somewhat prominent in front, rendered preternaturally so by the bulging forward of the trachea. The muscles of the region were in bold relief, steadying the parts in their new and acquired position, and exerting manifestly a protective influence against motion.

The entire neck and face appeared somewhat congested, though no marks of contusion were visible, even over the immediate site of injury in the spine. The patient lay upon his back, the position which he desired on being placed in bed. The lower extremities were extended flaccid, and motionless; neither was there sensibility in them, nor over the surface of the body as high as the neck, and all power of voluntary motion was lost. The upper extremities were only partially affected as to sensation, the forearms and fingers were entirely deprived of it, while the upper arms maintained it in a minor degree; but the power of motion, as in the lower extremities, was totally annihilated; the upper limbs lay across the chest; the forearms bent; nearly at right angles with the arms, and fingers contracted. On the slightest attempt to alter this position, intense pain was experienced, "as of the darting of a knife at the root of the neck." There was a total paralysis of the intercostal muscles; the chest was motionless, except at its inferior margin; and the abdominal muscles were flaccid. Respiration was merely performed by the diaphragm; thus the muscles of expiration seemed likewise deprived of their motor power; and the expiratory effort was affected by the elasticity of the thoracic and abdominal parieties, restoring the parts which had been previously displaced by the diaphragm. The pulse was slow and weak and the surface of the body cold. The sphincter ani had given way, and the feces were passed involuntarily. The penis was flaccid, and the bladder empty.

The treatment adopted in the first instance was entirely directed towards supporting the neck evenly, and propping the patient on either side with pillows; then the application of heated jars to the pit of the stomach and extremities, warm drinks, &c., to bring about reaction.

In five hours the pulse became full and strong, the temperature of the body rose, and the heat of the lower limbs was actually greater than natural. The respiration, which was before slow and tranquil, became hurried, and, in short, all the evidences of reaction were strikingly manifest. Ordered eighteen leeches over the injured part of the spine, and ten grains of calomel, with four of James' powder in a bolus. A catheter was passed, and about three ounces of urine drawn off.

February 5th.—He had imperfect sleep in the course of the night; position of the body as placed on yesterday. Pulse full; action of the heart steady; respiration rather slower; refers indescribable pain to the root of the neck; total annihilation of sensation and power of motion in the parts already referred to. The increased development of heat in the lower extremities is very remarkable, and not at all so conspicuous in the upper; there is also to-day slight tremulous motion of the cheeks and lips. There has been no involuntary pas-

sage from the bowels since yesterday, but the entire abdomen is inflated and tympanitic. The bladder is distended. I passed a catheter, and drew off somewhat more than a pint of urine, a little darker than natural, and faintly acid. The long tube, passed up the rectum, permitted a large quantity of gas to escape. He was ordered eight leeches to the spine, calomel, two grains, and the eighth of a grain of opium every two hours. The patient requested to have his position altered, and to be placed upon the left side, which was not accomplished without much suffering, but when steadied, was a position most favorable for the dislocation of the neck.

3 P. M.—I passed the catheter, and drew off a pint and a half of urine, more acid than that removed in the morning.

6th, 10 A. M.—He has been sleeping for short periods through the night, and now seems to be in a prolonged doze, yet when roused up speaks sensibly, but again quickly relapses into quiet, and shuts his eyes. The eyes are filmly, and lack vivacity.—Pulse and heart steady in beat, but weak in force. Respiration hurried and feeble. The patient makes ineffective attempts to get rid of some increased secretion of mucus from the bronchial tubes, but the cough is imperfect— the act fails; the expiratory muscles remain as from the first paralysed. The developement of heat in the lower limbs has become even greater than at any former period, though the powers of life are more prostrated. Abdomen greatly swollen, and increased tympanitis. I passed the long tube many inches up the bowel, and allowed a quantity of air to escape. Bladder distended; the catheter was introduced, and a pint of urine drawn off, far more dark and acid than yesterday Mouth touched by the mercury; its administration stopped.

3 P. M.—Drew off a pint of urine, highly acid and dark colored.

February 7th, 10 A. M.—He has remained since last evening in almost a constant doze, is easily roused, and is quite sensible, but answers questions with difficulty, owing to embarrassed respiration; the countenance is expressive of great anxiety and distress, the brows furrowed and cheeks haggard. The pulse is weak and small; the upper extremities and body cold, but the lower limbs still preserve a great exaltation of temperature. He continued to grow worse, his respiration more labored, and he expired at 1 o'clock, fifty-seven hours after the accident, retaining his faculties unclouded to the last.

Examination nineteen hours after death. The neck rigid, in the same position as it maintained during life, and with all the external indications of displacement as strikingly marked. On cutting through the muscles, and detaching them from the back of the spine, a quantity of extravasated blood was situated in a circumscribed way, repullulating, as it were, from the immediate site of the injury. The supraspinous ligament, derived from the ligamentum nuchæ, was torn through between the fifth and sixth cervical vetebræ, as well as the muscular fibres in the same locality, filling the offices of interspinous ligament; the articulating processes of the fifth and sixth cervical vertebræ were apart more than a quarter of an inch, particularly on the left side; the partial rotation of the head and five superior vertebræ to the right side, will account for this inequality; it is scarcely necessary to mention their little capsular ligaments were torn, and their polished cartilaginous surfaces exposed. On examining the front of the column, the body of the fifth cervical vertebra formed a remarkable prominence; the connecting fibro-cartilage between it and the sixth, being entirely torn through, permitted of the anterior displacement of the former by the depth of half its body in front of the latter, while two-thirds of the intervertebral substance adhered to the sixth, and one-third to the fifth vertebra; the anterior common ligament of the spine was perfect in its structure, being only separated to a small extent from the margins of the displaced bones. In order to prosecute the investigation, I removed carefully the whole of the cervical spine, without in the least degree disturbing the parts, and plunged the entire into alcohol, so as to stiffen them in their acquired position. In eight-and-forty hours I removed the traverse processes and laminæ on the left side, cutting through the pedicles in front of the former, and severing the latter close to the bifid spine. This section was readily effected by means of a fine bow saw, such as I employ in amputations. The theca was slit up, laid to either side, and the spinal marrow exposed; the specimen thus illustrated beautifully to how great an extent the anterior diameter of the vertebral canal was lessened,—from the careful measurement, I should say, by about one-third; and how the fatal pressure was produced between the body of the vertebra below the diastasis and the arch of the fifth above it; the slightest fragment of bone could not be detected as having been detached in the site of the injury. The preparation as I have described it remains in my possession, and is catalogued "Dis-

location of the cervical vertebræ without fracture."

The mode in which the force was applied in this instance, sufficiently accounts for the effect produced. The man fell upon his head, which, together with the five superior vertebræ, was driven forward, while the trunk and lower extremities, falling backwards propelled the inferior part of the column in the contrary direction. The position of the wound, on the occipital bone, will account for the rotary displacement towards the right side. It is unnecessary to recapitulate; the treatment of the case was directed with the following objects:—First, to steady the displaced spine, effected by the judicious arrangement of pillows; for here the removal of the deformity could not be procured by gentle means, and more violent measures were not had recourse to; secondly, large local depletion was employed to prevent inflammation and its consequences; and, lastly, the exhibition of mercury to insure this object, and protect the phrenic nerves from being involved by softening of the spinal marrow and extensions to their roots.—Though all these intentions seemed to be fulfilled, as verified by post-mortem examination, yet this did not stay the rapidly fatal issue: death in fifty-seven hours after the accident.—*Dublin Quarterly Journal of Medicine*, May, 1853.

HOSPITAL FOR CONSUMPTIVES, IN ENGLAND.

As the subject of founding a hospital exclusively for consumptive patients has frequently been discussed in this country, considerable interest is attached to it, and we therefore copy from the London Lancet a brief notice of a late visit to the hospital of this kind at Brompton.—*Bost. Med. and Surg. Jour.*

"We lately," says the writer, "paid a visit to this hospital, the practice of which bears upon one of the diseases which prove most destructive in this country. It would, however, be an error to suppose that none but tubercular diseases of the lungs are treated in the institution: we noticed, both among the out- and in-patients, cases of bronchitis, pneumonia and cardiac affections. These diseases, as is well known, are also treated (and even on a large scale) in general hospitals; but it must be confessed that in this special institution all the domestic arrangements, the heating and ventilating of the wards, are calculated to place the patients in the most favorable condition for recovery, where such a termination is possible. The ventilation is so managed, on the plan introduced by Dr. Chowne, as to keep the room free from any noxious emanations, and the temperature is kept perfectly equable by means of warm air.

"We were struck by one circumstance, respecting the comfort of patients, which seems of much practical value: the passages on the first and second floor are spacious, and provided with sofas, tables, &c., and are intended as a kind of sitting-rooms for the patients, the latter being allowed to spend, in these warm and comfortably-furnished passages, the time which is not strictly given to the bed-rooms.

"Phthisical patients admitted into this institution are thus placed in the best condition this country can afford, as regards the air inhaled by diseased lungs; and we noticed, whilst following Dr. Roe through the wards, that the means employed to moderate the course of the morbid process going on in the lungs of patients laboring under tuberculosis are often directed to the pulmonary mucous membrane itself, independently of other remedies which act through the circulation, and tend to promote healthy nutrition in the system at large. The time for attaching exclusive virtues to the inhalations of iodine is now past (though M. Piorry, Professor of Theory and Practice of Physic at the Faculty of Paris, lays great stress on iodic inhalations,) but it stands to reason that vapors which may soothe pain in the pulmonary texture, remove spasmodic action, and moderate inflammation and irritation in the mucous membrane of the bronchi, should be by no means neglected. It would appear that the inhalations of the watery vapors of the balsams, creasote, &c., are much used here, and we heard Dr. Roe state that he succeeded in many instances in completely abating pain and irritation in the lungs by the inhalation of the vapor of hops. Those who have had many cases of phthisis under their care are fully aware how difficult it often is to obtain sedative effects by means of opium, hyoscyamus, conium, &c., administered by the mouth, and will be prepared to take advantage of the inhaling method, which seems to act so beneficially in this institution. It is principally in the advanced stage of the disease, when the trachea and larynx become involved, that inhalations are of value, as the pain, spasmodic cough and difficulty of breathing proves very distressing."

LONGEVITY OF GREAT MEN.

Academicians, in respect to longevity have been particularly distinguished. I need mention only the venerable Fontenelle, who wanted but one year of a hundred, and Nestor and Formey, both perpetual secretaries, the former of the French, the latter of the Berlin Academy.

We find, also, many instances of long life among schoolmasters—so that one might believe that continual intercourse with youth may contribute something towards our renovation and support.

Both poets and artists—in short, all those unfortunate mortals whose principal occupation leads them to be conversant with the sports of fancy and self-created worlds, and whose life, in the properest sense, is an agreeable dream, have a particular claim to a place in the history of longevity. We have already seen to what a great age Anacreon, Sapho, Haller, Metastasio, Gleim, Utz, and Oeser, all lived to be very old.

The following short list of the ages of distinguished men may be interesting to the reader in this place. For a more complete catalogue, arranged according to the classes of science and literature upon which they shed their light, he is referred to Madden's "Infirmities of Genius."

Tasso, 51; Virgil, 52; Shakspeare, 51; Moliere, 53; Dante, 50; Pope, 56; Ovid, 57; Horace, 57; Race, 59; Demosthenes, 59; Lavater, 60; Galvani, 61; Boccacio, 62; Fenelon, 63; Aristotle, 62; Cuvier, 64; Milton, 66; Petrarch, 70; Lesage, 70; Linnæus, 71; Locke, 73; La Fontaine, 75; Handel, 75; Reaumer, 76; Galileo, 78; Swift, 78; Roger Bacon, 78; Cornelle, 78; Marmontel, 79; Thucydides, 81; Juvenal, 80: Young, 80; Plato, 81; Buffon, 81; Goethe, 82; Claude, 82; West, 82; Franklin, 84; Metastasio, 84; Anacreon, 85; Herchell, 84; Newton, 86; Voltaire, 85; Halle, 86; Sophocles, 90; Lurwenhock, 91; Hans Sloane, 93; Weston, 75; Michael Angelo, 96; Titian, 96; Herodias, 100; Fontenelle, 100; Georgias, 108.

CASE OF RETAINED FÆCES.

BY DR. W. H. H. RICHARDSON, OF EAST MONTPELIER, VT.

On the night of the 2d of Feb., I was sent for to attend upon Judge C., of this town, aged 58, who, it was said, was suffering from an attack of "bilious colic." I found him in great distress from pain in the left iliac region, which he described as being a hard ache. In regard to his previous history, he had been somewhat costive for many years, but had taken no cathartic or any other medicine. For the last four months, he has suffered from occasional attacks of colic, which had always been relieved by a cup of ginger tea or other warm drink. He remarked that for many months he had felt his health declining; that his joints (particularly his knees) grew weak; that he had little appetite, and in short that he felt *old age* warily approaching. He felt that he was acting in the last scene of that drama, whose perpetual mutations seem to constitute the fundamental law of existence. Although he is not sixty years of age, and never suffered from disease to any considerable extent, yet he had mostly given up business, and felt that his sphere of activity and usefulness was at an end. Let me remark here, that the habit of yielding to the first influences of old age is bad philosophy, and tends in no small degree to shorten the period and diminish the happiness of human life.

His bowels not having moved on the day of the attack, I gave him a free dose of the comp. infusion of senna, which in a few hours operated freely. He felt some relief, but still complained of pain in the iliac region as before. I then administered castor oil, with oil of turpentine, which having operated freely he felt much better; but still there was an unnatural and uncomfortable feeling in the left side. He took occasionally mild cathartics for several days, and feeling about as well as previous to the attack, settled his bill. I had scarcely reached home before he was again attacked, and much more violently than before, with pain in the left iliac region, and a "severe ache in the stool." Being myself absent, he took, before my arrival, three ounces of table oil with one ounce of the oil of turpentine. When I arrived, this had been down five hours, and still there was no action either of the stomach or bowels. I found him in great agony, and himself firmly believing his case hopeless. I ordered thirty grains of calomel; pediluvium with warm fomentations to the bowels; waited two hours, and no motion being felt, I gave calomel and rhubarb ten grains each. I waited an hour, but there was no action. I could not account for this inaction, as the bowels had moved freely the day before, and I was unable to detect any evidence of inflammatory action in the symptoms. I ordered a solvent injection, and a dose of the sulphate of magnesia to be taken. The patient immediately vomited, and at the same time had a stool. The stool was watery, but it did not descend to the vessel from the chair, but spattered about over a space at least four feet square. He still complained of the severe ache in

the stool. He made a violent effort, and expelled a hard substance, which striking the floor, or the mop-board near the floor, sounded like a rock thrown with violence against a board. Immediately following this, was a free evacuation of scybalous excrement, in hard lumps of various sizes. The large mass was somewhat larger than a hen's egg, and of irregular shape. It appeared to have been moulded in one of the folds of the sigmoid flexure of the colon, and to have had one side channeled out by the passing current. It was exceedingly hard, and had probably existed here in the fold of the intestines for many months. After this evacuation, the patient had no pain and no uneasy sensation in the left iliac region. He now takes exercise daily, and is more robust and healthy than he has been for years.—*Boston Med. and Surg. Journal.*

ARTIFICIAL BREEDING OF FISHES.

Prof. Brainard of Chicago, writes from Paris, to the North Western Medical and Surgical Journal as follows:—

"At the side of Bernard, in the College of France, is Coste, whose lectures upon the developement of organized bodies, are the most eloquent and instructive course I have ever listend to. The substance of his course is contained in his great work entitled "General and Special History of the Development of Organized Beings," which has reached its third number, being published by the government. He is known in America from his efforts in introducing the artificial breeding of fishes, a process now employed in all the different countries of Europe. I saw in his private room in the College of France, a number of troughs of earthen ware, containing the eggs of fishes of the choicer kinds, such as salmon from the lakes of Switzerland, and other kinds from the different rivers of Europe. Prof. Coste informed me that the eggs are transported without difficulty, a distance of 800 miles by land, and that they could easily be sent to America without injury. These eggs are the size of peas, of a bright red color, and to be hatched are placed upon little racks made of willow twigs, which are fixed in the troughs so as to be covered with water, and a gentle current is kept playing over them. I saw them in different stages of development, from the simple egg to the fish just bursting from it. It is a curious sight, and seems to promise much benefit to man, by fresh and wholesome food. It has, however, its difficulties. Like other orphans, a large portion of these fish brought up by hand, die before attaining maturity, and it is yet doubtful whether the plan will be successful, excepting with regard to those fishes found in the waters where the breeding is carried on; in this case there seems no reason to doubt its full success.

"An interesting fact has incidentally been noticed by those engaged in observing this process of hatching; it is that a great number of monsters occur among the newly hatched fishes, a number much larger in proportion than occurs in the mammalia."

Boston Med. and Surg. Jour.

PULVIS FERRI—IRON BY HYDROGEN.

BY WILLIAM PROCTER, JR.

There has recently been considerable discussions in the London Pharmaceutical Journals, as to the composition of the substance sold as Quevenne's metalic iron, as manufactured by Mr. Morson and Mr. Heathfield, both of London. Having for several years been a manufacturer of this preparation, although not now so engaged, it may be appropriate to say a few words in relation to the subject at issue.* It appears (*Pharm Jour.*, page 333, January, 1854,) that iron reduced by hydrogen, made by both the gentlemen named was on sale in Edinburg by different pharmaceutists. Messrs. Duncan, Flockhart and Co., who sold the preparation of Mr. Morson, were complained to, that their iron was not *black* like that of Mr. Robinson made by Mr. Heathfield. Messrs. D. F. and Co. then forwarded to Mr. Morson a sample of the black iron, and he pronounced it magnetic oxide of iron, and not metalic iron. On this, Mr. Robinson placed samples of both kinds in the hands of Dr. George Wilson, of Edinburg, who pronounced both to be impure, that is, contained oxygen, but that Heathfield's was seven per cent. purer than Morson's. On this being published in the *Chemist*, Mr. Morson obtained a specimen of Heathfield's iron, as sold in Edinburg, and had it analysed by Dr. Gregory, Dr. Stenhouse, Professor Williamson and Dr. Garrord all of whom pronounced it to be magnetic oxide of iron, and published the whole affair in the *Pharmaceutical Journal* of January. In the next number, Mr. Heathfield pursues the subject by bringing forward microscopical evidence, and vindicates the *black* iron from the charge of impurity, attributing its color to minuteness of division, than to magnetic oxide, and endeavors

* See a paper by the Author, Amer. Jour. Pharm, vol. xix. p. 14.

to throw doubt on the correctness of the four analysis obtained by Mr. Morson. And, finally, Dr. George Wilson appears in the March number, reasserts the correctness of his analysis, and claims for specimens of the preparation of Mr. Heathfield since examined, the strength of 91 and 98½ per cent. of metalic iron.

By one who is practically familiar with what takes place in the process of reducing iron by hydrogen, the causes of the controversy above are easily explained. The reduction tube, when ready for the operation, is nearly filled with red oxide of iron, obtained by calcining the sub-carbonate of iron of the Pharmacopœia, to free it from its water of hydration. After the current of hydrogen is established and the fire is kindled, the operator is made aware of the commencement of the reduction by the appearance of aqueous vapors at the exit pipe; and when it is continued for a length of time and stopped, the contents of the tube will vary considerably in appearance. Near the point of ingress of the gaseous current, if the heat has been sufficient, the red powder will have assumed an iron gray color whilst further along the color will be blacker, and finally perfectly black. If the tube and contents have not been heated to a dull red, the reddish color of oxide will be retained at such point, and it sometimes happens in the same operation, that the unreduced oxide and all the grades of reduction to the perfect metalic state may be observed. It never happens in practice that all the oxide is reduced, and the fire would have to be continued too long, to the injury of the reduced portion, and it is usual to employ the partially reduced oxide of one operation for the next. The line of complete reduction is distinctly marked, so that the chemist can by means of a spatula separate readily the perfectly reduced iron; yet between this and black oxide there is a portion consisting of metalic iron and oxide in variable proportion. Hence there is no reason why imperfectly reduced iron should be sold except either through ignorance of the process, carelessness or fraud. Mr. Heathfield, therefore, in alleging the action of hydrogen in a hot tube as a reason for purity, is only conditionally correct.

It sometimes happens in operating in a four inch tube, that the interior particles in a part of the oxide are black, and the exterior iron gray. Now, in reference to color, it may be said that no metalic iron is *perfectly* black, but when the oxide is reduced at the lowest heat possible, so that its particles do not contract or weld together by excess of heat, after reduction, it is of a dark iron gray hue, and will dissolve with rapid effervescence of hydrogen in dilute sulphuric, acid like a carbonate; when, however, the heat has been allowed to become cherry red, after the reduction, the particles contract more and more, until, if the heat has been continued long enough, a metalic mass is obtained, difficult to powder, and requiring the avoidance of blows of the pestle to prevent its condensation into solid shining pebble-like masses. The color of overheated iron is light iron gray, with a peculiar lustrous appearance, derived from the trituration necessary to pulverize it.

Now, when the operator opens his tube and finds that he has but a partial product, and that the interior part of the oxide is not thoroughly reduced, he is tempted to overlook the presence of the latter, and convert all to powder. This may be occasional and accidental, or habitual, according to the conscientiousness or knowledge of the manufacturer, and, whilst this is the case, iron by hydrogen will constantly vary in composition. We see by the analysis of Dr. Wilson, admitted by Mr. Heathfield, that his own preparation varies from 2 to 22 per cent. of foreign matter.

Undoubtedly, the best condition of this preparation, when removed from the tube, is that of a light spongy mass, like light carbonate of magnesia, yet more compressible, and of a dull, rather dark iron gray color. When the fragment is struck on a bright anvil with a smooth hammer a thin brilliant laminia of metal is obtained, and when the powder is strongly pressed with a bright spatula, with traction, the compressed surface exhibits a metalic lustre.

It may be well to say a word in reference to the sulphur found in reduced iron: it may arise from two sources. First, from the presence of sulphuretted hydrogen used, when the sulphuret present is that of iron; or it may be due to the deoxidation of sulphate of soda in the oxide of iron, when sulphuret of sodium is the sulphurretted body, as may be proved by washing the iron. It is almost impossible, on a manufacturing scale, to wash all the sulphate of soda from the hydrated carbonate of iron in the process of making the sub-carbonate, hence it is necessary to thoroughly wash the dried sub-carbonate after it is pulverized, till the washings are free from sulphate. The success of this operation is known by testing the reduced iron with dilute sulphuric acid, when, if any sulphuret is present, the odor of hydrosulphuric acid is perceptible.

In my experience in operating with a

wrought iron tube, forty inches long, and four inches diameter, the charge of oxide is six to eight pounds, and the hydrogen is furnished by the solution of twelve pounds of zinc in dilute SO^3. The current is kept up rapidly for eight hours, at which time the tube is kept at as near a dull red heat as possible; and after the removal of the fire and the cooling of the walls of the furnace with water, the evolution of gas is moderated to a slow bubbling at the exit end, until the tube is *perfectly cold*. The yield of reduced iron, on the average, is between two and four pounds to an operation. The black pulverulent oxide in the other end of the tube is used for part of the next charge. The most difficult point in the process is the regulation of the heat; the next, the management of the gas, which should be carefully purified by passing it twice through a solution of subacetate of lead.—*Journal of Pharmacy.*

ON DELIRIUM TREMENS.

BY W. CAMPS, M.D.

The symptons of delirium tremens vary, from the most trifling degree of tremor, wakefulness and delirium, accompanied with hallucinations and quickened pulse, to the highest degree of nervous depression, and muscular and cerebral excitement. The first stage usually presents the following indications, and very generally in the following order:—A peculiar slowness of the pulse, attended with coldness of the hands and feet, which being generally bedewed with moisture, and from the effect of evaporation, present a clammy, icy sensation. These are preceded and accompanied with symptoms of general debility, and usually a diminution of temperature, cramp in the muscles of the extremities, with giddiness, nausea, and occasionally actual vomiting; the bowels are sometimes open, sometimes the reverse; nervous tremor of the hands and tongue, especially of the latter, which is mostly moist, and but slightly furred.—These symptoms are accompanied with a dejection or depression of the mind, which is sometimes extreme, accompanied with frequent sighing and oppression, or sense of sinking at the precordial region, anxiety and depressed state of the countenance, with short and disturbed slumbers. The second stage comes on with a marked increase of many of the symptoms observed in the preceeding stage, the countenance of the patient assuming gradually a wild and more anxious expression; he soon begins to have various mental illusions, or hallucinations; he imagines that he sees loathsome and disagreeable objects, which constantly annoy and trouble him, and which he will attempt to catch with his hands, supposing they are upon his bed; he suffers from increased restlessness; he is excessively talkative; in fact, in some cases the garrulity is extreme, and most commonly upon the objects of his delusions. He is more sleepless, and at times absolutely so; so that by some writers this per vigilium is considered as pathognomonic of this stage of the disease. The temperature of the surface of the body may increase, while that of the hands and feet remains cold and clammy as before. The general restlessness and hurry of manner increases; the tongue is more coated with fur, and it is now so tremulous, that the patient cannot hold it still when protruded from the mouth. The urine at this time is usually scanty; the pulse is mostly frequent, above 100, and sometimes considerably so. The pupils are usually contracted, but he does not complain of intolerance of light, nor, during the course of the disease, does he complain of any pain about him; and frequently, when interrogated by his physician or his friends about him, will reply, sharply it may be, that he is quite well, that there is nothing the matter with him. After these symptons have continued two or three days, and the case is about to terminate favorably, the gradual mitigation of the above symptoms is usually attended with yawning and drowsiness, with evident disposition to sleep; and this, as soon as it thoroughly seizes the patient, is frequently very deep or profound, lasting sometimes from six or eight, to twelve, fourteen, eighteen, or even twenty hours; and in most instances is so completely critical, that it appears, as it were, to resolve, or almost to terminate the disease. Of such cases as terminate favorably, this may be said to constitute the third stage of the disease; but if, on the other hand, the disease should terminate fatally, the general symptoms increase in violence; the mind of the patient labors under excessive irritability; he makes frequent and violent struggles; there is more evident depression of the muscular, nervous, and vascular systems; the pulse becomes quicker, smaller and weaker; the tremor, too, affects nearly all the limbs; the patient is constantly talking or muttering to himself; the delirium increases in intensity; sometimes the patient expires in an attack of convulsions, and sometimes death is preceded by a subsidence of the general symptoms. The treatment of delirium tremens was then referred to, and the arguments for and against free bleeding discussed at some length, the author strongly

reprobating the copious abstraction of blood as recommended and practised by some authorities. The recorded effects of emetics, purgatives, blisters, mercurials, and the warm bath, were then mentioned. Two cases were related in which chloroform had been administered internally with advantage, after other remedies had failed to give relief. The treatment recommended by Dr. Stokes, of Dublin, who divides all forms of this disease into two classes, was also mentioned by Dr. Camps in his paper, in which he strongly advocated its treatment by opium and ammonia, and other similar remedies—a mode of treatment described as the narcotico-stimulant method. —*London Medical Times & Gazette*, April 16, 1853.

"DOCTORS" AT THE WEST.

BY H. GRAHAM, M.D., OF TOLEDO, O.

We are truly a "great nation," and a "fast" people. There is not only a "great deal of land out West," but there are a great many *doctors!* In old times, or during the "dark ages," there were many things that were looked upon as wonderful or mysterious, but in these latter days, and in this age of "progress and reform," most of these wonders have ceased, and most of the mysteries are explained. Light has taken the place of darkness, wisdom the place of ignorance, and self-conceit and vanity the place of modesty and diffidence. What is not already known, is comparatively little, and is becoming daily "beautifully less." People have long since ceased to wonder at the quantity of land in the world, but they have not been able to account satisfactorily for the great number of *doctors*, and their rapid increase. The grand discovery has finally been made; the whole mystery is explained, and made as "clear as mud"!

We are gravely told "that some persons are *born doctors!*" When this announcement was first made, I was incredulous, and was inclined to call it a "humbug," for I could not understand it, or conceive how it could be possible; but on further reflection, I am fully satisfied that this is the way the thing is done! In fact, there is no other way that I can see, to account for the rapid increase of *doctors*, except the one here suggested. We must either say, that all are not *doctors*, who profess to be *doctors* (and that would not do,) or we must admit that many of them are *born doctors*; for it is very evident that there are many (especially in the West) who claim this honorable title, who have never studied the science of medicine, or any other science, since they were born!

I shall not attempt to explain the process. It is enough for me to know the fact, and I leave it for your readers to say whether it is done through the influence of Mormonism, Millerism, mesmerism, spiritual rappings or infinitesimals. I do not look upon this discovery as a matter of much practical importance to the profession, but it may be of importance to the public.—Should any of your readers wish to know how these hereditary doctors manage to obtain the title of *doctor*, and how they get into business, I can tell them how it is done "out West." In the first place, the aspirant to professional honors and emoluments (after learning the fact that he was born a *doctor*, through the spirits or some other medium) "sticks out his shingle," or, in other words, he gets his name printed on a sheet of tin, with the word *doctor* attached, and nails it to the door post.—Thus, he gets the name or title! He then unites with the masons, the odd fellows, or sons of temperance, (all useful and honorable institutions,) and as a natural consequence, he is immediately patronized and puffed by some of his brethren! No one stops to enquire when or where he was educated! or, whether he ever was educated! And if any one should enquire, he would either tell them that he was born a doctor, or that he was educated in Paris, London, or Edinburgh, and either of these answers would be perfectly satisfactory to the public! It is taken for granted that he is a *doctor*, because his sign says so!

I do not pretend to say that the masons, odd fellows, or sons of temperance, employ these new-fledged doctors because they belong to their society; and yet, if they were asked for a reason, they probably could not give any other or better! This, then, is the way that *some* doctors are made "out west," and this is the way they take to get into business! The whole process is simple and easy, and yet, if you have any "shorter cut" to professional honor and wealth, "down east." I should like to know it.—*Boston Medical and Surgical Journal.*

IODIDE OF ZINC IN VENEREAL AFFECTIONS.

Dr. S. C. Sewell, of Canada, writes as follows in the Montreal Medical Chronicle respecting the use of iodide of zinc in his practice:—

"Its value in reducing enlargement of the tonsils is now pretty generally acknowledged by the profession, and I have used it in several cases with satisfactory results. I

had a case of venereal ulceration of the throat which resisted the acid permitrate of mercury. As an experiment, I employed the iodide of zinc with immediate improvement, followed by a speedy cure. Since that I have used it in several cases of venereal ulcers, both of the throat and nose, with like success. Since 1837, I have used chiefly the acid pernitrate of mercury (Ricord's formula,) in such cases, and am therefore competent to form a comparative estimate of their value, and I give the preference to iodide of zinc. To apply it, twist a little cotton wool round the point of a wooden skewer, and having dipped it in the caustic, apply it to the ulcer. One application usually suffices to destroy the morbid action, and it is to be followed up with metallic washes for the throat, and dilute citrine ointment for use."

ON THE POLYTRICHUM JUNIPERINUM AS A DIURETIC.

BY WILLIAM WOOD, M.D.,

of East Windsor-Hill, Connecticut.

Having been in the habit of using a plant in my practice which is, I believe, wholly unknown to the medical profession as possesing any medicinal properties, and believing it to be far superior to any diuretic known, I am induced to give a brief botanical description of it, with a few marked cases in which it was useful. The plant grows very abundantly in New England, and I know not but that it may be found elsewhere. My method of using it has been, to gather a generous handful of the *whole* plant while on the way to see my patients, and order it to be steeped and drank freely, the more so the better. I have never seen an unpleasant symptom arise from it, although I have used twice the above-named quantity in twenty-four hours.

Series. Cryptogamia. *Nat. Order*. Musci. *Genus*. Polytrichum. Calypta apparently formed of fibres of hair or flax. Capsulse 4-sided, nodding in old fruit. Peristome single. 64 teeth. Flowers diœcious; sterile flowers cup-shaped, terminal.

First species, *Juniperinum* (Hedwig,) stems generally simple; pedicle supporting the capsule, smooth, wiry, two-third inches in height from the top of the plant; leaves entire; capsulse oblong, about the size of a grain of wheat, surmounted by a beaked lid which falls from the old fruit, exposing the smooth dilated apex of the columella.

Second species, *Commune* (Linn.), differs from the foregoing by being taller, and having serrate leaves; found often with the former, generally growing in damp places; possesses probably the same medicinal properties. Common name, Hair-cap Moss, and Robbin's Rye.

Case 1. Miss O., in the winter of 1847 and 1848, had severe attack of typhoid pneumonia, and, while convalescing, her kidneys ceased to perform their proper function. This was followed by anasarca, the œdema commencing in the lower extremities and increasing very rapidly. The legs became enormously enlarged, to more than twice their natural size presenting the appearance of polished marble, and so sensitive as not to be able to bear the least touch. After a few days, this was followed by ascites, respiration became very difficult, so much so that I was summoned to the patient's bed three times in twenty-four hours with the message that she was dying; pulse 140–150 a minute. I had been using diuretics, alteratives, frictions, counter-irritants, and tonics, as the symptoms had indicated, but all to little or no purpose. At this stage of the disease, Dr. Watson was called in consultation, and pronounced it a hopelss case, saying that she could not live twenty-four hours. For the nine days previous, she had been elevated to nearly the sitting posture, as it was impossible for her to breathe lying down, during this time, her position had not been changed, as the least motion produced dyspnœa to an alarming degree. I now administered polytrichum freely (for the first time in my practice,) without any fear of doing injury, as I believed that no medication could save, or even prolong life many hours. In twelve hours called again; found her passing urine freely (or, as the nurse said, by the pailful, which afforded her great relief. Twenty-four hours from the time the polytrichum was first administered, the skin on her limbs could be laid in folds. The case after this improved gradually under the use of tonics, stimulants, &c., without any return of the dropsical effusion.

Case II. Miss A., 1848, had been troubled with ascites for more than twelve years; had consulted the physicians in Hartford and vicinity, and had been under the care of at least as many M. D.'s as she had years been troubled, not only without any permanent amelioration of symptoms, but with a gradual increase of disease. The ascites had been ascribed to hepatic derangement, for which mercurials had been freely administered; salivation had been the result. She had become so susceptible to the influence of mercurials, that one-eighth of a grain of calomel would salivate

ber. When I saw her, the dropsical effusions extended over her lower limbs, abdomen, and chest; pulse 120 a minute; respiration difficult; urine little in quantity and high colored, with a brick colored sediment. I gave her freely of the abovenamed article. In forty-eight hours her dropsy had almost disappeared; she has had but one slight turn of the disease since, and that was induced by severe attack of dysentery.

Case III. Mrs. N., from New York city 1850, had for years been troubled with scantiness of urine and consequent œdema; generally gained some relief from medicine; but, as she remarked, "had derived no benefit of late, because she had worn her medicines out." I gave her polytrichum; saw her next day, and learned of her that she had had occasion to urinate sixteen times during the night. On her return to New York, she took a supply of the article with her; saw her in New York three months after, and at that time there had been no return of symptoms to require the medicine again.

Case IV. Mr. H., of Hartford, 1853, had been unwell for six months; had been troubled with hepatic difficulties, bleeding from the lungs, œdema, very little urine, and sometimes scarcely none at all for several days. His father hearing that I had been successful in the treatment of some obstinate cases of dropsy, applied to me for medicine for that purpose. He informed me that the best medical skill Hartford afforded could not give the least relief to his son for his dropsy; that he could not get on his trowsers or stockings. I gave him some polytrichum; did not see him for three weeks, when the young man himself rode up to me, eight miles, with not only his trowsers and stockings on but also his boots. Mr. H. said: "In half an hour after taking the above medicine, he began to pass water freely, and his dropsical symptoms immediately subsided." I gathered him a suply of the article when here, but have recently learned that he has had no occasion to use it, as there has been no return of the dropsy since, although three months have elapsed, and his other symptoms continue unabated.

I could give a long list of cases equally as striking, if necessary.—*Am. Journal of the Medical Sciences.*

East Windsor Hill, Oct. 13, 1853

HYDROPHOBIA.

The Paris correspondent of the Liverpool (Eng.) Advertiser states that:—

"A Russian peasant, of Simbirsk, on the Volga, possessed a celebrity in the cure of this worst of all human diseases. He was not the discoverer of the root that cured, but was the sole depository of the secret. The renown of his extraordinary cures, bursting, at length, beyond the circle of his government, their number increased with his practice, and his celebrity along with them." The remedy used was the Alisma Plantago. A correspondent of the London Literary Gazette writes as follows respecting it:—

"Sir,—I send you for acceptance, a drawing of the reputed valuable plant, Alisma Plantago. It grows, I may venture to say, in most parts of Suffolk, certainly with us in great abundance, to the height of two feet above the surface of the ponds and ditches, bearing white flowers, inclining more or less to a purplish tinge, from the middle of June to August. I have endeavored to express the form of the seed-vessel so that the plant may be known after its flowers have ceased to exist. I am acquainted with no species of Alisma that at all resembles this in habit; therefore it must be known at a glance. For specific minutiæ you can refer to Dr. Smith's "Flora Britannica," or to "Withering's English Botany;" you will receive information from either."

ACONITE AS A LOCAL ANODYNE.

The comparative value of several of our local anæsthetics was well exhibited in a case recently under the care of Mr. Curling, in the London Hospital. The patient, a woman 57, had a patch of dry gangrene on the outer side of her left foot. Its slow increase was attended with such intense pain, that for several weeks she scarcely slept at all. To obtain relief, chloroform, on lint beneath oil-silk, belladonna lotion, and the solution of opium, were severally applied to the part, with, however, but very slight and temporary benefit. A liniment, consisting of equal parts of the soap liniment and of tincture of aconite was then ordered to be used in the same manner; and so great was the efficiency, that under its influence the poor woman was frequently able to obtain a very fair night's rest. This case is only one among many in which we have seen proved the powers of aconite as a local anodyne.—*Medical Times and Gazette*, November 12, 1853.

Part 3. Editorial.

STATE MEDICAL SOCIETY.

The State Medical Society of Ohio has just had a short session in this city; they meet next year in Zanesville. The *best thing* done by the Society was to announce their opposition to the present law which interferes with anatomical pursuits, and take measures to bring the subject before the Legislature.

The SMALLEST TRANSACTION of the Society was the reception of an application from a medical society at Columbus denouncing a physician, G. W. Jannis, for consulting with an Eclectic physician—which was referred to the committee on Medical Ethics.

The *most sensible thing* in the proceedings of the Society was the denunciation of their code of ethics as an absurd superfluity by Dr. M. B. Wright. By the way, Dr. Wright is the author of the prize essay of the Society on "difficult labors!"

The *most difficult case of labor*, we think, will be found in the labors of their committee, of which Dr. Mussey is chairman, which is entrusted with the business of getting up a new medical law for Ohio, to establish a central board, which is to have the exclusive power of granting diplomas, and of filling medical offices in this State. We think this committee will have about as much success as their "illustrious predecessors" in the same fool's errand.

The *most laughable affair* in the proceedings, was the application of Dr. Cox to be admitted as a member of the Society, which was rejected by a vote of 39 to 28. The Doctor, it will be recollected, was in the first organization of the Eclectic Medical Institute in 1845, selected for the chair of Surgery, which he held for a number of weeks, (we forget how many,) until, as the Trustees did not remove him—the class practically dismissed him by withdrawing in a body from the Hall, during the hour of his lecture, leaving him "alone in his glory!" At that time, the Doctor tiraded largely and loudly against calomel—but after his discharge from the Institute—his principles accommodating themselves to circumstances—he lost all sympathy with reform, and finally he has proffered sincere repentance for all past errors, and begged to be again among the purely orthodox—but without success. The discussion of his personal merits was rather rich, and an irregular motion was made to take him in for twelve months, on probation. We would be much pleased indeed if the State Society would relax its rules and take in all our discharged or expelled professors who sympathize with the Society in opposition to the Eclectic Medical Institute. They would make zealous co-laborers with the Society against the Eclectic School.

The *most candid thing* in the transactions of the Society, was in a report from Dr. Dawson, the admission that there is a general distrust and loss of confidence in the old school profession among the people generally, even the most enlightened, and that it was partly owing to their *neglect to examine thoroughly botanic remedies.*

Perhaps the public declaration of one of the Society, that their papers and proceedings were really not worth printing, might be considered as candid as the admission of Dr. Dawson.

The *best specimen of old fogyism* was the motion of Prof. L. M. Lawson to condemn taking out a patent for a surgical instrument, as an unprofessional course. Dr. D. Judkins, who has something of Young America in him, proposed an amendment, denouncing copyrights for books as equally unprofessional. This killed the resolution of Dr. Lawson as dead as—what? Why about as dead as the summer course of lectures in the Medical College of Ohio. Alas! poor College! We have just been informed that it has only two professors remaining! the rest having resigned, including the Dean.

B.

IMPORTANT PUBLICATIONS.

The Central Eclectic Medical Society of Cincinnati, has just issued two medical tracts of four pages each, in fine type, de-

signed to furnish the necessary ammunition for the army of Reform in the present campaign. The first tract, entitled "*What is American Eclecticism?*" is an answer to that question—just such an answer as the people need. We venture to say that scarcely any question is so often asked without satisfactory ideas being obtained. It is a question which cannot be answered in a word, and the majority of the community everywhere have the most erroneous ideas on this subject, ideas which operate greatly to the disadvantage of reform, and enable its opponents to place it in a false light. Wherever it is designed to push the eclectic practice, this tract ought to go, and wherever the practice has been established it ought to be distributed to enlighten and encourage its friends and to remove the prejudices of its opponents by showing its reasonableness, its fairness, its practical success, its triumphs in Cincinnati and its superiority everywhere.

The other tract is on bleeding, and answers the question "*Why do American Eclectics refuse to bleed?*" in that plain and forcible style which will raise a formidable barrier against the lancet wherever it is circulated. These tracts are in the right style to reach the people and excite their interest. They ought to be sown broadcast through the land. In the State of Ohio, alone, there ought to be a million of them distributed among the people. It is very certain that an Eclectic physician can make no better outlay than by distributing such documents among the people, ten twenty or fifty dollars laid out in that way will procure him ten fold return in pecuniary profit aside from social influence and standing.

These tracts are furnished at the rate of fifty cents per hundred copies. The cost of transportation by express for a small package is about 25 cents, the postage (one cent each) would cost more than the tracts themselves.

Every Eclectic physician should at once join the Central Medical Society—(See our May No.) and then as a member, he can obtain the tracts of the society at half price, 25 cents per hundred, besides other important private information. B.

HOMEOPATHY, HUNKERISM AND PROGRESS.

The signs of the times indicate that the Homeopathic party like main body of the profession is divided into the conflicting parties of conservatism and progress. The ultra Hahnemannians who tolerate nothing but conformity to the words of their master still appear to be in the majority, as conservatism in the present age of the world is everywhere numerically predominant.

At the late national convention of the Homeopathic profession at Albany, N. Y., a conservative resolution was after some discussion adopted:

This resolution declares that the law of Hahnemann "*similia similibus*" is co-extensive with all disease, and that the resort to any means of treating disease not based on this law, is owning partly to the incompleteness of the Homeopathic materia medica, but mainly to the *ignorance of the present resources of Homeopathy* in those who thus deviate from the rigid law.

This amounts to a pretty explicit vote of censure against all Homeopaths who dare to use anything not embraced in the one-idea theory of Hahnemann; and although the liberal and progressive Homœopaths have not yet been actually read out of the party, there is evidently a disposition among the old school Homœopaths to cut them off entirely. The Homœopathic school at Philadelphia belongs, we believe, to the Hunker class of exclusive Hahnemannians, while the Cleveland school, possessing more of the spirit of West American freedom, is not afraid to acknowledge that cures may be happily performed beyond the law of *similia similibus*, and that cold water, as well as other non-homœopathic remedies, may be a legitimate means for the treatment of disease—indeed, some of its professors are actively engaged in Hydropathic treatment. The editor of the American Journal of Homœopathy at New

are decidedly opposed to the Cleveland school and in favor of concentrating all the strength of the party upon the Philadelphia school as the only place where perfectly *pure homœopathy* can be obtained. The Cleveland Journal retorts with some asperity, and the line is pretty distinctly drawn. The effort was made in the national society to have the graduates of the Cleveland school excluded, or at least their diplomas disregarded as not being good homœopathic documents. The attempt failed, but the resolution just adopted looks that way.

We should not think it strange if Philadelphia became the general headquarters of fogyism in medicine, and Ohio the centre of liberalism. Some mysterious law of nature locates fogyism in the East, and progress in the West. The farther we go eastward, the deeper is the darkness of bigotry. Philadelphia, London, Rome, St. Petersburgh, Constantinople, Asia Minor, Persia, Tartary, China, and Japan, are successive stages of twilight and darkness. New Jersey, the darkest spot in the Union, was the last to repeal her medical laws. Eclecticism has a starveling existence in the East—it may triumph in Ohio—it will flourish in Iowa and Minnesota—but it will be glorious in California and Oregon. "Westward the star of empire takes its way."

B.

DEAD LANGUAGES.

The following quotation from Professor Playfair should have been introduced into the lecture on Medical Colleges, but was not within reach at the time.

"Without contesting the point, whether dead languages are of any use, it will be allowed that the study costs pretty dear.—Three quarters of the year, for seven years, at least, is the expense. Not above one hundred learn to read Latin even decently well—that is one good reader for every £10,000 sterling expenditures. As to speaking Latin, perhaps one out of one thousand may learn that, so that here is a speaker for each £100,000 spent on the languages. It will, perhaps, be said, that Latin is necessary to the understanding of English; but the Greeks, (particularly at Athens) who learned no language but their own understood and spoke it better than the people of any other country."

From the Boston Medical and Surgical Journal.

GRADUATES OF MEDICAL SCHOOLS, IMPOSTORS.

Messrs Editors,—The Catalogue of the "Cleveland Medical College, session of 1853-4," contains a full list of graduates at that institution, from its organization up to the present time. This, in my humble opinion, is right, and I hope every medical school in Union will follow the example. Such a list is necessary, not only to the profession but to the public; for there are impostors in the world, and some of them are so base and impudent as to claim the title of M. D., who have no right to it. So long as the people have no means of discriminating between the physician and the quack, they are liable to be deceived and imposed upon; and the profession are held responsible for all the malpractice, and all the sins of quacks and impostors, or all who call themselves doctors.

I do not say that all are quacks who have not graduated; but I do say, that those who attach M.D. to their names without any authority or right to do so, are impostors, and justice to the profession and public demands an exposure of the fraud.—There can be no injustice in publishing a list of graduates, for it will enable those who wish to employ a scientific physician, because he is a physician, to do so, understandingly. The profession are willing to be responsible for their own sins, but they are not willing to father the sins of quacks and quackery. No man should be permitted to sail under false colors, and I am in favor of calling men and things by their right names. Yours, &c.,

H. Graham.

Toledo, Ohio, April 6, 1854.

We hope to be able during the year, to publish an ample list of the graduates of the Eclectic Medical Institute since the commencement.

N.

THE CHOLERA IN PARIS.

On the 8th of April, there were in the hospitals of Paris forty-seven cases of cholera. In the course of the day three new cases were admitted, and three others were reported among the inmates of those institutions; one death happened on the same day. Up to the 8th day of April, the total number of cases treated in the hospitals was 1204. Discharged cured, 582; dead, 574. —*London Lancet.*

How long will outraged humanity tolerate

York and a report made to the State Society

erate these miserable quackeries? A mortality of about half of their cholera patients was long since confessed by eminent old school authorities. We know here by ample experience that a mortality of five per cent. is all that should be expected by a physician who properly understands the treatment of cholera. That old school physicians at the great emporium of medical science should still have ten times the legitimate mortality in this disease, after so much experience in its successive invasions, is an outrage against which the voice of mankind should cry aloud. B.

LAW REGULATING THE PRACTICE OF MEDICINE AND SURGERY IN NEW JERSEY.

The following law was passed by the legislature of New Jersey, at the instance we believe of a medical college in Philadelphia, which found the old law bearing rather hard on its graduates. "The last link is broken" now in the chains of medico-legal despotism in the United States. B.

A SUPPLEMENT to an act entitled "An Act to incorporate medical societies for the purpose of regulating the practice of physic and surgery in this State," passed January 28th, 1830.

Whereas certain practitioners of physic and surgery in this State, labor under certain disability in the practice of their profession, owing to existing laws, by which they are unable to collect their dues, and are liable to pains and penalties in the pursuit of their profession; therefore,

1. *Be it enacted by the Senate and General Assembly of the State of New Jersey*, That it shall be lawful for all persons of good moral character, who have diplomas from any medical college, or from the medical department of any university of any State of the United States, which, before conferring diplomas, require those upon whom they are conferred to be twenty-one years of age, to have studied physic and surgery three full years with a respectable and lawful practitioner of medicine, including two full courses of lectures of not less than twelve weeks each, in which shall be taught the principles of Materia Medica; Pharmacy, Chemistry, Anatomy, Physiology and the practice of Physic, Surgery and Midwifery, to practice Physic and Surgery in this State, after depositing a copy of such diploma, translated in the English language, or other evidence of graduation, with the clerk of the county in which such practitioner may reside; and until such copy shall be so deposited those practitioners who shall neglect the same shall be liable to the penalty of the act to which this is a supplement; and it shall be the duty of the said clerk to file such copy in his office, for each of which he shall receive twelve and a half cents, and no more, from the practitioner who may deposit the same.

2. *And be it enacted*, That all acts and parts of acts conflicting with the provisions of this act, be and the same are hereby repealed. Approved March 17, 1854.—*Phil. Journal of Homœopathy.*

EPITAPHS.

HERE LIE

ALL THE MORTAL REMAINS

OF THE

SUMMER MEDICAL INSTITUTE

OF THE

MEDICAL COLLEGE OF OHIO.

AT THE OPENING OF THE SESSION, ONE PROFESSOR WAS PRESENT, AND WE ARE CREDIBLY INFORMED THAT ALTHOUGH THERE WERE NO STUDENTS

ONE VISITOR

LOOKED IN.

"*Requiescat in pace.*"

HERE LIE

ALL THE MORTAL REMAINS OF THE SUMMER SCHOOL HELD IN THE ROOMS OF THE ORTHODOX

MEDICAL COLLEGE

LOCATED ON

WESTERN ROW, CINCINNATI,

AT THE OPENING OF THE SESSION WE ARE CREDIBLY INFORMED THAT

TWO STUDENTS AND ONE PROFESSOR

WERE SEEN IN THE HALL, ENGAGED IN THEIR LABORIOUS DUTIES—THEIR SUBSEQUENT CAREER IS BRIEF, MYSTERIOUS AND

Unknown to History.

THE

ECLECTIC MEDICAL JOURNAL.

THIRD SERIES, Vol. II | AUGUST, 1854. | WHOLE SERIES Vol. XIII.

Part 1. Original Communications.

CLINICAL REPORTS,

At Newton's Clinical Institute.

SERVICE OF PROFESSORS NEWTON & FREEMAN.

REPORTED BY PROF. E. FREEMAN.

(Continued from page 298.)

SPRING SESSION.

Treatment.—By a special request of the parents who expected the child to die either without or with an operation, Prof's. Newton and Freeman were persuaded to operate upon it. An incision with a lancet was made on the left side of the median line two inches from the sup. long.' sinus in the site of the parietal protuberance and near the border of the parietal bone, and the hydrocele trochar and canula introduced obliquely forward, gauged by the thumb and forefinger, the trochar was withdrawn; a few drops of blood followed and one quart of water was drawn away. During this time a light bandage was applied over the scalp to compress the bones of the cranium which approximated as the water was drawn off, and when the face of the child began to assume a paler appearance or the slightest change, the stream of serum was arrested, canula withdrawn and the head bound tightly, and retained with adhesive straps. We did not draw off all the water; expect to operate again in a few days if the child survives the first operation.

Keep the patient quiet, let him nurse as usual.

April 21. Doing well, is conscious and to all appearances as well as ever; serum accumulating and oozing from the wound under the dressing about half a pint has passed away in this manner.

22. Still improving, symptoms favorable.

23. Not so well to day, breathing laborious, pupil slightly dilated, skin paler than yesterday, appetite middling.

24. Died calmly and without convulsions.

Such operations are rare and a favorable result uncertain—the chance for a cure tho' slight indeed, was preferable to a short life in the condition described previous to the operation.

April 10.—Case 131. Alice Foley, æt. 9; Ulceration of the cornea, commenced two months since, blood vessels leading to the ulcer engorged, also engorgement of the blood vessels leading to the cornea, no intolerance to light; the case is a singular one from these facts,—I have never seen one similar, tho' I have noticed reports of a few cases, some by "Miller."

Treatment.—Apply the mild zinc ointment to the ulcer for a few days.

May 5. Discharged cured.

April 21.—Case 132. Patrick Navy; Opthalmia and granular eyelids. Been affected since last July, most inflamed in

the morning from retention of the secretions; bowels costive and stomach acid.

Treatment.—Alk. bath; mild zinc ointment to the eyelids.

April 21.—Case 133. Will P. Harregan, æt. 25; Periostitis of the middle of the shin.

Caused by a blow four months since, some inflammation, swelling and pain, caused more annoyance than suffering.

Treatment.—Irritating plaster over the part.

May 5. Did not use the plaster until within a few days. Some discharge from the plaster, no pain in the bone.

Treatment.—Keep up the discharge from the plaster for a few days, then use the elm poultice until the sore heals.

June 1. Discharged cured.

April 21.—Case 134. A. F. Harris; Herpetic ulcer of the shin. Ulcer cracked and scaly; two inches in diameter, itches much.

Treatment.—℞. oxalic acid ʒ j., water ʒ j. *m.* apply night and morning.

April 25. Improving, continue the oxalic acid solution once in three days.

May 12. Ulcer healed; discharged cured.

April 25.—Case 135. Ellen Fitzpatrick; Chronic rheumatism in the right shoulder and arm.

Has been affected eighteen months, has been treated by a number of physicians with scarcely any improvement; is able to do a little labor about the house, has some headache, cold feet and much perspiration.

Treatment.—℞. Iod. potass ʒj., water ʒvj., *m.*; take ʒj. three times a day.

May 12. Improving, continue the treatment, use also stim. liniment.

May 30. Discharged cured.

April 35.—Case 136. Peter Nangle, æt. lus ulcers and fistulæ. Commenced as rheumatism or as ostitis upon the upper part of the arm, which terminated in necrosis with a discharge of pus and sequestrum; the part healed. Inflammation has since commenced in the lower part of the right femur, near the knee joint, a fistulous opening extends into the thigh at the point of inflammation four inches, to and under the bone, there is much discharge of unhealthy looking and fetid pus, some pain in the part. He has also a fistulous opening in the groin, can pass a probe into it three inches, this discharges pus similar to the opening near the knee, is unable to labor, much debilitated, has night sweats and much pain in the back; habit scrofulous.

Treatment.—℞. Sesq. carb. potass ʒ ij, water ʒ j., *m.*, inject the fistula on the thigh twice a day; use sesq. carb. potass dry upon the sore in the groin.

Constiutional Treatment—℞. Comp. syr. still. ʒj three times a day.

April 28. Appearances better. the opposite side of the knee is inflamed and much swollen; continue the treatment, use the irritating plaster over the recent swelling on the outside of the knee.

May 2. Not so much pain or stiffness in the part as before; less inflammation.—Continue the treatment.

May 5. Sores discharging freely, parts more painful and stiffer from the irritating plaster; continue the treatment.

May 12. Improving, swelling on the outer part of the knee less, fistula formed on the outside communicates with the one on the inside of the thigh, less discharge, can walk much better.

Treatment.—Use cold applications to the knee. Use the injection weaker, if the groin bleeds discontinue the caustic.

June 1. Continue the treatment.

April 25.—Case 137. John Mooney, æt. 54; Chronic opthalmia. The eye has been affected two years and has now assumed the purulent form.

Treatment.—℞. Comp. aconite collyrium applied to the eyes four times a day, and hydrastin ointment applied at night.

April 28. No better; apply sesq. carb. potass to the eyelids, use internally comp. syr. sarsap. ʒ ss three times a day; continue the collyrium and ointment.

June 1. Improving, continue the treatment.

April 28.—Case 138. George Staffer. Weakness of the lower extremities. This weakness is a sequel to the measles; can scarcely walk; is well otherwise.

Treatment.—Irritating plaster over the lower part of the loins.

June 1. Improving, is much better, continue the treatment.

April 28.—Case 139. John McCrudder, æt. 21; Chronic pleurisy. Had the dysentery for eleven weeks previous to the pain commencing, pain in the right side commenced three months since, has a cough, coughs up some dark mucous, pulse 110, neither full nor strong, bowels irregular, appetite variable, cannot lie on the right side.

Treatment.—Alkaline bath; irritating plaster on the right side. Give internally, ℞ Tinct. opii. camp. ʒ j, syr. squills ʒ ij, *m*. Give ʒ j three times a day.

May 2.—Improving; can lie on the right side, stronger, no pain after eating. Cough better; continue the treatment.

May 5.—Improving; did not feel the pain for three or four days until sneezing caused its return, feels some pain now, coughs a little toward evening; strength improving.

Continue the treatment, excepting the expectorant.

June 2.—Has taken some cold, not so well, some cough, pain all the time. Bowels regular; soups, &c., become acid in the stomach, pain in the region of the liver upon pressure, a long breath produces pain. (Liver affected some.)

Treatment.—Use comp. carth. pills, two at night, and if they do not operate use two in the morning. Irritating plaster over the lower part of the lungs and liver.

May 2.—Case 140. Thomas Butler, æt. 30; Chronic Synovitis of the knee joint.

Has been affected three months, pain in the knees on walking, cannot walk much, pain on laying down at night, cannot walk during a storm, some heat and tenderness over the joint.

Treatment.—Cold water dressing; internally use ℞ Comp. syr. of Sarsp. ʒ viij, iod. potass. ʒ j, *m*.; give ʒ ij, three times a day.

May 5.—Improving; parts quite supple, is much better. Continue the treatment.

May 20.—Improving. Continue the treatment.

June 1.—Improving. Can move the patellæ, not much pain. Continue the treatment.

May 2.—Case 141. Thomas Mulvoy, æt. 23. Chronic Opthalmia.

Been affected five months, commenced by dimness of vision. Can see a little, can distinguish the presence and outlines of a body, but not the features; conjunctiva injected, ulceration of the cornea, blood-vessels leading to the ulcer imperfect. Depletion would injure him very much.

Treatment.—Mild zinc ointment applied carefully to the eye twice a day. ℞ Comp. syr. sarsap. ʒ ss, three times a day. Diet nutritious.

May 5.—Improving; sees much better—conjunctiva less vascular, net work less. Continue the treatment.

June 1.—Improving; continue the treatment.

May 2.—Case ——Martin Rody. Disease of the lungs, spitting of blood.

Pain in the lower part of the chest, some cough, was here last winter and relieved of an illness.—was taken sick since and has been in the marine hospital. Thinks he can be treated more successfully here.

Treatment.—℞ Lycopus Virginicus ʒ iij, water ℥ j, *m*. Make a decoction. Take ʒ j, three times a day.

June 1.—No report from him.

May 2.—Case 143. William Cullem.—Inflammation of the ligaments of the knee joint.

Caused by a sprain two months since. Some pain and much swelling; painful on moving the joint.

Treatment.—Use cold water dressing for a few days, then the irritating plas.er.

May 23.—Improving; surface of the knee discharging pus. Omit the irritating plaster and use the black save.

June 1.—Discharged cured.

May 5.—Case 144. John Keif. Constipation and hemorrhoids.

Has but one fecal discharge during the week, discharge accompanied with much pain and discharge of pus and blood; pain in the stomach, coughs a little, has taken much medicines; cathartics leave him costive, edges of the tongue red, headache accompanies costiveness.

Treatment.—℞ Comp. cathartic pills two every night until they operate freely.

March 12.—Has one or two operations every day from the medicine, he uses only two pills every day, more would injure him, passes not much blood, not so much straining as usual—such cases may terminate in *fistula in ano* from the constant irritation of the rectum.

Treatment.—Continue the comp. cath. pills, one morning and evening.

May 23.—Improving; has an operation from the bowels once in two days. Has no hemorrhage with the piles now, piles less. Continue the treatment.

June 1.—Improving, continue the treatment.

May 5.—Case 145. Mary Quinn, æt. 33. Hæmoptisis and pneumonic irritation.

Been affected twelve months. Commenced coughing last June, had much oppression of the lungs and spat up some blood, cough some now, appetite indifferent, pain through the shoulders, changes from the right to the left shoulder.

Treatment.—℞ Lycopus Virginicus ʒ ss, water O j, *m*. Make a decoction and give ʒ j, three times a day.

June 1.—No report.

May 5.—Case 146. ——Quinn, æt. 4. Parotitis, (mumps.)

Been affected four days. Symptoms, those common to this disease.

Treatment.—Keep quiet at home for a few days.

May 23.—Discharged cured.

May 5.—Case 147. Margaret Hardin. Chronic Opthalmia.

Eyes have been diseased for three years, but confined to the lids mostly.

Treatment.—℞ Comp. syr. sarsap. ʒ ss. three times a day. Hydrastiu ointment to the lids.

May 12.—Much improved, inflammation has disappeared from the eye ball, confined to the lids, (Opthalmia Tarsi,) lids scaly. Continue the treatment.

June 1.—Improving, continue the treatment.

May 5.—Case 148. Stephen Butler, æt. 35. Opthalmia.

Caught cold last July, eyes have been diseased since that time, no headache, appetite indifferent, otherwise general health good.

Treatment.—℞ Mild zinc ointment to the eyes twice a day.

May 12.—Eyes more painful, sees as well as previously, pain in the temple, right eye more swollen, left better.

Treatment.—℞ Comp. syr. sarsap. ʒ ss, three times a day. Use the comp. aconite collyrium four times a day.

June 1. No report.

May 5.—Case 149. —— Leper. Functional preumonia and spinal irritation.

Has some pain and soreness in the chest during the last two months,—mucous and sputa tenacious and frothy, breathing oppressive.

Treatment.—Counter irritation to the spine (apply croton oil), also use ℞ syr. senega ʒ j, syr. scilla ʒ ss. paregoric ʒ ss, *m*. Take ʒ j three times a day.

May 12.—Discharged cured.

May 12.—Case 150. —— Ugens, æt. 8. Otorrhea.

Ears have been affected two years, the discharge is profuse and offensive, there is much pain in the ear, and obtuseness of hearing; scrofulous temperament, think the bones of the ear are affected.

Treatment.—℞ Sesq. carb. potass ʒ ss,

water ʒ vi, *m*, inject into the ears morning and evening.

May 23—Improving; has not so much pain in the ears. Continue the treatment.

May 30.—Improving; secretion less and less fetid.

June 1. Improving; use ℞ Sesq. carb. potass 3 j, hyd. canad. 3 ss, water ʒiij *m*., use as the previous injection.

May 23.—Case 151. Mrs. W—. Cancerous tumor of the breast. Tumor four inches in diameter, involving the right nipple; nipple depressed, tumor involving the whole of the right mamma and attached to the intercostal muscles. The tumor had become very painful, some pain in the arm; patient very anxious and nervous.

The whole mammary gland and tumor were extirpated by Prof. Newton. Chloroform was administered and the cold water dressing used.

June 1. Improving; the surface of the wound granulating well, you distinguish the morbid from the healthy granulations. There was a lady came to be operated upon by me, at the same time with Mrs. W., but was persuaded to adopt the old treatment under another physician. She was operated upon without using chloroform. Reaction never came up in her case perfectly, she lingered a number of days laboring under severe prostration, and has since died, while Mrs. W. is doing well and will soon return home free from disease.

May 23.—Case 152. Michael Burke. Fracture of the leg. Eight weeks since, a loaded wagon passed over his ankle fracturing both malleoli, and causing some displacement; the dislocation was reduced at the time, and since then there has been a discharge of a small piece of bone from the internal malleoli; the parts are large, swollen and weak, but the joint is not much impaired or is there much imflammation.

Treatment.—Cold water dressing and roller.

June 1. No report.

May 23.—Case 153. C. M., æt. 26. Chronic Bronchitis.

Has been affected ten months. Took blue pill first, but no improvement, has coughed much, spat some blood and much mucous; some pain in the trachea and bronchial tubes, much mucous discharge in spitting.

Treatment.—℞ Nit. silver in sol. 3j to ʒj water, apply to the throat with a probang once a day. Use internally, ℞ comp. syr. still. ʒ vii, iod potassa 3j *m*., use 3j three times a day. Vesicate with oleum tiglii over the larynx.

June 1. Improving; feels much better.

May 23.—Case 154. Thomas Moore, æt. 5. Scrofulous ulcer.

Ulcer behind the angle of the jaw, not much induration, the sore discharges some pus.

Treatment.—℞ Com. syr. sarsap. ʒ vj; iod. potassa 3 ss *m*., take 3j three times a day. Use zinc ointment to the sores.

June 1. Improving; continue the treatment.

June 9.—No clinic reports to day. It being the last day of the clinic lectures for the spring session, Prof. Newton remarked:

Gentlemen, members of the clinic class, again I meet you, to give you the parting hand, and most of you I expect to meet no more within these clinic halls, where we have met so pleasantly, and discussed and demonstrated so much to our mutual satisfaction, the principles and practice of our truly American Eclectic system of medicine. I do not part with you reluctantly, for I am anxious that you should be in the field, operating for the good of our common cause, which I believe you will represent so wisely and manfully. (Cheers.)

It was our object in establishing the clinic to have an institution where the merits of the system of practice which we teach, should be fairly tested before you, that you might in appreciating it, fully gain confidence to make a bold and successful commencement as you entered on your professional career.

We have spared no pains to make the clinic interesting, with varied and difficult cases, some of which have baffled the ski

of the old school physicians, but under our judicious management have been relieved and nearly all cured, as a reference to our clinical reports will attest; and we have endeavored to make an accurate report of those cases which have been and will be reported in the Journal, and will be a good reference for you when you return home. Indeed, we are daily receiving letters complimenting us upon the success of our clinical practice, and the lucid and satisfactory manner in which our clinical reports have been gotten up. Here you daily become posted in medical practice and diagnosis, and fitted for the responsible position which you design to occupy. And here let me kindly thank you, in behalf of the clinic faculty, for the degree of courtesy and attention you have shown us while listening to our instruction.

[Prof. Newton here presented the class with a certificate of attendance signed by the Clinic faculty. R. S. Newton, M. D., Professor of Clinic Medicine; Z. Freeman, M. D., Professor of Clinic Surgery; and O. E. Newton, M. D., Consulting Physician, which can be shown at any time, indicating the interest taken in professional studies.]

And, gentlemen, let me suggest that you all take a certificate, for fear that some of you may get no other diploma. I do not desire to discourage you, but to stimulate you.

There are some who, in the practice of their profession, neglect preparing themselves by lectures and a proper course of reading to fill their position with that degree of dignity which scientific knowledge imparts to the investigator. Such have not graduated, and though they may be good practitioners of medicine in a limited sphere, yet we suggest that they attend lectures and graduate in a legally authorized medical college, as a duty they owe the dignity of the Eclectic fraternity; and there are others who are not truly Eclectics, but have, like the jackass, donned the lion's skin, going about braying that they are Eclectics because it makes them more popular in their neighborhood. Though this speaks well for the popularity of Eclecticism, yet we suggest that the community ask for their diplomas, and if they cannot show one from the Eclectic College, it is because they have none. All who graduate at the Eclectic Medical Institute can show their diplomas. I do not desire to be so rigid as a young member of the old school profession, who feels himself a little inflated with Paris notions, and presented a resolution to the Medical Convention held in this city lately, that laws be made to prevent every physician in this city from practicing medicine who would not submit to be examined before a board of censors appointed by the said convention. The young doctor must have dug up some of the old resolutions that have been hissed under the ground by the better sense of a progressive and liberal legislature of some of our Eastern States many years since. The art of medicine is as progressive as the intellect, and should not be restricted to the narrow compass of petty minds; nothing is fixed but God's immutable laws. It was from this progressive impulse in medical politics that it became necessary to establish an Eclectic Medical College in this city, and the result is, that hundreds of intelligent Eclectic physicians are continually occupied in advancing our common cause throughout this Union.

The faculty and trustees of our college do not bind you by any oath to return your diploma if you should deviate from the beaten track of your ancestors, as was done in the presentation of diplomas at an Old School commencement in this city, but have you to pursue any course that your educated judgment shall suggest. The taking of the vow suggests the idea of putting the collar around the dog's neck and holding on to the string, and if Mr. *Doggy* should go a little too far to jerk him back—this is not *Young America* but the meanest of servility and belongs to Rome and despotic ages. Each man's collar should be marked so that all might know the wearer. Progression is the most prominent feature of the age and the people should not be forced to swallow poison against their will, and they will not do it, so that it is a common saying among them, "doctor do

not give me any calomel" &c., and often Mr. *offended-dignity* takes his hat and leaves the room—let him leave. The people have Eclectics to resort to who can cure without using those harsher poisonous drugs.

Another prominent feature among us is the preparation of our concentrated vegetable remedies, for a knowledge of which I refer you to our Professor of Materia Medica, to the few last numbers of the Journal and to the Eclectic Dispensatory. I hope that you may all add some new and useful remedy to the long list already presented to the profession.

Gentlemen, good bye, I wish you all a full share of earth's blessings, and general success in the practice of the profession of your choice. (Cheering.)

LIST OF CLINICAL STUDENTS.

John A. Leeper, Iowa.
Oliver Chase Joslin, Indiana.
Henry R. Potter, Ohio.
Orville P. Chubb, Michigan.
David H. Thomas, Tennessee.
Hiram E. Zimmerman, Pennsylvania.
Howell H. Hudgins, Mississippi.
George W. Noble, Ohio.
August J. Emiks, Illinois.
Joseph Everingham, Iowa.
Benjamin F. May, Alabama.
Robert E. Kiernan, Ohio.
Charles Lee Fisk, Jr., Massachusetts.
Handford W. White, Ohio.
Philip T. Gans, Pennsylvania.
Cristopher C. Ferguson, Kentucky.
Abraham Russel, Ohio.
Peter N. Woods, Ohio.
Henry G. Averdick, Ohio.
Thomas E. St. John, Wisconsin.
James L. Springgate, Kentucky.
Alexander S. Tandy, Kentucky.
Henry Drake, Connecticut.
Erskine D. Curtis, Connecticut.
Henry Wohlgemuth, Illinois.
Courtland C. Stowell, Michigan.
Everell F. M. Torry, Michigan.
Leroy W. Brown, New York.
Onerious R. Powell, Kentucky.
John M. Swift, Michigan.
Andrew J. K. Murphey, Ohio.
John D. Watts, Illinois.
J. Leopold Stiger, Hungaria,
Isaac Kesling, Ohio.
Enoch Lagore, Ohio.
Joseph G. Campbell, Ohio.
Henry Douglas, Texas.
Joseph Fireraugh, Indiana.
Joseph W. Jay, Indiana.
Benjamin M. Robins, New York.
William R. Sample, Alabama.
Jeptha G. Dolley, New York.
Moses W. Bonebrake, Ohio.
Joseph E. Ruhl, Pennsylvania.

STOMATITIS—INFLAMMATION OF THE MOUTH.

BY R. S. NEWTON, M.D., PROF. OF THEORY AND PRACTICE IN THE ECLECTIC MEDICAL INSTITUTE, CINCINNATI.

This affection appears under a variety of forms, which result from differences of cause and of constitution. It appears with such marked differences, in different individuals, as to have caused pathologists to divide it into six or seven sub-forms, for its better elucidation and treatment.

Stomatitis Erythematic—Common Inflammation of the mouth.—This inflammation may so spread itself as to occupy the whole of the lining membrane of the mouth, but more generally it appears in patches. It is sometimes very superficial or erythematic in its character, but at other times it involves the entire thickness of the membrane, and in some instances involves the sub-mucous tissue and the adjacent glands, and thereby produces considerable pain and swelling.

The superficial or erythematic form is characterized by redness, heat, and sometimes with dryness of the mouth and tongue. It varies considerably in its duration and intensity; with regard to the first, it may be transitory, or it may continue for a long time. In young infants, it is but rarely attended by febrile symptoms or derangement; but in children of eight or nine months it is apt to be attended with much pain and febrile derangement. The epithelium sometimes becomes opaque, and occasionally rises into blisters, and becomes detached.

In such states of the system as indicate a more than ordinary depravity, superficial ulcers appear, which may spread or become deep, as well as extensive, and finally, if the constitution be too depraved and feeble to sustain such an inflammatory action as may be essential to the removal of the disease, gangrene may supervene.

When this affection happens to involve the gums, after the teeth have appeared, they swell and rise between the teeth, and frequently ulcerate, and this destructive action may continue until the teeth are disengaged or removed; but such instances as this are very rare.

There is a mild variety of this affection which has been denominated catarrhal—the secretions of the mouth are abundant—the tongue is furred, and the taste blunted. This has been very carelessly mistaken for disease of the stomach. Such a suspicion should not be found in the absence of all direct gastric symptoms. Stomatitis may accompany gastritis or enteritis, but in such cases the symptoms, if attended to, will permit of no mistake.

Causes.—When it is idiopathic, it results generally from some chemical or mechanical cause; the latter can very seldom be a cause in infancy, but the former may, as by an accidental use of acid substances. At this early age, it is most generally symptomatic of gastric irritation or disease. It may sometimes result from an extension of either variety of angina.

Treatment.—If the disease have resulted from chemical or mechanical means, the occasional use of a little sweet oil, applied with a hair pencil or a feather may alone prove sufficient, but should it prove more obstinate, resort must be had to astringent washes, as infusions of geranium, and in case of much inflammation, a solution of borax should be freely used as a wash.

If it shall be symptomatic, our first duty should be the removal or mitigation of the disease of which it is a consequent.

STOMATITIS WITH ALTERED SECRETION—INFANTILE SORE MOUTH—THRUSH.—This form of disease commences with an erythematic inflammation of the epithelium of the mouth, or the surface of the tongue; and after two or three days, small white points are presented upon its extremity or sides, or upon the internal surface of the lip, particularly the inferior one, and they appear to crown the papillæ of the surface to which they adhere. These increase in number and coalesce so as to form patches, which may finally cover the tongue, the roof of the mouth, the inside of the cheeks, and sometimes the fauces.

The progress of this form, from its most simple to its more complicated character, presents, through its excretion or exudation, three distinct results or phenomena: the first we have named, consisting of white points; the second, is that of variously-sized shreds; and the third, is that of a pellicle or membrane covering all of the diseased parts. This membrane assumes, sometimes, a yellowish or a reddish color, but these are adventitious circumstances—having nothing to do with the disease—mere stains from the presence of bile, or sanguineous exhalation.

The true seat of the disease appears to be the surface of the epithelium, and not the parts below it; and the state of it, which the white points represent, may be regarded as the first or mild stage, and if it progress no further—the white points disappearing—the attack may be considered as mild.

When the points coalesce to the formation of patches, which thicken and exfoliate and leave the surfaces they occupied red and inflamed, to produce another crop to exfoliate in like manner, without further increase of the inflammation, then there is a termination of the disease in the second degree.

When the inflammation so spreads as to render the patches confluent—forming follicles of greater thickness and extent, then it is regarded as malignant. Post mortem examinations have discovered patches of the exudation in the œsophagus, stomach, and small intestines.

In the course of the disease, in either of its forms, the exudations may exfoliate and be replaced several times, and consequently there is no definite period for its reign—it

may vary from a few days to several weeks. Diarrhea, flatus, and colic pains are frequently attendant upon it. The breath of the child often has an acid odor—the contents of the stomach, when thrown up, are green, and smell like the breath, and this acidity may be the occasion of that redness which is sometimes seen about the anus in this complaint.

The skin is usually hot and dry and the thirst insatiable, and yet fever is scarcely ever manifested, and the pulse is as rarely affected.

No age can be regarded as entirely exempt from this disease, but infancy is peculiarly liable to it, and equally so, perhaps, in all seasons of the year. It is not now considered to be contagious.

Causes.—Improper nutrition, foul air, and improper or deficient attention to the skin, may properly be regarded as the principal exciting causes in early infancy. The remote cause, it is said, may consist in that predisposition of the mucous membranes of infancy to inflammation—a consequence of their sanguineous repletion. We think it to be far more probable that it consists in some feebleness or depravity of the constitution—a want of vital force; and hence, instead of a predisposition to it, there was only an organic liability to it. And it should be remembered that neither fat nor lymph indicate an adequate vital force. Close observation will fully illustrate this truth.

Considerable difference of opinion prevails in the profession as regards the true source of thrush; some have maintained that it is always sympathetic, while others are very positive that it is sometimes idiopathic. We are willing to admit the latter conclusion, in a very large proportion of instances. We view it as a disease, when idiopathic, as having its origin in a feeble vital force, and this explains why it is so much more frequently met with in hospitals than in private practice.

Dr. Eberle says, that "feeble and sickly children scarcely ever escape from this disease." Now, when it is remembered that the feeble children are very generally the sickly ones, our conclusion, that it depends greatly upon an original organic and feeble viable condition of the system, is rendered even more than probable. He further states, that "bad and old milk, and thick farinaceous preparations, sweetened with brown sugar or molasses, are especially apt to give rise to the disease." Here, again, we find our leading argument to be sustained. The nutritive system is incapable of converting the carbon into fat, and the lungs cannot combine it with oxygen, and disease is the consequence.

Treatment.—As in this form of disease the bowels are, if not always, very generally, in a deranged condition. A superabundance of acid is thought to be generally present, as the evacuations, if diarrhea be not present, are usually of a green color. We are not willing to take it as granted that the green color of the fæces is a certain proof that they are acid—we do not know that it is ever the case, but we are sure that it is not always the case. Green evacuations are sometimes, and so far as we know to the contrary, entirely insipid and insensible to any test for the presence of acid. Nevertheless, the green color is an evidence that the bowels are not in a normal condition. and therefore it would be judicious to employ the compound powder of rhubarb, or the syrup of rhubarb and potash, to change this condition and restore the vitiated excretions to a state of health.

In the event the stools are frequent, sparing, aqueus, painful, and straining. a small portion of paregoric may be added to the above agents, and injections of starch-water or mucilage in small quantities, administered immediately after each alvine evacuation; sometimes infusions or decoctions of astringent vegetables may be advantageously employed, as of blackberry root, dewberry root, etc.

When the diarrheal evacuations shall have a green color, which is sometimes the case. the use of magnesia and of lime water has been recommended, but in the generality of cases, we prefer the course above-named to any other.

When the bowels indicate the existence

of much irritation, the discharges are scanty and possibly stained or streaked with blood, Dr. Dewees strongly recommends the use of the oil of butter two or three times a day. For the same purpose, he thinks very favorably of gum arabic water.

But in this plan of treatment, even though we shall succeed in preventing a prostrating debility, a circumstance that not unfrequently results from it, we have incomparably more confidence in the efficacy of a purely revulsive treatment, because a thorough equalization of the circulation will be followed by an improved condition of the alvine secretions; therefore, in addition to the means above pointed out, the whole external surface should be once or twice a day bathed with a warm, weak alkaline wash, and dried with some degree of friction.

The most proper food for the child is its mother's milk, provided she be in good health, but even then she should, for the time being, live upon simple and very digestible food.

Local applications, in the treatment of this form of disease, are not to be dispensed with. During the inflammatory stage, stimulating applications should be applied under the jaw, as the compound capsicum liniment or the compound tincture of camphor, which, in very young infants, may be diluted by the addition of sufficient olive oil; and, for a mouth wash, or rather as a remedy for the sores contained within it, a decoction of hydrastis canadensis may be used several times a day, and even a portion of it may occasionally be swallowed; or borax may be added to the decoction in many instances, with decided advantage.

STOMATITIS FOLLICULAR—INFLAMMATION OF THE MUCOUS FOLLICLES OF THE MOUTH. In the appearance of aphthæ and thrush, and in their constitutional symptoms, there is a very striking analogy; but still we cannot declare, with Prof. Dewees, that we can perceive no difference between them as described by C. M. Billard. The resemblance is one of appearance, and the difference is one of reality—of anatomical location; and when we consider that both are located in the same districts, we should not consider it strange that the constitutional symptoms should scarcely admit of a distinction. We concede that the distinction appears to us one of fact—of science, rather more than one of therapeutical utility.

In muguet or thrush, the disease is confined to the surface of the epithelium, says Billard; but in aphthæ it is confined to the muciparous follicles of the mucous membrane. Now, if these be the facts, then certainly they are not one and the same disease, although it may be difficult to determine a difference between the symptoms.

Prof. Wood regards thrush and aphthæ as distinct forms of disease, but he does not agree with Billard in considering follicular inflammation and aphthæ as one and the same. He admits that the muciparous glands may be sometimes the seat of aphthous ulcerations. He teaches that aphthæ is a vesicular inflammation and embraces all the small ulcers, with whitish surfaces, which are frequently to be seen in the mouth.

This misunderstanding between pathologists is not as to the true seat and character of those forms of disease which visit the mouth, but as to which of them belongs, truly, the name of aphthæ. It is fortunate that this difficulty can avail but little, if anything, in practice, because the treatment must be about the same in all three of the inflammations—the diffused, the follicular, and vesicular.

After digesting the information which we have been able to glean concerning these forms of disease, we are disposed to conclude that the one which is generally regarded as aphthæ in this district of country is the *thrush* or *muguet* of French writers—the infantile sore mouth of common denomination.

As Prof. Wood no doubt understands that form of disease which is generally understood to be aphthæ by the profession of this country, it is perhaps best, for practical purposes at least, that we adopt his views.

The mucous follicles are so exceedingly

small that they cannot ordinarily be seen; but the infinity of their number sufficiently compensates for their smallness; but, when they become inflamed, they may be felt with the finger although they may not be seen, and when first seen they are small, hard, round, whitish eminences, surrounded by a reddish circle. When the inflammation takes its natural or uninterrupted course, these eminences become soft in their centers and ulcerate, throwing out a whitish matter which is disposed to adhere to the surface.

These ulcers are either isolated or confluent, and when the latter, they present a continuous, whitened, and ulcerating surface. It is common to adults and infants, but more frequently appears in the latter, and with them it is sometimes mistaken for the thrush.

It is said to attend at the conclusion of the exanthematous fevers and chronic inflammations of the viscera in general.

The treatment of this form of disease, so far as is now known, does not differ from that of aphtha, to which we refer.

Stomatitis Vesicular—Aphthæ—Ulcerous Inflammation of the Mouth.—The term aphthæ is applied to all those small and whitish ulcers which frequently appear within the mouth, without reference to their particular seat or source.

This form of disease generally begins on the inner surface of the inferior lip, or within the angles of the lips, and consists of white vesicles, which may be few or many. From these points it spreads rapidly upon the buccal parieties and surfaces of the mouth and gums. At other times, it appears simultaneously, and in the same form, upon several portions of the buccal cavity. Wherever it may begin, it resembles a coagulum of milk. In its severer forms, as in the thrush, the eruption becomes darkish or reddish, and probably because of the presence of blood.

Aphthæ is thought by many to be altogether symptomatic—that it is always preceded by some gastric derangement, but as it sometimess attacks children whose stomachs and bowels are in excellent health, we are justified in doubting its purely symptomatic character. It is thought to appear, sometimes, epidemically, and if it do, we cannot well doubt that it is sometimes idiopathic.

As in the thrush, so in aphthæ, the stomach, the bowels, and the brain appear to participate in the inflammation of the mouth—the desire to sleep is unusual, and the bowels are troubled with aqueous, acrid, and greenish stools, attended more or less with flatus.

Young children, when the disease is severe, emaciate rapidly—they are harrassed greatly by colics, diarrhea, and gastric irritability. The last is sometimes so great, that scarcely anything is retained. The œsophagus is sometimes so closed up with aphthæ, that the little which the stomach may retain is with great difficulty swallowed.

It is useless to pursue the symptoms of this disease further, because it is impossible to define an appreciable difference between the general symptoms of it and thrush and Dr. Eberle uses the two names synonymously.

Aphthæ is not so common to early infancy as to a more advanced stage of childhood, and after this it may attack any age. It is not confined to the mucous membrane of the mouth—Prof. Dewees says, that he has seen it "most plentifully in the labia pudendi as well as on the internal face of the prepuce." After this remark, we think it rather surprising that he should seriously doubt as to the occurrence of aphthæ upon the mucous lining of the stomach and bowels.

Causes.—Feeble children, and those whose constitution has become depraved by the use of improper food, air, etc., are the most liable to it. Prof. Dewees thinks that farinaceous diet predisposes to the disease, more especially when sweetened with brown sugar or molasses. We would, *a priori*, adjudge sugar and fats as calculated to produce the disease, especially with the feeble—particularly the latter.

Treatment.—Same as that of thrush.

Stomatitis Pustular—Cancum Oris

—CANKER; ULCERATIVE INFLAMMATION OF THE MOUTH.—The disease of which we are about to treat must not be regarded as being a dependent upon, or as a sequent of, any one of the preceding varieties of stomatitis; but as being one which is entirely independent of them, and, also, as being one to which new-born infants and young children are frequently liable. It may locate itself indifferently upon any portion of the buccal cavity. It may select the base of the tongue, the frænum, the palatine arch, the gums, the lips, or the internal surface of the cheeks. It has been confounded with aphthæ, but by the time we conclude, it will be discovered to be an entirely different form of disease.

It is but rarely, if ever, noticed before it becomes an ulcer of considerable magnitude, of a grayish color and surrounded by an inflamed border. The adjacent or contiguous parts are usually so far involved as to be inflamed and swollen. If it be located in the cheek or in either of the lips, the swelling will be exposed to external observation, and the cutaneous surface will be red and shining. The internal swelling is sometimes so great as to render an examination of the ulcer very difficult.

The ulcer, perhaps, never penetrates through the cheek, nor destroys the part in which it is located, except, possibly, in some of the fatal instances, and they are exceedingly rare; and though rarely fatal it is nevertheless a painful disease.

It is usually attended with fever, constipation, a copious flow of saliva and a fetid breath, but this fetor is distinct from that of gangrene. When located in the gums, it is apt to expose the alveolar processes, and though it may continue for weeks or months it is not apt to be attended with worse consequences.

Causes.—The causes of this disease are fully as obscure as those of thrush and aphthæ. While, on the one hand, it has been referred to improper nourishment and depravity of constitution, it has, on the other hand, been known to appear under very opposite circumstances—apparently so, at least.

Writers have not yet learned to consider very feeble and often-ailing children, and very obese ones, as being very similarly related to disease and death. The latter may escape for a long time those irritations which for a similar period distressed the former, and yet be equally destitute of vital force; and this truth becomes manifest as soon as the fat-producing process becomes disturbed or arrested.

If we were to indicate any one article as being the most productive of juvenile diseases, it would be sugar—saccharine matter; and for two reasons: first, all children are fond of it; and second, parents, almost universally, believe that it is healthy and nutritious. In some sections of our country, it constitutes a leading article of juvenile diet. Ulcers and eruptions are common to those who intemperately indulge in alcoholic drinks; how then can children escape similar afflictions who use much saccharine matter? Both are carbonaceous, and both are, measurably, destitute of nourishment. Those infantile and juvenile constitutions which cannot convert sugar into fat, we would, *a priori*, suppose to be most liable to the present forms of disease, and such we find to be the fact.

We know that hundreds of children have suffered whose only food had been the mother's milk, but let it be remembered, that too many mothers indulge in gross and carbonaceous food.

Treatment.—In the treatment of this affection, the most important indication is to arrest the sloughing and prevent its further progress, and if this be not accomplished, the disease will rapidly proceed to a fatal termination, notwithstanding a favorable condition of the pulse, appetite and mind. And, probably, a reason why the disease generally resists the treatment employed, is, that after the affection has been properly recognized, the local applications are of too mild a character or have been insufficiently applied; and this may be owing to the difficulty which attends the effectual applications of any caustic to gangrenous parts in the interior of the mouth, both from the swollen and resisting

condition of the cheek, and the struggles of the child to free itself from a painful operation.

A writer, in speaking of the application of caustic in this disease, remarks:

"Ineffectual cauterization, however, is useless, or worse than useless; and though every endeavor should be made to prevent the needless destruction of healthy parts, yet of the two evils, that of doing too much is unquestionably less than that of doing too little. It is of importance, moreover, not only that the cauterization should be done effectually, but also that it should be practiced early."

The sloughing advances rapidly from within outward and when once it has penetrated through the substance of the cheek, the chances of cure are but few; consequently, the treatment must from the commencement, be active and energetic. The caustics which have been recommended are strong hydrochloric or nitric acid, which must be applied to the gangrene in the interior of the mouth, by means of a piece of sponge or lint fastened to a quill, at the same time properly protecting the tongue and other healthy parts, as far as possible, from the action of the caustic.

We have never used the sulphate of zinc in this disease, yet from its known success in other gangrenous affections, we should deem it an important local agent in arresting the sloughing; but whatever agent is employed, the mouth must be carefully examined every six or eight hours, to ascertain whether the sloughing has been checked, or whether it has extended into the yellow eschar produced by the acid; and the cauterization should be repeated sufficiently often to completely arrest the disease. During the whole course of treatment, the mouth must be frequently washed with astringent decoctions, and the diet should be of a generous and nutritious character, supporting the patient's strength also by wine, porter, quinine, or other tonics and stimulants.

Great success has obtained in this affection by the following treatment:

A mild aperient of rhubarb and magnesia was administered, together with four grains of chlorate of potash dissolved in water sweetened with syrup, which last dose was repeated every four hours. The mouth was washed with a weak solution of chloride of soda. Recovery took place in about six days, while in one case, which was treated with tonics and alteratives, three weeks ensued before a cure was affected.—This treatment is worthy a trial in cases of a similar character.

STOMATITIS MERCURIAL—INFLAMMATION AND SLOUGHING OF THE MOUTH, CAUSED BY MERCURY.—The people of this country unfortunately, are so well acquainted with this variety of sore mouth, that any description of it would seem to be a work of supererogation; nevertheless, a brief account of it will not be out of place to those who desire to learn how to treat it.

After the disease becomes fully developed, those who visit the patient do not require to be informed as to the nature of the disease—it is announced to them, as soon as the door is opened, by the patient's breath. From first to last, this is a distinguishing symptom. The first indication that the patient has, that he is, to use a common phrase, salivated, is the copper or brass-like taste with which the tongue is impressed. The next indication is a sense of soreness of the gums of the inferior incisors, and finally, all doubt is removed by an obvious increase of the salvia.

When the complaint is first made, of soreness of the gums, a close examination will detect a transverse opacity of the gums just below their edges, resembling a white band, attended with some redness and tumefaction about the necks of the teeth. In a little more time, the inflammation extends to the periosteal linings of the alveoli, causing pain when the jaws are closed upon each other; by the same time, the inflammation seems to have affected the muscles of the jaws, as the patient has now to make some effort to open them—there exists in them a sensation of stiffness.

The disease progresses—all the parts in the mouth become sore from the extension

of the inflammation. The cheeks, throat, salivary glands, and tongue are all painful. The last organ, the tongue, is covered with a brownish, or possibly a yellowish, fur, and so swollen as to fill the buccal cavity.

Ulceration commences generally in the gums, but it is soon extended to the jaws, cheeks, throat, tongue, palatal, and ethmoidal bones. All are destroyed, if life continue long enough.

This is a rapid and general sketch of the disease, as it usually appears in adults.—Now, suppose the disease to attack an infant, in which, as is very generally the case, the tissues are all soft and incomplete, and then we have such an exhibition as should induce the civil authorities to hold that physician to be guilty of a capital offense, who should administer mercury in any form to an infant.

Prof. Wood remarks, that the "pre-occupation of the system by a very violent disease, presents, in many instances, a complete obstacle to its action upon the mouth."

Is he sure that it does not present an equally complete obstacle to its action upon any part of the system? This is a question of which the profession at large seems never to have thought. We were taught to make calomel, blue-mass, etc., the sheet anchor of our hope in all congestive forms of disease. We did so until the mortality in that department of practice forced upon us an investigation of the subject, and then we discovered that calomel is as inert as brick-dust in all congested forms of disease.

Prof. Wood adds, that "in yellow fever, it is sometimes utterly impossible to induce the mercurial salivation."

Yes, and in such cases, and by such a practice, it is as utterly impossible to save the patient. It is, to us, much more than probable, that the cases to which he has referred were highly congested, and if so, the whole difficulty is explained.

We are fully aware the preceding paragraphs are, scientifically and systematically, out of place; but we feel equally sure that those students for whom the work is especially intended, will not only appreciate them, but also our motive for introducing them.

Treatment.—From all the cases we have witnessed, we have but little confidence in any treatment either in this or the ulcerative form of stomatitis—for, notwithstanding the most energetic measures, all hasten rapidly to a fatal result; nevertheless, the treatment suggested for cancrum oris would, probably, be equally indicated under the present affection.

PUERPERAL FEVER.

R. E. CABLE, M.D.

This a form of disease peculiar to women after delivery, which of late years has become very prevalent in this country, and having had considerable experience in its treatment. I therefore offer a few remarks relative to the symptoms and treatment of this so called fatal malady.

Symptoms.—Puerperal fever generally commences with rigour or chills, which is succeeded by great heat, and most always ends in perspiration; but the characteristic by which it is most generally known, is pain in the region of the womb, which although generally with remarkable aggravations, resembling after pains, yet has no intermission as they always have. The pulse is generally rapid, sometimes runs as high as 140 and 160 or 170 per minute. In a short time after the attack, the patient's strength rapidly fails, her countenance expresses great pain and anxiety, with more or less pain in the head, particularly in the front portion; giddiness with ringing in the ears; secretion of the milk generally suppressed; breasts become flaccid; lochia suppressed; bowels in the first stage costive, but in advanced stages diarrhea is apt to come on; the abdomen swells to a great extent, and with tympanitic symptoms; extremities generally drawn up; lies mostly upon her back; urine scanty and high colored, sometimes suppressed; tongue soon becomes coated with a yellowish brown color; stomach oppressed with nausea;

breath offensive; purple or red spots appear on the face; great pain of a subacute character in the small of the back. Such are the symptoms in general of puerperal fever, they may, however, vary according to the constitution of the patient, and the peculiar organization and its earlier or later invasion after delivery.

Treatment.—The principal indication in the cure of this form of disease is, first, to subdue the inflammatory symptoms, to effect which, we should have this one object in view, that is to equalize the circulation and nervous action, which can be done in various ways; my mode of accomplishing that object is, to give nauseating and relaxing medicines, such as lobelia inflata, and cypripedium pubescens until the system becomes relaxed, then give stimulants, and if any symptoms of bilious matter in the stomach, increase the medicines until emesis ensues; after which, I move the bowels with some mild aperient, such as leptandrin and oil, (ricinus communis) after the operation of the physic, relaxing and toning medicines, to be exhibited. Treat the patient upon general principles independent of those minute discriminations set forth by some authors so particularly to be observed in the treatment of fever and inflammation, but treat it as we treat any form of fever, only paying strict attention to the locality of the peculiar inflammation and congestion to the various organs affected. As a toning and diaphoretic measure, I use quinine and ipecac combined in about three grain doses, two grains of the former and one of the latter; foment the bowels with hops and tanzy stewed in vinegar, thickened with wheat bran to a proper consistency, changed as often as it becomes dry, accompanied with a liniment of tinct. of lobelia, oil of sassafras and oil of hemlock, bathed on the bowels and over the uterus, an occasional sinapism of mustard to the bowels, lobelia in broken doses, and if febrile symptoms increase, push the lobelia and diffusive stimulants till slight emesis, then not so frequent, but always enough to keep the system partially relaxed, not forgetting the bowels to have them evacuated at least once every twenty-four hours.

Drinks.—I give a tea of flaxseed and juniper berries, and sometimes ulmus fulva and althea officinalis, as much as the patient can drink, occasionally acids but not often. If the extremities become cold, put warm bricks to them, and sometimes mustard, &c. The foregoing treatment varied according to circumstances, has proved good in my hands, therefore, I adopt it. I have treated quite a number of puerperal cases and not lost one, consequently I recommend the treatment to the profession.

Regimen.—A light cooling diet should be used, such as rice soup, indian meal gruel, toasted bread and water, squirrel broth, etc., with an occasional dose of port wine.

Pleasant Hill, June, 1854.

SOME OF THE ABUSES OF MERCURY.

BY PROF. Z. FREEMAN.

While visiting *Enochsburg*, Ia., Dr. Tuke an Eclectic Physician, practising medicine in that vicinity, wished me to consult with him in the case of Miss Catharine Brunsman, a girl of about eleven years of age who was most horribly mutilated by the effects of mercury prescribed as calomel. I think that I have never seen a more hideous and loathsome sight as the result of the quackish use of "Quacksalber;" and this is only one among a thousand and one cases of deformity and mutilation caused by the drug. Dr. Tuke is alone responsible for the facts given in this case; he gave me a note of them to insert in the Journal.

On April 21, Miss B. was attacked with a fever and soon afterwards commenced vomiting; the vomiting continued for a few hours, when and old school physician practicing there admininistered "two white powders," after vomiting again, he ordered calomel and jalap one dose every three hours, until the vomiting was checked, which was on May the 3d. May 4th, Dr. Tuke was called to the patient, found her pulse full, skin dry, jaw anchylosed, unabled to open her mouth and badly sali-

vated. The doctor used a wash of honey, sage and alum, to the throat, also diaphoretic powders internally and Quinine and iron, he also used the alk. bath. The swelling of the upper lip increased and when he visited her on the fourteenth of May, gangrene had commenced. He cut out the gangrenous part and applied zinc, sulp., tinc. myrrh and creasote to arrest the decomposition and fetor. Anodynes and emolient poultices were used as circumstances demanded, but the gangrene continued its course accompanied by that peculiar mercurial fetor that one who once smells it cannot mistake. When I saw her she presented a horrible spectacle enough to make the heart sick, and the blood of even an anatomist or pathologist coagulate in the veins and his lips to involuntarily articulate "Oh tempora, oh mores!

The child was confined to her bed surrounded by a horribly fetid atmosphere, which seemed a delightful element for the myriads of flies that held their carnival there. The face was of a dark red hue and much swollen. Half of the upper lip, and the face extending from the middle of the lip to the malar bone, and back to the ramus of the lower jaw, down to the angle, across under the chin and obliquely up to the the angle of the opposite side of the mouth was entirely destroyed by gangrene, and had dropped out, exposing the base of of the lower jaw and the teeth, the roots of which protruded from the sockets anteriorily. The jaw was dry excepting around the alveoli where decomposition was going on rapidly, the fraenum lingue was eaten off, and a large ulcer making rapid progress on the under surface of the tongue. By raising the surface of the ulcerated edges of the whole sore, I could observe the gangrene still progressing, and the parts had swollen to four times their natural thickness and were very painful. As the whole system seemed saturated with the effects of the calomel, and she was so sadly deformed, there being no prospect of a cure, some anodyne was given to keep her as comfortable as circumstances would admit, and in a few days she died. There was a time when we could look with some degree of lenity upon those who administered calomel for any thing and every disease, because they supposed there was no medicine that would accomplish the desired purpose as well; but at this period of medical progress, the man that uses calomel so wantonly as to produce such revolting effects should be branded among the worst of quacks, and sent back to the hoe or the pickaxe where he should have staid when there. To do a little transient mischief is pardonable, but a permanent injury and mutilation is not easily forgiven by the good sense of an enlightened public, and public opinion we are glad to assert is severe against the reckless use of that drug whose effects is so uncertain and frequently so horribly disastrous. I would here mention as a point of diagnosis, that the inflamation and gangrene commenced upon the alveolar process of the upper jaw and extended to the soft parts. In company with Dr. O. E. Newton I visited the case of a young girl who had been sadly mutilated by mercury given in small doses. The jaw in this case was anchylosed, and a large patch of gangrene had destroyed a part of her cheek. With the forceps we took out four pieces of bone, each over an inch in length and three fourths of an inch in thickness, including a number of teeth, from each side of each jaw. The mercurial bone fœtor was very offensive in this case. Another case came before me while lecturing on anatomy in Memphis, (a subject for disection) the jaw was necrosed and with the adjoining part of the face black and horribly disgusting, not only from the peculiar fetor but the deformed and mutilated appearance it presented. But enough of this at present! If those who prescribed calomel for the public were forced to do as Lord Nelson threatened the French admiral who retailed slander about him, "If I catch him by ——— he shall eat it," there would be less prescribed, consequently less taken, less sore faces, mutilated gums, decayed teeth, toothless jaws, artificicl teeth, dentists, dentists pains, twists and horrible teeth pulling, sore legs, mercurial rheu-

matism, premature deaths, broken down constitutions, incipient old age, scrofula and gruntings and groaning among those who should be buoyant and elastic with fine spirits and health. There would be healthier parents, stronger children and a different race of people, fewer doctors and of course fewer to play upon the credulity of a too credulous public, who swallow with too much avidity the dose presented whether a "bug or a worm."

Part 2. Miscellaneous Selections

ACUTE HYPERTROPHY OF BOTH MAMMÆ IN AN ADULT.

BY DR. LAWRIE.

Cases of this kind are very rare. This case also contains several features which seem to render it almost unique; it occurred in a woman æt. 30, without any acknowledged or ascertained cause; it affected both mammæ; it ran a rapidly acute course, resisting all remedies, and terminating fatally in 40 days; and it presented appearances in the ovaries and liver, not hitherto observed in any case of hypertrophy of the mammæ. Dr. Lawrie writes:—

Mary D—, æt. 30, house servant (cook, —— Club,) called upon me about the 9th of April, 1852, complaining of general pyrexia. At this visit she made no complaint of her mammæ, but when I saw her again, two days afterwards, she said they were painful. I found them very slightly enlarged, painful to the touch, the areola I thought darker, and the papillæ more prominent than natural, the integument otherwise normal. Suspecting sexual uterine excitement, I questioned her very closely. The girl, being from the Highlands, and speaking English imperfectly, did not give very satisfactory or intelligent answers, but the impression left on my mind certainly was, that she might be, and probably was in a very early stage of pregnancy. I accordingly prescribed some gentle diaphoretic medicine, and waited the result. The only cause that she could assign for the enlargement of her breasts, was sudden transitions from heat to cold, the necessary attendant on her employment as a cook.

She did not improve, and as the breasts continued to increase rapidly, I sent her to the Infirmary on the 19th April. She proved a very discontented patient, and twice left the hospital without permission, so that the treatment employed had not fair play. From whatever cause, none of the means prescribed had the slightest beneficial effect. They consisted, in the early stage, locally of friction, and fomentations, followed by cold and gentle pressure, leeches, and acupuncture; internally, mercury to the extent of gentle salivation, and iodine freely.

On her admission into hospital, 19th April, the breasts are described as enlarged to double their natural size, firm, elastic, resistant to the feel, but very irritating and inconvenient from their weight and size. The integuments not discolored, and slightly painful. She left the house on the 28th, and returned on May 7th. The mammæ are then reported "to have increased very much in size, to be affected with acute stinging pain, and to have assumed a bluish color." These symptoms continued to increase, the suffering became very great, and the color of both breasts was a deep purple before her death. They were never in the slightest degree "pendulous;" on the contrary, although moveable, they were firmly bound to the chest, and from their tension, caused not only pain, but considerable difficulty of breathing. The lobulated form of the glands was very distinctly felt.—That their vascularity was great, was shown by the jets of blood which flowed from the puncture of a common-sized grooved needle. In a few minutes I collected six or eight ounces, and to all appearances I could have bled her as freely from this small aperture, as if I had opened a vein in her arm. About the 10th or 12th of May, her general health began to give way rapidly, typhoid symptoms set in, she became partially hemiphlegic, and her tongue was much drawn to the left side. She died on the 17th. I showed her twice to my colleagues in consultation; none of them had ever seen a similar case. Surgical interference was considered inadmissible, and no means beyond those already employed were suggested. I entrusted the *post mortem* examination to my friend, Dr. Wm. Aitken, Demonstrator of Anatomy to the University, and Pathologist to the Infirmary, who has most kindly sent me the following report:—

"A cast having been taken of the external form of the breasts immediately after death, the mammary glands were removed from the body for inspection and preservation. The right gland was larger than the left, but each preserved the characteristic lobulated form and arrangement of the gland substance. Along with the skin and a small portion of pectoral muscle which accompanied each gland, they weighed six pounds fourteen ounces; and it was observed that the skin covering them was

less tense than before death, probably from the gravitation of the blood towards the dorsal regions of the body. The right, and larger gland of the two, when freed from all its accessory parts and hardened in spirit, so as to remove a considerable portion of water from its substance, weighed two pounds two ounces.

"The hypertrophy appeared to depend upon the following conditions of the gland substance, and its accessory parts: 1. The acini, or sac-like dilatations of the extreme ends of the gland tubes, were distended to about twice their size compared with a mammæ which had never secreted milk. This distension appeared to be due partly to a granular exudation, and partly to a very large amount of epithelial cells, mingled in some places with globules of oil.—The ducts of the acini were also in some places irregularly distended with this epithelial secretion. 2. On examining a section of the gland, harder portions could be observed, which, when isolated from the rest of the gland, varied in size from a millet seed to a pea, or a bean; and microscopic observation showed that these harder portions were the seat of abundant exudation and secretion. 3. Immediately below the skin, a layer of exudation filled up the space between the lobules, making the surface of the gland assume a rounded aspect. This exudation was of a granular appearance, similar to fibrine in its first stage of organization; and it was abundantly exuded into the interspaces between the tubes and ultimate lobules of the gland, apparently taking the place of the fat usually found there, and which had probably disappeared by absorption, the result of pressure. In each axilla the lymphatic glands were much enlarged, and infiltrated with a granular exudation.

"*Liver.*—Circumscribed deposits were irregularly and sparsely scattered throughout the whole substance of the liver, projecting in some places from its surface. They varied in size from a pea to a plum, presented a granular appearance microscopically, and no liver-cells could be distinguished among the substance of these deposits; and while they were perfectly circumscribed by the capsule of Glisson, the secreting substance of the gland was condensed round their periphery.

"*Uterus and ovaries.*—The ovaries and broad ligaments of the uterus were morbidly adherent to the walls of the pelvis, and appeared to be infiltrated with a serous exudation. The ovaries, on removal (and more especially the right one,) were found to be in a state of inflammatory softening and much enlarged. The fallopian tubes also, were unequally distended, especially near their fimbriæ, which adhered firmly to the ovaries. The softening was so great, that the substance of the right ovary was easily broken down under the finger, and no appearance of extravasated blood, or of corpora lutea, could be detected in either.—The uterus was somewhat larger than one whose cavity had never been distended by conception. Its neck was more especially elongated, and did not terminate in an anterior and posterior lip separated by a transverse slit, as in the normal uterus. A pointed sugar-loaf-like apex projected into the vagina, through which an opening with an irregular border led into the cavity of the uterus; but so contracted that a probe about two lines in diameter, was all that could be passed through it. The whole aspect of this part of the uterus, perfectly resembled what is described as the result of ulceration and cicatrization of the neck and mouth of the uterus. The substance of the organ, more especially near its fundus, enclosed condensed white portions, like the commencement of fibrous tumors in its substance."—*Glasgow Med. Journal, April*, 1853.

PATHOLOGY OF PHLEGMASIA DOLENS.

The paper, of which the following is the abstract was read before the Medical Chirurgical Society during the last session, in answer to a paper on the same subject, which is reported in our last number (page 232.)

The true nature of this disease did not begin to be known until the publication of MM. Boiullaud, and Velpeau, and of the late Dr. Davis. Up to this period various hypotheses had been advanced respecting the cause of the swelling in the lower extremities of puerperal women,—mere speculations unsupported by facts; but the cases and dissections of the authors just enumerated, demonstrated that the true nature of the disease consisted in an inflammation of the trunks and principal branches of the veins of the lower extremities. In papers by the author, published in the fifteenth volume of the *Transactions*, the actual condition of the iliac and femoral veins was ascertained, and he had been led to infer, that inflammation of these veins gave rise to all the phenomena in puerperal women of phlegmasia dolens, and that it commenced in the uterine branches of the hypogastric veins, and subsequently extended from them into the iliac and femoral trunks of the affected side. Other cases had been recorded in the *Transactions*, of crural phlebitis following ulceration of the mucous membrane of the in-

testines. Experiments performed by Pirigott in 1839, and by Reumert in 1840, on dogs, showed that the action of chemical and mechanical irritants was limited to the vein on which the experiment was made, and the extension of the inflammation in the veins was not common; and Stannius, who had collated and tested all the facts bearing on the subject, doubted whether inflammation of venous trunks admitted of being excited by constiutional causes, independently of local irritation. A series of experiments on the veins of the lower animals, similar to those just mentioned, had recently been made, and a paper on the phlegmasia dolen had been read to the Society during the present session, not founded on actual observation of the disease as it occurs in the human subject, but upon experiments on the veins of the lower animals in which phlegmasia dolens had never been observed. The object of the present communication was to submit to the Society the observations which the author had made during the last twenty-four years on inflammation of the crural veins. The paper contained the record of forty-three cases of phlegmasia dolens. The first nine cases were accompanied by *post mortem* descriptions, and preparations illustrating the disease; and the author was led, from the whole of the facts thus adduced, to the conclusions he had formerly expressed, "that inflammation of the iliac and femoral veins gave rise to all the phenomena of phlegmasia dolens, and that the inflammation commenced in the uterine branches of the hypogastric veins, and from them extended to the iliac and femoral trunks of the affected side." The next series comprised the history of twenty cases, which the author thought furnished additional evidence in favor of this conclusion, though, in consequence of the recovery of the greater number of the patients, an opportunity was not afforded of determining by dissection the actual condition of the crural veins. Nine cases followed, which demonstrated that phlegmasia dolens might occur wholly unconnected with pregnancy and parturition, and that in such cases the inflammation likewise commenced in the uterine branches of the hypogastric veins, and followed a course similar to what occurred in puerperal cases. In some of these the inflammation of the uterine veins was produced by cancerous disease of the os and cervix uteri; in others there was no organic disease of any kind previously existing. The concluding cases were five, in which crural phlebitis had followed inflammation of the saphena veins, and of the deep veins of the lower extremities, from fracture of the tibia and fibula, and the pressure of encephaloid tumors on the thoracic viscera. The author thought that these cases and dissections, as well as those of the distinguished authors whom he had quoted, proved in the most conclusive manner that inflammation of the iliac and femoral veins was the proximate cause of phlegmasia dolens; and that in the puerperal women this inflammation commenced in the uterine branches of the hypogastric veins. It had likewise been demonstrated, by morbid anatomy, that phlegmasia dolens was a disease which might take place in women who had never been pregnant, and even in the male sex, and that, under all circumstances, the proximate cause was the same.—*Medical Times and Gazette*, June 4, 1853.

ON THE ETIOLOGY OF MAMMARY ABSCESS.

BY M. NELATON.

M. Nelaton states that, as the result of his examination of the history of a great number of these cases, he is very sceptical as to the truth of the supposition which attributes their occurrence to the exposure of the breasts. He believes that abscesses are very often due to the existence of chaps or sores of the nipple, whence the irritation is propagated along the lymphatics of the organ—just as a wound of the foot or hand will give rise to inflammation in the vicinity of the glands of the groin or axilla. Once excited in the breast, the inflammation may become speedily propagated to the deeper parts of the organ. M. Sappey's preparations of the lymphatics exhibits the great abundance of these vessels, which almost all arise at the nipple or areola, spreading and ramifying from this common centre in all directions along the fibrous partitions of the gland. Another important point is the pretty direct relation which exists between the situation of the chap and that of mammary inflammation. If situated at the upper part of the nipple, the inflammation will usually be found at the upper part of the breast, and so on for the other localities.

The case which immediately gave rise to these observations also led to another, of interest in relation to *diagnosis*. The puncture, after having at first furnished pure, healthy pus, yielded a sanguinolent pus on compression two days afterwards. It may be laid down as an *absolute rule*, that whenever an abscess at the surface of the body thus comports itself—the fluid taking on a bloody appearance without obvious cause—a second abscess has become

developed in the vicinity of the first. Our attention being thus directed to this point, we shall usually be able to discover this second tumor. The wall interposed between the two collections becomes the seat of great turgescence, and of a considerable afflux of blood; and a sanguineous transudation takes place into the first cavity.—*Rev. Med. Chir., xiii.*, 169, 1853; *and Medico-Chir. Review*, July, 1853.

ON DR. WEHN'S METHOD OF TURNING.

BY J. S. UNZICKER, M.D., of Cin.

Some years ago I gave a translation of Dr. Wehn's method of turning, in the Western Lancet. It differs from the old way of turning.*

1st. By placing the patient on her knees and elbows, until one foot is brought down.

2d. By tieing the umbilical cord before it is compressed by the head, and deliver afterwards.

This way of turning is undoubtedly more safe to the child, less painful to the mother, and easier to the operator than the old plan. Of this I am now so well satfied, that I should consider myself guilty of malpractice, were I to turn again according to the plan as laid dow by the books.

I have turned thirteen cases within the last three years, a few of which I will here recite.

CASE. I.—Mrs. A., age 35. At my arrival, the midwife informed me that the patient had been in labor 36 hours, and that about 24 hours ago, the liquor amnii had escaped, and that her pains had been very severe all this time, but that the child would not come down. After a careful examination I found the left shoulder presenting, and prepared for turning by placing the woman on her knees and elbows, when the pains immediately abated. I had no difficulty in finding the feet, but found it very difficult to turn, on account of the tonic contraction of the uterus around the child. By careful manipulation I at last succeeded in bringing down one foot. I then placed the patient on her back, when the pains immediately returned, bringing down the breech. Then reaching up with my left index finger and gently bringing down the umbilical cord, which was immediately tied, and the head was born ten minutes after. The child is now living, a fine boy two years old.

CASE II.—Mrs. D., age 23. Found right arm and cord presenting, liquor amnii had escaped a few minutes before my arrival. Finding the cord yet pulsating, I prepared to turn, but fearing that the cord might get braced, I ligated it immediately then bringing down one foot, and delivered the child alive.

CASE III.—Mrs. R., age 33, with narrow pelvis. This person I had delivered twice before unsuccessfully. The first child was born dead, after a severe and tedious labor of 36 hours. The second child I delivered with the forceps, but also dead. When I was called the third time to deliver this person, I determined to try turning, before the patient was debilitated by the severe pains, which she had always to suffer before. As soon, therefore, as the os uteri was sufficiently dilated, I turned without difficulty, tied the cord as soon as I could reach it, and delivered the head with the forceps. The child is living and doing well.

CASE IV.— Mrs. G., age 26, of delicate constitution. Had been in labor 18 hours. Pains very feeble. Breech presentation.—Her midwife had given two doses of secale cornutum, which had no other effect than producing nausea. I then prescribed

℞. Pulv. Rad. Colchici, gr. x.
Elæosacchar. Cinnamon, gr. xv.
M. in 3 part. Divide.

One of these powders was given every fifteen minutes, when the pains increased, and a living child was born, the umbilical cord having been tied like in the previous cases.

These facts but too clearly prove, (the old theory notwithstanding,) that the umbilical cord can be successfully tied, before respiration can be established. Dr. Wehn's theory regarding it, I have not been able to obtain; but think, myself, that the success of his method may be explained in this way: As the head enters the pelvis, the cord is but partially compressed, and the circulation of venous blood through the umbilical vein, continues to be forced towards the child, the brain thereby becoming congested, and the child dies of apoplexy.—But if the circulation is entirely cut off by ligating the cord before head presses upon it, the equilibrium of the brain will be retained and no consequences will follow.—*North Western Medical and Surgical Journal.*

* Will it not be known as the Dutch method of turning?

ETHEREAL SOLUTION OF IODINE.

Both from its more rapid evaporation and its higher degree of concentration, the ethereal solution of iodine is a much more powerful counter-irritant than the spirituous ones. A young man was recently in

the London Hospital, under the care of Mr. Curling, on account of impeded respiration from a bronchocle. The tumor was not a very hard one, nor yet unusually large, but it extended equally to both sides, and involved also the isthmus. That the trachea was compressed was evident from the dusky countenance, stridulous respiration, dyspnœa, aphonia, and laryngeal ring with the cough. It was feared that tracheotomy might become necessay, as the common solutions of iodine, conjoined with its internal use, had failed to prodnce any mitigation of symptoms. Mr. Curling now ordered the ethereal solution to be applied; it produced extreme pain and irritation; but a few days afterwards the tumor was perceptibly softer, the man could speak sufficiently loud to be heard across the ward, and the air entered freely into every part of his chest. Mr. Curling has also employed this preparation with great benefit as a counter-irritant in several cases of inflamed joints. We noticed in our reports some weeks ago, from the City Hospital for Diseases of the Chest, the very successful employment of a strong alcoholic solution of iodine applied to the external throat in cases of chronic or catarrhal laryngitis, with aphonia. Since then, the remedy has been tried in numerous other instances, with like favorable results; and although, of course, not always curative, it certainly appears to possess great advantages over all other modes of counter-irritation.—*Med. Times and Gaz.* Nov. 12, 1853.

FISTULA IN ANO, TREATED BY IODINE INJECTIONS.

BY M. BOINET.

At a meeting of the Institute of August 1st, M. Boinet read a memoir designed to demonstrate the efficacy of injections of iodine in the radical cure of fistula in ano, whatever their form, extent or complications. Seven cases are detailed, which offer examples of almost every variety of fistula—complete, blind, or incomplete fistula, deep fistula, with loss of substance of the intestine, and fistula in tuberculous subjects. These observations tend to prove that iodine injections may be advantageously employed in all cases of fistula, but especially in those in which the method by incision is dangerous or ineffectual, such, for example, as extend deeply, or occur in phthisical patients, or depend upon some alteration of the ischium, coccyx or sacrum.

The advantages of iodine injections over the ordinary method consist in obtaining a cure more easily, and in a shorter time, in avoiding pain and the danger of hemorrhage, and in permiting the patients to continue their usual avocations.

The following are the conclusions of the memoir:

1. Iodine injections, properly administered, can cure radically all cases of fistula, whether complete or incomplete, simple or complicated.

2. They cure them more promptly than the method by incision commonly employed, and with less danger.

3. They produce no pain and are easily practised.

4. They permit patients to follow their occupations, and relieve them from daily painful dressings.

5. They are applicable to all cases, and especially to those in which incision or excision are dangerous or impossible.

6. They do no harm, even if they are ineffectual, and do not prevent the subsequent use of the knife. It is therefore rational to employ them before having recourse to a cutting instrument.—*Gazette des Hopitaux. New Orleans Med. and Surg. Jour.*

THE INTERNAL USE OF CHLOROFORM.

BY HENRY HARTSHONE, M.D., of Philadelphia.

Since 1848, when some account was given in this Journal [the American Journal of Medical Sciences,] of experiments with chloroform, internally administered, it has been variously and extensively used by practitioners in different parts of the world.—It is now generally recognized as being, when so used, a narcotic of the mildest and yet most powerful character, and as possessing in its pungency, also, a quality which recommends it in some cases above other anodynes. While the untoward accidents which have followed its use in many cases as an anesthetic by inhalation have produced a growing distrust of its safety in that capacity, experience has shown that, taken into the stomach, it is as totally free from danger as any other drug; and its employment is destined to be yet much more widely extended.

The object of this article is chiefly to make some remarks upon its *dose* and *mode of administration*. Many practitioners within the writer's knowledge hesitate from their recollection of its powers as an anæsthetic, to give it in doses of more than a few drops; and as the drop is exceedingly small, such doses are really often insignificant. The writer can assert, from positive

experience, that a fluidrachm of chloroform, taken by the stomach, is not more than equal, in suporific effect, to 30 or 35 drops of laudanum. In doses of 50 to 75 drops (about 15 minutes,) I have given it every half hour for several hours together. It differs from the opiate preparations in the promptness of its hypnotic action, the much shorter period of its duration, a less degree of cerebral oppression, and the absence of all stimulus to the circulation. It might be called a "diffusible narcotic," comparing in this respect with opium as ammonia does with alcohol. To produce much effect with it, repeated doses, at short intervals, will be necessary.

The advantages which the above peculiarities afford in many instances of disease will suggest themselves to every physician. We may leave them to do so, proceeding to remark briefly upon its mode of administration.

The pungent property, already alluded to, causes it to require plentiful dilution, which is, of course, facilitated by the addition of some demulcent, Perhaps the *orgeat syrup* is the best. Every fluidrachm of chloroform should have at least two fluidounces of water with it when taken; and it will need, if in ordinary gum mucilage, considerable agitation to resuspend the particles immediately before swallowing.—When taken in aquous mixture alone however, unless in very small doses, it produces nausea with some persons. This is entirely prevented by the addition of a strong aromatic, or, still better, by giving the chloroform in aromatic *tincture*. From the ready solution and kindred action of camphor with chloroform, their combination has become a very common one. For many purposes, however, a still better preparation is a sort of chloroform paregoric, or compound tincture of chloroform, *e. g.*; ℞. Chloroform f ʒ ij; sp. camph. et tinct. opii. aa f ʒ iss; Ol. cinnamon. gtt. viij; alcohol f ʒ iij. M. et fiat tinctura. Dose, from 5 to 30 minims, or more, as required.

The most admirable effects have been witnessed from the administration of chloroform, as above combined, in malignant cholera. In the summer of 1849, my attention was first called to it while attending a very severe case of cholera with the late Prof. W. E. Horner. The prompt and signal restoration accomplished in that case, from a state of collapse, was evidently due to the exhibition by Prof. Horner, every five minutes, of a few drops of a combination of chloroform, oil of camphor, and laudanum, with ice, and warm frictions externally. The writer's conviction was very strong that the *short interval* between the doses was an important item in the treatment; and in pursuing the same plan in a number of subsequent cases, several of which were of the most alarming violence, an extremely gratifying success was obtained. The opinion has thus been formed, that no other plan of treatment gives so much promise in the management of malignant cholera as a combination of powerful yet mild antispasmodics, such as above described, with ice, internally, and persisting external stimulation. It may be mentioned that the writer has added, with apparent advantage in a number of cases, sp. ammon., and occasionally creasote, in minute doses, to the preparation above designated as a compound tincture of chloroform. A formula of a very similar character is now quite extensively used as a gentle carminative and anodyne, or antispasmodic, and may be often substituted with benefit for the common paregoric.—*The American Journal of Medical Sciences.*

ALCOHOL IN MEDICINE.

In the Boston Medical and Surgical Journal of March 29th, in answer to a series of questions proposed by himself, Dr. Gilman has endeavored to prove that alcoholic liquors are not indispensably necessary in the practice of medicine, and his zeal against this article seems to have led him to discard the use of stimulants altogether. As a specimen of his reasoning upon the subject; take the following:—"The apparent increase of strength is nothing more than the latent nervous energies, aroused for the sole purpose of driving out the enemy from the body. When this task is over, there is still greater exhaustion." Now by this *easy* mode of reasoning, it can soon be shown that all medicines are injurious; for if it holds good with regard to stimulants, it may be just as fairly applied to sedatives—"the first effect of a sedative being opposed to action, the second re-active"—and thus we get rid of another large and important class of remedies. If we adopt the classification, then, of the Italians, and make but two classes of medicines, stimulants and sedatives, our theory is complete, and we may close our offices.

I do not propose to answer the questions propounded; but as Dr. Gilman desires light, I offer the following extracts; and, perhaps it will shine all the brighter, as it comes from the same author he has quoted so largely. That the quotations in the article under consideration apply to the abuse of alcohol in health, is quite clear; but

how it is that any one familiar with the views of Dr. Carpenter should have so entirely misapplied his arguments, perhaps Dr. Gilman can best explain. In Dr. Carpenter's "Principles of Human Physiology," page 624, after alluding to the experiments of M. Chossat upon starvation says: "It is especially, perhaps, in those forms of fever, in which no decided lesion can be discovered after death, that this view has the strongest claim to reception; and the beneficial result of the administration of alcohol in such conditions, and the large amount in which it may be given with impunity, may probably be accounted for on this principle. That it acts as a specific stimulus to the nervous system, cannot be doubted from its effects on the healthy body; but that it serves as a *fuel* to keep up the calorifying process, appears equally certain. Its great efficacy in such cases seems to depend upon the readiness with which it will be taken into the circulation by a simple act of endosmotic imbibition, when the special absorbent process, dependent upon the peculiar powers of the cells of the villi, is in abeyance. There is no other combustible fluid, whose miscibility and whose density, relatively to that of the blood, will permit of its rapid absorption by the simple physical process adverted to."

But another objection to alcohol, in Dr. Gilman's opinion is, that "it interferes with the nutritive operations," by coagulating soluble albumen. Dr. Carpenter does not reject it as a *medicine* on this account; nor, perhaps, will Dr. Gilman throw away the mineral and vegetable acids, which also have the power of coagulating albumen.

Alcoholic stimulants are generally resorted to, to give temporary relief in cases of emergency—the dose repeated sufficiently often to prevent "exhaustion," and continued until the urgent symptoms have disappeared. And so with sedatives—the antipodes of stimulants as therapeutics agents—the same caution is to be observed in their administration. or we may hasten the calamity we are endeavoring to avoid. As illustrative of this, take cold water, which is much used as a local sedative to prevent inflammation. Its first effect is sedative. the second re-active. Now in order to be prophylactic, its application must be continuous, otherwise we invite action instead of repelling it.

Dr. Gilman thinks that if stimulants are necessary, preference should be given to ammonia, oil of peppermint and spearmint, ginger, Cayenne pepper, serpentaria, etc., for he says that some of these act simply upon the primæ viæ as stimulants, and by sympathy upon the vital organs. In this, perhaps, he is entirely mistaken. From late investigations it appears quite probable that all these medicines enter the circulation. But what can take the place of alcohol in the treatment of persons bitten by poisonous snakes? Will the doctor answer?

The doctor says:—"When the mass of the people, who have no medical education, shall get their eyes open and look into this subject for themselves, some of our learned craft will be ashamed of their own stupidity."

Now this is unkind. The doctor should be more charitable towards his medical brethren, and recollect that they are not all as profound philosophers as himself.—*Boston Medical & Surgical Journal*, April 29.

CONSULTATIONS.

Consultations in difficult and protracted cases are many times of infinite advantage to both physician and patient, when conducted in a frank, honest and courteous manner. The young physician often requires an occasional suggestion from one of more experience, provided, it can come from the heart dictated by none other than a just desire to assist the young brother in performing the duties and responsibilities of his profession.

If he has a complicated case under treatment. and is *quite certain* even that his prescriptions are well selected—that his anticipations are soon to be realized in the recovery of his patient—a few words of encouragement seem to operate favorably upon all concerned. Like the mariner that has been tossed by contrary winds, although he may have taken the sun and worked his log correctly, yet when he speaks a ship just from her departure, with fair winds and smooth sea, giving him the same latitude and longitude that he has by care and diligence kept for himself, it gives him new courage—assures him, notwithstanding the winds, the storms, and the currents, that he is correct—the approaching doubts are dismissed, and he is satisfied that his skill in navigation is sufficient for his purpose; so the physician, when his doubts can be thus dissipated, feels himself relieved of an uncertain load.

Consultations are not generally conducted upon principles of honesty—the physician does not find in his professional brother that candor which the mariner finds in *his* brother. Jealousy, rivalry, or some other accursed feeling, takes possession of the attending or consulting physician, and the desired object is not accomplished.

Whenever counsel is called to *satisfy the*

patient or friends, the attending physician frequently feels as if his skill is called in question by those who have no right to judge him. He feels as though asked to take advice, when advice is not required—and that, too, very frequently from one whom he knows to be his inferior in many or all respects. Under such circumstances it would not be very surprising if the consultation resulted in little or no good.—Such is human nature (and physicians are human—public opinion to the contrary notwithstanding)—if a physician's dignity and pride are thus compromised, and his reputation sacrificed to gratify some over-earnest friend of Dr. Somebodyelse, the result may, *a priori*, be anticipated.

Again, the consulting physician (unless he is a gentleman) often arrogates to himself that which does not belong to him.—He supposes, or presumes to suppose, it is his *superior* skill (though he be an ignoramus) that has induced some one to call him in to *dictate* to his *inferior* of course what to do in the case. It is not supposed the attending physician knows how to manage the case, or he would not have been called in to tell him what to do. He, therefore, feels himself to be the superior; and acting upon this assumption, does what other brethren would never stoop to do.

After examining the patient and treatment, however well the latter may be adapted to the former—even when there is no prospect of changing the plan of treatment for the better—he seems to think his services will not be appreciated unless some change is made in the medicine by which his superior scientific knowledge may be apparent; and to do this, no tricks are too low for his resort. The real object of consultation—that of inspiring the patient with confidence in his physician—is sacrificed upon the altar of his selfishness, by proposing a change for the sake of change, without an alteration—thus destroying what it was his duty to confirm.

I have in my recollection a case to the point. (When I was younger than I am now, but old enough not to be trampled upon in this manner with impunity,) where the consulting physician proposed a *change* in the treatment in order to *satisfy* the friends, he said, that *something* was accomplished by the consultation—*something* for which they paid their money. It was this. A child came under my professional care, which among other medicines, I thought required nit. pot. I prepared a little, nicely pulverized in separate papers, to be given at stated intervals in a little gum water. The parents were considerably alarmed for the safety of their little one, and I, a "young doctor" (that terror to all communities) was asked to call in Dr. G., the old family physician. The old doctor was sent for, and I the *young* doctor, it was supposed, would play second fiddle. After a very pompous examination of the patient, we (or rather *he* went and I followed) retired to another room to "consult" (might I not say *insult*,) I explained my method of treatment, and submitted to him the management for rejection or approval. He said he had nothing to say against the treatment; it was all well—very good—on the right plan, &c. "But" said "you know when we are called in this way it is necessary that something should be done to let the friends know we have been here—that is, we must make some little alteration. Just take the nit. pot. and dissolve a sufficient quantity in a tumbler-full of cold water, so that a teaspoonful shall contain the present dose, and give it, with the other medicines the same." One need not ask what I thought of the doctor's honesty as a brother—nor need any one suppose I was *young* enough to allow the change to be made.

All physicians are not as dishonest as Dr. G.; but too many are tinctured with his notions—or have such impudence as to trespass upon all known laws of propriety. Yet there are many good physicians who intend to deal honorably, and still it is hard work for them to allow the opportunity to pass unembraced, which will exalt them at their worthy neighbor's expense. They lack the manliness to say what they know to be facts when their own glory is not to be magnified. Such feelings are not confined to the rich or the poor—the learned or ignorant—no matter if

"To the manor born,"

or, "A dull and muddy-mettled rascal." The man that is without a soul will "steal your good name."—*Boston Med. & Surg. Jour.*

ACONITE LINIMENT.

Macerate four ounces of powdered aconite root in half a pint of alcohol, for twenty-four hours; then pack it in a displacer, and add alcohol gradually until a pint of tincture has passed. Distil off twelve fluid ounces, and evaporate the residue until it measures twelve fluid drachms. To this add two fluid drachms each of alcohol and glycerin, and mix them. It is used as an external anæsthetic application in the following manner. Cut a piece of lint or

muslin of the size and form of the part to be treated, lay it on a plate or waiter, and by means of a camel's-hair brush saturate it with the liniment. This may be applied to the surface, with a piece of oiled silk laid over it, to prevent evaporation. It should not be applied to an abraded surface, and the patient should be cautioned in reference to its poisonous character.—*Journal of Pharmacy.*

STRICTURE OF THE URETHRA.

BY WARREN STONE, M.D.

Prof. of Surgery, University of La.

It is unfortunate that the diseases incident to the urethra—so important and serious, and so much under the control of correct treatment—should so generally fall into the hands of quacks, or those who do not understand their nature The efficient surgeon is rarely consulted until the case becomes serious, and it is really distressing to the surgeon, who entertains ordinary sympathy for suffering humanity, to see to what a distressing state his patient has been brought by injudicious treatment. The subject of stricture is an extensive one, and though it has received the special attention of the ablest surgeons, there is much that is practical to be said, on so many cases.—in this land overrun with physicians,—would not terminate in complete retention of urine, fistula, disease of the bladder, sudden extravasation of urine, extensive sloughing, or death.—There is something wrong, for these cases are common, and taken in season and properly managed, they are simple. It can scarcely be profitable to go into the minute history of stricture, and I will confine myself to treatment. Some one is generally consulted in the forming stage, but instead of curing, the disease is generally aggravated. I will suppose a case, or rather give the history of a common case. After the gonorrhea and the use of strong injections, some difficulty is experienced in passing water. The physician is consulted, or an elastic bougie is obtained at the druggists—for although every physician treats this complaint, very few have the instruments—and thrust into the urethra, through the thickened and contracted portion; blood flows freely. This is repeated several times, and the urine flows nearly as free as ever, but there is considerable scalding, and in the course of a month or so, the case is as bad, or a little worse, than before. The same course is resorted to, with the same result, and the patient tired of fees, for no permanent benefit, gets an instrument and uses it. The complaint in the meantime is insensibly getting worse, until finally, after a debauch, or some sudden exposure, a complete stoppage takes place, and in horrible distress the physician is sought again. A catheter is thrust into the urethra, but the stricture cannot be passed; the case is imminent, and desperate efforts must be made at any risk; blood flows freely, but finally, finding that the instrument cannot be passed, the physician may fall upon a course of treatment he should have commenced with—bleeding, tartar emetic, the warm bath, etc., and as nausea and faintness is produced the urine begins to flow, probably as free as ever.—The physician thrusts through a moderate sized instrument, finds the patient grateful for an empty bladder, takes what money he can spare, and leaves him worse than before; for the violence done the urethra is sufficient to produce a stricture if none existed before. In a short time, great difficulty is experienced in passing the urine, and finally a hard swelling takes place in the vicinity of the stricture—a little behind, probably; great pain and smarting is felt in it at the time and after urinating. The tumor finally softens at its apex, breaks, discharges a little pus, and the urine flows through. A fistula is formed, or it may be that retention may take place again, and after making strong efforts to relieve the distended bladder, a sudden swelling takes place in the scrotum and perineum attended with great pain, indicating extensive extravasation of urine, extensive sloughing takes place; or under the best management the patient is left with urinary fistula, a loathsome object, disgusting to his friends, and miserable beyond discription. This is the common history of a bad case of stricture, and the blame rests with the one who had the first treatment of the case. The proper treatment is plain and simple, but it is often difficult to persuade patients to undergo it, or take proper time for a permanent cure. Stricture is the result of inflammation, and in the cure we must not only effect dilitation, but have the parts free from inflammation, or even irritation. When a patient consults me for stricture in the forming stage, and is unwilling to lay up and be cured, I advise him to let himself alone, satisfied that an introduction of an instrument and dilating hastily and abruptly, and leaving the parts in a high state of irritation, does serious harm, and often lays the foundation for permanent stricture. If the parts are irritable—as they generally are—the patient should be laid up, placed upon light diet, and if the general condition is favorable,

anti.nony may be administered, the system relaxed, etc., before the bougie is used. The finely polished conical pointed steel or silver bougie is preferable to all others, and the size should be graduated so as not to do violence to the parts. A little pain will be felt at the introduction, but if the instrument is properly graduated, and the parts are in a proper condition for its use, the pain soon subsides, but if it should not, the instrument should be removed, and a smaller one substituted. The dilating force of a finely polished instrument is very great, although introduced with gentle force, and we should bear in mind that we cannot restore tissues endowed with vitality to a healthy condition by a mechanical violence. The parts must not only be dilated, but the inflammation and irritation subdued, and then the cure is complete.—Strictures are rarely cured, not because they are incurable, or even very difficult of cure, but because they are treated mechanically, and without regard to pathology, and they are generally left after treatment with the original cause existing in an aggravated degree. The disease is looked upon as trifling by the general practitioner who does not often see the horrible consequences of neglecting or carelessly treating this simple disease. The surgeon does not do his duty who does not urge in the most earnest manner the necessity of prompt attention, and lay before his patient the sad consequences of neglect. When the stricture has become firm and unyielding by the transformation of the tissues, a permanent cure may be effected by perseverance in the use of proper means. Dilitation is the proper method in almost all cases; a few cases, and but a few, comparatively, may require division, according to the method of Mr. Syme. For making dilitation, Mr. Wakely has invented an instrument, or a series of instruments, which I would advise the new beginner, or those who practice surgery without any knowledge of anatomy by all means to use. This apparatus consists of a small catheter, which is introduced as a guide, and a series of tubes, whose calibres acurately fit the catheter, and are passed down upon it. In all difficult cases, it will be found that the guide cannot be readily passed, and when it can be passed, the polished conical pointed bougie can be. A little roughness or inequality in an instrument, produces serious impediment to its passage through a hard, unyielding stricture, and Mr. Wakley's instrument, when the tube is passed down upon the guide to the stricture, must represent a bougie with a small point, and an abrupt enlargement. Mr. Wakley is a theoretical surgeon—in fact it would be unreasonable to expect anything practical in one who constantly parades before us his title of M. P. for eighteen years, and simply calls himself surgeon. There is much more tact and judgment necessary to dilate a stricture after we are able to pass instruments than is generally supposed, and it is against the careless and inefficient treatment that is generally pursued that I am writing, rather than suggesting anything new. Dilitation can be made more or less rapid according to the case. Some strictures are hard, callous and insensible, and will bear violence without taking on irritation; others are sensitive, and if we proceed too hastily, we create irritation, and I believe occasionally ulceration. I have observed that the finely polished conical instrument exercises an immense wedge power, and we should carefully consult the sensations of the patient, which will furnish a very correct guide as to the force that can be profitably used. A little pain must necessarily be felt on the first introduction of the instrument, and if it does not gradually subside, it should be withdrawn a little; in short, dilitation should be so applied as not to produce irritation, and when it is fully effected, the patient should be fully warned of the almost certainty that the stricture will gradually and insensibly return, unless an instrument is occasionally introduced for some time. It is astonishing how neglectful patients are in this disease, even where they have suffered extremely. I can only account for it by the fact that they soon forget what a free flow of urine is; for sensible, observing patients will tell us that their urine flows as free as ever, when, in reality, it takes them three times as long to pass a given amount of urine. I generally furnish the patient with suitable instruments, instruct them to time themselves in urinating, and as soon as there is the slightest diminution in the flow, to introduce carefully the instrument. I met a patient a short time since who had suffered extremely; had fistula, etc., and passing a little urine by the penis. I dilated the stricture, laid open the fistula, and gave him an instrument to use. He told me that at first he used it once a week, and then once in two weeks, once a month, and at the time I speak of he had not used it for six months, but observed that he thought it took him a little longer to empty his bladder than it formerly did, and that he intended the next day to prepare himself and introduce his instrument. It becomes necessary sometimes to use much violence to overcome a stricture, but

it should not be followed up when a stricture is once overcome. A moderate sized instrument is sufficient to make wholsome pressure on the parts and favor the suffering of indurated tissues preparatory to absorption, whereas, if we persist in the use of too large instruments, we, in our haste to effect a cure, defeat our object.

It is not for the want of knowledge on the subject that stricture is treated so often, and ends so badly, but because the knowledge is so bungingly applied.

Inflammation ad deposition of lymph is the cause, in a majority of cases, and time is required to allow absorption and restoration of the tissues to their natural elasticity, and when this is accomplished, the parts must be left free from irritation or inflammation, otherwise the disease necessarily returns. Where fistulas exists, if they are direct and do not burrow, they will close, if the stricture is overcome. It is not necessary to keep an instrument in the bladder for the urine to pass through; indeed, very few can wear an instrument any length of time without serious mischief. When all obstruction is overcome, and the urine has a direct and unobstructed channel, it will not pass by the fistula, and granulations soon block it up, so that the patient suffers no inconvenience. If an instrument is kept in the bladder, the patient suffers great inconveniece, and the bladder being irritable, contracts strongly when the disposition to empty itself occurs, and forces the urine beside the catheter into the fistula with as much certainty, if not more, than if left to flow through the urethra. Notwithstanding this disease is almost certainly under the control of the surgeon, if properly managed early, we have often cases presented to us, not only under great suffering, but in imminent danger to life. These extreme cases can generally be relieved by severe means and often restored to entire ease and comfort, if not to the entire use of the organs.

I have heretofore expressed my views strongly in favor of dilatation with the finely polished conical pointed metalic bougie. There are other bougies that will answer in some simple cases, but it is scarcely necessary to speak of them, for whatever is found efficient in bad cases must certainly be preferable in slight ones. The fault usually committed in dilating is in endeavoring to effect it too hastily, and leaving off treatment as soon as the mechanical difficulty is overcome. Surgeons of distinction have written seriously and earnestly upon the value of rapid dilatation. No one will question the propriety of overcoming disease as expeditiously as it can safely be done; but whoever adopts the practice of rapid dilatation in all cases, disregards entirely physiology and pathology, which no mechanical dexterity can compensate for. The dilatation may be made as rapidly as the state of the parts will admit of. In some old callous strictures strong force can be used without causing much irritation; in other cases the parts are morbidly sensitive and although gentle pressure from a bougie tends to overcome this sensibility, if hasty dilatation is practiced the case is aggravated. In these latter cases if rapid dilatation is practiced, or if a large instrument is introduced, the pain increases; if it is allowed to remain, a flux of fluids takes place to the part, the irritability and contracity of the parts increase, and after the removal of the instrument the patient is often unable to urninate at all. The careful introduction of a proper sized bougie. so as to make a wholesome pressure, and preserved in, will very certainly effect a cure in these cases; although it is somewhat tedious. We have familiar examples of the importance of graduating pressure to the peculiar state of the tissues in the application of the bandage. How often do we observe the great benefit of nicely graduated pressure to swollen, thickened. indurated and irritated parts, and how often do we observe that if it is made too great, or improperly applied, the difficulty is aggravated? It is this irritable elastic stricture which, it is said. will not stay dilated, that may call for the operation of Mr. Syme; although I contend that this species of stricture can be overcome by perseverance in the proper use of proper bougies, and it is only when it is complicated with urinary fistula that I would advise the perineal section. Mr. Syme has received much praise, and deservedly, for his perseverance in this operation; for he has shown how readily and how well the urethra recovers after being laid open, and no one now hesitates to make such incisions into the urethra at any point that necessity seems to demand. It remains, however, for others to determine, more accurately than Mr. Syme has, the precise case in which the division of the stricture through the perineum is necessary or useful. Mr. Syme operates only when he can pass a director to cut upon; at least, he says he never met with a case that he could not pass a director through. I do not doubt the assertion of Mr. Syme, but I must say that he has been very fortunate in his cases for one who must have seen so much of this disease, and I can only account for it by supposing that stricture is treated, in all its stages, by surgeons in Europe, whereas,

in our country it is treated by quacks, or physicians who make no pretentions to surgery, but will practice upon every surgical case that will afford a fee. It has been said that where a director can be passed dilitation can effect a cure; and it is true with very few exceptions. There are some cases of irritable elastic stricture in which it would be proper to divide, and there are some cases connected with fistula where the division ought to be made; though a urinary fistula, if it is direct and has not burrowed under the fascia, will generally close as soon as the stricture is entirely overcome and the urine has no impediment to its flow.

It has been my ill fate to meet with far worse cases than Mr. Syme, for I have met with cases through which I could not pass an instrument; and although I may not possess the ingenuity of Mr. Syme to coax an instrument through a stricture, I claim more physical power. and I have met with cases in which this failed, aided by all the tact I possess. There was no occasion for the half that has been written upon the division of the stricture where a director can be passed, for it is a simple matter; but it is astonishing that nothing has been said, by those even who admit that there are cases that do not permit of the passage of any instrument, on the method to be adopted in such cases. The bladder of course must be relieved—but how is the stricture to be overcome? In the course of my long service in the Charity Hospital I have met with many very troublesome cases. Formerly I used Stafford's cutting instrument, which is a lanceted catheter; but I have long since abandoned it, and now I use the metalic bougie, and sufficient force to overcome the obstacle if possible; but if the stricture is so close and unyielding as to resist force, I cut down freely and divide the induration. This can be done easily when the surrounding cellular tissue is not much transformed, and in any case is the safest proceeding and offers the surest chance for permanent relief. It is very common for surgeons to cry out against using force; but an unjust necessity exists —an obstacle is to be overcome which no dallying or coaxing can effect. or the patient perishes sooner or later. either by complete retention, or by the slower process of disease of the bladder and kidneys. The only question is, in my opinion, whether it shall be overcome by strong force with a smooth steel bougie, or divided by the knife. False passages are most commonly made by the careless or ignorant use of instruments while the stricture is soft and the tissues more yielding! but the fact that false passages have been made and are liable to be made when force is used is no argument against the forcible use of the bougie; the thing must be done, the patient must be relieved, and the only question is, how? The bougie in proper hands will rarely fail, and if a false passage is made, or if the bougie is thrust through the urethra, the practical surgeon will know it, and a free incision prevents any evil consequence, and if properly made accomplishes what the bougie failed in doing. The stricture being overcome, all the care, caution and perseverance heretofore laid down is to be observed in effecting a permanent cure.

I had a case of almost enclosure of the urethra, a short time since. A gentleman had suffered for several years with stricture —had used bougies for a long time for temporary relief, until, finally, the tissues became so unyielding that the bougie could not be passed, and his case becoming serious from retention of urine, an operation was performed in an adjoining State; but it was imperfectly done, and he was finally relieved from immediate danger by the formation of a fistula some distance behind the stricture. When I first saw him he was passing his urine by using great force through the fistulous opening, and occasionally a few drops came through the urethra. On examination, the stricture was found within the scrotum, and the urethra appeared enlarged into a hard bulb. about the size of the end of the finger. The fistula was behind the scrotum and was disposed to fill by the granulations. so that there was occasionally almost an entire retention. I selected a small steel bougie and used nearly as much force as I was able, but without engaging in the least the point of the instrument in the stricture. On a second trial the instument slipped and perforated the urethra, and the knife being the only resort I divided the scrotum in the septum down to the induration, and carefully divided that, which was an unyielding fibro-cartilaginous substance—a canal in the centre, not unlike that of the vas-deferens, As the wound began to granulate, a catheter was introduced and worn a part of the time; the fistula healed and the wound closed in a few weeks, leaving a free passage for the urine through the natural passage.

I have said that when urinary fistulæ are direct, and do not burrow, they will close by granulation, if the urethra is opened— the stricture relieved, so that there is no impediment to the flow of the urine; but in some cases the outer orifices of the fistula will close, and the urine burrows, excites fresh inflammation, suppuration, etc., and opening after opening will be made.

The perineum and scrotum will become hypertrophied and indurated, and as one opening closes, and the patient is not only in constant suffering, but is a nuisance to himself and all around him. These cases are relieved by laying open the perineum, and if necessary the scrotum, through its whole extent down to the urethra, and if any strictures exist, they should be divided. Also, a catheter may be worn, if it does not give pain; but if it does, it is better to introduce it occasionally—the wound filled with lint to the very bottom, so as to insure healthy and firm granulations, and it is astonishing how perfectly these miserable cases recover. The worst strictures occur at the beginning of the membranous portion of the urethra, and when a director cannot be passed, it requires a careful dissection to relieve the stricture; but by introducing an instrument into the stricture and making a free incision, as in the operation for stone, the strictured point can be found, and the urethra beyond will generally be found enlarged, and the flow of urine will indicate that the canal is reached. The wound will heal around a catheter, and a good channel will be established; care being required to keep it from contracting by occasionally introducing a bougie after the wound is healed.

In conclusion, I would say, that stricture ought never to be allowed to become bad; and never will, if dilitation is properly applied; but if we find it bad, it is best to overcome it, if possible, with such force as may be necessary, with the metalic bougie. If the strictured portion is very irritable and elastic, it may be proper in some cases to cut down upon a director and divide the strictured part, and if there is complete retention, or the bladder is suffering from distention, and no instrument can be passed, it is best to pass an instrument as far as possible, and cut down upon the point, and then follow on until the urine flows. The bladder may be punctured with perfect safety, above the pubis, with a trocar; but this affords only a temporary relief, and an incision may be made with equal safety through the perineum up to the prostate, if necessary, and with the prospect of establishing a permanent opening, and passage of urine through the natural course.—*New Orleans Medical News and Hospital Gazette*

IODIDE OF ZINC FOR ENLARGED TONSILS.

Dr. Sewell, in the Montreal Medical and Surgical Journal, says he has used the iodide of Zinc in several cases of enlarged tonsils with satisfactory results.

WHAT IS THE AMERICAN ECLECTIC SYSTEM OF MEDICINE?

There are few who have any accurate conception of the American Eclectic System of Medicine, excepting those of the medical profession, who have studied and carried out the new system. It is not a special exclusive theory of medicine, based upon one principle, like Homeopathy or Hydropathy, and consequently requiring a certain degree of fixedness and uniformity of doctrine in its followers. It is not a perfect and finished system of science like geometry and arithmetic, embracing a certain number of truths, which can neither be modified nor increased. It would be but folly and dogmatism to claim such perfection for any medical system. It is not a systematic routine of practice, which may be learned like the alphabet, and adhered to for ever. It is not in any sense, a finished, fixed, or stationary system. On the contrary, it is a system of progress. It is not a system governed by any one dominant idea, theory, or measure, like Homeopathy or Hydropathy. On the contrary, it is a comprehensive system, which tolerates all ideas, and recognizes all contributions of science, as well as all the principles of healing, which legitimately belong to the healing art.

It is therefore, not a scientific system, in the sense in which that term is used by system makers, theorists, and routineis's, but is rather a comprehensive mass of science, the central principle of which is benevolence, and which embraces every thing connected with the healing art, as the solar system embraces, not only the greater planets, but the asterioids, and minor bodies which revolve around the sun.

A truly eclectic medical mind should be like a cyclopedia, embracing the whole circle of medical science,—and not like the systematic treatises, put forth by different schools, a mere presentation of the views of a particular portion of the profession.

It has been the fashion to designate the medical parties by names, ending in the termination, *-path* or *-pathy*, which refers to disease. Thus—those who treat diseases by remedies having an analogous character, and capable of producing symptoms similar to the disease treated, are called Homeopaths. Those who disregard the Homeopathic law, and use remedies producing effects different from the diseases to which they are applied, have been called Allopaths; while those who, disregarding the question of analogy or difference, treat diseases by water alone, are called Hydropaths.

The eclectic physician can not be identi-

fied with either of these classes. He is not an Allopath, for he cares nothing about the question of differences or similitude, if his remedies are capable of curing the disease. Neither is he a Hydropath, for, although he uses water freely, he does not confine himself to the water treatment. On the contrary, he claims the right to use everything that is useful, whenever, in his judgment, it will benefit his patient.

There are three principal relations which medicine may sustain to disease: that of resemblance, which is embraced by the word Homeopathy, as when we hold a part which has been burned, to the fire to cure it; that of specific antagonism, or Antipathy, as when we apply ice, or cold water, to a burned surface: and that of general difference, or Allopathy, which may be illustrated by the application of spirits of turpentine to a burn.

Now it is obvious, that the first dictate of common sense, is, to treat an injury by something of an opposite character, as when we apply cold water to cure a burn, or an anodyne to relieve a pain. Still, it is well known that burns may sometimes be relieved by holding them near the fire, and that a frozen part is sometimes benefitted by rubbing it with snow. The eclectic physician practices freely by the antipathic law, as when he gives a cathartic to relieve constipation, tonics to relieve weakness, anodynes to relieve pain, stimulants to restore warmth and circulation, and anti-spasmodics to overcome muscular contraction; but, at the same time, he finds it practicable, occasionally, to quiet the stomach, not by an aromatic or carminative, such as peppermint, but by a small dose of some emetic substance; or, to overcome a diarrhea, by a medicine of a cathartic character; or, to relieve an inflammation, by the application, not of ice, but of warm water. Thus, he resorts, without hesitation, to the Homeopathic principle, whenever he finds it convenient. At the same time, he uses freely any successful measure which is neither specifically Homeopathic, nor specifically Antipathic. In other words, he uses remedies which may be called Allopathic; as, for example, when he would relieve a diarrhea, or an attack of rheumatism, by exciting perspiration; when he would relieve an attack of fever by quinine and iron, or dysentery, by a remedy to act upon the liver.

It is obvious, therefore, that none of the fashionable *pathies* express the objects of the practice of an eclectic physician. On the contrary, as he adopts all the *pathic principles* of treatment, whenever he deems them appropriate, his system is properly called PANTO-*pathic*, or, in other words, a system which uses medicines in every relation to disease, that may be made curative. We may, therefore, put our nomenclature into a fashionable shape, by saying that the American Eclectic System is a system of *Panto*-pathy. It is, therefore, a system in which its votaries have the largest liberty to choose, and which denies the right of any society or college to dictate a medical creed, or a limited routine of practice to the profession,—since every physician should always be ready to use any remedy which he has found to be useful, no matter whether colleges, societies, and authors have recommended it or not.

Such is the *philosophic position* of Eclecticism. But, in a *practical* point of view, we might give a more simple and equally truthful definition. The American Eclectic System is the protest of American common sense and experience, against the traditional dogmas, the antiquated theories, and the aristocratic rules which have cramped and degraded the medical profession.—There are but three principal divisions of the profession. The Old School, or conservative European party; the American Eclectic, or reformatory party; and the Homeopathic party, or the followers of Hahnemann. The *Allopathic* party has no existence but in epithets, for no physicians, either old school or Eclectic, confine themselves to the Allopathic law of treatment.

The healing art has been progressing slowly for ages; in every generation new discoveries are made, and old absurdities are laid aside. In our own country, the independent spirit of the people, and the habits of free inquiry, which are fostered by public institutions, have led a large portion of the profession to disregard, in practice, the extravagant theories which they were taught in the schools. Thousands of experienced physicians have discovered in their practice, that the doctrines of their teachers produced unsatisfactory results, and have been compelled, by a sense of duty, to abandon the pernicious practices of bleeding and salivating their patients.—Finding, then, that they were far more successful in following their own common sense and observation, than in blindly obeying authority, they were encouraged to go on in additional changes and improvements; and, as they were often in villages or country places, unable to obtain a sufficient supply of all the officinal remedies, they were compelled to resort to the native plants, which they found growing about and which had been successfully used in domestic practice, or by the abrogines.—This independent course was rewarded by

an astonishing success in practice. They discovered new articles for the materia medica, the use of which had not yet been known in the colleges, and by the use of such remedies, guided by their own independent sagacity, they were enabled to accomplish wonderful cures, where the most learned graduates, fresh from London, Paris and Philadelphia, had signally failed.

The progress, however. of these democratic improvements in the profession, mostly effected by individuals who had never written a book, or occupied a professional chair, was regarded with great jealousy by the leading authorities of the profession. A violent party spirit was aroused, and physicians who were known to have discarded mercurials and bleeding for the sake of using the more safe and efficient remedies furnished by our indigenous plants were violently opposed, and treated with great indignity, as if they had been guilty, not only of errors of opinion, but of degrading, unprofessional, or immoral conduct; and so violent, in many instances, was the opposition to these innovations, that no physician could be recognized as a respectable member of the profession, who would not consent to administer calomel to his patients, in accordance with the dogmas of the schools. The independent physicians, who discarded calomel and bleeding, were freely and generally denounced by their rivals as empirics and quacks, and stringent laws were passed in many of the States, to exclude them from practice, and compel every member of the profession to submit to the control of its leading societies. Fortunately, however, the spirit of liberty was too powerful for all such combinations, and every State in the Union, which had allowed its statute book to be disgraced by such laws, has repealed them absolutely in accordance with the remonstrances of the people—even the medical profession, in many instances acknowledging the justness and propriety of their repeal. and the absurdity of endeavoring to control mens' opinions in medicine, by the power of legislation.—New Jersey, we believe, was the last State in which any such restriction existed, and there it has lately been repealed.

From the peculiar manner in which various changes and improvements have been effected. it is obvious that this great American Reform is not a matter of *philosophical theory*—the product of a single mind—but rather a matter of *clinical experience*, the result of a vast number of observations, by intelligent physicians in every part of our country. This great American Reform, therefore, can not be a very systematic affair; and its unity, or consistency, arises solely from its truth; for, if a great number of independent observers agree in their experience, recommending certain changes and improvements in medical practice, it is exceedingly improbable that they should be mistaken, or that their system should not be a great improvement upon its predecessor. In fact, nothing but the consciousness of truth, and the encouragement of success, could have induced so many American practitioners to brave the odium of innovation, and the annoyance of medical proscription, by organized and powerful societies.

Originating thus, the American System of Medica' Reform may justly claim to be the most advanced condition of medical science, combining the scientific research and learning of Europe, with the practical skill and medical improvements of America. Originating in so popular and democratic a manner, this American Medical System has been far more distinguished by practical success, than by collegiate institutions, or medical literature. There are, at the present time, it is believed, between two and three thousand physicians in the United States who follow the American Medical System in their practice; and five or six medical journals, devoted to the advocacy of this reform. It is only, however, within the past ten years, that the movement of medical reform has been sufficiently centralized and organized to make rapid progress, and present a commanding front before the public.

The most important movement for this purpose, was the establishment, in 1845, of the Eclectic Medical Institute of Cincinnati. This college, the only Eclectic institution which has had a prosperous and successful career, became, in two years from its establishment, the leading medical school of Cincinnati, in point of numbers, and has ever since mantained a prominent position among the leading schools of the United States. The number of its annual matriculants, in 1852 and '53, was over three hundred.—a number exceeding those of the four other medical schools in Cincinnati.

The doctrines taught in this school, and carried out by its graduates in their practice, may be justly considered the practical embodiment of the American Eclectic System. These doctrines are the following:

1. That every physician has a right to exercise his own judgment, and that no society or college has a right to prescribe and enforce a medical creed.

2. That the physician is bound to preserve, with the utmost care, the vital power of his patient, to aid nature in the cure of

disease, and to avoid every measure in practice, which experience proves to be deleterious or dangerous to the constitution.

3. That the practice of blood-letting has been proved, by ample experience, to be generally injurious, and often dangerous to life, and ought, therefore, to be discarded from a system of medical practice.

4. That the use of mercurial remedies has been shown by ample experience, to be productive of a vast amount of disease and mortality, and that the use of suc remedies should be laid aside, whenever their objects can be attained by other remedies and measures.

5. That the new remedies which have been introduced by American Eclectic practitioners, are entirely sufficient to accomplish all the purposes which have heretofore been accomplished by mercurials, in a much safer and more efficient manner.

6. That all other unsafe remedies, which, like the mercurials, are subject to great abuses in their use, and which are capable of being substituted by better and safer remedies, should be gradually laid aside, and improved remedies introduced as rapidly as the progress of science and experience will permit.

7. That all new truths should be received and investigated in a spirit of candor, and that the numerous errors and deficiencies in medical science, in Practice, Surgery, Obstetrics, Materia Medica, Physology, and Pathology, should be corrected as soon as possible.

Improvements in all these departments of science, and especially in the physiology and pathology of the nervous system, are now being introduced by the Institute, and a continual progress in improvement is insisted upon by the faculty, as the fundamental and distinctive feature. It is true that enlightened and liberal-minded physicians every where recognise these principles as just, but it is not true that the profession generally, and especially its leading authorities, are willing to carry them out. That majority and leaders of the profession have, in all past times, been opposed to any great and fundamental improvement, unless coming from individuals who had previously gained so eminent a position as to carry their suggestions by the mere force of authority. Harvey, Jenner, Gall, and all others who have disturbed greatly the old errors of the profession, were stubbornly resisted and discredited by their cotemporaries; and at the present time, the remarkable improvements in medical practice which have been made by American physicians, are neglected and opposed by the medical schools, colleges, and societies of America, the new remedies peculiar to the Eclectic practice being almost entirely unknown in the colleges devoted to the old system of practice, although we can not doubt that like all other improvements they will in time be universally adopted. We have no doubt of the ultimate progress of the profession, we merely insist that its progress is slow, and that it requires an entire generation to make as much improvement as might be accomplished in one year by general co-operation in a liberal spirit.

To sustain and diffuse the improvements which have already been made by American physicians, and to give a cordial welcome to other improvements which are now in progress, or which may hereafter arise, is the leading object of the Eclectic school.

Those who meet with graduates of the Eclectic Medical Institute of Cincinnati, will find, if they are faithful representatives of their Alma Mater, that they possess this liberal spirit; that they have been duly instructed in Anatomy, Physiology, Chemistry, Materia Medica, General Practice, Surgery, and Obstetrics; that they have become familiar with the human body by anatomical study and dissection, and with Practice and Surgery, both by general instruction and by clinical observation—in short, that they are familiar with all departments of the science as taught in the best schools of the United States and Europe, and instead of being permitted to idle through the lessons of college study, have been subjected to daily and thorough examinations throughout the whole period. But, in addition to this knoweledge which is common to the graduates af reputable schools, they will manifest a large amount of knowledge not common among the graduates of Paris and London, Philadelphia and New York. They will exhibit a greater familiarity with our native medicinal plants, and with the new and potent remedies which the chemistry of Eclectic pharmaceutists has recently developed.

A great amount of aversion to medical treatment is felt by intelligent persons, on account of the fact, that medicines are generally formidable and poisonous agents, which, if used freely, may do so much harm as good, unless if they do not strike the disease, they must strike the patient, and do him a serious injury. As disease is infinitely diversified in its character, it is self-evident that a physician whose materia medica is limited, who seldom use any thing but calomel, opium, tartar emetic, quinine, and half a dozen other articles, can not possibly adapt his remedies to the great diversities of disease, and must,

therefore, inflict more or less injury, sometimes impairing the constitution for life.

Against these evils the Eclectic physician is especially guarded. He has been taught never to use anything that can not be safely given, never to allow poisonous materials to become lodged in the constitution, never to use remedies so harsh as to break down the constitution while attempting to reach the disease; and from his ample stock of new remedies, (a large portion of which are unknown in European schools,) he is enabled to select a safe and apropriate remedy without useing agents that will produce effects entirely foreign to his objects He is not obliged to give calomel when he wishes to operate on the liver, because it produces many objectionable effects, and because he has remedies which act on the liver more powerfully and safely than any mercurial preparation. He is not compeled to use tartar emetic, because he has better agents which do not produce so much prostration, and are not so liable to irritate the bowels or congest the lungs. He is not compelled to bleed, because he can produce just as promptly every *desirable* effect that can be produced by the lancet, without losing a drop of blood or inflicting any serious loss or injury.

Supplied with ample resources, and carefully instructed in their use, he does not feel disposed to despond, and prognosticate a fatal issue in many diseases in which learned authors scarce give any hope. He does not feel disposed to say to every consumptive patient that the case is hopeless, because he knows that if there has been a good natural constitution, and it is not entirely broken down, it is perfectly practicable to restore such a patient to respectable health. He does not take a panic when cholera approaches, because he knows that in the worst epidemic attack which has occured in our country, the Eclectic physicians of Cincinnati cured nineteent-wentieths of all their patients. He does not regard scarlatina, puerperal fever, croup, and pneumonia, as diseases of a very fatal character, because he knows that when promptly and rightly treated, there is very little mortality in such diseases. He does not pronounce cancer an incurable disease, because he knows that it has been successfully treated in a large number of cases by Eclectic surgeons. In short, he does not dread to encounter any of the formidable prevalent epidemics; he does not shrink from any of the responsibilities of his profession, for he knows that its blessings are great, and failures or discouragements are few; he knows that the average mortality of the Eclectic practice is less than two per cent., and, consequently, that the best evidence he can give to the public of his superior skill is to engage actively in the treatment of diseases which are considered the most formidable and destructive.

STATISTICS OF MEDICAL SCHOOLS.

The rapid progress and diffusion of the doctrine of the Reformatory, or American Eclectic party, may be learned by reference to the following statistics of Medical Colleges, which exhibit the unequaled sucess of the Eclectic Medical Institute by comparison with the three principal medical colleges, located in the same region, all of which enjoyed ample endowments from the liberality of state or city governments, and were sustained by the general co-operation of the profession, while the Eclectic Medical Institute, without a dollar of endowment, or even a hospital privilege, and opposed by strong influences and predjudices, has attained its opposition by theability and energy of its Faculty alone.

The following table shows the number of matriculants during the first four years from the establishment of the Medical Department of Transylvania University, at Lexington, the Louisville Medical Institute, the medical College of Ohio, and the Eclectic Medical Institute of Cincinnati:

	Transylvania.	Louisville Med. In.	Med. Col.	E. M. Inst.
1st year' "	37	86	25	81
2d year, "	98	120	30	127
3d year, "	120	204	18	220
4th year, "	150	208	00	191
	405	612	73	619

To appreciate the above table properly, we should bear in mind that the Transylvania school had almost exclusive occupation of the field of its patronage—that the Louisville Medical Institute, in its first four years, was not really a new school, but rather a continuation of the Transylvania school, the faculty of the latter having gone in a body from Lexington to Louisville, for a better location, thus giving it at least twice as great success as it would have had, if it had been really a new school. Yet notwithstanding all these advantages, and although these schools were occupied by Faculties, embracing some of the most celebrated physicians in the United States, and had no professional opposition to encounter, none of them, with all their rich endowments, and learned Faculties, have achieved so great a numerical success as the Eclectic Medical Institute.

At the present time, the Eclectic Medical Institute is far in advance of its competitors. During the session of 1852-53, it had 308 matriculants, while the Medical Institute of Louisville had less than 300. The last session of the Medical College of Ohio was only attended by 92 matriculants, and the Transylvania school had a still smaller class. The number of matriculants in the Eclectic Medical Institute, is about three times the average number in attendance upon medical colleges in the United States. In fact, the Medical College of Ohio, and the Transylvania school combined, (which are richly endowed State institutions,) with four other smaller medical schools in the valley of the Ohio, do not altogether equal the Eclectic Medical Institute alone, which graduates from one hundred to one hundred and twenty physicians per annum, and is still unable to supply the extensive demand among the people for educated Eclectic practitioners.

TENTH ANNUAL ANNOUNCEMENT OF THE ECLECTIC MEDICAL INSTITUTE.

In the present programme of the Institute for the Session of 1854-55, we have every assurance of the perfect equipment of this Institution for efficient service in every department. The departments of Medical Practice, Pathology, Clinical Medicine, Institutes of Medicine, Therapeutics, Physiology, Obstetrics, and Diseases of Women and Children are occupied by Professors BUCHANAN, KING and NEWTON, whose established reputation as experienced and able teachers and advocates of the American Eclectic System of Medicine, renders it entirely certain that they will impart to their pupils an accurate and thorough knowledge of the best resources and principles of those important and responsible departments of medical science.

The instruction of the remaining members of the Faculty will be as heretofore, of that clear, practical and solid character, which stores the mind with important knowledge, without embarrassing and confusing the intellect with needless speculation, useless detail, or uncertain and conflicting doctrines. Drs. SHERWOOD, FREEMAN, HOYT, and WARRINER are all graduates of the Institute, imbued with that liberal and independent spirit, and that devotion to true practical medical improvement, which have constituted the characteristics of the Institute heretofore, and which they will zealously maintain hereafter. It is seldom that a medical school at so early a period of its history, has been enabled honorably to fill half of its professorships with its own pupils. This circumstance is peculiarly gratifying and satisfactory, as it is highly important to preserve and transmit to future medical classes that fund of experience and knowledge which has accumulated in the Institute—a fund which the talented graduates of the Institute not only preserve but increase.

In the arrangements of the departments and the facilities which they afford, some changes have been made, and increased facilities provided, the results of which it is believed, will be highly gratifying to all. In the department of Anatomy, the Faculty have secured the services of Dr. HENRY A. WARRINER, one of the early graduates of the Institute, whose scholastic habits and fine mental cultivation, peculiarly fit him for scientific pursuits.

MATERIA MEDICA AND MEDICAL BOTANY.

In this department the resignation of Prof. Bickley (which has been in contemplation since his attack of amaurosis in 1853,) has been received and accepted.—This step having been delayed until satisfactory arrangements could be made by the Institute, he has finally withdrawn to engage in other pursuits.

To supply this vacancy, the authorities of the Institute after much deliberation to select from the ranks of medical reformers a judicious, talented and reliable occupant of this responsible department, have chosen Dr. CHARLES H. CLEAVELAND, late of New York, a graduate of Dartmouth Medical College, who has been engaged in practice since 1843, and has enjoyed the reputation of a thorough medical scholar and successful physician, as well as an instructive writer on medical subjects. Dr. C. although

not educated in the Eclectic school had too much liberality and independence to confine himself within the limits of medical sectarianism, and studied with candor the works of the different schools with the view of arriving at the truth. The result of his investigation and practical experience was the conviction of the necessity and propriety of the Eclectic reform, since which his name has become familiar to other medical reformers by communications in the various medical journals devoted to reform, and by personal intercourse and correspondence.

We feel well assured from his practical experience, solid attainments, sound judgment, enlarged and liberal views, ready and perspicuous expression of thought, agreeable address and thorough cultivation, that he will honorably sustain the reputation of the Institute, and deliver as thorough practical and discriminating a course of instruction in his department as has ever yet been given, in which the peculiar merits and superiority of the resources of the Eclectic school, will be clearly displayed by one who has not only critical knowledge, but personal experience as a practitioner.

The Institute has always been distinguished by its practical character and tendency, and by giving such an education as prepares its pupils to enter with confidence and satisfaction upon the practice of their profession. At the present time this character is distinctly marked—every Professor of the Institute is personally engaged in active practice excepting two whose scientific departments require extensive scholastic research upon other subjects than the treatment of disease, and with which an extensive practice would be incompatible.

In the lectures upon Materia Medica, the subject will be developed with that fullness which has always characterized the teaching of the Institute, and with a careful attention to all that recent experience has developed—to the character and peculiar resources of the Eclectic practice, and to the concentrated remedies and recent chemical improvements, which are making so great a change in the details of Eclectic pharmacy. The lectures will be demonstrative in their character,—the substances described will be presented before the class—and the plants will be illustrated as far as practicable, either by paintings, by dried specimens or by the living plants.

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General, Special, and Pathological Anatomy.

The course of lectures by the professor of Anatomy will be thorough, comprehensive and minute. He will adopt the most appropriate nomenclature, and describe the various parts of the subject with demonstrative distinctness. He will pass over more rapidly such portions of the science as possess less practical importance, or which can be learned with facility in the private office, in order to devote more time to the elucidation and demonstration of the organs and regions of the body more particularly connected with medical, obstetrical, and surgical practice, and which cannot well be studied successfully except in a medical college.

The anatomical lectures will comprise the history, description, relations, and pathology of the osseous, muscular, glandular, vascular and nervous systems. The various organs pertaining to each system will be perfectly demonstrated by careful dissections, their peculiarities of form and structure described, and their relations completely displayed. The respiratory, circulatory, and digestive apparatus will be exhibited to the best advantage, and special attention will be given to dissections of the brain and ganglia, and the nerves connecting these with each other and with the system at large.

The facilities for teaching anatomy in the Institute have recently been greatly increased, not only in the dissecting rooms but also in the amphitheatre. The size of this hall has been increased at least one-third, and the skylight has been enlarged and remodelled, so that a flood of light is poured upon whatever is to be exhibited. All the usual methods of illustration will be employed, such as paintings, plates, drawings, extemporaneous diagrams, on

the blackboard, &c. But the demonstrations by means of preparations and dissections of the fresh subject, constitute the most important feature of this department; and now that a process has been discovered by which anatomical material may be preserved from decomposition, and kept unchanged in structure and appearance as long as desired, the unpleasantness of researches in practical anatomy may be entirely obviated.

Another circumstance which affords much advantage and satisfaction to the student may be mentioned here, although it is not peculiar to the anatomical department. The leading points of each lecture will be uniformly repeated on the succeeding day in the form of questions propounded to and answered by individual members of the class, in regular succession. In this way, the memory is improved, errors are corrected, the intellectual faculties impelled to activity, and much of the monotony and tedium of daily lectures relieved. In short every practical expedient will be adopted, and every effort put forth by the professor of anatomy with a view to the correct and thorough instruction of the class; and although the space of four months is too short for the perfect developement of this extensive science, yet since he has been released from the labors of instruction in the dissecting rooms by the appointment of a competent demonstrator to that department, it is believed he will be able to succeed, even better than heretofore, in affording to the class a full course of instruction in regard to the delicate and complicated machinery of the human body, which as physicians it will be their duty to understand and regulate.

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Anatomical Demonstrations.

The anatomical Hall of the Institute affords everything requisite for the study of practical Anatomy. A hall occupying one entire story of the collegiate edifice, is furnished with tables, gas lights, and every necessary convenience, while a separate apartment is provided for female students. Strict cleanliness will be enforced and every precaution taken by antiseptics, &c., to protect those engaged in dissection. Great improvements have recently been made in he art of preserving anatomical material in a perfect and inoffensive condition.

A discovery, rivalling that of the celebrated Signor Sigato (which was lost by his death,) has recently been made by a physician of Cincinnati, and has been offered for the use of the Faculty of the Institute. By means of this discovery, the human body may be preserved in all its freshness and naturalness of appearance for an indefinite period, even when fully exposed to the air. The body of an animal subjected to this process immediately after death, without any other preparation whatever, appears after the lapse of many weeks as natural, fresh and inodorous, as if it had just been killed. The parts revealed in the most minute dissections, are thus preserved in a faultless condition, and all unwholesome or unpleasant effluvium is entirely destroyed, thus rendering the studying of anatomy entirely free from its usual repulsiveness.

The Demonstrator of Anatomy will give assiduous personal attention to those who are engaged in dissection, and use every effort to facilitate their progress. To assist his personal explanations, the hall is furnished with a full series of anatomical maps, carefully labelled with the names of the parts, which may readily be recognized by a glance.

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Chemistry, Pharmacy and Medical Jurisprudence.

In this department, the Institute is fortunately supplied with an enthusiastic devotee of science, whose attention has been concentrated upon his department, and whose scholastic enthusiasm enables him to inspire his pupils with a portion of his own vivid interest in a subject which is too often neglected as dry and repulsive.

The science of Chemistry is illustrated by all the necessary apparatus, and taught in a manner which renders it clear and attractive. Its bearings upon practical med-

icine, physiology and pharmacy, are clearly elucidated. Inorganic Chemistry is fully taught, but more especial attention is given to Organic Chemistry on account of its important relations to the medical profession. Physics, embracing especially the subjects of light, heat, and electricity, will be carefully taught, not overlooking the important meteorological conditions which affect the human constitution. The medical uses of electricity (the so-called "Electropathy,") will be fully explained, giving to that agent its true scientific position in therapeutics.

Medical Jurisprudence will be illustrated by a brief course of lectures embracing all that is deemed necessary to the physician.

The pupils of Prof. Hoyt will have the satisfaction of knowing that their knowledge is accurate and reliable, not being a repetition of old lectures behind the present condition of science, but embracing the most recent and accurate researches of the chemists of America, England, France, and Germany. In this rapidly progressive science, it is only the diligent student who resorts to the publications of Germany and France as well as to the English translations, who can be regarded as familiar with the exact condition of the science at the present day. It is not to the works of Faraday, Brande, Graham, Thomson, Playfair, Gregory, Booth, Smee, Knapp, &c., that Prof. Hoyt limits his investigations. On the contrary, he draws freely upon the original French and German works of Dumas, Regnault, Raspail, Payen, Persoz, Chaptal, Simon, Mitscherlich, Gmelin, Fresenius, Liebig, Woehler, Reichenbach, Doebereiner, Mueller, &c., to whose immense labors we are so much indebted for the modern progress of this profound and complex science. It is not, however, to make a display of learned lore and of attainments which have no practical utility, that he resorts to these elaborate records; on the contrary, his aim is to adapt the subject to the hearer, and having been himself a pupil of the Institute, he appreciates fully the position and the wants of the medical student.

The work of Prof. Hoyt on General and Medical Chemistry is not yet published, but his assiduous habits justify us in anticipating its early completion.

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Physiology, Institutes of Medicine and Therapeutics.

In the department of Physiology, Institutes, and Therapeutics, the science of the human constitution is presented with a thoroughness and fullness which is not to be found in any other institution. In medical schools generally, Physiology receives but little attention; being in many cases not even mentioned in the programme o the professorships, or if mentioned, assigned a very subordinate position. Anatomy, Pathology, and Chemistry have much more prominent positions assigned them, and the attention of the student is accordingly fixed on morbid processes to the neglect of the principles of Physiology and Hygiene. Hence some of the most important principles for the preservation and restoration of health are overlooked entirely, or but feebly and casually mentioned. Owing to this defect, methods of medical treatment which violate or disregard important medical principles are taught and practiced without suspecting their unscientific character and destructive tendency.

Physiology is especially important for the purpose of establishing the laws of health, and indicating the causes of abnormal conditions, without which medical science becomes empirical. It is also important especially to the physician in enabling him amid the incessant exposure of his professional labor to guard and preserve his own constitution. These important applications of Physiology are properly presented in the course of lectures, showing how to sustain the constitution in a state of development beyond the reach of the ordinary causes of disease.

The course of practice taught in the Institute finds a solid foundation in the unquestionable principles of Physiology—thus, much that would otherwise be empirical becomes philosophical and scientific, and medicine is advanced much nearer to the condition of an exact science. Various omissions and inaccuracies of physiol-

ogists which may be recognized even in the standard and generally accurate work of Carpenter, are supplied and corrected in the lectures.

Familiar with the recent discoveries of physiologists, Prof. BUCHANAN presents in his lectures the authentic facts displayed in the writings of Carpenter, Paget, Muller, Todd and Bowman, &c., not in the abstruse style of the exclusive physiologist or naturalist, but as an illustrative portion of medical science, exerting an important influence upon practice, and laying the foundation of the too much neglected science of Hygiene—the benefits of which to the medical student in the preservation of his own health and prolongation of life are inestimable.

In the ensuing course of lectures, Prof. B. will give more attention than heretofore to the INSTITUTES OF MEDICINE and THERAPEUTICS, thereby giving a more practical character to his department and pointing out principles of medical treatment and the uses of medicines, with which the pupil will find it necessary to be thoroughly familiar in his subsequent practice.

In addition to the physiological knowledge obtainable from standard authors, the pupil will obtain from the lectures of Prof. BUCHANAN a great deal of knowledge not obtainable elsewhere. His profound discoveries in the physiology of the brain, enable him to elucidate many heretofore inexplicable mysteries in physiological science, and to correct important errors in current medical literature. In these brilliant discoveries, the physiology of the brain has been for the first time distinctly displayed, and the fragmentary sciences relating to man united into a harmonious whole. Thus is laid a broad foundation for the Institutes of Medicine by the explanation of the governing forces of the human constitution, the sympathies of various organs, and the relations which they bear to medical agents. In the new views of physiology, and the startling facts adduced by Prof. BUCHANAN, a fascinating interest is imparted to subjects heretofore obscure and embarrassing—the philosophic mind receives with intense pleasure the new propositions which are presented, and the grand system of ANTHROPOLOGY which he has erected by means of new discoveries. The facts of Anatomy, Physiology, Phrenology, and Mesmerism, which have never heretofore been made harmonious and satisfactory for want of a correct knowledge of the functions of the brain, are rendered by the discoveries of Prof. B. intelligible portions of a grand and comprehensive science, in the establishment of which he has completed the great undertaking, the foundation of which was laid by Gall and Spurzheim. The higher departments of this science, embracing the operations of the human mind, can not be embraced in the limits of a course of medical lectures, but its elucidation of the action of the brain upon the body as the agent of sympathies and cause of health and disease, as well as its explanation of the nervous relations of all parts of the body, and philosophy of Health, Disease, Insanity, Sleep, Somnambulism, Sensation, Perception, Temperaments, Appetites, Passions, &c., is regularly presented in the lectures of this department.

MEDICAL PRACTICE AND PATHOLOGY.

The Professor of Medical Practice and Pathology, upon the fidelity and correctness of whose instruction so much depends, brings to his department the proper preparation for a valuable practical teacher. Being the most prominent Eclectic practitioner in Cincinnati, and widely known through the Union as the most distinguished Eclectic Surgeon, his extensive medical and surgical practice places him in the position which should be occupied by every professor of that department in daily contact with the prevalent forms of disease, and personally familiar with the value of recent improvements, instead of depending upon hearsay evidence or reports for the results of clinical experience. In his instructions he avoids those theoretical discussions with which learned professors often encumber their course, and goes direct to the subject of disease and its

remedy. He developes the pathology of all maladies in a more exact and thorough manner than was attempted in the early courses of the Institute, and describes after a sketch of the old school treatment, that which he has found most successful. His lectures, therefore have a peculiar practical and clinical character, being illustrated by reference to cases in his own experience. In presenting the Eclectic treatment, he does not give it as a mere copyist of his predecessors, but aims, like a true reformer, at continual improvement. Having made very extensive use of the new concentrated remedies, which give to the Eclectic practice many advantages which it has heretofore needed, he gives in his instructions the full benefit of these improvements.

Clinical experience is the only true and final test of medical systems and medical teachers. Eclecticism has always proudly relied upon its success, in the treatment of disease. We have often found the reports of the results of Eclectic practice to exhibit a mortality of but one per cent, or less upon the number of cases treated, and never over two per cent., while the mortality in malignant cholera is but five per cent. The result of Prof. NEWTON's private practice are most eminently successful, and honorable alike to himself and to the cause of Eclecticism, of which his present position renders him the practical exponent. The statistics of Dr. NEWTON's practice during the past year in 780 families, (with only five deaths,) exhibit, in the most eloquent manner, the immense value to mankind of the Eclectic medical reform, and show that the healing art, as at present taught in the Institute, is a glorious illustration of the spirit of progress and the triumphs of the American mind in the nineteenth century. No European college, nor American offspring of the European system, can exhibit such results as these.

OPERATIVE SURGERY AND SURGICAL PRACTICE

The Prof. of Surgery spares no pains to make his course of lectures exceedingly interesting and instructive. Formerly occupying the chair of Anatomy at Memphis, Tenn., and in the Eclectic Medical Institute of this city, his extensive investigation and thorough knowledge of the subject, fully capacitates him to teach scientifically and practically, the principles of Operative Surgery, which are based upon an exact knowledge of Surgical Anatomy. The first part of the course will be occupied in treating upon inflammation and its terminations, demonstrating clearly to the class the pathological condition of the system in inflammation, and showing in what reaction consists. Next will be noticed Abscesses, Ulcers, (malignant and non-malignant,) chronic Ulcers, (as old sore legs,) which have baffled the best treatment in Old School practice, but are treated with success by the Eclectic method, as statistics will show. Cancer in its different species, will also be described, and its history, pathology and treatment clearly shown. This disease has hitherto been considered incurable, and as such the patient has either been left to die unmolested, or, if the disease was not too extensive, it has been operated upon with the knife, and according to the statistics of Professors GROSS and MUSSEY, few cases out of the many presented have been cured, and those that were cured, they supposed were not cancer. Under the Eclectic system of practice, the Prof. of Surgery proposes, where the system has not been brought completely under the constitutional influence of the disease, to eradicate it entirely without the use of the knife. The management of this disease has attracted the attention of the profession so much of late, that the superior treatment of Eclectic surgeons and their general success, offer one of the greatest attractions to the medical student, which could be found among modern improvements in the profession. A sketch of the comparative statistics of the success in the treatment of cancer has been published in the Eclectic Medical Journal, to which the attention of the reader is invited.

Dr. FREEMAN will also teach the class the recent and most improved, and so far entirely successful method adopted by him in the treatment of Fistulæ both of the anus

and perinenum. These diseases have hitherto, been treated by the knife, deforming instead of curing the patient; but by the new treatment, the fistulous pipes and indurated organized adventitious masses connected with the fistulæ are entirely eradicated, and the parts healed soundly, which they cannot be unless the morbid growths are entirely taken away. The knife alone cannot cure a severe case of fistula in ano.

Diseases of the eyes will also be treated upon, and the class fully instructed in manipulating with nicety in the treatment of that delicate organ. He will take great pains to teach the class the new mode of treating opthalmia, pterygium and granular eyelids; the latter is an important feature in the Eclectic practice. Special attention will be paid to the new method of treating diseases of the bones and joints, and the treatment of Bronchocele—the successful treatment of this is another attractive feature of the Eclectic school.

No pains shall be spared to familiarise the students with the use of the new remedies and mode of treatment peculiar to Eclectic surgeons. All surgical diseases will be taken up in detail and proper order, so that the student may receive as full a course upon descriptive surgery as can be received in any college in the Union, with the addition of the improved Eclectic resources which are attracting so much attention abroad, and making Cincinnati a resort for surgical patients. The operative part of surgery will be demonstrated upon the fresh cadaver, and with proper apparatus in the most approved methods of Europe and America, and during the demonstrations the students will be taught the manner of manipulating with the knife, and the anatomical reasons in favor of certain directions for operating and against others.

The major operations, as amputations, excisions, etc., will be carefully taught, and the minor clearly demonstrated. Fractures and Dislocations, simple and compound, will be clearly treated upon, and the modes of treatment fully demonstrated by a large assortment of the most approved surgical aparatus. Every pains will be taken to present to the class cases for surgical treatment, where the student will be allowed to have a close view of the case under treatment, the operation and the means used, and a clear demonstration of the whole process of treatment and cure. The clinic affords to the Prof. of Surgery a more ample field for giving satisfaction to the class than any method previously adopted. Besides this, being daily occupied in an extensive surgical practice, he will be continually reporting cases to the class, and the results of the treatment adopted by him. In short the chair of Surgery has become one of the most attractive features of the school, from the thorough anatomical knowledge and decidedly practical character of its occupant, and the perspicuous and interesting manner in which he presents to the class the subjects peculiar to his department.

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Obstetrics and the Diseases of Women and Children.

Probably no department in medicine is of more importance to the young practitioner, than that of Obstetrics and the Diseases of Women and Children, as it depends much upon his success in this line of practice whether a liberal amount of patronage be extended to him by the inhabitants of his neighborhood; and not only this, but an error once committed by an accoucheur, especially if it prove to be a serious one, can never be retrieved in public estimation, but condemns him to perpetual reproach and suspicion. This chair in the Institute is occupied by Prof. J. King, who has been engaged for nearly the last twenty years in a successful and extensive practice upon the principles adopted by Medical Reformers, who is a most thorough and impressive lecturer, and whose lectures have given universal satisfaction to the classes who have had the good fortune to attend them since his association with the school. His course is full, complete, and of a decidedly practical character, and the flattering opinion has sometimes been expressed by medical gentlemen that his first course classes are, in point of knowledge and practical information connected with his department, nearly

if not quite equal to the second course classes of other institutions in the United States.

The course commences with an explanation of obstetrical anatomy, in which the student is well disciplined, for without a correct acquaintance with this, it would be impossible for him to practice scientifically or with any degree of confidence or satisfaction; and the better to impress many essential points upon the minds of the class, as well as to facilitate instruction, the Institute has furnished for the course a series of drawings and diagrams, representing more especially certain changes and results of pregnancy, as well as conditions of parts necessary to its occurrence, which could not otherwise have been well presented to a class. This will be found a valuable addition to the ordinary mode of conveying instruction in this department, the advantages of which to the teacher, and particularly to the student, have already been seen and acknowledged.

In the clinical portion of Obstetrics, especial pains are taken to render the student thoroughly conversant with all its details; the efficient and ample resources of Eclecticism are made known to him, and every means adopted which may permanently impress the teachings upon the minds of the class. In several points of obstetrical practice, there is a material difference between Eclectic treatment and that of other medical schools. As a long and successful experience has demonstrated the former to be safe, salutary, and more especially effectual, it becomes a matter of much interest to the practitioner to have a correct acquaintance with the several means, the superiority of which has thus been proven. Unfortunately for the cause of Eclecticism, the many improvements effected in obstetric practice have not yet been presented to the profession in a published form, (though Prof. K. is rapidly progressing with his work on the subject,) and almost the only method by which they can be satisfactorily obtained at present, is by a close attendance upon the lectures of the Institute; in which the student will have an advantage over those of other institutions, in being enabled to avail himself not only of the ordinary practice of standard authors, but likewise of the new and improved resources peculiar to the Eclectic school.

Although the improvements in Eclectic Obstetrics have signally lessened the necessity for obstetric instrumental operations, a detailed account of their uses and applications will be given, and no means spared to render this knowledge familiar to the student, that he may be prepared to act promptly and scientifically in the time of emergency, and be relative to these matters rather in advance of his professional brethren. Eclampsia, or puerperal convulsions, and puerperal peritonitis or child-bed fever, which have proved so obstinate and frequently fatal under the common practice, (the mortality varying from 20 to 45 per cent.,) and for which it has no regular scientific mode of treatment, independent of the prostrating measure of bleeding, sometimes to an enormous extent, are, under the improvements of Eclecticism, reduced in point of mortality to a level with ordinary diseases, and means are explained by a pursuance of which practitioners are enabled to treat them successfully.

In that division of his chair devoted to the Diseases of Women, the various abnormal conditions peculiar to the sex, both in the gravid and non-gravid state, will be discussed in detail, and the amplitude of Eclectic resources for their removal fully unfolded. The various displacements to which the uterus is subject, its several maladies, as leucorrhea, ulcerated cervix, malignant formations, etc., which are so common to the sex in the present age, and which require close application and investigation on the part of the practitioner, that he may prove successful in their treatment, or be enabled to compete advantageously with those already eminent in the profession, will be especially referred to, and the superiority of Eclectic means, as evidenced by past experience, fairly presented. And as Prof. K. has had an extensive and successful practice in diseases coming more particularly under his department, the students

will have the advantage of his individual experience in these matters, which greatly enhances the value of his lectures. The remarkable results in the treatment of this class of diseases by therapeutical agents peculiar to the Eclectic system of medical practice, having probably done as much to forward medical Reform, unaided as it has been by libraries of professional or popular publications, as any other single cause.

The great annual mortality among children in nearly all parts of the Union is painful to behold, and disgraceful to the present condition of medical science; and we may justly infer from it, either that the means usually employed to remove infantile diseases are inadequate for that purpose, or that the majority of the profession do not bestow a proper attention upon them. In cases of measles, scarlatina; pneumonia, remittent fever, and summer complaint, the mortality under the common course of treatment is very great, while the per centage of mortality under the Eclectic practice is really so small as to create much incredulity among those who have not personally witnessed its success. With such an enormous difference in results, there must necessarily be a great difference in treatment, the nature of which will be exemplified in the lectures during the session, in which the Professor will endeavor to render the student acquainted with the several maladies of childhood, as well as the best and most effectual means for their cure. The student will, therefore, not only receive a more satisfactory course of practical instruction than can be had at other institutions, but he will also, by observing the happy results of an independent and faithful adherence to clinical observation, have the principles of mental independence and liberality in investigation instilled into his mind, and be taught to entertain respect for no authority but truth, and to yield in submission to no leaders, save impartial observation and faithfully recorded experience.

Finally, it may be remarked that while many of the doctrines presented in the Institute differ from those of the majority of medical authors, they are not presented in a partizan or proscriptive spirit, nor enforced as a medical creed by the authority of the Faculty; on the contrary liberality and courtesy are extended to all, and independence of thought recommended and respected. If the practical resources offered by the Faculty are not esteemed in practice superior to those obtained from other sources, it is the duty of the physician to discard them and follow the dictates of his own experience, if it teaches him anything better. Protesting as the Faculty do against proscription and dogmatism, they will never attempt to limit the views or knowledge of a student to their own instructions.—Whatever the predilections of a student, he is respected in his mental independence, and he will find in the lectures of the Institute that thorough instruction in medical science, which will be recognized every where as constituting a sound medical education, irrespective of the peculiarities of schools, while the large additional amount of knowledge imparted (peculiar to the Eclectic school,) will be gratefully remembered in his future career, as the commencement of rational satisfactory views and of successful practice. Such has been the case heretofore with many of the students and graduates of other Colleges, who have attended the lectures of the Institute.

By authority.

W. P. STRICKLAND, *President.*

I. WILSON, *Vice President.*

MATRICULANTS OF WINTER SESSION OF 1853-54.

Names.	*Residence.*
Allhand, David	Indiana.
Ashton, William A.	Ohio.
Anderson, Samuel Brooks,	Ohio.
Armstrong, Zaccheus	Ohio.
Averdick, Henry Georgius	Ohio.
Benton, George Root	Illinois.
Beam, Thomas Lemon	Penn.
Brown, Zachariah Cox	Penn.
Bailey, Mary Malin	New York.
Beadle, William	Ohio.
Barber, Lewis	Ohio.

Names.	*Residdnce.*
Bunker, Alice H.	Michigan.
Beale, John Sunderland	Ohio.
Beachley, Nathaniel Jacob	Penn.
Bethea, William Laurin	Georgia.
Brown, Anson Richmond	Ohio.
Burkitt, Samuel	Kentucky.
Burnett, Flavius Josephus	Indiana.
Bailey, Abram	Kentucky.
Bayne, William Fielding	Illinois.
Beardsley, Charles	Ohio.
Baker, Jonathan Stamper	Kentucky.
Bricker, John	Ohio.
Burke, Francis Noel	Ireland.
Brooks, Reuben	Ohio.
Barnes, Orville Julius	Ohio.
Bush, William S.	Ohio.
Bruce, Alexander M., M. D.	New York.
Bruce, William C.	Indiana.
Brown, Ira	Ohio.
Bartholomew, Chester G.	Ohio.
Burdsal, J. S.	Indiana.
Covert, George	Ohio.
Cox, Paris Irving	Indiana.
Crosnaw, Mary Eliza	New York.
Cable, Abram H.	Ohio.
Cropper, Charles	Ohio.
Conaway, John	Ohio.
Carman, John	Ohio.
Chaney, Washington	Kentucky.
Coates, Edmund John	Ohio.
Cleis, Margaret	Penn.
Cobb, Joseph	Indiana.
Coombs, William Franklin	Kentucky.
Crosby, Peter Harvey	Michigan.
Curtis, Erskine Dennis	Conn.
Chandler, Jonathan	Iowa.
Coon, Christopher Columbus	Kentucky.
Crook, John Wesley	Indiana.
Campbell, Joseph Gibson	Ohio.
Dunlap, Robert	Iowa.
Davis, Jeptha	Ohio.
Dove, Alpheus	Virginia.
Durant, Joseph Fuller	Illinois.
Durr, Abram	Wiscon'n.
Davis, Aaron A.	Ohio.
Daniels, De Witt N.	Ohio.
Davison, James	Penn.
Dora, Thomas Beacham	Kentucky.
Doyle, John	Missouri.
Dickinson, Simeon	Alabama.
Dial, William Collins	Ohio.
Dailey, James J.	Indiana.
Dixon, John Cain	Indiana.
Dale, Harvey Newton	Indiana.
Everingham, Joseph	Illinois.
Ewing, James	Ohio.
Emeis, August Julius	Illinois.
Eagon, Elijah	Illinois.
Everly, Nathan Harrison	Kentucky.
Ellis, Jonathan W.	Indiana.
Faris, Michael	Kentucky.
Foote, Thomas Whiteside	Illinois.
Faulkner, Thomas Lamb	Indiana.
Frease, Solomon	Ohio.
Fisher, Wilson	Illinois.
Ferguson, Christ. Columbus	Kentucky.
Foster, Elijah	Ohio.
Finch. Cyrus Marion	Penn.
Freeman, Henry	New York.
French, Martha Ann	New York.
Fain, John Wesley	Georgia.
Gaudern, Rich	Indiana.
Gullett, Andrew	Indiana.
Gibbs, George Lundy	Ohio.
Gans, Oliver C.	Penn.
Geddes, Robert Walker	N. Hamp.
Gartrell, Luther Sylvester	Alabama.
Gans, Philip F.	Penn.
Green, John Nelson	Ohio.
Gerrish, James W. F.	Indiana.
Harriman, John Pryor	Virginia.
Holmes, Luther C.	New York.
Holland, W. Siddons, M. D.	Missouri.
Hunter, Milton R., M. D.	Ohio.
Hall, James Z.	Missouri.
Hayden, Charles Newell	Michigan.
Hudgins, Howell Harper	Miss.
Hamill, Thomas	Penn.
Holton, John Hervey	Kentucky.
Howard, James Curry	Alabama.
Howe, Hiel Hullister	Conn.
Ing, Joseph Henry	Tenn.
Isgrigg, Nathaniel S.	Indiana.
Judd, Harriet Amelia	Conn.

Names.	*Residence.*
Judge, John French	Ohio.
Jacoby, George Thomas	Penn.
Jones, Enoch Pearson	Indiana.
Jones, Geo. Washington	Ohio.
Jones, Isaac Newton	Tenn.
Johnson, John William	Kentucky.
Keeler, William Nelson	Michigan.
Kesling, Isaac	Ohio.
Kyle, Samuel	Ohio.
Kelso, Ephraim W.	Ohio.
Knott, Ananias Brawner	Ohio.
Kirkpatrick, George	Virginia.
Lansdown, Zach. Marton	Ohio.
Leonard, Hiram Zenas	Ohio.
Laws, Ovid S.	Ohio.
Latta, William S.	Ohio.
Lane, John H.	Ohio.
Lewis, Henry H.	Kentucky.
Long, George	Ohio.
Lagore, Enoch	Ohio.
Lynn, Caleb D.	Ohio.
McHenry, Van	Ohio.
McKinney, Archibald	Ohio.
McDaniel, Marcellus	Kentucky.
McMullen, William	Ohio.
McKinney, M. Van Buren	Ohio.
McMaster, William W.	Illinois.
McGarr, James Hudgins	Penn.
Miesse, Gabriel, Jr.	Ohio.
Mitchell, James	Virginia.
Myers, Henry A.	Penn.
Moss, James	Indiana.
Mauney, George Rush	Arkansas.
Malott, George Franklin	Indiana.
Millinger, Henry	Penn.
Monahan, Isaac Thomas	Ohio.
Morehouse, Eli Martin	Ohio.
Mershon, Elias H.	Kentucky.
Marsh, Richard	Ohio.
Milnor, Plemon	Indiana.
Noble, Geo. Washington	Ohio.
Neely, Levi H.	Ohio.
Newman, Lane L.	Michigan.
Purinton, Enoch C.	Maine.
Pearce, Geo. Charlton	Ohio.
Poe, William Westlake	Ohio.
Payne, William W.	Michigan.
Prunk, S. H.	Illinois.
Painter, Aaron Burr	Ohio.
Powell, Oner Rius	Kentucky
Piper, Edward Tiffin	Ohio.
Perry, Henry	Indiana.
Potter, Charles	Indiana.
Rice, Henry Clinton	Ohio.
Roberts, Ebenezer Place	Ohio.
Rumsey, Julia	New York.
Ricker, Cecilia P.	Ohio.
Roe, James	Kentucky.
Ruhl, Joseph Eugene	Penn.
Rosamond, William E.	Miss.
Rannels, Jno. M., M. D.	Ohio.
Rosindale, Charles	Ohio.
Reed, Joel	Illinois.
Reed, Jesse	Illinois.
Rose, Charles Henry	Maryland.
Roe, Salem	Kentucky.
Ross, William J.	Penn.
Smiley, James	Ohio.
Stuve, Bernard	Missouri.
Stick, Jesse	Penn.
Sorber, Jacob L., M. D.	Indiana.
Swan, Grosvenor	New York.
Smith, Abraham Melvin	Illinois.
Stearns, Elias Phinny	Indiana.
Staton, Samuel	Indiana.
Short, Wesley	Indiana.
Snyder, Alva L.	Ohio.
Shultz, Francis Asbury	Indiana.
Shotwell, Jeremiah	Ohio.
Sullivan, Ulysses Taylor	Kentucky.
Smith, James Alexander	Iowa.
Stamper Greenville Carter	Indiana.
Stapp, John Speed	Kentucky.
Stauffer, Henry J.	Ohio.
Surber, William Henry	Virginia.
Savage, Edward Taylor	New York.
Stiger, J. Leopold	Hungary.
Stiers, Reson B.	Ohio.
Stevens, William Martin	New York.
Stonebraker, John H.	Indiana.
Stockham, G. Henry	Ohio.
Taylor, George Washington	Ohio.
Taylor, David Enyart	Ohio.
Tuke, Edward, M. D.	Indiana.

Names.	*Residence.*
Turrentine, Joel	Alabama.
Terry, William, M. D.	Ohio.
Tyler, William	Illinois.
Towner, Pamela M.	New York.
Thurston, Wilson Benjamin	Penn.
Thomas, David Hamilton	Tennessee.
Vertress, Charles	Indiana.
Van Buskirk, Landy	Ohio.
Van Liew, Henry Clay	Tennessee.
Vance, James Ward	Ohio.
Wonsetler, Gideon	Ohio.
Wuist, Joel Frederick	Ohio.
Wilson, John P.	Ohio.
Williams, Urbane Valentine	Kentucky.
Wilkerson, William North	Tennessee.
Wilson, Richard M.	Michigan.
Wright, William B. H.	Miss.
Wiley, John Huston	Indiana.
Walker, John Wesley	Tennessee.
Walker, Edward, M. D.	Indiana.
Work, Samuel	Indiana.
Wright, Joseph Benson	Indiana.
Wagoner, Daniel	Indiana.
Woolley, Edward	Indiana.
Walker, Henry	Illinois.
Yeagly, Andrew	Penn.
Zimmerman, Hiram Ettinger	Penn.

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RECAPITULATION.

Ohio,	80	Mississippi.	3
Indiana,	37	Connecticut,	3
Kentucky,	21	Iowa,	3
Pennsylvania,	19	Georgia,	2
Illinois,	15	Maine.	1
New York,	11	Maryland,	1
Michigan,	6	Wisconsin,	1
Tennessee,	6	Arkansas,	1
Virginia,	5	New Hampshire,	1
Missouri,	4	Ireland.	1
Alabama,	4	Hungary,	1
Total,			226

MATRICULANTS OF SPRING SESSION OF 1854.

Names.	*Residence.*
Averdick, Henry Georgius	Ohio.
Brown, Leroy Wood	New York
Blazer, Joseph Hoy	Iowa.
Bonebrake, Moses Whitridge	Ohio.
Chubb, Orville Patterson	Michigan.
Croshaw, Mary Eliza	New York
Cropper, Charles	Ohio.
Curtis, Erskine Dennis	Conn.
Campbell, Joseph Gibson	Ohio.
Drake, Henry	Conn.
Dial, William Collins	Ohio.
Dailey, Samuel Randolph	Ohio.
Douglas, Henry	Texas.
Dolley, Jeptha George	New York
Emeis, August Julius	Illinois.
Everingham, Joseph	Iowa.
Ewing, James	Indiana.
Fuller, John A.	Alabama.
Ferguson, Christopher C.	Kentucky.
Firebaugh, Joseph	Ohio.
Foster, Elijah	Ohio.
Felter, Jacob Cox	Ohio.
Fryrear, Aaron B.	Ohio.
Fisk, Jr., Charles Lee	Mass.
Frease, Hiram	Ohio.
Gans, Philip T.	Penn.
Hudgins, Howell Harper	Tennessee
Hendrix, Alexander Arkley	Tennessee
Jay, Joseph Wareham	Indiana.
Johnson, Robert James	Missouri.
Jenks, George Washington	Ohio.
Joslen, Oliver Chase	Indiana.
Kiernan, Robert Emmett	Ohio.
Kesling, Isaac	Ohio.
Leeper, John Alexander	Iowa.
Lansdown, Zach. Marton,	Ohio.
Lagore, Enoch	Ohio.
Longley, Margaret Vater	Ohio.
Murphey, Andrew J. K.	Ohio.
May, Benjamin Franklin	Alabama.
Noble, George Washington	Ohio.
O'Leary, Arthur	Ohio.
Powell, Oner Rius	Kentucky.
Potter, Henry Radford	Ohio.
Potter, Homer Curtis	Ohio.
Ruhl, Joseph Eugene	Penn.

Names.	*Residence.*
Russell, Abraham	Ohio.
Robins, Benjamin W.	New York
Reid, James Anderson	Iowa.
Stowell, Courtland Curtis	Michigan.
Springgate, James Lawrence	Kentucky.
Smith, J. Alexander, M.D.	Iowa.
Swift, John Marcus	Michigan.
St. John, Thomas E	Wis.
Sample, William Robert	Alabama.
Smizer, Sarah	Ohio.
Stiger, J. Leopold	Hungary.
Thomas, David Hamilton	Tennessee
Tandy, Alexander Spratt	Kentucky.
Torrey, Everell F. M.	Michigan.
Van Buskirk, Landy	Ohio.
Wohlgemuth, Henry	Illinois.
Woods, Peter Nesbitt	Ohio.
White, Handford William	Ohio.
Watts, John Dexter	Illinois.
Zimmerman, Hiram E.	Penn.

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RECAPITULATION.

Ohio,	25	Pennsylvania	3
New York.	4	Tennessee,	3
Iowa,	5	Connecticut,	2
Michigan,	4	Missouri,	2
Indiana,	4	Wisconsin,	1
Kentucky,	4	Massachusetts,	1
Illinois,	3	Texas,	1
Alabama,	3	Hungary,	1
		Total,	66

GRADUATES OF THE WINTER SESSION OF 1853-54.

Names.	*Residence.*
ANDERSON, SAMUEL BROOKS,	Ohio.
ARMSTRONG, ZACCHEUS,	Ohio.
BAILEY, ABRAM,	Ky.
BAILY, MARY MALIN,	N. Y.
BARBER, LEWIS,	Ohio.
BEADLE, WILLIAM,	Ohio.
BEACHLEY, NATHANIEL JACOB,	Penn.
BETHEA, WILLIAM LAURIN,	Ga.
BARNES, ORVILLE JULIUS,	Ohio.
BENTON, GEORGE ROOT,	Ill.
BLYTHE, BAUGHMAN,	Ohio.
BROWN, ZACHARIAH COX,	Penn.
BURDSALL, J. S.,	Ia.
BURKITT, SAMUEL,	Ky.
BURKE, FRANCIS NOEL,	Irle'd.
CABLE, ABRAM H.	Ohio.
CARMAN, JOHN,	Ohio.
CLEIS, MARGARET,	Penn.
CONWAY, JOHN,	Ohio.
COOMBS, WILLIAM FRANKLIN,	Ky.
COATES, EDMUND JOHN,	Ohio.
DAVIS, JEPHTHA,	Ohio.
DICKINSON, SIMEON,	Ala.
DOVE, ALPHEUS,	Va.
DOYLE, JOHN,	Mo.
DURANT, JOSEPH FULLER,	Ill.
ELLIS, JONATHAN W.,	Ia.
FARIS, MICHAEL,	Ky.
FAULKNER, THOMAS LAMB,	Ia.
FISHER, WILSON,	Ill.
FOOTE, THOMAS WHITESIDE,	Ill.
FREASE, SOLOMON,	Ohio.
GANS, OLIVER C.,	Penn.
GANTRELL, LUTHER SYLVESTER,	Tenn.
GEDDES, ROBERT WALKER,	N. H.
GIBBS, GEORGE LUNDY,	Ia.
GULLETT, ANDREW,	Ia.
HOLLAND, WILLIS SIDDONS,	Mo.
HOLMES, LUTHER C.,	N. Y.
ING, JOSEPH HENRY.	Tenn.
JACOBY, GEORGE THOMAS,	Penn.
JONES, ENOCH PEARSON,	Ia.
JUDD, HARRIETT AMELIA,	Conn.
JUDGE, JOHN FRENCH,	Ohio.
KYLE, SAMUEL,	Ohio.
LANE, JOHN H.	Ohio.
LATTA, WILLIAM S.,	Ohio.
LAWS, OVID S.,	Ohio.
LEECH, JERRY,	Ill.
LEWIS, HENRY H.,	Ky.
LONG, GEORGE,	Ohio.
MAUNEY, GEORGE RUSH,	Ark.
MERSHON, ELIAS H.,	Ky.
MONAHAN, ISAAC THOMAS,	Ohio.

Names.	*Residence.*
Myers, Henry A.,	Penn.
McKinny, Archibald,	Ohio.
Neely, Levi H.,	Ohio.
Newman, Lane L.	Mich.
Payne, William Wesley,	Mich.
Pearce, George Charlton,	Ohio.
Rice, Henry Clinton,	Ohio.
Roe, James,	Ky.
Rumsey, Julia,	N. Y.
Short, Wesley,	Ia.
Shultz, Francis Asbury,	Ia.
Smiley, James,	Ohio.
Smith, James Alexander,	Iowa.
Stearns, Elias Phinney,	Ia.
Stick, Jesse,	Penn.
Stuve, Bernard,	Mo.
Sullivan, Ulysses Taylor,	Ky.
Swan, Grosvenor,	N. Y.
Sorber, Jacob L.,	Ia.
Turrentine, Joel,	Ala.
Walker, Edward,	Ia.
Wilkerson, William North,	Tnn.
Wilson, Richard M.,	Mich.
Wiley, John Huston,	Ia.
Woolley, Edward,	Ia.
Work, Samuel L.,	Ia.
Wright, William E. H.,	Miss.
Wonsetler, Gideon,	Ohio.
Wuist, Jacob Frederick,	Ohio.
Yeagly, Andrew,	Penn.

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Honorary Degrees.

Campbell, A. S.,	Miss.
Gamble, William J.,	Penn.
Massie, J. Cam.,	Texas.
Poor, John Slavens,	Ky.

Graduates of the Spring Session of 1854.

Averdick, Henry Georgius	Ohio.
Brown, Leroy Wood	N. Y.
Bonebrake, Moses Whitridge	Ohio.
Crosshaw, Mary Eliza	N. Y.
Cropper, Charles	Ohio.
Chubb, Orville Patterson	Mich.
Campbell, Joseph Gibson	Ohio.
Curtis, Erskine Dennis	Conn.
Dolley, Jeptha George	N. Y.
Emeis, August Julius	Ill.
Everingham, Joseph	Iowa.
Ferguson, Christopher C.	Ky.
Gans, Philip T.	Penn.
Hudgins, Howell Harper	Miss.
Joslen, Oliver Chase	Ia.
Lagore, Enoch	Ohio,
Leeper, John A.	Iowa.
Murphey, Andrew J. K.	Ohio.
Noble, George Washington	Ohio.
Ruhl, Joseph Eugene	Penn.
Russell, Abraham	Ohio.
Smizer, Sarah	Ohio.
Swift, John Marcus	Mich.
Shotwell, Jeremiah	Ohio.
Stowell, Courtland Curtis	Mich.
Thomas, David Hamilton	Tenn.
Van Buskirk, Landy	Ohio.
Wohlgemuth, Henry	Ill.
Woods, Peter Nesbit	Ohio.
White, Handford W.	Ohio.
Zimmerman, Hiram Ettinger	Penn.

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Honorary Graduates.

Ira Morris Allen,	Mich.
Grover Coe,	N. Y.
Isaac Shelby Taylor,	Texas.
Daniel N. Mead,	N. J.
J. J. Perry,	Ia.
Jos. S. Burr,	Ohio.
W. H. Whitaker,	Ala.

Total Matriculants and Graduates of the collegiate year 1853-4.

Matriculants Winter Session,	226
" Spring "	66
Total	292
Graduates of Winter Session,	88
" Spring "	38
Total,	126

ECLECTIC MEDICAL INSTITUTE

Chartered in 1845.—Total Number of Matriculants, 1865.—Session of 1853-54.—Matriculants, 292, Graduates 126.

W. SHERWOOD, M. D.,
Professor of General, Special, and Pathological Anatomy,

J. W. HOYT, M. D.
Professor of Chemistry, Pharmacy, and Medical Jurisprudence.

C. H. CLEAVELAND, M. D.,
Professor of Materia Medica, and Medical Botany.

J. R. BUCHANAN, M. D.,
Professor of Physiology, Institutes of Medicine, and Therapeutics.

R. S. NEWTON, M. D.,
Professor of Medical Practice and Pathology, and Lecturer on Clinical Medicine and Surgery.

Z. FREEMAN, M. D.,
Professor of Operative Surgery and Surgical Practice, and Lecturer on Clinical Surgery.

J. KING, M. D.,
Professor of Obstetrics, and Diseases of Women and Children.

HENRY A. WARBINER, M. D.,—DEMONSTRATOR OF ANATOMY.

The Tenth Winter Session of the Eclectic Medical Institute will commence on the *third Monday of October*, (*the 16th.*) 1854, and continue four months. Gratuitous preliminary lectures will be delivered from the first to the 16th of October. The fees required for attendance upon all the lectures are $25—viz. Matriculation, $15, Building fund $5, and Clinical Ticket $5. The clinical instruction is given by the Professors of Practice and Surgery in the amphitheatre of Newton's Clinical Institute.

All students are required to take the Clinical Ticket and to engage in dissection. The graduating fee is $20. The usual price of board is from $2.50 to $3.09 per week.

The Text-books recommended, are: *Practice*—Newton & Powell's Eclecic Practice, Jones & Morrow's American Eclectic Practice, Wood or Watson. *Pathology*—Williams. *Anatomy*—Harrison, Horner, or Wilson. *Surgery*—Eclectic Surgery. *Obstetrics*—Meigs, Ramsbotham, Churchill. *Physiology*—Carpenter, Kirkes & Paget, or Dunglison. *Materia Medica*—Eclectic Dispensatory, U. S. Dispensatory, Pereira. *Botany*—Bickley's Botany, Griffith's Medical Botany. *Chemistry*—Fownes, Gardner, Turner. *Dictionary*—Hooper, Gardner, Dunglison.

GRADUATES of the Institute, or of other respectable schools are admitted to attend the lectures upon the payment of $5 for Martriculation and $5 to the Building Fund. Gentlemen who have graduated in other colleges, will find it greatly to their interest to attend a course in the Institute, in which, in addition to the usual elements of a medical education, they will be enabled to acquire knowledge of great importance, calculated greatly to increase their success as practitioners. A spirit of courtesy and liberality is inculcated by the Faculty, and they demand for the doctrines of the Institute nothing but a patient and candid examination.

Experience has shown that collegiate lectures are three times as efficient as private study in advancing the student, it is therefore the interest of those who wish to acquire a through education, to attend the Institute forthwith, without losing a session in waiting for preliminary medical study. Students, on arriving in the city, will call at the office of Prof. R. S. NEWTON, Seventh street, between Vine and Race.

JOSEPH R. BUCHANAN, M. D., *Dean.*

THE

ECLECTIC MEDICAL JOURNAL.

THIRD SERIES, Vol. II. | SEPTEMBER, 1854. | WHOLE SERIES Vol. XIII.

Part 1. Original Communications.

FATAL CASE OF SCURVY.

BY JAS. A. THOMAS, M.D.

I was called to see Mrs. C., a very respectable lady living near Pittafield, aged about 35 years. I was called some time in November last, she had been treated by two or three other physicians I was informed, without receiving any benefit—she had been confined from August up to that time. I found upon examination her tongue coated, pulse about 100 beats to the minute, skin dry, some thirst, no appetite, restless, the skin and whites of her eyes perfectly yellow with occasional chills, also suppression of the menses. I expressed an opinion that I could help her; accordingly I commenced the treatment by giving her cathartic doses of *hepatic* physic (as her liver was much enlarged), after which I gave her alterative doses of podophyllin and leptandrin, following by quinia and carb. ferri, which soon succeeded in breaking the chills and all febrile symptoms, and she was able to be up attending to her domestic concerns, with every prospect of a speedy recovery. I then put her upon the use of tinct. ferri mur. as a tonic, and the following as an emenagogue which I find to be very excellent.

℞	Sanguinaria Canadensis	ʒ i
	Macrotys Racemosa	ʒ i
	Best Wine	O i

Let it stand 14 days; of this give a teaspoonful three times a day, which soon had the effect desired.

I then dismissed my patient with instructions to continue the treatment for several months, but she mended very fast and soon quit taking medicine, until in Febrary, I was again summoned to see Mrs. C.; upon my arrival I found her relapsed, and all the former symptoms present. I succeeded in a short time in restoring her to partial health again. In March I was again summoned, I found decided scorbutic symptoms much worse than any I had ever witnessed before. Urine highly colored with blood, purple and livid spots on the legs and other parts of the body, profuse hemorrhage from the gums. She was immediately put on the use of acids, also occasional doses of acetate of lead and opium as an internal remedy for the hemorrhage. Irish potatoes as food. I cauterized her gums with a stick of nitrate of silver. I then made a strong solution of the same, wet a sponge and applied to the gums; all failed, I then told Mr. C. to send for counsel. Accordingly Prof. H. was called, who came and made another effort with creasote which signally failed to arrest the hemorrhage. The next day Dr. C. was also called in consultation who is the oldest physician in our county, and we all failed to arrest the hemorrhage. Death in a few days terminated the melancholy scene.

My object in this communication is to enquire of my medical friends, if they have

had any such cases, (as I think they must be very rare), and to elicit useful information with regard to the treatment of such cases.

Pleasant Hill, Ill., June, 1854.

VERATRUM VIRIDE.

BY J. TURRENTINE, M.D.

I see in the March and April Nos. of the Journal, a reprint of the essay of Dr. Norwood, on the merits of Veratrum Viride. Also, an editorial in which you state that you had never tried its efficacy, and that you are not responsible for anything in the above mentioned essay.

Supposing that this is generally the case with Eclectic physicians, and being satisfied that it is an article of superior merits, I have concluded that I would trouble you with a very few lines on the subject, which you may dispose of as you think proper.

I am by no means ready to indorse all Dr. N. says on the subject, yet it is my candid conviction from repeated experiments with it, that in all cases when sedation is desired, and when its use is not contra-indicated by gastric irritation (in which case I do not think it should be used) that it is not only equal to any other article in the materia medica, but that it is worth all the materia medica besides,—that it is an article upon which we may rely implicitly, and which will not disappoint.

I have never administered it in any case save one or two, where considerable gastric irritation existed, in which it was immediately thrown back, (a blunder which I will not soon make again), when it failed to exert a decided influence over the action of the heart and arteries. I do not hesitate to say that I had never administered any article for that purpose, that will so certainly accomplish it, nor do I believe such article exists.

Another advantage that it possesses over all other articles (at least that I have used) is, it has such a marked and specific influence over morbid arterial action, that with its proper administration, you can reduce the pulse low as you desire, and then by modifying the doses maintain that condition.

It is beyond all doubt a very superior article in all cases where there is excessive arterial action, and especially in typhoid fevers, pleuritis, pneumonia, etc., in which cases I almost regard it in the light of a specific.

Moreover, it unquestionably exerts a marked influence over the secretions generally, and supercedes to some extent the administration of other medicines for that purpose, while as an expectorant I doubt whether it is equalled by any other therapeutic agent.

The only precautions that are requsite in its administration, are.

1. Never give it when there is much gastric irritation. In all such cases, it is certain to produce hyper emesis, which may be prostrating to the patient.

2. Never give it in over doses, otherwise you will produce unpleasant effects. I seldom commence with more than 4 or 5 drops and often not more than 2 or 3, repeating every three hours, increasing each dose one drop until I have secured the desired effect; administered thus, it invariably reduces the pulse, sometimes produces nausia and vomiting, with cool skin, and free prespiration, which effects soon subside and leaves the patient in a pleasant condition. Should the vomiting be excessive, it can be relieved by a little morphia and brandy, or some other opiates and brandy.

I will close this hasty article by reporting a solitary case. Some two or three weeks ago. I was called to see Mr. T., æt, 65 years, who had been suffering from chronic bronchitis, accompanied by a distressing cough for three years. He was now laboring under a violent attack of pneumonia; Found him in muttering delirium, deep stupor, great hepatic torpor, dry skin, high fever, pulse 110, with the right lung very much congested, and the cough almost incessant, and expectoration scanty.

TREATMENT.—Correctd hepatic torpor

with broken doses of podophyllin triturated in loaf sugar administered the alkaline bath, applied sinapisims over the congested lung and as a nauseant and expectorant used.

℞ Syrup of squills.
Tincture of lobelia.
" Gelsaminum, aa.

Dose of the mixure, 3 ss every two hours.

Continued this prescription 48 hours, gained nothing, discovered periodicity, administered quinine, left off the squill, and used the lobelia and gelseminum; continued one day longer, nothing gained, fever returned, much prostrated, in a state of coma, breathing hurried and very laborious, expectoration difficult being of a tenacious mucus, occasional hiccough, etc.

Commenced the veratrum, and in twelve hours the symptoms were abating, pulse 75, continued 12 hours longer, clear of fever, expectorates freely, breathes easy, pulse 60, administered a full dose of quinine, reduced the veratrum to 2 drops every three hours, the excerbation of fever did not return sustained the strength by wine and barks, convalesence prospered finely; now using veratrum as an expectorant from 3 to 4 drops three times a day, and I believe it will break up his habitual cough.

Somerville, Ala., July, 1854.

CHOLERA INFANTUM.

BY L. OLDSHUE, M.D.

When we take into consideration the fact, that the above named disease is one peculiar to infants only, and which rarely occurs after the twenty fourth month of age, and knowing the tenderness and delicacy of all the minutely constructed tissues, organs, and membranes of their little beings during the whole period of this, their infantile existence, and consequently being able to comprehend in a measure, their great liability to an attack of this their insidious foe, especially in cities and large towns where so many concomitant influences which are calculated to produce it are known to exist. we can only wonder, that so many escape it.

But with all this wonder, our marvellousness is only increased, when we view for a moment the treatment which is laid down by our allopathic physicians for the cure of this formidable disease.

Our wonder then, however, is not, that so many escape the disease, but among those who are attacked, that any should survive, the treatment and the disease.

For the treatment, hear Prof. Eberle. First he says, "I generally commence the treatment with the application of leeches to the temples, or small blisters behind the ears, the exhibion of small doses of calomel and ipecacuana. and a large stimulating poultice on the abdomen."—"From one sixth to a quarter of a grain of calomel in union with a quarter of a grain of ipecacuana, should be given every half hour, or hour." This you might think had already amounted to a course; but you are told that it is only a commencement. "Then the vomiting and purging are extremely frequent, the spirit of turpentine is an excellent remedy, and may be advantageously used along with the "calomel and ipeccuana."

The stomach and bowels are then to be "bathed with the spirit of turpentine, and a large blister applied over the whole region of the epigastrium. "When the blister has fully raised, the cuticle is to be removed and the blistered surface is to be dressed with mercurical ointment."

"If the abdomen has now become "tumid and turse," "a few doses of calomel" should be given sufficiently large to procure its purgative operation; "a grain or two, every two or three hours." After this effect has been produced, he says, "it will be best to return to the minute and frequent doses of the articles mentioned above."

"If the abdomen continues tumid, terse, and tender to the touch, the pulse frequent, contracted and quick, blood ought again to be abstracted."

If blood be not promptly and efficiently abstracted in cases attended with these symptoms, "it will be in vain to depend upon the effects of any remedy, for inflam-

mation and its consequences will have ensued, long before we can hope to make any impressions on the affected viscera, even by the use of calomel." What a burlesque on the common sense, of his brethren! Take but the above course of treatment, which is only a mere synopsis of his full course, in this disease; and subject the most healthy infants imaginable, to the "bleeding," "leeching" "blistering," "rubbing with turpentine," "with mercurical ointment to blistered surfaces," &c., and to the internal administrations of turpentine, calomel and ipecachuana, in the doses, and with the frequency recommended by Eberle, in his work on children, and what child under two years of age can be found to survive the remedies.

I am disposed to believe, that any who do survive, or that recover under the general allopathic treatment, owe their recovery more to the laxity, than the stringency of their medical adviser, and more to the non-observance of the orthodox treatment, than to the strictness of a "regular course."

Contrast the above allopathic treatment with that pursued in the Eclectic School of Medicine as laid down by Profs. Newton, and Powel, and as is practiced by every thorough Eclectic. First, "the syrup of rhubarb and carb. potassa, which removes nausea and vomiting, acts mildly upon the stomach and bowels, and restores the evacuations to a healthy condition.

"If febrile symptoms are frequent, the whole surface of the body and limbs should be sponged, two or three times daily, with a weak alkaline solution, rendered stimulant by the addition of a small quantity of whisky or spirits."

And in obstinate cases attended with high fever, the compound tincture of virginia snake-root may be added to the above syrup.

Where the discharges from the bowels are frequent and attended with pain, we employ the following injections:

℞ Ulmus Fulva,
Cort. Prunus Virginiana, aa ʒss,
Aqua, Oct. j M.

"This injection has a decided influence in moderating inflammation and relieving pain."

"Where vomiting is obstinate and frequent, a mustard poultice applied over the epigastric region will be found useful."—"If the patient becomes prostrated, stimulants must be administred, as diluted brandy, wine whey, or aromatic spirits of ammonia."

"Cooling mucillaginous drinks should be frequently given when nausea and vomiting are absent."

"After the inflammatory form has thus been removed, should diarrhea remain, astrigents, with tonics must be given."

Diet.—"Boiled milk with powdered cinnamon added, or milk, thickened with wheat or rice flour."

The contrast, between these two different modes of treatment of this disease, is not greater than is exhibited in the success also.

Whilst that which is herein laid down as Eclectic, has been almost uniformly successful,—the failures being mere exceptions to the rule; the reverse has been true, under allopathic treatment, as is shown by a European author of their own stamp, who says, "it must be acknowledged that it (the treatment) has not been very successful in America, since the disease continues to make frightful ravages in that country."

Another author says, "no disease contributes so largely to swell our bill of mortality during its prevalence; and were it not restricted to the summer season, it would prove a greater scourge to the community than consumption itself."

Upon which the European author says: "considering the nature of this disease, if the American physicians were to adopt a system of treatment less inflammatory, they might perhaps have less reason to lament the ravages of this species of disease."

These are very severe strictures upon the non-success of allopathic practice and treatment of cholera infantum, coming as they do from old school authors upon the subject. But not more just than similar strictures would be, if applied to any other disease, when a comparison is made or a con-

trast to be exhibited between the mild yet efficient Eclectic Practice, and the old heroic allopathic regular course.

Pittsburgh, Pa. July, 1854.

PNEUMONIA.

BY A. ASHBAUGH, M.D.

The disease that has been most fatal with us is Pnumonia Typhoides with a peculiar type.

Symptoms.—It commences with a chill and shiverings, which last from two to four hours and is followed with heat and great thirst. After twelve or fifteen hours from the chill, the patients were taken with a pain in the side (almost every case in the left side) about the short ribs, and some times near the sternum, accompanied with a slight cough and spitting up a white frothy mucus. As the disease increased it became more viscid and had a yellow-green appearance. The tongue at the commencement of the disease has a white fur, but in a few days it turns brown on the top with a red tip and gets very dry and will often crack and bleed so that the blood will run from the mouth. The pulse is full and strong and will vary from 100 to 120 in a minute, a great prostration of strength and a general aching of the limbs and back. The urine is scanty and very red and leaves no sediment. Little external fever. After the third day, the skin becomes very moist so that prespiration becomes copious with great internal fever and thirst.

Treatment.—In the first place I gave an emetic of lobelia inflata and ipecacuanha equal parts, while nauseated we applied bottles of hot water to the back and feet until we could produce free prespiration. After the emetic had operated well we washed our patients in warm water and bicarbonate of potash, and continued the use of this wash once a day; generally in the morning. We gave full doses of podophyllin with one grain of ipecacuanha and keep the bowels well opened. After we produced two or three free operations on the bowels our patients would feel relieved, but as soon as we would stop the influence of the podophyllin the symptoms would return. There was a great inclination to costiveness, and if this was not prevented they would appear like the last stage of cholera. For the pain in the side we applied hot fomentations of hops in vinegar as often as every twenty minutes, at the same time we had a tea made of the hops and gave two drachms every half hour while the pain lasted. If this would not relieve the pain (which hardly ever failed) we applied the blister. For drink we gave the pure cold water and gave it freely, sometimes adding a few grains of citric acid to a glass of water, which was agreeable to some. For the profuse sweating we used the nitro-muriated mixture one drachm to the pint of cold sage tea, to be drank during the day which seldom fails in stopping the sweating. For the cough we gave the tincture of sanguinaria canadensis, one teaspoonfull every two hours with five drops of the tincture of opium and continued it.

For the prostration and aching of the loins and extremities we ordered a strong decoction of vinegar, spirits, and capsicum applied to the parts as hot as the patient could bear twice or thrice a day. This is about the treatment that I adopted without the loss of one out of twenty cases. This was in March, 1854. Some twelve or fifteen cases of the very same kind have died within the circuit of my practice since the first of February last, and every death under allopathic treatment.

I was called in to see four cases treated by bleeding and salivation, they were ptyalised. In one case I could have picked every tooth out with my fingers before death. The Dr. who attended this case remarked to me that it was not ptyalism but that it was the peculiarity of this disease which settled on the tongue and on gums, and still they will continue this practice notwithstanding the great mortality which attend it.

Millersburgh, Ill. July, 1854.

DIABETES MELITUS.

BY J. J. AVERY.

Messrs. Editors: I wish to call your attention to the subject of Diabetes Melitus. Not seeing any treatment in medical works that we could depend upon, caused me to examine the therapeutical operation of medicine to find something that we could rely upon in the treatment of that formidable disease. I will give you a short statement of two cases that came under my care during my stay in Newcastle.

Joseph White, aged about forty-five, of a strong constitution, in height about six feet, farmer by occupation, weighs in health over two hundred; claimed to be the strongest man in Henry county; has always enjoyed good health (excepting an occasional attack of intermittent fever,) up to the time his present disease commenced. Shortly after one of his attacks of fever, the diabetic symptoms showed themselves. He soon placed himself under the care of Dr. Parr, of Newcastle, who treated his case most of the time for three years, during that time he was twice in Cincinnati. Once a council of ten physicians was held over him; they pronounced his case hopeless. He returned home, gave up all hopes of being cured, and for two years he took no medicine excepting to keep his bowels open. By the solicitation of his friends, he was brought on a bed five miles to see me.

Feb. 24th, 1853. His symptoms were as follows—very much emaciated; complained of soreness all over; skin dry; large scales on his feet; œdema of the lower extremities; a puffy appearance of the face; sallow complexion; voracious appetite, never satisfied; thirst very great; liver torpid; pulse one hundred and ten per minute; constipated bowels; takes from 18 to 20 common pills to move them; passes about 40 pints of urine daily, with a sweet sickening smell, thick albuminous deposite; a very offensive smell from his hair and breath; fæces dry and hard, with but little smell; pills did not appear to soften them; has been twelve days without an operation; complains of great weakness; mind dejected; with but little disposition to move or converse; can walk in his room by holding on to the furniture; has to pass urine about every half hour, night and day; sits up but little; seems reconciled to his fate. I looked upon it as a doubtful case. I told him if he would remain in town, I would try and see what I could do for him free of charge, to which he consented.

Feb. 26th. I commenced treatment by giving large doses of comp. powd. of senna every three hours for twenty-four hours before it operated. I directed him to bathe every night in a weak alkaline bath. I placed boiled corn around him at two different times, in order to sweat him, but with little success. I then repeated his physic until his bowels were moved freely, and gave him a decoction of uva ursi. I directed him to bathe his feet every night. I continued the above treatment one week, but as it aggravated his symptoms, I discontinued it.

March 2d. Commenced with about 5 grs of Pulv. Sanguinaria three times a day for five days; I then gave him our hepatic medicine, of which one-third was Podophyllin, in three-grain doses every three hours, until his bowels were moved freely. It produced five bilious operations in 24 hours. The next day, I commenced again with the Sanguinaria as before. By this time he began to improve.

March 9th. Urine diminished one half, and some color; appetite diminished; thirst abated; some deposits in his urine.

March 10th. His bowels became regular; fæces of a natural color; has one operation daily. At this time I reduced his powders one-third.

March 12th. Soreness left him, all but his feet; skin moist; has gained some strength. I repeated the hepatic medicine as before, with decided advantage. His improvement now became more rapid; every symptom appeared to yield. In about one week, his appetite became natural; urine reduced to eight pints in 24 hours; looks perfectly healthy. Diabetic smell

gone, with but little thirst; gaining strength and flesh; has commenced walking through town; breaks out into a free perspiration with but little exercise; feet becoming moist; scales dropping off; and but little soreness.

March 22d. He returned home in about ten days in his wagon; can get in and out without help; has walked all over his farm; says he feels like getting well. I still continued the same medicine only twice a day.

April 7th. He came to see me in his wagon by himself. Being absent, I did not see him, but he left word that he was still improving. His feet have entirely scaled off. I have not seen him but once since. At that time, he could attend to some business. Every time I applied any moisture to him, he complained very much, particularly of his feet. I discontinued all kinds of bathing, and put him on the treatment as above narrated.

The next case was a child in this place, aged 17 months; had the measles a short time before I was called to see him; he had the usual symptoms of Diabetes Melitus, emaciated to almost a skeleton. I commenced with the Sanguinaria in one grain doses three times a day. In one week, all his diabetic symptoms left him, and have not yet returned, and I think will not.

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[The above cases were detailed by Dr. Avery to show what he considers a *specific* action of Sang. Canadensis in cases of Diabetes, and to induce others to make a trial of that remedy if such a case should occur in their practice. There can certainly no harm result from a cautious use of the Bloodroot, and the suggestion should be acted upon.—C.]

DEATH FROM AN OVER-DOSE OF HYDRO-ALCOHOLIC SOLUTION OF STILLINGIA SYLVATICA.

BY A. R. BROWN, M. D.

Messrs. Editors: In the spring of 1852, I was called to treat one Mrs. F., aged 54, for a well marked case of Psoriasis Guttata. In connection with other medicines, I left her a bottle of very strong Hydro-alcholic Solution of Stillingia Sylvatica, with very strict injunctions relative to the size of the dose to be taken, which was half of a teaspoonful three times a day. I made occasional visits to her for several weeks, in which time she had become nearly freed from the disease. Passing again through the neighborhood, I called to see how she was getting along, and to my great astonishment I found her dead in the house. I inquired of the daughter, who attended constantly upon her, relative to her death, and she said the old lady had been amending very rapidly ever since she commenced taking my medicine, and they had looked upon her as being about well until about one hour previous to her death. She was then found sitting in the rocking chair, very much exhausted, and it was with great difficulty that she could be induced to speak, and then only in monosyllables. Her prostration increased, and in one hour she was dead. She died without a struggle or a groan. I then asked the girl if she had been faithful in taking my medicine, to which she replied yes, and said a little time before they found her in this condition she took about *half a teacupful* of that in the bottle. I asked for the bottle, and from the quantity gone I should judge that by taking it according to directions for the whole time it had been there, it would have required the taking out of the full amount specified by the girl to have reduced the quantity to what it then was. I of course [seeing them satisfied or not suspecting the medicine as being connected with her death] said nothing, as I could only blame myself for having left so large a quantity, which was caused by their not having an empty vial in the house, and so I left a pint bottle full which I had in my pocket. But I never afterwards left so much in a place, and I always informed the one who was to administer it, that if an over-dose was given, serious consequences would follow. I know in the usual prescribed doses no injury ever results from its use.

Cincinnati, July, 1854.

LACERATION OF THE URETHRA.

TREATED BY PROF. Z. FREEMAN.

June 3, 1854. Mr. M. Miner, while in an affray with a man, received a pistol shot in the right groin, the ball, breaking the integument upon the side of the penis, passed into the scrotum, wounding the spermatic chord, testicle and perineal urethra, and

(a) The wound in the Urethra.

passing out through the perineum one inch and a half in front of the anus.

The wound was temporarily dressed by the physician present, and the patient sent to me. I examined the wound, and as the hemorrhage had subsided. I took a few more sutures in it, applied a slight compress, gave an anodyne, and left him for the night.

June 4. Parts painful and much swollen and inflamed—with much difficulty and pain, I introduced a small elastic catheter and drew his urine.

June 5. Parts more swollen and painful; cannot introduce either a catheter or a bougie; cannot pass any urine; some febrile excitement; gave a drachm of the comp. powder of senna, which purged him freely.

June 6. After using fomentations of Humulus Lupulus through the day, in attempting to pass the urine, it found its way through the urethra and flowed in a large stream from the wound in the scrotum (between the sutures,) and from the wound in the perineum.

July 7. Sutures sloughed out, and exposed the wounded testicle and chord, both gangrenous. Excised those parts; cleansed the wound; applied Pulv. Zinc. Sulph. to the decomposing surfaces; used compression to the chord to arrest the hemorrhage.

June 8 and 9. Was called to arrest the secondary hemorrhage; applied ℞ Zinci Sulph. grs. ij., Tannin, grs. iij. M. to the bleeding surfaces; compressed the blood-vessels with a pledget of lint retained in the wound. Has perfect control over the bladder; passes his urine every morning through both wounds; none passes through the penis; swelling and inflammation subsiding; general symptoms favorable.

June 15. Have kept a compress upon the urethra, which is now exposed, and an opening can be seen in it six lines in length, and of the diameter of the canal; no urine passes out of the perineal wound, that passage having closed; the granulations are filling the wound in the scrotum; the urine still passes through the scrotal wound, and the patient catches it as it flows in an elevated stream from the opening; general symptoms good; patient still keeps his bed.

June 24. Still improving; wound healing fast; using a compress to retain the edges of the wound nearly together; removes the compress to void the urine.

June 29. The wound of the scrotum is healed close up to the wound in the urethra, and their granulations commingle; still keep up a slight compression.

July 2. The wounds of the urethra and scrotum lessening in size.

July 6. Introduced a small catheter through the penis, and guided it into the bladder and drew off the urine. (The swelling of the urethra prevented the catheter from passing the wound previous to this time.) Continued to draw off the urine every day.

July 10. Applied a compress gently to the wound in the urethra, and passed the urine through the penis without the catheter. Continued this practice until

July 16. Voided the urine normally without a compress. Continued to pass the urine normally to

July 24. Discharged him cured! The external wound having healed, no difficulty in passing the urine; the stream is of a

normal size. The weather being excessively warm, and the urine passing over the wound, were great sources of hindrance to the ready healing of the parts, yet the result has exceeded my most sanguine expectations, both the urethra and scrotum healing up in a common mass.

DYSENTERY—ITS VARIETIES, CAUSES SYMPTOMS & TREATMENT—FLUX.

BY J. H. HAND, M.D.

This disease occurs here endemically and sporadically, as well as in its epidemic visitation. The former varieties of this disease are usually very easily managed, while the latter, in its malignant type, is one of the most fearful and fatal diseases in the catalogue of human ills. Yet it exists in every variety of gradation, in the same locality during the same season of the year. In fact, these different grades or types are frequently to be seen among the different individuals of the same family.

Dysentery consists of an inflammation of the mucous membrane of the colon and rectum, hence the application of the name *colitis*, *colo-rectitis*.

It has been ascribed to a variety of causes, such as malaria, unwholesome food, and to contagion, high diurnal temperature, exposure to wet and cold.

We cannot justly attribute it to malarial influence alone, from the fact that it frequently occurs in localities where the evidence of the existence of malaria is wanting. Nor can we with any more propriety ascribe it to the use of unwholesome food, independently of other causes, for if so, in our large cities the poor would never be free from its ravages. That class of our inhabitants suffers quite as much from ague and fever, bilious and typhus fever, as it does from dysentery. Yet the debilitating and enervating influence of unwholesome food subjects the sufferer to the most fearful forms of any malady. Again, it has been regarded as a contagious disease. Dr. Watson says, "That Dysentery is in itself a contagious malady, we have no satisfactory evidence," p. 816. Hooper mentions as its exciting cause, contagion. Yet he makes the observation interrogatively.—That opinion no doubt resulted from an observation of the disease as it occurs in armies, on board of ships, and so forth; where ventilation and cleanliness are disregarded, where putrid provisions are used; where exposure to wet and cold, and great fatigue, cannot be avoided: I will not deny that it may become contagious under such circumstances. Sir James McGregor calls it the "scourge of armies,"—"the most fatal of all their diseases."

I am under an impression that whatever tends to retard the cutaneous transpiration, or disturb the circulation in extensive surfaces, may become a remote cause of the disease under consideration.

Whatever disturbs the capillary circulation, produces internal congestions, and this engorgement occurring in parts already debilitated, by the existence of acid or acrid humors in the alimentary canal, it is easy to understand how inflammation may be engrafted. It is reasonable to suppose that the operation of atmospheric changes upon a system thus previously debilitated, will more readily induce *inflammation* in those engorged and debilitated surfaces, than any other forms of diseases.

Symptoms.—Perhaps there is no disease that makes its appearance so differently in its grades of intensity. Frequently, without febrile disturbance, the attack is so slight as not to hinder the patient from attending his avocation. Perhaps not more than half a dozen operations during the day, with but little pain, and slight tenesmus. Usually in such cases there is a discharge of more or less bilious matter, with blood and mucus. And thus the disease runs its course in a few days, without any serious disturbance. Or it may continue thus for two or three days, and the symptoms become greatly aggravated. There is more or less febrile excitement, thirst, perhaps pain in the head, nausea and vomiting; patient complains of pain and soreness in the abdomen; tormina and tenesmus become distressing; the dejections are greatly increas-

ed; the patient is tormented day and night. The operations in such cases do not exceed twenty-five or thirty during the twenty-four hours. In cases of this grade, the patient usually retains strength sufficient to go to the night chair.

The tongue, at first slightly coated with a whitish fur, now becomes yellow, brown, or dark, the tip and edges a little red.

The pulse does not vary greatly in frequency from the natural beat—from 80 or 90 to 100. The surface is dry and has an oily feel about it.

Again, there are some patients in whom the attack is preceded several days by lassitude, headache, pains in the limbs, loss of appetite, pains in the bowels, and constipation. The attack is then ushered in, somesimes with a chill or an ague, or with pyrexia, accompanied with chilly sensations and thirst. The local affection is now manifested; some two or three evacuations of ordinary fecal matter, perhaps more liquid than usual. The thirst is more urgent, the febrile symptoms increase; pain in the bowels, with tormenting tormina and tenesmus; the patient goes to the chamber vessel and strains violently, as though there were some excrement to be dislodged from the bowels, and yet there is nothing evacuated but a little blood and mucus; occasionally perhaps a few small indurated balls of fecal matter, which give great pain in passing. Nausea, retching and vomiting, with us during the present year, has constituted one of the most distressing symptoms in the more violent attacks. Everything swallowed is speedily ejected, as the vomiting begins as soon as the patient goes to the night chair.

And usually that inclination becomes peremptory so soon as the patient swallows a mouthful of anything. Again, he is irresistibly impelled to strain violently, but with about the same result. Sometimes mucus only is discharged; at others, blood unmixed. At other times again, membraneous shreds and morsels resembling flesh are discharged. The pulse now ranges from 90 to 100, and in some cases even as high as 120. There is a peculiar hardness about the pulse that is always present in this grade of the disease.

The tongue that was previously covered with a yellow or brown fur, now becomes clean, perhaps dry, with edges and tip morbidly red and shining.

The abdomen is very tender and sore on pressure; the walls of the abdomen contract so as to make the patient very gaunt. I have rarely seen the bowels swollen. The patient sleeps but little, in a half conscious dreamy state, and this usually only a few momeuts at a time. His strength rapidly declines; the force and fulness of his pulse also decline, but as it becomes weak it increases in frequency. In most of the cases there is some abatement of these symptoms, usually in the morning, after the third or fourth day. The upper bowels, or small intestines are usually locked up. This is one of the symptoms that might be overlooked, but should not be lost sight of by the physician. The excrements are so offensive, so horribly fetid, in this grade of the disease, that the atmosphere of the room is almost insupportable, even while the patient is over the chamber vessel. Prolapsus of the anus frequently occurs among children and persons of a relax habit, and patients of the lymphatic temperament; and it is a very disagreeable and troublesome symptom. Another very grave symptom is *delirium*. The surface usually on the third or fourth day becomes somewhat cool, with partial perspiration. This, with the above symptoms, discloses the fact to the physician that the disease is sapping the fountains of life—the "vis vitæ" is yielding to the disease. In cases of this character, the dejections vary from 30 to 50 per day. This aggravated state of the patient continues to the eighth or ninth day, when death kindly closes the scene of suffering. The majority of deaths occurred on the ninth day.

In cases terminating favorably, there is usually an abatement of the symptoms on the seventh or eighth day. Yet death has occurred from the fifteenth to the twenty-first day. And again, this state may terminate in the chronic form, which is but

little preferable to death, as it usually terminates fatally in the end. The disease, as it has appeared here during the last season, has exhibited more of a putrid tendency than an inflammatory character.

This disease, in the West India Islands, seems to be attended with extraordinary fatality during the rainy season of the year. During the sixteenth and seventeenth centuries, the disease was very destructive in London. The bills of mortality there, exhibited a fearful list of from 1,000 to 4,000 annually.

Post mortem examinations disclose inflammation with thickening of the colon and rectum; gangrene or sloughing of the lining membrane; in protracted cases, ulceration.

Treatment.—The intractableness of this disease in its malignant form, has given rise to a great variety of prescriptions; each school of medicine treating it according to its own theory of inflammation; and the successful treatment of mild and manageable cases with certain nostrums and cordials, has induced a great many persons who are ignorant of the character of the disease, to impose on the public with a great variety of "sovereign remedies," "certain cures," "speedy reliefs," etc., etc., which the public may as well avoid.

For its successful treatment, reference must be had to its *causes*. If it has resulted from the action or agency of accumulating acid and acrid secretions, the first indication will be their removal. If it has been excited by atmospheric vicissitudes, the effect must be counteracted by the use of revulsive means. If from malarial influence, the disease is apt to assume the periodic form, then antiperiodics are the most suitable means.

For the removal of any morbid secretions in the alimentary canal, and to obviate the congestion and torpor of the liver, and to correct its morbid secrations, there is no agent or combination of agents superior to the combination of the neutralizing physic of Eclectic physicians, with Leptandria and Podophillin—20 grs. Neut. Physic, 8 grs. Leptandria, 2 grs. Podophyllin, mix. divide into four powders; one every two or three hours until three are taken; the fourth will be necessary in about 24 hours after the commencement. At the same time, apply over the region at the colon a mild sinapism or simple fomentation. Where there is much pyrexia, I prefer cloths wrung out of cold water, or the cold water bandage. It is usually very pleasant and acceptable to the patient.

So soon as the powders operate, the sudorific and diuretic course is necessary. As a general and very valuable diuretic and diaphoretic, I have combined 2 ʒ f. Nitric Ether to 1 ʒ f. each of Tinct. Lobelia and Paregoric, in doses sufficient to nauseate. I prefer the Lobelia because it is more relaxing and less irritating than Ipecac. I do not rely upon opium in these cases as a curative agent, yet it is necessary in order to procure quietude and rest to the patient during the night. When it can be dispensed with, it is better to administer it only at night. The diaphoretic powder of the Eclectic physicians I regard as superior to any other preparation for this purpose. Mucilaginous drinks are both necessary and grateful to the patient, as Gum Acacia, Slippery Elm, etc. Though the less the patient takes into his stomach the better he fares. To quiet the irritable rectum, I have succeeded better with starch and laudanum than anything else. I have used almost every variety of injections, warm and cold, emolient and stimulating, astringent, and so forth. The starch and laudanum has succeeded better in my hands than any other.

Where there is any periodicity manifested in the disease, the early use of Quinine will readily shorten the disease and the sufferings of the patient. I have not used it sufficiently in cases where there was no marked remissions to venture an opinion.

When the stomach is very irritable, which was universally the case with us here in the severe cases, Morphine succeeds in relieving it more certainly than any other agent that I have used. The warm bath, saline bath, used daily or even twice a day where there is much dryness of the

skin, is not only grateful to the patient but it prepares the surface for a general and copious perspiratton. Dysentery cannot be well treated without it.

It will in many cases be necessary to repeat the hepatic and neutralizing powder every second or third day, and the balance of the means as the symptoms demand. Suppositories have not succeeded as well in my hands as injections.

The sinapism, fomentation, or wet bandages must not be discontinued so long as there are any traces of soreness or tenderness of the bowels. The treatment must be continued until every vestige of the disease is subdued. It is necessary that the patient should be extremely cautious in his diet, as there is great danger in a relapse.

Milton, Ga.

CLINICAL REPORTS.

Newton's Clinical Institute.

SERVICES OF PROFS. NEWTON & FREEMAN.

REPORTED BY PROF. Z. FREEMAN.

Continued from page 337.

SUMMER SESSION.

June 12. Case 114.—Franklin Hoyland. Fistula Lachrymalis.

Discharged cured.—the tears pass freely into the nose.

July 16. Case 118.—John Clark. Incipient Staphyloma and Opthalmia.

The inflammation returned from exposure; eyeball very painful, blood vessels leading upon the cornea much enlarged.

Treatment.—Cut the enlarged vessels leading to the cornea. Used the comp. collyrium during the day, and cold water dressing at night.

June 23.—Improving; clipped the blood-vessels as before. Continue the treatment.

July 1.—Erysipelas of the posterior part of the scalp, part painful and edematous.

Local treatment,—℞ Tinct. ferri mur. apply to the affected part morning and evening.

July 10.—Discharged; eyes and erysipelas cured.

June 12. Case 154.—Ugens. Otorrhea. Improving; continue the treatment.

June 20.—Improving; some pain in the right ear, discharge from the right ear most offensive, some blood passes from the ears upon wiping them with cotton.

Treatment.—℞ Zinci sulph. grs xxxx, hydrastin grs xx, water ʒ vi. M. Inject into the ear twice per day. Continue the comp. syr. sarsap.

June 23.—Improving; secretion from the ear not so offensive. Continue the treatment.

June 24. Case 85.—Catharine Gaffney. Schirrous tumors of the arm.

One of these tumors was located at the bend of the elbow and one over the middle of the biceps muscle. They commenced by a pain and hardness in those spots, which she supposed to be rheumatism, become painful, each two inches in their diameter, nearly round and elevated above the surface of the skin and extending down upon the muscle above, and the one at the elbow down among the nerves and blood-vessels at that point, arm quite painful.

Treatment.—Made an incision into the tumor and applied zinci sulph.; also used a poultice of ulmus fulva.

July 1.—Applied zinci sulph. and continue the poultice; continue applying the zinci sulph. every second day, and using the poultice.

August 3.—Apply zinc sulph, and continue the poultice.

August 6.—The tumors have disappeared, excepting in each one is a hardened mass of adventitious tissue, which looks white and is very sensitive.

Treatment.—Protect the granulations with cotton and continue the pulv. zinci sulph.

August 9.—Improving; nearly clear of the disease, edges hard.

Treatment.—Apply the adhesive straps tightly, (they cause much pain.)

August 16.—Improving; ulcers look healthy and are healing.

August 19.—Still improving; continue the straps.

August 22.—Discharged cured.

June 12. Case 155.—Thos. Crane.—Herpetic ulcer of the elbow.

Was before the clinic last winter, when the ulcers were healed. By exposure and accident the ulcers returned. Ulcers two in number, each nearly two inches in diameter, edges indurated and excavated—morbidly sensitive, number of eruptions around the ulcers upon an inflamed base.

Treatment.—℞ Zinci sulph. ʒ j, Hydrastin grs x. M. Apply to the ulcers and eruptions once in two days.

June 23.—The ulcers still present an excavated appearance and communicate by openings under the skin with each other, and some of the larger pustules.

Treatment.—Cut the integument over the channels communicating between the sores and apply zinc sulph freely for a few days, use the ulmas poultice.

June 30.—Improving; cut open the communications and applied zinc sulph.

July 6.—Improving; continue the treatment.

July 18.—Improving; cut off the projecting edges of the inflamed tegument with the scissors, and apply zinc sulph. Continue the poultice.

August 9.—Improving; continue the treatment.

August 15.—Improving; eruptions have all disappeared, some of the smaller ulcers have healed, large ones much better, though there is a disposition of their edges to become excavated and sensitive.

Treatment.—Dry compress and roller, apply tight, rolling the forearm.

August 19.—Improving; continue the treatment.

August 22.—Discharged cured.

June 16.—Case 156.—Mary Kent. Whitlow. Caused by an injury while washing.

Commenced May 20; was opened two weeks since with a lancet. The felon was over the middle phalange of the middle finger, the part was much swollen and gangrenous, the line of demarkation was distinct.

Treatment.—Ulmus poultice day and night.

June 20.—Swelling and pain less, gangrenous part sloughing off. Continue the treatment.

July 1.—Dischaged cured.

June 19. Case 157.—William Jones, æt. 3. Chronic irritation of the lungs.

Has been affected 14 months, much debilitated, coughs much at night, appetite indifferent; has been treated by Homeopaths and old school physicians, has not improved under their treatment.

Treatment.—Alkaline bath with friction every morning. ℞ Hydrastus canadensis ʒ j. ferri phosp. ʒ j, vinum oport. ʒ viij, M. Take ʒ ij three times a day. ℞ Morphia sulph. gr j. Make powders viij, take one every night.

July 27.—Improving. Continue the treatment.

August 3.—Discharged cured.

July 1. Case 158.—Ann Carr (infant) Intermittent fever, tertian type.

Commenced five days since, patient much debilitated.

Treatment.—℞ Tinc. gelseminum ʒ ss hydrastin grs xx, M and give gtts x four times a day. Warm pediluvia.

July 5.—Discharged cured.

July 15. Case 159.—Charles Mooney, æt. 20. Chronic Gastritis.

Been affected eight weeks, caused by drinking whisky and exposure. Much pain and tenderness in the epigastrium on pressure; the presence of food in the stomach is painful—stomach acid at times, system otherwise healthy, tongue nearly white in the middle and red at the edges, more or less pain in the stomach all the time.

Treatment.—℞ Hydrastus Canadensis, Prinor Verticillatus, Althea officinalis a a ʒ ij O j, make a decoction, use the amount in twenty four hours.

℞ Emp. Cantharidis, irritating plaster a a. M; Apply over the epigastrium.

July 28.—Improving; symptoms much better. Continue the treatment.

August 4.—Discharged cured.

July 10. Case 160.—James Burns, æt. 24, (laborer). Spinal irritation. Irritation of the heart. Pain on pressure over the third dorsal vertebra, much soreness in the region of the heart, pulse 70 per minute and variable, been treated by old school physicians; no better.

Treatment.—Alkaline bath every morning, irritating plaster over the upper dorsal region. ℞ Alcoholic ext. nux vomica 1-15 gr three times a day. ℞ Iodide potassa ʒ ss, water ʒ iv, M. Take ʒ j three times a day.

July 22.—Improving; not so much soreness in the region of the heart, pulse more regular and stronger, coughing not so painful, appetite good, some pain in the precordia on pressure. Continue the treatment. Apply irritating plaster over the precordia.

July 26.—Less pain in the heart, no pain in the stomach. Continue the treatment.

Aug. 5.—Improving. ℞ Hydrastus canadensis grs iij. ferri phos. grs ij. M. Give three times per day.

Aug. 22.—Discharged cured; advised to perform light labor.

July 19. Case 161.—Kate Maheen, æt. 4. Ext. Scrofula. Been affected two years. Eruptions in the anterior nares; discharge of pus from the nose; pustules upon the face, accompanied with swelling; pustules on the gums over the incisor teeth; appetite indifferent; tongue coated white.

Treatment.—℞ Comp. syr. still. ʒ iij. iod. potass ʒ ss. M. Give ʒ j. three times per day. Alkaline bath every morning; zinc ointment to the eruptions. ℞ Hydras. canad. prinus verticillatos aa. Make a decoction for the gums.

Aug. 1.—Improving slowly. Use sesq. carb. potass to the eruptions in the nose.

Aug. 22.—No report.

July 20. Case 162.—Mrs. O. Farrell. Subacute Opthalmia and Subacute Matritis. Been affected two months. Dimness of vision; conjunctiva slightly injected; pain and uneasiness in the region of the womb; nervousness.

Treatment.—Comp. aconite collyrium applied to the eye four times a day. ℞ Comp. powder of senna ʒ j. to be taken in water as needed to open the bowels. Wear a cold wet cloth about the pelvis continually.

Aug. 7.—Discharged cured.

July 22. Case 163.—Kate Faba, æt. 15. Chronic Capsulitis of the Ankle Joint.

Been affected fourteen weeks; caused by a slight sprain and a cold. (Has never menstruated.) Tenderness on pressure in front of the ankle joint and behind the external malleolus; some pain on walking.

Treatment.—℞ Vinum colochci ʒ ij., iod. potass. ʒ ss. M. Take ʒ j. times per day. Scarify over the points of tenderness at the ankle, and rub the incisions with ol. tiglii to vesicate. If much inflammation supervene, use a fomentation of dat. strammonium. Use alkaline bath every morning.

July 28.—The incisions of the scarificator are discharging pus; not so much soreness in the joint; improving.

Treatment.—Use the ulmus poultice.

Aug. 4.—Discharged cured; walked two miles to the office; when she came here first she could scarcely walk about the house.

Is using ℞ Tinct. macrotys. ʒ ss. tinct. ferri mur. gutt. x. three times per day to induce menstruation.

July 26. Case 164.—Kate McDarrow, æt. 22. Granular Eyelids and Opthalmia. Eyes much inflamed; granulations very large, covering both eyelids; much intolerance to light; eyes painful; some pain in the head. General health good.

Treatment.—℞ Comp. powder of senna ʒ j. every night until it purges the patient freely. Alkaline bath. Evert the lids; shave off the granulations and apply argent nit. sol. ʒ j. to acqua ʒ j.; use cold water

dressing to the eye day and night; warm pediluvia at night.

Continue the treatment, omitting the cathartic for a few days.

Aug. 13. Much improved; cut the remaining granulations. Continue the treatment.

Aug. 22. No report.

July 26. Case 165.—Mrs. Andrews, æt. 28. Acute Opthalmia. Commenced six days since.

Caused by exposure to the sun. Conjunctiva injected; much chemosis of the left eye; skin rather dry. Pain in the head and lower part of the orbit; much intolerance to light.

Treatment. ℞ Comp. powder of Senna ʒ j; repeated every day. ℞ Comp. aconite collyrium, applied to the eye; use cold water dressing to the eye; warm pediluvia.

July 30. Not much better. Applied sol. argent nit. (ʒ j. the ʒ j. water) to the eye freely. Continue the above treatment.

Aug. 7. Improved much. Continue the treatment, excepting the argent. nit.

Aug. 19. Discharged cured.

July 26. Case 166.—Jenny Black (negress,) Whitlow on the thumb; ungual phalange.

Thumb much swollen; a small opening in the integument, and fungus protruding; part very painful.

Treatment. Incision through the fungus mass into the distended cellular tissue; the cellular tissue is filled with immature pus. Apply zinc. sulph. to the wound.

July 28. Improving; less inflammation and pain. Use elm poultice.

Aug. 6. Discharged cured.

Aug. 12. Case 167.—Ann Burns, æt. 25. Spinal Irritation. Has been affected eighteen months (since confinement in parturition;) was salivated three days after confinement; has some pain under the middle of the sternum; weakness across the loins; pain on pressure over the third lumber vertebra. Appetite indifferent.

Treatment. ℞ Ferri phosp. grs. ij., hyd. canad. grs. ij. M. Take one three times per day. Irritating plaster over the loins. Alkaline bath every morning.

Aug. 22. No report.

Aug. 15. Case 168.—Margaret Murphy, æt. 40. Dyspepsia. Been affected three weeks. Some difficulty of breathing; sense of pulsation in the stomach, no appetite; pulse irregular; general debility and lassitude.

Treatment. ℞ Emetic of lobelia inflata. Next day use ℞ Hyd. canad. ferri phosp. aa grs. ij. three times per day. Alkaline bath, and sinapism over the stomach night and morning.

Aug. 20. Discharged cured. Be careful of your diet.

Aug. 17. Case 169.—Ed. b. Obtuseness of hearing.

Was affected with Syphilis from Jan. '54 to June. Syphilitic symptoms have disappeared, excepting a few eruptions upon the arms. Took a dose of epsom salts in June, which operated seventeen times; at the same time exposed his head and neck by lying in a current of air between two windows; has been very deaf since; is a little better now. Much dizziness; could scarcely walk on that account; is better now; some pain in the head; otherwise well; has taken quantities of strychnine, and is laboring under its specific effects.

Treatment.—Alkaline bath every morning. Electricity passed through the head, from the right to the left ear, and to the upper cervical vertebræ. Vesication of the back of the neck and behind the ears, with oleum tiglii.

Aug. 21.—Not so much tenderness of the head and dizziness; can hear a little better. Continue the treatment.

Aug. 21. Case 170.—Thomas Turner, æt. 23. Gonnorrheal Opthalmia. Been affected forty days, caused by exposure to the rain and night air. Gonnorrhea has subsided. Hydropthalmia of the left eye. The cornea of the right eye is opaque; the conjunctivæ of both eyes are very vascular

and turgid; the eyes painful, and some intolerance of light; a purulent secretion oozing at times from between the lids. The cornea of the left eye has been punctured twice, and now protrudes from between the lids; patient otherwise healthy. Chance for cure small.

Treatment.—Scarify the back of the neck and vesicate it with ol. tiglii. ℞ Zinci sulph. ʒ ss. water ʒ j. M. Apply freely to the conjunctivæ once per day. ℞ Comp. powder of senna ʒ j. every day; cold water dressing to the eyes all the time.

Part 2. Miscellaneous Selections

RECOVERY AFTER TAKING A LARGE DOSE OF PRUSSIC ACID.

Mr. W. H. Burnam, of Wath-upon-Dearn, has communicated to the *Lancet* a very interesting history of the recovery of his father from the accidental poisoning by prussic acid. The following abstract is from the *Brit. and For. Med-Chir. Rev.*, April of this year. Mr. Burnam, Sr., took by mistake a drachm of Scheele's acid instead of diluted acid. In a few seconds, he perceived by the bottle the mistake he had made; he immediately swallowed half an ounce of aromatic spirit of ammonia, with a little water, then called to his son and told him what had occured. He spoke hurriedly, and breath deeplyed. Mr. W. H. Burnam immediately administered some solution of crystals of sulphate of iron, trusting to the ammonia previously swallowed for the formation of an insoluble compound of the acid with the oxides of iron. This was two minutes after the poison had been swallowed; from this time, for twenty minutes, Mr. Burnam had no recollection of anything that was taking place. Respiration became deeper and slower. Four minutes after taking the poison, cold douche was freely employed, and more solution of sulphate of iron with spirits of ammonia administered. Vomiting took place; a slight convulsive shudder occured; the cold effusion was persevered in, with the occasional administration of spirits of ammonia. In twenty minutes he began to exhibit signs of returning consciousness. In about fifteen minutes later, he was able to walk up stairs to bed. Perfect recovery took place. The patient was about sixty years of age, and of a strong constitution.

By chemical analysis, Mr. W. H. Burnam found that the quantity of the acid which his father had taken contained 2.4 grains of anhydrous acid. Mr. Burnam observes, that this is the largest recorded quantity taken, and followed by recovery. It is also a matter of interest in this case, that at the time at which insensibility came on is so exactly known, viz. two minutes after the poison was swallowed.

NERVOUS ASTHMA.

M. Morpain, a French physician, has found that by burning brown paper soaked in a solution of saltpetre in the room of an asthmatic patient, the latter will obtain instantaneous relief. M. Carrie, working out this fact, has had the following polypharmaceutical paper prepared for the same purpose:—Pasteboard broken down with hot water, four ounces; nitrate of potash, two ounces; belladonna, stramonium, digitalis, lobelia inflata, all in powder, each twenty grains; myrrh and olibanum, of each two drachms and a half. Incorporate all these with the paste, divide the mass into sheets of the thickness of three lines; dry, and divide in little square pieces. Burn them in little saucers in a well shut-up room.—*Lancet, Dec.* 31, 1853, p. 625.

ON COCOA-NUT OIL AS A SUBSTITUTE FOR COD-LIVER OIL.

Dr. Thompson says. "Among the patients to whom cocoa-nut oil was given, there were some instances of arrested phthisis, as decided as I have been accustomed to attribute to the use of cod-liver oil, over which it possesses advantages in reference to economy and palatableness: and it is interesting to remark that its efficacy was experienced by some who had previously taken cod oil uselessly, and by others who had discontinued it on account of nausea."—*Med. Times and Gaz., Feb.* 25, 1854, p. 190.

EXSECTION OF THE ULNA.

Dr. Caronchan's paper on this important operation, which appeared originally in the American Medical Monthly, is now circulating in a pamphlet, with a plate, which will be an acceptable form for general distribution. Every one interested in the subject of which it treats, does not have access to the Journal in which it first appeared, but for a trifle copies may now be ordered all ovet the Union.

INHALATION AND OTHER TREATMENT IN PHTHISIS.

BY WM. M. CORNELL, M. D.

In the Boston Medical and Surgical Journal for April 19, are the following editorial remarks:—"It is said that the benefits of inhaling the vapor of iodine in pulmonary affections, have been underrated. Until within a short time, there has been but little notice taken of iodine in this form of medication; and we are pleased to learn that several medical gentlemen in Europe have lately given their attention to the practical application of it in cases of confirmed phthisis. It is hoped that their use of it will be attended with good results, and that it may prove a successful remedy in some cases of intractable disease."

In 1851, in the 43d volume of the same "Journal," the writer communicated some remarks on the subject of "Inhalation in diseases of the air-passages and of the lungs." In that paper the belief was expressed that "more benefit may be derived from *inhalation* than has generally been experienced." The vapor of iodine is there named, among other articles, for inhalation, and cases given from Sir Chas. Scudamore, Murray, Barton and Corrigan, where it had been advantageously employed. Some physicians in this country were disposed to give it, and other articles there named, *a trial;* among whom was the late Dr. Peirson, of Salem. The American Medical Association, by their committee on the treatment of these diseases, referred respectfully to these inhalations; and Drs. Wood and Bache, in the last edition of the United States Dispensatory, have mentioned the inhalation quoted from the Boston Journal. But others looked upon the whole scheme as chimerical and useless, if not worse.

Since that period, however, medical men abroad, and some in this country, have looked more carefully into the matter, and put the treatment in practice. The writer has watched the reported cases, he believes, in all the Journals as they have appeared, and still believes, as then expressed that, if we are ever to find realized the remark by Dr. Armstrong—that "at some future period the whole class of tubercular diseases will be arrested" by medical treatment, no small share of that treatment will consist in remedies addressed, by inhalation, directly to the diseased organs, and to the integument, rather than the stomach of the patient.

It is by no means strange, when *phthisis* is weekly sweeping to the grave a larger number of victims than any other disease, and this under the most approved treatment, that physicians should look with a somewhat sceptical eye upon any new plan of treatment which promises to be in any measure successful. They doubt (and they ought to doubt) the utility of any plan of treatment, till they have evidence of its success. But they ought, also, to give any feasible plan, which has been stated to be successful, a fair trial. No one doubts that phthisical patients sometimes recover, both with and without treatment. But it does seem incumbent upon the medical profession to put in action all possible means to stay this great ravager of our land.

During the last three years, the writer has treated (among many who have died) some phthisical patients who have recovered, among whom were the following:

Mr. M., a young man aged 23 years; well-marked *phthisis;* right lung cavernous. Several remedies were tried, but without any good effect. At last, he was put upon the following:—℞ Cod-liver oil, ʒ iv.; sol. carb. potash. ʒ ss.; pulv. g. Arabic, ʒ j.; syr. orange peel, ʒ j.; spirit peppermint, ʒ ij. Of this compound, a large tablespoonful was taken four times a day. The patient began to grow better from the commencement of taking the medicine. He also inhaled the vapor of the tinct. iodine and creasote, five drops of each in conjunction, several times a day. The inhalation quieted rather than provoked coughing. But what part of the cure is to be ascribed to the medicine taken, and what to the vapor inhaled, or whether any to either or both, he is not prepared to say. This was the treatment under which he recovered, and he has now remained apparently well more than a year.

Miss C., a young lady from the country, had *phthisis.* Cough excessively harrassing; expectoration of viscid pus profuse; night sweats, &c. Was treated the same as the above. She gradually improved in strength and flesh, the cough and expectoration diminishing daily for eight weeks, when she returned to her home in New Hampshire. Two months after her return, she wrote me a letter, in which she says, "my health is now good, and *I am married.*"

Mr. L., a gentleman, aged 27 years, married; residence one hundred miles from this city. Wishing to visit a brother in this vicinity, was recommended to my care by Dr. H., his physician at home. He had disease of the right lung, but did not appear to be a *strumous* patient. His cough and night sweats were very troublesome. The cod-liver oil he was reluctant to take; and when, at my earnest request, he did take it, it would not set on his stomach.

He therefore soon abandoned its use. He was put upon the *leontodine*, the concentrated chemical extract of the *taraxacum*, and the *cornine* of the *cornus Florida*, of Keith & Co., according to the following:—℞ Cornine, grs. ij.; Leontodine, grs. ij. M. Sum. at once, three times a-day. He also inhaled the vapor of iodine, gutt. x., three times daily. Under this treatment, for eight weeks, he gradually improved, and returned home in much better health than when he first came to me. Each of these patients was freely rubbed with equal parts of warm sweet oil and New England rum, morning and evening.

I am not prepared to say how much of the benefit, which appeared to result from this treatment, was to be ascribed to either the medicine, the inhalation or the unguent, or whether either did any good. The patients improved while being treated, and that is all I would say about it.

I have employed inhalation of *creasote*, for more than three years, in phthisis, in bronchitis, and in a few cases of gangrene of the lungs. I was first led to use it in *gangrene*, by supposing, from its name, and the Greek words from which it is derived (*kreas, flesh;* and *soter, preserver*, that is, *flesh preserver*,) that it might possibly be useful, as an antiseptic, in a gangrenous lung; and as the best way to introduce it to the lung, resort was had to *inhalation*. At the time when I commenced the inhalation of creasote, I had not seen any account of its having been employed, as a remedial agent, in *that form*, not even in European journals. But in the second volume of the last edition of Pereira's Materia Medica, re-published in this country at the commencement of the present year, I find the following remarks:—"The inhalation of creasote vapor is occasionally useful in relieving excessive bronchial secretion. This inhalation may be effected by diffusing a few drops of creasote through water or a mucilaginous liquid, and breathing through this by means of the ordinary inhaling bottle."

In the first volume of the same work, Dr. Pereira says, "Inhalation of iodine vapor has been used in phthisis and in chronic bronchitis. In phthisis, it has been recommended by Barton, Sir Charles Scudamore, and Sir James Murray. I have repeatedly tried it in this, as well as in other chronic pulmonary complaints, but never with the least benefit."

I think I can say it has been beneficial in my hands, and I shall continue to use it.

I have also, up to the present time, used with benefit the *powder* of *nitras argentii* and lycopodium, prepared according to the formula of Dr. Chambers, as published in the 43d volume of the Boston Medical and Surgical Journal. in chronic laryngitis, bronchitis, and incipient phthisis.

I will add, in conclusion, that though I never use inhalation of any kind to the exclusion of general treatment, yet I consider it a useful adjuvant in the management of these generally chronic and often fatal diseases; and if a patient puts himself under my care, I never feel that I have done my whole duty to him, unless I have tried both general and local treatment. I believe the *pathology* of phthisis has been but imperfectly understood; and that, in most cases, the *skin* is first in fault. But this is a point on which I will not enlarge at present, only to say, that every one knows how very intimate is the sympathy between the integument of the body and the respiratory organs. Hence, in the treatment of all phthisical patients, I have always paid special attention to the skin. For the last five years, I have been in the habit of applying the *alcoholic lotion*, recommended in such cases by Marshall Hall; but for three years I have directed my patients to be rubbed over the whole surface of the body with equal parts of warm olive oil and New England rum; and it is my opinion that no part of my prescriptions has been more beneficial. If opportunity should *offer*, I may say more on this treatment at a future time.

I have recently treated a case of *aphonia*, of more than a year's standing, with the alcoholic tincture, iodine ℥ j. to ℥ j. of alcohol, according to the recommendation of Dr. Bennett, in the Medical Times and Gazette, and re-published in the 28th Part of Braithwait's Retrospect. The tincture was applied, externally, over the larynx, with a camel-hair pencil, every other day for a week. The pain produced by so strong a solution was considerable, and the friends of the young lady, seeing her suffering, desired her to desist. I had concluded to forego its further application, when she suddenly surprised us by the return of her voice. *Galvanism* had been used, for two weeks, previous to the application of the *iodine;* the current being passed, for fifteen minutes daily, from the larynx to the cervical vertebræ. In this case, there was no disease of the lungs, but chronic inflammation and enlargement of the chordæ vocales. The voice still continues.—*Boston Med. and Surg. Jour.*

SPIRIT RAPPING AND THE PHILOSOPHERS.

BY C. D. GRISWOLD, M. D.

I have observed, of late, that the subject of "spirit rapping" occasionally finds a place in the medical journals. When the phenomena, so styled, first began to attract popular interest, the matter was deemed too contemptible for discussion in scientific journals, and consequently fell into the hands of mystery-mongers, and speculators in monstrosities. Wise men have regarded the credulous and curious in this matter as fools; but the simpletons seem to be in a fair way to prove the quidnuncs no wiser than themselves in relation to the 'spirits.' I admire exceedingly the perseverance of the ghosts, who having knocked for admission, and finding themselves refused at the front doors of society, do not hesitate to make their way through the kitchen. This violation of our infallible laws in etiquette, has cost them much dishonor, but, nevertheless, seems likely to succeed, inasmuch as the unseen visitors are now quite frequently entertained in the parlors of very sensible people. To be sure, they are always let in at first merely to please the young people; and the first interview will close with, perhaps, an acknowledgment that "the trick is really very clever."

Affecting to be wise from fear of appearing to be less so than somebody else, is a very commonly-exhibited weakness; and were it well understood that a man makes a greater fool of himself by so doing, than he would be likely to be suspected of being under other circumstances, there is no doubt that the spirits would have been received into good company long ago. Moreover, we should have been saved from a great number of explanations and learned expositions, reflecting in most instances upon the opakeness of the human intellect, by persons who being befogged themselves, simply mystified the subject.

Who that recollects Prof. Taylor Lewis's explanation of the "rappings," some five years ago, can help smiling at the absurdity of his notions upon the subject. He informed the Rochester people of the fact that currents of air sometimes so effect water falling over a declivity, as to cause a perceptible jar in the surrounding earth. Now as there was a waterfall at Rochester, Prof. Lewis was astonished that at the fact that it had not been discovered as the cause of tables and windows rattling, or "rapping"!

Profs. Flint, Lee and Coventry, of the Buffalo Medical College, about four years ago, took the subject in hand, with an honest purpose and a zeal worthy of a good cause. The result, after a protracted investigation, was announced in a lengthy article, making a full and (of course) perfectly satisfactory exposition of the fraud, based upon the *fact* that they had discovered a lady in Buffalo who could snap the knee-joints, and the *assumption* that the Rochester girls *could* and *did* do so likewise.

Within a year the philosopher Faraday has condescended to re-illumine the world (which had already grown dim again) upon the subject of spirits; being careful to explain that the matter was no mystery to him, and that he was only induced to take hold of it on the ground that so many of the weak-minded were being led astray by its pretensions. Table-turning was the branch of the subject to which his attention was directed. By putting a number of pieces of smooth pasteboard together, with an unctuous substance between them, laying these on a table, and then placing the hands of the medium upon them, he found, after a trial, that the pasteboards slid from each other in a slight degree. This solved the mystery. By the slipping of the pasteboards it was proved, to his satisfaction, that the medium exerted a voluntary or involuntary force, and thus the tables were moved.

Now it must seem not a little remarkable, to a sensible man, that these three expositions, emanating from five persons extensively known as scientific men, should be so unlike each other, and yet be offered as full explanations of the whole subject. Certainly a waterfall has not the power to snap one's knees, nor does snapping knees have the effect to move a table. But confine each explanation to the peculiar order of phenomena sought to be elucidated, and let us ask in what way has a waterfall the effect to produce a concussion loud enough to stun the senses like a blow from a heavy hammer? or how can snapping one's knees cause a house to tremble from its foundation? Faraday's explanation implies that the medium's hands are always on a table when it moves. But such is not the case; and how does it move when there are no hands upon it?

A great number of other individuals could be mentioned in this connection, who have come before the public and professed to clear up the mystery by resolving it into simple facts, but they have invariably simply *simplified* themselves. The newspapers have all had their say, over and over again, and geniuses have had their jokes. Yet still the subject grows in importance. The more dignified journals have occasionally admitted a paragraph by way of explanation,

until at last the ponderous quarterlies timidly venture upon the theme.

Under the head of "Pseudo Science," the January number of the British and Foreign Medico-Chirurgical Review discusses "spirit rapping" at some length. Introduced in the first place as an absurdity to illustrate principles, and prove other doctrines fallacious, we are nevertheless treated to a rare example of inductive reasoning, to prove the thing what it must be, on the ground that it cannot be anything else. We are here told that "sound is a physical phenomenon produced by the forcible meeting of *two* material substances; and consequently if these sounds are physical, they cannot be spiritual; and if spiritual, they cannot be physical." It is also further stated that the sounds under consideration are contended not only by the spiritualists, but by the alleged spirits, to be purely spiritual. Now considering the fact that the phenomenon of thunder has never yet been satisfactorily explained, the *first* assertion above named must be considered a weak base for so strong an argument; while the *second* I hesitate not to assert, and thousands will agree with me, is greatly at variance with facts. I have often known the "spirits" to aver that the sounds are electrical, controlled or produced by the will of spirits.

This theory of the sounds seems well sustained by the fact that they always (in my experience) appear to come from the side of any substance on which they are produced, opposite the hearer; as, for instance, when the sounds are on a partition door, parties on each side will contend that they were opposite to them. This fact is a striking test that they are not produced by art.

Of twelve sources of error calculated to mislead in the investigation of a subject, laid down by the writer of this Review as common, we find, after carefully looking over his article, that he has committed *but seven* of them, viz.:—

"1. Errors arising from mistakes about the meaning of terms.

"3. Errors arising from the substitution of assertions for facts.

"4. Errors arising from illogical reasoning from correct data.

"5. Errors arising from illogical reasoning from incorrect data.

"6. Errors arising from logical reasoning from incorrect data.

"7. Errors arising from partial instead of complete observation.

"8. Errors arising from mistakes in observation."

In the above examples, the editor of the Review has given us a key to the contrariety of opinions upon the subject of spiritual rapping. The names given to the different orders of phenomena are extremely absurd, and convey to the mind a very erroneous idea of the nature and character of the manifestations; and whatever has been once impressed upon the mind as an absurdity, it takes a long time to make appear rational. Ultimately spirit rapping may become well understood as a natural phenomenon, and had unbiased and intelligent minds taken it up at first, that result would be much sooner attained. Now all is confusion, and the task is yet for philosophers to perform; but we are to look to others than Faraday, or the editor of the British and Foreign Medico-Chirurgical Review.

Any man who will examine this subject as it presents itself, will find much to interest; but the moment he regards it with reference to the absurd theories advanced by the too-ready believers in its spiritual origin, he becomes disgusted, and falls into some or all of the errors above specified, which are fatal to a just appreciation of its true character. The time has come when the little great men who always have been ready with an explanation, begin to grow chary of their opinions, and find it a wiser course to observe, than to denounce.—*Boston Med. and Surg. Jour.*

INJECTION OF ALUM IN UTERINE HEMORRHAGE.

BY A. C. HALL, M. D.

It is said that an isolated case is worth something. The following is illustrative of the use of injections for the relief of uterine hemorrhage. Aside from my former preceptor (Dr. Crosby, of Hanover,) I know of no American physician who has fully used this prescription.

Feb. 16, 1853, I was called to visit, in an adjoining town, Mrs. S—., aged 40; of full habit, and previously healthy. Had not been regular the month previous. Three days before, had been attacked with 'flowing' without any known cause, which had increased till the evening of my visit. The patient having had a similar attack about a year previously, which was relieved by simple means, I prescribed rest in the horizontal position, with Dover's powder and ergot. A vaginal examination revealed nothing but a patulous condition of the os uteri.

No relief was obtained from this prescription. From day to day, for nearly a week, all the ordinary appliances were brought into requisition without avail.

Patient continually sinking from loss of blood. At length the friends yielded to an examination with the speculum. An irregular mass was found occupying the neck of the uterus, and a portion was relieved with a small forceps. But the bleeding was fearfully increased by this disturbance, and the inability to remove the entire mass compelled me to desist. Here was a retained placenta, with a sufficient hold to retain a portion of its vitality, yet so nearly detached as to act as a foreign body, keeping up irritation and distension of the organ. Older heads might *perhaps* have devised some plan different from the following, but I must confess I could not. Accordingly, by aid of a male catheter, I injected into the cavity of the uterus a saturated solution of alum. This arrested the hemorrhage, and the diagnosis was confirmed by the expulsion of a partially decomposed embryo. Some superficial ulcerations about the os uteri were cauterized, and the patient had a rapid convalescence. I have since used the same injection with equal success for hemorrhage after delivery.—*Boston Med. and Surg. Jour.*

PULMONARY CONSUMPTION.

In 1851, Theophilus Thompson, M. D., physician to the Hospital for Consumption and Diseases of the Chest, in London, gave a course of clinical lectures, which, with a few alterations, appeared in the Lancet for that year. Such was the estimation in which the series was held, that they were embodied in a distinct volume and published. Messrs. Lindsay & Blakiston, of Philadelphia, have anticipated the desires of American practitioners, who are always asking for more light respecting the treatment of consumption, and now have in readiness an American edition of Dr. Thompson's lectures, in a compact, economical volume, which will be estimated just in proportion to the determination of the reader to profit by the suggestions and undeniable facts collated by the learned author. There are thirteen lectures in the volume, which seem to embrace every imaginable symptom and condition recognized in the various aspects of pulmonary consumption. The remarks of the author accord with our own observations and experience; and all who are conversant with the melancholy tendency of the disease, when once developed, will discover, in the plain statements of Dr. T., the lessons of a wise, judicious physician; and no other could have produced a practical guide like the one under consideration. Copies are to be had in this city at Messrs. Ticknor & Co.'s, where the publications of the day, on medicine and surgery, are promptly placed on the shelves as soon as published.—*Boston Med. and Surg. Jour.*

PHYSICIANS' BLACK LIST.

Resolutions have been adopted by the Berks County (Penn.) Medical Society, directing the members of the society to furnish to their secretary a list of such of their patients as do not pay their doctor's bills. We have long been of the opinion that a similar course should be pursued by all the regularly organized medical societies in the country. It would be far be ter, however, if the European system could be adopted, which is, to receive the fee at each visit—or, at any rate at the termination of the case. It is an incontrovertible fact, that physicians are more imposed upon by the people, than any other class of professional men. We do not know why it is so, unless from a general impression that doctors are always rich, or are getting rich, and consequently, if paid at all, are the last ones to be remembered when the time for paying bills comes. We verily believe, if a black list was opened in every large town or city, a change of physician would not take place quite so often in many families.—*Bost. Med. and Surg. Jour.*

A SYNOPSIS,

CONTAINING A SHORT ABSTRACT OF THE MOST PRACTICAL ARTICLES IN BRAITHWAIT'S RETROSPECT: SHOWING, AT A GLANCE, THE MOST IMPORTANT INDICATIONS OF TREATMENT PUBLISHED BY DIFFERENT WRITERS WITHIN THE LAST HALF YEAR, (1854.)

AFFECTIONS OF THE SYSTEM GENERALLY.

Fever.—Fever in one sense is incurable, but, by proper management, it cures itself. "We cure the patient by preventing him from dying" during a certain period, and then the disease dies out; we keep him up by food, stimulants, and tonics. One of the most important doctrines of the day, is, that fever may produce local symptoms very like inflammation, but not really so; and if these local affections be treated on the antiphlogistic plan as in cases of fever, it is probable that the results will be fatal. Therefore, in fever, although the patient be attacked *apparently* by inflammation of the brain, causing delirium, &c., don't deplete, but steadily support the patient by food and small and repeated doses of brandy or wine, say a teaspoonful or tablespoonful every hour or two. The same principle

must be remembered in affections of the lungs, heart, and digestive organs. All or some one of them may be attacked by apparent inflammation, but don't deplete if you see typhus present. On the other hand, boldly give food and stimulants, till you see the brown tongue assume a healthier aspect, notwithstanding the apparent inflammatory symptoms, as it is the rarest thing possible for real inflammation to coexist with fever. (Dr. W. Stokes, p. 17–24.)

Where the secreting surface is not easily disorganized, we may try, by stimulating it, to aid in the elimination of the poison. This we may fulfil by emetics. Ipecacuan is the emetic to be preferred in ʒ j doses of the wine. It should be given during the early stages, while nausea already exists as a symptom. Fever terminates commonly in four ways; 1st. The patient may be struck down at once and die by the shock; 2nd. He may die from the first to the second week; in this case there is great febrile action, and the patient dies by phrenitis, or this perhaps conjoined to some other complication. 3rd. The cerebral symptoms may appear more gradually, as at the end of the second week, commencing with delirium, and if fatal, ending with coma. In the 4th class, he may die at the end of the third, fourth, or fifth week, the asthenia increasing, and accompanied, perhaps, by specific intestinal lesion. In the third class, where violent delirium is present, we must give opium and apply cold affusion to the shaven head. The opium may be guarded with ipecacuan. If coma comes on, large blisters may be applied. The strength must be sustained on the plan of Dr. Todd, by giving small quantities of brandy and water and beef-tea at frequent and short intervals, and it must be especially observed that severe febrile symptoms do not contra-indicate this method. In the fourth class we must relieve the pain and tympanitis in the bowels and peritoneal cavity by turpentine stupes. A turpentine enema may be also given in the following form: Spirit of turpentine, thirty minims; tincture of catechu, two drachms; tincture of opium, fifteen minims, to be added to ʒ ij. of decoction of starch. (Dr. W. Brinton, p. 26–33.)

Tropical Fever and Dysentery.—When the remissions are imperfect, and there is acute congestion of some important abdominal or other organ, give quinine (in ℈j. doses) from ʒ j. to ʒ ij. daily. The more acute the symptoms and the less the remissions, the larger and earlier should be the doses. These doses should be continued until complete cinchonism is produced, namely, singing in the ears and deafness. In robust cases, before the accession of the fever, one blood-letting often gives temporary relief. (Mr. E. Hare, p. 32–36.)

Gout, *Acute.*—Apply pure spirits of wine to the part by means of a piece of lint, and cover it with oil silk. (Dr. Goolden, p. 45.)

Chronic Gout and Rheumatism.—Mix ʒ j. of carbonate of soda with a bread poultice and apply this hot every night. (Dr. J. R. Bennett, p. 45.)

Purpura Hemorrhagica.—Give turpentine in the following manner: Sp. terebinth. ʒ ij. sacchari albi, pulv. acacie. aa ʒ ij.; tinct. lavand. comp. ʒ j; aqua menth. pip. ad ʒ viij. M. fiat mistura. ʒ j. ter die. (Dr. G. Willis, p. 49.)

Rheumatism.—Almost all the salts which act on the kidneys are useful. Lemon-juice seems to be useful chiefly by acting on the kidneys, and from the supercitrate of soda or potass which it contains; for the same reason we may give citrate of ammonia, and nitrate of potass. Dr. Golding Bird prefers acetate of potass. He gives half an ounce, largely diluted, in divided doses every twenty-four hours. (Dr. G. Bird, p. 43.)

Dissolve ʒ iij. of nitrate of potass in a pint of water, let the whole be taken during the twenty-four hours. By this dose, gastric and renal irritation is avoided, and the patient does not get disgusted with the drug as he is apt to do when the quantity taken is two or three ounces in the same period. (Dr. Rowland, p. 41.)

Chronic Periosteal.—Dr. Basham has observed that in cases of chronic periosteal rheumatism, where the patient has been benefited by iodide of potassium, at some antecedent period he has been salivated by mercury; whereas if no salivation has previously occurred, he has found the iodide of potassium of little or no effect. This disease may depend upon the impregnation of the system by mercury, or from the syphilitic virus. If the former, iodide of potassium is the remedy; if the latter, alterative doses of some mild preparation of mercury. (Dr. R. W. Basham, p. 45.)

Scarlatina.—When coma exists after or during an attack of scarlatina, the electro-galvanic battery has been found successful, the same as in cases of poisoning by opium. At the same time a flexible tube may be passed into the stomach, and port wine and ether introduced. (Dr. P. J. Murphy, Lancet, April 1, 1854, p. 360.)

AFFECTIONS OF THE NERVOUS SYSTEM.

Cerebritis.—When fever is present, of a typhus character, don't be afraid of the symptoms of inflammation in the exhibition of wine. When typhus is present, there may seem to be local inflammation either in the brain, heart, or other organs, but this is not real inflammation, and will really be aggravated by depletion. (Dr. W. Stokes, Edin. Med. and Surg. Jour. April 1, 1854, p. 364.)

Headache.—Simple congestive headache and other painful affections of the head may be relieved by what is called 'traction,' or dry cupping. The spine, and if necessary, the whole back is smeared with spermaceti ointment. The cupping glass is then exhausted and fixed on any given spot; it moves with facility over the anointed surface, acting powerfully as it goes along. This is very useful in hysterical headache. (Dr. P. J. Murphy, Lancet, April 1, 1854, p. 360.)

Neuralgic and hysterical headache generally depends on subacute ovaritis, and attacks the left side of the scalp, shooting from the neck to the forehead and not vice versa, as in odontalgia. Use the following remedies according to circumstances: open the bowels well and regularly; use the cold hip-bath or sea bathing; a sinapism or blister to the back of the neck; belladonna plaster with a little opium in it. Tonics, as quinine in a solution of valerian; valerianate of zinc half a grain three times a day with one drop of creasote; sulphate of iron combined with valerian and ammonia, or the ammoniated tincture of valerian; morphine in doses of one-sixth or one quarter of a grain to relieve the pain, if other remedies fail. (Dr. P. J. Murphy, Lancet, May 20, 1854, p. 540.)

Neuralgia.—Where the simple carbonate of iron fails to give relief, give the subcarbonate of iron and manganese. (Dr. S. P. Speer, Med. Times and Gaz., Dec. 10, 1853, p. 599.)

Solar Plexus.—For exhaustion of nervous power of the Solar Plexus, give the following, varying it according to the requirements of individual cases: Chloroform and tincture of ginger, of each half an ounce; aromatic spirit of ammonia, two drachms; mix. Twenty-five drops to be taken thrice daily in a wineglassful of milk. (Prof. Osborne, p. 71.)

Sensation.—A case of loss of sensation from Hysteria in a young woman, aged 25, which various remedies failed to relieve, was gradually cured by the patient persevering in taking the following, in the form of a draught, three times a day: Tinct. ferri sesq. m xv.; tinct. cantharid. m. iv.; and tinct. aloes, m. xx. (Dr. Rowland, p. 68.)

Tetanus.—Belladonna may be given in large doses. Give one grain every two hours, and increase this dose to one and a half grains, using also occasionally a suppository with three grains in it. Watch the pupil; if it dilate, gradually desist from the belladonna. (Mr. Booth Eddison, Med. Times and Gazette, April 15, 1854, p. 378.)

AFFECTIONS OF THE RESPIRATORY ORGANS.

Asphyxia *of infants.*—Galvanism is most useful in exciting respiration in this condition. (Dr. Barnes, p. 266.)

Asthma.—Twenty drops of Chloroform inhaled in the handkerchief and repeated carefully, taking care not to produce stupefaction, produced marked relief in a case of asthma. (Dr. R. Reynolds, p. 63.)

Ten minims of tincture of lobelia, with sedatives, expectorants, or stomachics, is very useful in chronic bronchitis, with tendency to paroxysmal asthma.

Nervous.—Brown paper soaked in a solution of nitrate of potash and burnt in the room of an asthmatic patient will give instant relief. The following pharmaceutical paper is still better: Pasteboard broken down in hot water. four ounces; nitrate of potash, two ounces; belladonna, stramonium digitueis, lobelia inflata, all in powder, each twenty grains; myrrh and olibanum, of each two and a half drachms. Incorporate all these with the paste, divide the mass into sheets of the thickness of three lines; dry and divide in little square pieces. Burn them in little saucers in well shut up room. (M. Carrie, p. 93.)

Hemoptysis.—In hemorrhage from the lungs preceding tubercular deposit, we should not always be in haste to check it, as it may relieve congestion. We should determine the blood rather to other organs, than give direct astringents. Alum dissolved in the mouth is one of the best astringents. Take up powdered gum arabic and of white sugar, each three drachms, powdered tragacanth one and a half drachms, catechu three drachms. rose water sufficient to form sixty lozenges.

Hooping Cough.—As hooping-cough seems to be the elimination of some poison in the blood, we must endeavor to find an

antidote to it. As we know of no antidote, we are obliged to let the patient cough the disease away, guarding him against the bad consequences, and protecting him from the complications. The disease is not an inflammatory condition of any part, therefore any antiphlogistic treatment does harm by weakening the patient and impoverishing the blood. The first thing is to guard against bronchitis and pneumonia, by affording a well-regulated temperature. Then we must uphold the strength by keeping the patient well nourished. The chest may be also sponged with water once or twice a day; of remedies, the sedative, anti-spasmodic class is the best for allaying the irritability of the parts, as the preparations of opium, henbane, conium, belladona, and hydrocianic acid. Depressing drugs should be avoided, as tartar emetic and ipecacuan. The careful inhalation of chloroform deserves a trial, but only in small quantities. Splashing the chest with cold water is also valuable, taking care not to wet the head, and that the temperature of the room be warm when it is done. (Dr. R. B. Todd, p. 82.)

Let a few drops of chloroform be inhaled on a handkerchief, when the attack is felt coming on. (Dr. F. Churchill, p. 84.)

Phthisis, *Diarrhœa of.*—Give five grains of trinsitrate of bismuth combined with three grains of gum arabic, and two of magnesia, every four or six hours. (Dr. T. Thompson, p. 92.)

Night perspirations of.—Give four grains of oxide of zinc, and four grains of extract of hyosciamus, made into pills, every night for a time. Dr. T. Thomas, p. 92.)

AFFECTIONS OF THE DIGESTIVE ORGANS.

Cholera.—Immediately wrap the patient in a sheet wrung out of boiling water with a dry blanket over the sheet. The purging is to be checked by appropriate means; if it continue, with vomiting and thirst, large quantities of cold water are not allowed; but small quantities of iced water, or portions of ice. Afterwards, he may have a teaspoonful of brandy and half a wineglassful of soda-water every five or ten minutes; or ten minims of laudanum in soda-water, with or without brandy, as it may suit the stomach. A solution of the nitro-muriatic acid is usful sometimes, given with a little syrup of poppies. (Mr. Barwell, *Monthly Journal, Jan.* 1854. p. 50.)

Mix from ʒ ss. to ʒj. of the undiluted nitrious acid, according to the severity of the symptoms, in from ʒ iv. to ʒ vj. of some aromatic waters. If there be restlessness and pain, add forty minims of laudanum. A quarter of this mixture to be given every two, three, or four hours according to the urgency of the vomiting and purging. It may be given in a cup of thin gruel, nearly cold. If rejected, it may be repeated in ten minutes. No food should be taken for half an hour afterwards. (Mr. R. H. Whiteman, *Assoc. Med. Journal, Dec.* 2, 1853, p. 1063.)

1. The "rice water" vomit and purging require to be energetically subdued by quinine, sulphuric and other acids, creasote, nitrate of silver, and such like remedies.—2. In actual and threatened collapse, external warmth, stimulant embrocations, and those internal stimulants which act on the capillaries, are of signal benefit. 3. In reaction, and during convalescence, local inflammations and congestion require to be guarded against or subdued; and rational means must be adopted to restore the secretions of the liver, kidneys, and skin, but particularly of the two former. 4. Lastly, though not of less importance, the character of the fever should be modified, and a repetition of the paroxysm guarded against, by change of air, or by the administration of quinine, which, in the majority of cases, from the existence of anemia, ought to be conjoined with iron. (Dr. Cormac, *Assoc. Med. Jour. Nov.* 11, 1853, p. 993.)

Dyspepsia, *from Defective Action of Excreting Organs.*—Enjoin a light and simple diet, with water for drink, fresh air and exercise, and medicines that increase the secretions of the liver, kidney, and bowels. Blue pill and black draught do well enough for strong people. In other cases, 15 grains of sesquicarbonate of soda, and as much potassio-tartrate of soda as will act gently on the bowels, may be given. To relieve the acidity, fifteen grains of the bicarbonate of soda or the bicarbonate of potash may be given two or three times a day, two or three hours after the principal meals. At the same time keeping up a free action of the bowels by blue pill, or colocynth with henbane. If total abstinence is not feasible, the best drink is pale sherry or brandy largely diluted with water. If we have oxalic acid deposit and freedom from red deposit, the best remedy is the nitro-muriatic acid, eight to twenty minims of each twice a day in a glass of water half an hour before breakfast and half an hour before dinner. If there be a red deposit, however, from lithic acid or lithate of ammonia, give instead of the mineral acid, the carbonate or aromatic spirit of ammonia.—Sugar in this kind of cases should as much

as possible be avoided. (Dr. G. Budd, p. 98.)

Slow and Imperfect Digestion.—We must first give remedies which increase the flow of gastric juice. The diet and habits must be regulated. The stomach must not be oppressed by new bread, tough meat, or malt liquors; and bodily fatigue, and nervous exaustion must be avoided. Half to two grains of ipecacuan; three or four grains of rhubarb, or these with a grain of capsicum in a pill, may be given before dinner. Salt and mustard are also stimulants.—Ipecacuan would seem to be the most powerful of any of these. A glass of water and a lump of sugar after a meal will sometimes relieve the uneasiness. The muriatic and nitro-muriatic acid taken half an hour before meals are also useful. Alkalies must not be given, as they weaken the gastric juice. If the food undergoes fermentative changes, and sulphuretted hydrogen is given off, producing belchings like rotten eggs, half a minim of creasote may be given in a pill at the time of meals. If the fermentative change be accomplished by distensions and eructations of indorous gas (carbonic acid, nitro-muriatic acid and the stimulant dinner pills just mentioned will be useful. If the fermentative change produce lactic acid, then we have every thing taken turning to acid; in this case we must give alkalies, and before meals bismuth and magnesia, and brace the walls of the stomach with the mineral acids, especially the sulphuric. (Dr. G. Budd, p. 94.

When the food lies heavy on the stomach, as in people in the turn of life, who lead sedentary lives, give small doses of ipecacuana, from a quarter of a grain to two grains, in the morning fasting, so as to cause a slight feeling of vermiculating motion of the stomach, but not to cause nausea, and gradually increase the dose if necessary; one grain may be mixed with two grains of rhubarb, and give just before meals. Small doses of rhubarb, ginger, and pepper; one grain of rhubarb with one grain of cayenne pepper in the form of a pill, also give relief in these cases.

Painful Digestion.—Bismuth is one of the best medicines when pain or cramp accompanies digestion, and where there are no ulceration. It restrains undue secretion, and thus differs from ipecacuanaha, which promotes it. It is best given a short time *before* meals, ex. g., ten grains three times a day. (Dr. G. Budd, p. 105.)

Accompanied with Oxalate of Lime in the Urine.—A solid animal diet with little bread and vegetables, no fruit, very little sugar, or vegetable acid. Give the mineral acids. These do for oxalte of lime what the alkalies do for uric acid deposits. Give each acid separately. Give the dilute sulphuric acid when an astringent is wanted, as in colliquative prespiration, menorrhagia, hemoptysis, and diarrhea: hydrochloric acid when digestion requires assisting. The stomach liberates this acid for the purpose of digestion. Give both this and the dilute sulphuric acid before the meals. Give dilute nitric acid when the secretion requires to be increased; it is the opposite of sulphuric acid in its action. Sulphuric acid, therefore, astringes; hydrochloric promotes digestion; nitric promotes secretion. To prevent these acids acting on the teeth, wash the mouth out with a teaspoonful of aromatic spirit of ammonia in a little water immediately after taking them. They should all be taken on an empty stomach. (Dr. Bence Jones, *Medical Times*, *May* 6, 1854, *p.* 454.)

Hemorrhoids.—In useing nitric acid, the strongest possible should be procured, not that which is kept by the chemists. The best way for applying the acid is by using some instrument which will encircle the base of the tumors, hold them in their situation, and sufficiently press upon them so as to prevent hemorrhage. If necessary, any portions of the tumors may be removed, the parts wiped dry, and the acid at once applied to the surface. There are two classes of these tumors, one which is soft and vascular and very liable to bleed, and another which is firmer and which does not bleed. For the first the best treatment is the nitric acid application, but for the second the nitric acid is not sufficiently strong.—For these Mr. Lee has invented a pair of broad forceps (see diagram, page 219) by which he grasps the tumor, and a portion of it near the operator is removed with the curved knife. The cut surface is then touched with the acid or with the actual cautery, and the parts returned into their natural position. If the portion cannot be protruded, then Mr. Lee has operated in another way. A rectum speculum is introduced having a slide; the opening is applied against the tumor, and when the tumor has bulged in to the speculum, the slide is placed in the groove and the tumor firmly held between it and the rest of the instrument. A long narrow knife is introduced within the speculum, a portion of the tumor cut off and the nitric acid or the actual cautery applied. (Mr. H. Lee, p. 217.)

Mr. Steel relates a case of this disease, which he treated successfully by the galvanic cautery. (p. 220.)

TAENIA.—Give tannic acid. This we might infer from analogy would be beneficial from its action on gelatine and albumen, both of which these parasities contain. (Prof. Osborn, p. 119.)

The seeds of the pumpkin contain a fixed oil; half an ounce of this given twice a day, followed by an ounce of castor oil, has proved very effectual. (Prof. Patterson, p. 120.)

ON THE PURITY OF ALCOHOL.

BY EDWARD N. KENT.

In a recent investigation which required the use of alcohol perfectly free from fusil oil, I was led to suspect that nitrate of silver could not be depended upon as a test for this substance, and upon mixing pure fusil oil with pure alcohol, verified my suspicion. Nitrate of silver is not reduced by fusil oil, even by boiling, but it is true that alcohol frequently contains other organic substances by which nitrate of silver is reduced when mixed with it and exposed to heat and light. Most of these substances can be removed by simple distillation, but fusil oil cannot be removed in this manner, and consequently this substance constitutes the most usual and injurious impurity in all commercial alcohol. To detect its presence I find that pure sulphuric acid is the best and most convenient test, and as I am not aware that this acid has before been used for this purpose, I will proceed to describe the method of using it as a test for fusil oil.

It is well known that when concentrated sulphuric acid is mixed with fusil oil that a dark purple mixture is produced, with the formation of sulpho-amylic acid. This fact forms the basis of the test for fusil oil. When pure sulphuric acid is added slowly to *pure* alcohol, the mixture remains perfectly colorless; but if it be added to alcohol containing the least trace of fusil oil, the mixture becomes colored in proportion to the amount of impurity.

The most convenient method of applying this test is to fill a small test tube to one half its capacity with the spirit to be tested; the tube is then to be filled with pure concentrated sulphuric acid, which must be added very slowly, otherwise the heat produced will cause the spirit to boil and project the acid violently from the tube. If the spirit is impure, the mixture will immediately become colored, and if but slightly so, it is best to examine it by looking down through the open end of the tube. The color if any, becomes deeper on standing some hours, but generally a few minutes will suffice to determine as to the purity of the spirit under consideration.

I have tried the above test on spirits of different strength, from absolute alcohol to proof spirit, and find that the water in the latter does not perceptibly affect the test, when the quantity of sulphuric acid used is equal to that of the spirit to which it is added.—*N. Y. Journal of Pharmacy.*

SYRUPS OF ELDERBERRIES (SAMBUCUS CANADENSIS) AS A SUBSTITUTE FOR THE COMPOUND SYRUP OF SARSAPARILLA.

BY W. H. WORTHINGTON, OF WEST CHESTER, PA.

There being much dissatisfaction attending the use of the compound syrup of sarsaparilla in the hands of some physicians, the syrup of elderberries was recommended to my notice by Dr. Benjamin H. Stratton, of Mount Holly, N. J., who for some years has been in the habit of using it in all cases of disease in which an alterative action upon the system was desired, and for which the sarsaparilla is usually employed. In the treatment of gout, chronic rheumatism, eruptive and syphilitic affections, he has used it combined with the iodide of potassium, with marked benefit. The formula used by him is the following:

℞ Juice of elderberries, O xvj.
Sugar crystal, lb xvj.

Mix and boil to a syrup; after allowing it to cool, add to every pint of syrup one ounce of the best fourth proof French brandy bottling and keeping in a cool place.

Dose, from a desert to a tablespoonful three times a day.

Flattering myself that an improvement could be made in the preparation of the above syrup without injury, I have prepared a compound syrup of elderberries, containing some, if not all, of the most active ingredients of the compound syrup of sarsaparilla (*Guaiaci lignum and Sennæ fol.*); by this means, as I think, increasing the alterative virtues of the syrup, giving it a more marked and active character in the treatment of gout, rheumatism, &c., than it possessed without them. To this syrup may be added the iodide of potassium to suit the views of those prescribing. The formula is as follows:

℞ Juice of elderberries, O xvj.
Sugar crystal, lb.xvj.
Guaiacum wood, ℥ iv.
Senna leaves, ℥ iii.

Put the sennæ fol. and the guaiac lig. in three pints of water, boiling it down one-

half, and strain. Put the juice and sugar in a kettle, place it on the fire, and when it comes to a boil add the decoction of guaiac. lig. and sennæ fol., allow it to boil to a syrup, when it must be taken off, strained, and let to cool. To every pint of syrup add one ounce of the best fourth proof French brandy, bottling, and keeping in a cool place.

Dose, the same as preceding.

The syrup of elderberries is given to the profession chiefly upon the recommendation of Dr. Stratton, whose skill and experience as a practitioner is entitled to the confidence of his medical brethren. If, as he believes, it possesses more certain and prompt remedial virtues as an alternative than sarsaparilla, it ought to be added to our catalogue of officinal articles. The difficulty of obtaining at all times good sarsaparilla, and especially in the country, increase the claim of this syrup upon our rural practitioners, who can command with facility, and in great abundance, the material for its preparation.—*Charleston Med. Journal.*

LEAD DISEASE TREATED BY THE IODIDE OF POTASSIUM.

Dr. H. S. Swift states that the treatment of saturine poisoning by iodide of potassium, has been tried in the New York Hospital in 23 cases, and with highly satisfactory results. "In 13 instances the urine was submitted to chemical analysis, and the investigation has established the fact that the lead may be eliminated from the system by the iodide of potassium, and found in the urine. In no case was the lead detected before the administration of the remedy. The chemical analysis were made by Prof. Outram, and the results of his experiments are perfectly reliable.

"All the patients began to improve rapidly after this treatment was adopted, though they had previously resisted the ordinary means. No bad effects resulted from the long-continued use of the remedy. In two cases, as M. Meisens suggests may occur, the symptoms were at first slightly aggravated—one of them was profusely salivated while under treatment, and the other slightly so. One patient also suffered from coryza and gastric disturbance for a few days; but the treatment was only suspended for a short time. One patient was under the influence of the iodide of potassium for six months, one for five and a half, and another four months.

"In case 6, the urine was examined shortly after treatment was commenced, and merely a trace of lead was detected. The quality sensibly increased, until it was clearly shown both in the Urine and saliva; and as the patient convalesced, it disappeared entirely, and the iodede of potassium was found abundantly in the saliva. In case 5, we did not suspect the existence of lead-poisoning until after the patient had been put upon treatment for constitutional syphilis. While under this treatment, a well-defined 'blue line' appeared upon the gums. The urine was then examined, and found to contain lead.

"Of twenty-three cases treated by the iodide of potassium, sixteen have been discharged cured, and three so far relieved as to be able to resume their ordinary duties; four are still under treatment, and are gradually improving. Thirteen of the patients suffered from lead colic, complicated with neuralgia, arthralgia, &c., four had paralysis of the wrist, and in six the paralysis was general."—*New York Md. Times*, Feb. 1854.

EMPLOYMENT OF GLYCERINE IN DISEASES OF THE SKIN.

M. Cap read a notice on glycerine, which he asserted was serviceable in most affections of the skin. It penetrates easily into the pores, softens the surface, cicatrises fissures and openings. Its usage is indicated in all cutaneous diseases which fatty substances would irritate. Excellent effects have been observed from it in eczema, zona, acne, ichthuosis, and it is much preferable to the oil of Cade or the lotions of (corrosive sublimate). Glycerine can be employed simply, or added to various medicaments. It unites in all portions with water used for burns and other wounds, it preserves them from exposure to air, and keeps their edges in a supple and moist state. When it is added to cataplasms, it keeps them in a moist state, and, which is important, it prevents their borders adhering to the receiving surfaces.

Glycerine can be added to aqueous and alcoholic fluid, being also incorporated with lard, ointments, pomades, and soaps. It can serve as a basis for liniments and embrocations. It can be united to extracts, tinctures, medicated wines, and thus can serve in almost all medicinal compounds and those employed in surgery, adding to each substance its soothing, sedative, softening properties upon the tissues, and disposing them to the absorption of the medicinal substances to which it is united. This substance should, therefore, form the basis of a new class of remedies, to which we may give the name glycerol.—(*Journ. de Med. et. de Chir. Practiques*, Feb.)

TAPEWORM EXPELLED BY INFUSION OF PUMPKIN SEEDS.

BY D. LEASURE, M. D., OF NEWCASTLE, PA.

Mary, ———, aged 28, unmarried, has been delicate all her life, and for fifteen years subject to severe cramping pains of the abdomen, accompanied sometimes by obstinate vomiting. About ten years since, she noticed that she passed portions of tapeworm, of lengths varying from a single joint up to many feet, and, if the statements of the patient and her mother are to be relied on, sometimes half filling an ordinary chamber-mug. Her mother had also, at an early period of her life, been a victim to a tapeworm, which had been expelled by a secret *vegetable remedy*, probably *male fern* given her by a worm doctor.

My attention was called to Mary's case sometime in last February, while in attendance on her sister for another disease; but from some cause not necessary to mention, I did not prescribe till last week. I had intended to use the male fern or kousso, or both: but not having access to either of them in a fresh state, I determined to wait till they could be procured from Philadelphia. While thus waiting, I noticed in one of the journals a report of a case of tænia expelled by the use of emulsion of pumpkin-seeds. Curiosity, more than the expectation of success, prompted me to give it a trial. I directed a pint of the bruised seeds to be infused in three pints of boiling water, and left over night, the whole to be taken during the next day, the patient fasting in the mean time.

On the morning of the 9th of May, the patient commenced its use, and in the afternoon experienced the most violent cramps and pains in the bowels for several hours; and on the morning of the 10th she passed eleven feet of the parasite, including the head, as provedby observation under the microscope. The animal was entirely dead when voided from the bowel, and is a most beautiful specimen of a tænia.

TWINS OF DIFFERENT COLOR.

Dr. A. F. ATTAWAY, of Madison County, Geo., records the following remarkable example of this:—

Mrs. C——, a white woman, the mother of three children, gave birth to twins on the 16th of January, an interval of an hour between the births.

The first born was very dark, and had every appearance of being of African paternity. Not being willing to suggest such a thing, I tried to explain the matter, by attributing the color to cyanosis. At the expiration of one hour, the second child was born, and had very light-colored hair, fair skin, and blue eyes, which made their contrast very striking.

The condition of the mother and children was such, that they required medical treatment for several weeks, during which time I marked the great difference between the children with peculiar interest.

After the recovery of the woman and her children, seeing the African characteristics more and more developed, I asked the mother to give me a correct relation of the circumstances connected with her conception, &c.

After some hesitation, she gave me the following history of her case: She said that five days after the cessation of her last menstruation, she had sexual intercourse with the white man, whom she considered the father of the white child. Three days thereafter, making eight days after menstruation, she co-habited with a negro man, who she said was the father of the other child. She assured me that this was the only coitus she had with the negro man for more than one month after she menstruated. If this be true, she conceived at that time.

The precise period of her other conception is less definite, in consequence of the fact that she had connection with the father of the white child, at different times, during the month following he last menstruation.

Southern Med. and Surg. Journal, June, 1854.

ON A NEW METHOD OF PRESERVING ANATOMICAL AND PATHOLOGICAL SPECIMENS.

BY JOHN H. BRINTON, M. D.

The preservation of the animal tissues, in such manner as to present unchanged, their normal and abnormal relations, has ever been an object of study and interest to the practical Anatomist, the Pathologist and the Surgeon. But as yet, all attempts to retain, in an unaltered state, the size, shape and color of parts, have to a certain degree been unsuccessful.

Anatomical objects have hitherto been preserved in one or two states, either wet or dried. Both of these methods are, however, inadequate; for if fresh animal tissues be immersed in alcohol, or any other antiseptic fluid, they become blanched in color, condensed in structure, and consequently modified in size and shape. At the same time, they present inconveniences for demonstration. The method of preparation by drying is open to even more serious ob-

jections, since the parts are so shrivelled and displaced as to convey but an imperfect idea of their primitive relations.

Now, since this shrinking of the tissues and their decomposition, depend most probably upon atmospheric influence, it recently occured to me, that should I be able so to exclude the air, as to cause all evaporations to cease, I would effectually prevent, not only the desiccation of the part, but also its decomposition. Acting upon this idea, I commenced a series of investigations; the success attendant upon which, up to the present time, has led me to submit the results to the profession.

My object being to encase hermetically every portion of the specimens, I selected for my earlier experiments a solution of gun cotton in ether, and the ordinary collodion. By the means of a brush, I applied this carefully upon every portion of the external surface of the object to be preserved. The ether quickly evaporated, a thin pellicle of the cotton was left, coating the entire preparation. This process was then repeated, and the preparation finished by the application of successive layers of damarra, copal and shellac varnishes.

But it early became evident to me, that collodion was entirely unfitted for the preservation of the generality of specimens, especially for those of any size and bulk. It possesses too slight a degree of tenacity, and is liable to become fissured, and to chip off; at the same time its tendency to form white opaque layers, when moisture is present, renders it unsuitable as a transparent coating. I was, therefore, obliged to make use of some protective material, and for this purpose I selected gutta percha. This I dissolved in benzole, adding at the same time to the solution a few grains of caoutchouc in order to increase the elasticity of the pellicle. By filtering the viscid dark colored result through animal charcoal, a perfectly colorless solution may be obtained which upon application deposits a tenacious film.

This film, unlike that left by the evaporation of the ethereal portion of the collodion, evinces but little tendency to opacity; and, indeed, for all practical purposes, may be said to be perfectly transparent. The tenacity of the thinnest pellicle is very great; it possesses sufficient elasticity, is not liable to crack, and thus far has proven amply sufficient to prevent the occurence of evaporation, shrinking and decomposition; At the same time, by repeated applications of the solution, the coating of gutta percha can be increased to any desirable thickness.

To prepare a muscular specimen, as, for example, one exhibiting the relations of the arm and forearm, a limb should be selected which has been previously injected with the chloride of zinc, arsenic or other antiseptic solution. When the parts have been sufficiently exposed by dissection, the whole limb should be coated with the colorless solution of gutta percha: a transparent pellicle will then be left by the evaporation of the benzole. This process should be repeated until a layer of considerable thickness is obtained. Upon the muscular mass, the gutta percha may be applied in much greater quantity. Should opacity here result it matters little, as in consequence of the blanching of the muscle, dependent upon the previous antiseptic injection, an artificial coloring process will be necessitated. In preparations, however, of perfectly fresh muscles, or of those which have been injected with Horner's solution, this will not be the case. The layers of gutta percha having been obtained of sufficient thickness, it will be desirable to apply next a coating of collodion which has been filtered, and then mixed with Venice turpentine. This preparation possesses no contracile powers whatever, but is of great body and consistency. It splints, as it were, the specimen securely, and ensures stability and firmness.

In order to impart a proper hue to those muscles, whose color may have been affected by the preceding process, I make use of collodion stained with the wood of the Pterocarpus santalinus, (the ordinary red saunders.) The resulting color, when varnished, simulates closely that of fresh muscles. The specimen should then be completed by the application of damarra and copal varnishes. The adipose tissues, the tendons, faciæ, nervous and cutaneous surfaces will present almost the appearance of a recent dissection; the muscles alone will possess an artificial color, and even this can be avoided.

Each specimen should be mounted on a board separately, and I have found the most convenient method for so doing, to consist in the preparation first of its dorsal surface. The object should be placed upon the board, when the anterior surface, that intended for inspection and exhibition, can be finished in situ. I have also found it aviseable to keep them covered by glass cases. The period required for the preparation of an object by the above process does not exceed five days.

I have now in my possession specimens of meat which have been preserved by the preceding method 60 days, without having been previously saturated by an antiseptic fluid. In one preparation which I have examined, after removing the gutta percha coat at the expiration of forty-five days from its completion, no decomposition

whatever had taken place. The fibers of the muscle were, however, somewhat blanched, and afforded a slight odor of the benzole used in the preparation. Exposed to the air, decomposition ensued at the expiration of four or five days.

I have prepared, in a similar manner, a number of specimens, not only of muscular, but also of nervous tissues, as the brain and spinal marrow. In these no shrinking has occurred, and no evidence of decomposition exists. On the contrary, the preparations now present a harder, firmer and more natural appearance than at the date of their completion. In the nervous preparations the natural color is retained, and is visible through the transparent coatings. I am at present engaged in making application of the process to the preservation of pathological tissues, and with every prospect of success. I believe also that botanical specimens may be preserved in a similar manner, and, indeed, it seems to me not impossible, that, at some future day, an extension of this method may be rendered subservient to the preservation of meats, and all fresh animal tissues.

A longer period than has yet elapsed, is required, of course, to test fully the value of the above proceeding; at the same time the results already obtained seem to me so satisfactory, as to warrant me in laying them before the profession.—*Med. Exam.*

MEDICAL REFORM IN ENGLAND.

In a letter recently received from our friend, Dr. Simons, Birmingham, England, we find the following account of the feeling of the mother country on the subject of a reformation in medicine.—*Southern Medical Reformer.*

"The cause of medical botany is fast spreading in this country, meeting with great opposition from the faculty, but taken up and encouraged by thousands of the people. The faculty introduced a new medical bill into Parliament, with a view of crushing the cause of medical botany, but this will only bring it more before the people, for thousands of them signed petitions, which were sent to Parliament, in opposition to the bill of the Faculty, in whose practice they have no faith. A deputation of the Botanic League waited upon Lord Palmerston the other day, and found him quite favorable to the cause, which will prosper in spite of all opposition. I have practiced this system nearly eight years, and with great success, bating the license to kill in cases that have baffled the most skillful of the Faculty."

CALOMEL IN LARGE DOSES.

A nursing child, sixteen months old, was successfully treated recently, in New York city, for croup, to whom 200 grains of calomel was given. This amount was administered in ten grain doses every two hours, until the bowels were acted upon, and in the space of about three days. None of the specific effects of mercury were observed.

A case is also incidently mentioned in which a child took six drachms of calomel by mistake, without producing any noticeable effects.

We knew a patient who took through error of directions a very large dose of calomel; he said it produced an evacuation of two gallons and a half from the bowels; that is, a pail and piggin full.—*Nashville Journal of Medicine and Surgery.*

MORTALITY IN PHILADELPHIA.

During the last year there were 9,750 interments in Philadelphia and districts. The principal causes of death were Consumption, 1246; Convulsions, 543; Cholera Infantum, 399; Dysentery, 369; Scarlet Fever, 388; Typhus and Typhoid Fevers, 363; Yellow or Malignant Fever, 170; Inflammation of the Lungs, 339; Small pox 64. The total number of deaths, compared with the population, taking it at the lowest computation, 400.000, is about the ratio of one to every forty-one of the inhabitants annually, more favorable than any other large city in the United States, but still not so favorable as in London, with all its destitution, vice, and other sources of disease. —*Phia. Med. and Surg. Jour.*

THE SEEDS OF ASPARAGUS A SUBSTATIVE FOR COFFEE.

Baron Liebig has discovered that the seeds of asparagus contain large portions of tannin annalogous to that which is found in coffee, and, therefore, may be found a substitute for that delicious and universally-adopted beverage. They have been tested in England, and found to possess all the richness, flavor, and aroma of the best Mocha coffee. This will be interesting information to the consumers of coffee, as the imported article now commands an exorbitant price in our markets, while the asparagus is easily cultivated and prolific in its yields.—*Boston Med. and Sur. Jour.*

WHY DO AMERICAN ECLECTICS REFUSE TO BLEED?

We refuse to bleed, because we consider it unscientific. injurious to the constitution, and often dangerous to life. A physician who takes charge of a patient, in the course of a critical attack of disease, is bound to do every thing which will promote his recovery, and to abstain from every thing which will increase his debility, or break down that vital power upon which his recovery depends. If other physicians, though ignorance and inexperience, urge a measure which he knows to have injurious and dangerous effects, it is his duty to protest against it, in order to protect the life of the patient, as he would protect the life of his own brother, in a similar position. A physician who is governed by these moral principles, will not yield to fashionable errors, and allow the life of a patient to be sacrificed, while it is possible for him to prevent it.

There are many fashions which have prevailed in medical science, arising from ignorance and inexperience, and perpetuated by authority and example, against which intelligent physicians have arisen, and by earnest opposition and remonstrance, have succeeded in procuring the necessary reform. The barbarous fashion of cauterizing wounds, and closing divided arteries by burning with a hot iron, was the universal fashion of the orthodox practice, until the bold reformer, Ambrose Pare, protested against it, and proved, by the trial, that arteries could be closed without burning, by means of a simple ligature. Pare, of course, experienced great opposition, but was soon triumphant; and every enlightened physician of the present day should be proud to follow his example, and cooperate in destroying or reforming the errors and barbarisms of medical science.

We have not the slightest doubt that the entire medical profession will, ere long, regard the practice of bleeding sick and debilitated invalids, as not less absurd than the old fashion of applying the red-hot iron to a painful wound. A large portion of the medical profession have already condemned and rejected bleeding as a barbarism, and a still larger portion of the enlightened public agree with them in sentiment. The entire medical profession have been reforming their practice, in this respect, for fifty years past—bleeding less and less every year, as the world grows more enlightened, but changing their course of treatment so gradually that few are aware that an immense revolution has been accomplished. Twenty, thirty, or forty years ago, physicians almost invariably bled, in every case of active disease, besides a large number of cases in which chronic debility and the deficiency of blood constituted the leading symptoms. Physicians generally have learned to treat a great portion of their cases of fever, without any bleeding, and but few at the present day would be so stupid or barbarous as to resort to the lancet for an attack of cholera, dropsy, tuberculous consumption, delirium tremens, or simple insanity.

It is obvious that the general use of the lancet is going out of fashion in all civilized countries, and if this reform continues for the next fifty years, to as great an extent as for the fifty years past, bleeding will be entirely out of fashion by the end of the present century; and the old-fashioned lancet will be almost as great a curiosity to the public as the cauterizing irons from the days of Ambrose Pare.

When so great a reform as this is in steady progress, men of intelligence and practical sagacity ought not to wait for the slow progress of fashion, but to find out what is right, and to introduce it at once. The reform now in progress has been, to a considerable extent, brought about by the influence of those whose greater boldness and energy has enabled them to abandon at once an unscientific and dangerous practice.

The Eclectic Medical Reformers of America, for the past twenty-five years, have been publicly teaching and practicing the doctrine, that the blood is one of the most important parts of the human body, and one which should never be sacrificed under any circumstances. For if it would be barbarous to bleed a man in perfect health, and thus enfeeble and undermine his constitution, it is still more barbarous to bleed him when he has become debilitated by disease, and less able to endure so debilitating a measure. During these twenty-five years, this American non-depletory system of practice has been tested through all the climates of our country, from Canada to Texas and California, by thousands of practitioners, in every class of diseases. This vast accumulation of experience, has but strengthened and rendered immovable the conviction that the use of the lancet for bleeding, in the treatment of disease, is never, under any circumstances, requisite for the benefit of the patient. On the contrary, it is very well known that in fevers, inflammations, and all other diseases for which the lancet has been prescribed, the Eclectic practice has been vastly more successful than the practice of any class of physicians who resort to the lancet. Nay more; we can assert, without fear of con-

tradiction, that all over the world, the classes of physicians who have entirely repudiated the lancet, have been, without exception, much more successful than those by whom the lancet has been retained. It is remarkable that all who have rejected or laid aside the lancet—Hydropathists, Chrono-thermalists, Homeopathists, &c., continue to be satisfied with their change, and are never tempted, under any circumstances, to resort again to so destructive a measure. On the contrary, of those who have been accustomed to use the lancet, as taught by their professors, a large number are compelled by experience to diminish its use, and some even abandon it entirely; while others, dissatisfied with their results, become entire skeptics as to the value of medical science; or abandon their profession in disgust, unless they find relief in some new system. Even the most ignorant pretenders, without medical education, who merely know how to give a few vegetable remedies, and bathe and steam their patients, have had sufficient success, in many places, to secure a preference over well-educated and scientific practitioners who follow the practice of bleeding.

This universal practical superiority of the non-depletory system, over the old and bloody doctrines of the profession, is a perfect demonstration of the necessity of reform; and whenever a physician of candid mind gives a fair trial to the two methods of practice, he invariably decides against bleeding; hence a large proportion, if not a majority, of those who now reject the lancet, are individuals who were educated to bleed, and would have continued to do so, but for the results of experience. A fair trial of the comparative efficacy of the two systems was recently made by a German physician, Dr. Dietl. It has long been supposed that pneumonia was, above all other diseases, the one which most especially required the use of the lancet, and which manifested the most remarkable benefit from its application. Dr. Dietl made a fair trial upon three hundred and eighty patients, of the relative value of bleeding and tartar emetic, in comparison with the unassisted resources of nature, with the following result: 189 were treated by diet and rest alone—their mortality was 14. or 7.4 per cent.; 106 were treated by large doses of tartar emetic—their mortality was 22, or 20.7 per cent.; 85 were treated by blood-letting, and their mortality was 17, or 20 per cent. Thus, while the natural mortality of the disease, without medicine, was one to 13½, the mortality under the lancet was one to five, and under tartar emetic a little more than one to five, or nearly three times as great as when the disease was left to nature.

Wherever the blood-letting treatment has been subjected, by physicians or chemists, to a careful scientific investigation, the result has proved that it has no power to control inflammation, but, on the contrary, by increasing the weakness and irritability of the constitution, it renders the inflammatory process more dangerous and destructive.

Majendie, the distinguished French physiologist, in making the experiment upon dogs, of placing a ligature upon the large biliary duct (ductus choledochus), found that the animals were invariably carried off by attacks of inflammation of the peritoneum (peritonitis). This inflammation was, of course, to be treated in the orthodox fashion by blood-letting; and following up this doctrine, he determined, by bleeding in advance, to prevent the development of inflammation entirely. But instead of preventing the peritonitis by this treatment, he found the attacks to be greatly aggravated. Reducing the blood to a more serous condition only made the peritonitis worse, and when, in place of the blood withdrawn, he injected water, the effects were only more injurious and fatal. Hence he honestly concluded that this mode of impoverishing the blood by the lancet was injurious. He says: "I do not hesitate to assert that the anti-inflammatory bleeding ordinarily practiced before capital operations, may frequently, according to the constiution of the individual undergoing them, help to determine the serious accidents observed to follow these operations." I myself long upheld contrary opinions to those I now mantain, but I willingly sacrifice my vanity, and acknowledge my error; if all were as ready to do so, the progress of our science would be much more rapid. Majendie declares, too, that he made a careful trial of the effects of tartar emetic in the treatment of pneumonia and rhumatism, and was entirely unable to discover that they produced any good effects at all upon those diseases, but on the contrary, tartar emetic injected into the blood-vessels of animals actually produced pneumonia.

It appears, therefore, that the two fashionable remedies, which have heretofore been so much used in the treatment of inflammation of the lungs, really aggravate the mortality of the disease. If this be the case, it is no mystery that patients who are left to the power of nature, with faithful nursing and bathing, recover so much better than those who are, after the old fashion, physicked and bled.

While the universal experience of physi-

cians who have tried both systems, is emphatically opposed to bleeding—while the ample statistics from hospitals, infirmaries, and dispensatories, are equally decissive as to the superiority of a bloodless practice, the dictates of medical science are equally plain and positive, showing that the practice of bleeding is the most irrational violation of the laws of life and health. The facts upon this subject are so well established, so entirely incontestible, and so well known to all who are familiar wi h the modern achievements of medical science, that it is really remarkable that any well-educated physician should contend for the scientific propriety of blood-letting. The scientific facts by which this question must be determined, are of so simple and intelligible a character, that every intelligent citizen, when they are properly laid before him, may understand them as well as the greatest luminaries of medical science. Upon this subject, every man and woman of our country should be correctly informed, and prepared to protect themselves and their families against the formidable consequences of bleeding. The parent who allows a wife or child to die under this fashionable system of bloodshed, cannot easily excuse himself to his own conscience. for the weakness or ignorance which lead him to submit to so barbarous a practice.

Why should the blood of the human body ever be spilled or thrown away? Is it a superfluous or poisonous substance? Or s it an essentialpart of our bodies? Every one knows that the blood is an essential part of the human constitution; as essential as the heart or the lungs, the muscles, nerves, or brain. If a man in perfect health should voluntary bleed himself, and throw away a gallon or two of his blood, he would be regarded as a maniac; and if he did not fall into some lingering form of disease, it would at least be long before he could recover his wonted vigor. The destruction of the blood would be as absurd and mischievious as the destruction of a portion of the flesh. When the flesh is extirpated by the knife, the injury is local; but when the blood is destroyed by the lancet, the injury is general, affecting all parts of the constitution, and enfeebling every vital power. About thirty-five pounds of blood are necessary to a man of ordinary dimensions, for the functions of life. Every ounce of blood which he looses from his proper supply, is a deduction from the general vital force of his constitution, and renders him more liable to become the victim of disease. Bleeding, therefore, is nothing more than a direct attack upon vitality.

The chemical examination of the blood, by the most distinguished pathologists of modern times, gives the most ample demonstration of this view of the subject. The blood consists of a clear albuminous and saline fluid, called serum, holding in suspension an immense number of invisibly minute red globules, which red globules constitute one eight of its entire mass.—These red globules are the sources of the peculiar stimulating vitalizing power of the blood in all our organs. Take them away, the serous fluid which remains is incapable of sustaining human life; diminish their quantity, and in proportion to their diminution, the constitution becomes debilitated. It has been shown, by a vast number of examinations of the composition of human blood, that all persons of vigorous constitutions, and vigorous health, have a large amount of globules, or a richer constitution of their blood, while those of feeble, nervous, excitable, scrofulous, lymphatic, languid, and sickly constitutions, have a more impoverished blood; or, in other words, a blood deficient in its essential element—the red globules. So uniformly is this the case, that it is laid down as a law, by the most distinguished chemists and pathologists of modern times, that when the red globules of the blood amount to one eighth, or twelve and a half per cent., the individual is in a fair condition for the enjoyment of health. When the quantity increases from one eighth to one seventh, or fourteen per cent., he is in a peculiarly plethoric and vigorous condition, in which condition his temperament is active, his muscles vigorous, his brain capable of great exertion, and all the functions of life capable of being carried on with a remarkable vigor. In this robust condition, he is less liable to fatigue, less liable to nervous agitation, and dangerous diseases. On the contrary, when the proportion of globules in the blood sinks from an eighth to a ninth, or eleven per cent., the individual falls into a state of debility, and is much less able to undergo severe labor, or to resist any tendency to disease. When the blood becomes still more impoverished. greater and greater debility ensues, and under the ordinary circumstances of life, disease becomes inevitable. The supply of food being defective, each organ is imperfectly nourished, and whenever one organ is brought into very vigorous exercise, it withdraws from other organs what is necessary to mantain their activity. Thus, if the debilitated individual engages in a course of study, he debilitates his muscular system; if he engages in manual labor, his brain becomes inactive, he grows dull and stupid; if engaged in close and sedentary application,.

he becomes dyspeptic; and if his constitution is unable to sustain them; in short, for want of blood, the vital actions become feeble and unbalanced, the individual degenerates in his mental and physical powers, and if no other form of disease is fastened upon him, by local irritations, he gradually tends to a consumptive or scrofulous condition. Hence the immense mortality of consumption, which in most of our cities sweeps off one sixth of the entire population. Yet, no one ever died of tuburculous consumption, without going through this previous course of degeneration of his blood. The immense fields of medical practice are mainly supplied with their victims from the class of constitutions which have fallen below their normal standard of vitality, and lost their due supply of blood. Few, indeed, are attacked with disease who have mantained the normal composition of their blood, and whose vital powers are sustained by twelve, thirteen, or fourteen per cent., of the red globules. Such being the facts, established by the researches of Andral and Gavarret, Majendie, Simon, Becquerel, Rodier, Denis, Lecanu, and a host of other chemical pathologists, it becomes obvious that the great duty of physicians in the preservation of health is, to sustain the normal composition of the blood, and to prevent any impairment of the vital force which resists disease. Knowing that if this normal composition of the blood could be kept up, consumption, scrofula, and a host of similar diseases of debility, would become impossible, it should evidently be the duty of the physician to increase, and not to diminish, those globulous elements of the blood, which are so essential to life, and which never produce any morbid effects.

The evils connected with the blood, arise from degeneration and impurities which nature is vigilant to remove. For this purpose she uses the lungs, the kidneys, the bowels, and the skin, to burn up and evaporate, or to wash away and remove all noxious elements which impair the health and vitality of the blood. These organs as arranged by the all-wise Creator, are perfectly competent to regulate the blood by removing its impurities, and by discharging any element which is in excess; and while these organs perform their duty properly, it is impossible that the blood should fail to be pure and healthful. If there is any departure from the standard of health, the rational physician, knowing its cause, stimulates some of the flagging organs to a more vigorous performance of their duty, and after he has properly roused the action of the skin, the bowels, the kidneys, the liver, and the lungs, health is speedily restored. But he who follows antiquated fashions, rather than the lights of modern science, instead of purifying and renovating the blood, through the organs established for that purpose by the divine wisdom, inflicts a wound upon the veins, and barbarously spills and destroys the blood, because he has no the skill or the patience to renovate its composition, in accordance with the laws of nature. Yet, what is to be gained by destroying the blood itself, when it has fallen into a morbid condition? After a portion of the blood has been drawn, the remainder is in the same morbid condition as before, while the vital power of the constitution is impaired, just in proportion to the amount which has been lost.

The globules, which are the essential element of the blood, are the product of a mysterious vital power which operates slowly, and are very difficult to regenerate, while the more worthless, the impure and morbid constituents of the blood are rapidly reproduced. Water may be absorbed from the stomach and bowels, to fill the blood-vessels, in a few minutes,—the albumen may be regenerated in a few days, while the inflammatory and morbid elements of the blood are capable of more rapid production than any other constituents. Thus, after bleeding, we find that the character of the blood is invariably deteriorated; it has less of the vital globules, is of a more serous or watery constitution, and in the majority of cases, has more of the inflammatory and noxious elements, with less vital power to resist their formation. Why, then should a physician ever bleed? Why should he co-operate actually with the disease? Why should he render the patient pale, feeble, and bloodless, when the disease is already accomplishing the task with sufficient rapidity? Why should he attack and destroy the healthful life-giving portion of the blood, when it is only the inflammatory and noxious elements which he is required to expel? Why should he enter the citadel of life, and turn out its garrison, the red globules of the blood, instead of expelling its enemies, the inflammatory, disorganized, and decaying substances, which nature is striving to expel? Why should he not assist the powers of nature in expelling noxious substances through the bowels, kidneys and skin, and leave the life-sustaining element in the blood, which enables the patient to resist the ravages of disease, and enables him, when the disease has subsided, to rise speedily from his bed, and resume the active duties of life?

Even supposing the patient should survive the double attack from his disease and from the lancet; supposing that he has retained blood enough in his veins to endure the painful and prostrating attack, he recovers with an exhausted constitution, and it is long before his cadaverous and trembling limbs assume the appearance of health. Long years afterward, he has occasion to refer back to that dreadful attack of fever which shattered his constitution, from the effects of which he has never recovered. But probably he is not aware, that the permanent injury to his constitution arose, mainly, from the loss of blood. and that had he been treated in a rational manner, he would have carried through his attack a sufficient amount of blood to have resumed, in a week or two, his wonted habits, with the vigor of limb and the elasticity of spirits which he had formerly enjoyed, and an equal prospect for a long and happy life, since no important portion of his constitution had been lost or greatly impaired.

If such be a fair statement of the ordinary effects of bleeding in medical practice among vigorous constitutions, what is it among the delicate and feeble? To all of feeble constitutions, the depletory system is a speedy and effectual mode of breaking down what little vitality they have, and inviting the early approaches of death. It is not possible for those who have already less than the necessary amount of blood, to lose any material quantity of their vital resources without the production of disease. The pale, feeble, bloodless invalid—the delicate, nervous, and consumptive individual, who fancies himself to enjoy tolerable health, because he is not yet confined to his bed—the dyspeptic, melancholic, languid individuals, whose relaxed muscles are incapable of performing one fourth of the task of a day laborer, who never enjoyed the glorious consciousness of luxurious health and overflowing vital power, are capital material for the devastations of the lancet. As the raw conscripts of Napoleon were considered mere food for gunpowder, so this immense class of feeble constitutions has been, in times past, the food for the lancet. And medical men generally, until a few years past, have so commonly broken down that vitality in consumptive constitutions which they should have built up and renovated, that the idea has become almost immovably fixed in the medical mind, that consumption is an incurable disease. It was, indeed, incurable, when the physician, with lancet in hand, exhausted the vital power, and hastened the patient to his grave; but under the more rational system, which not only preserves, but builds up the vital power, not only is consumption curable, in large proportion of cases, but a large number of diseases which end in death under the depleting system, end in the full restoration of health and vigor, under the treatment which preserves the blood—the circulating life of the body. *Medical Sketches, No. 2.*

THE MURDER OF THE INNOCENTS.

If swill milk factories had existed in Judea in the days of Herod, that potentate would have been spared the trouble of sending armed men over the country to murder the children, and his fame might have come down to these times redolent of the odor of sanctity instead of reeking with infamy.—Had he operated in a legal manner, as our modern poisoners do, his own design would have come quite as near success, and Rachel would as certainly have mourned her children, though without heaping curses upon the head of the Tetrarch. The bills of mortality in this city present a uniform report from week to week, of sixty per cent. under the age of two years, the mark fixed by Herod for his slaughter. It were preposterous to assert that this excessive infantile mortality is natural or necessary.—It arises from many different causes, all or at some time or other under human control, and all the result of ignorance, carelessness, or willful wickedness. Of the varied causes we propose at present to advert to a single one—the use of poison sold throughout this city under the name of milk.

At the foot of the Tenth avenue there exists a great distillery, of itself an intolerable nuisance, but so strongly intrenched by the wealth and influence of its proprietors that all the efforts to break it up have failed. It has been presented by the Grand Jury we believe more than once, but no law has been found strong enough to put a stop to it; probably because of the magnitude of the nuisance, as the man who robs by millions is likely to go unpunished, while the ragged pilferer of a dollar gets his full allowance of justice. But it is not in its immediate filth, and stench that this distillery is most pernicious. Its ultimate effect, the substance it produces and sends all over the city in the form of poisoned milk, is a curse of much fearful nature.

We have heretofore described the premises, the stables, cows, milk and other matters thereabout; but an official report just made to the Health Officer by the Sanitary Inspector, which we print in another column, is worthy of attention not so much for new facts as for recalling those hereto-

fore set forth in Grand Jury presentments and Police Reports. The Inspector found in three rows of stables reaching from Tenth to Eleventh avs., more than fifteen hundred cows, each one tied in a stall but three feet wide, surrounded with filth, panting for air, and nearly all of them in advanced stages of disease. These cows are fed exclusively on warm swill, made for the purpose in the distillery. The Inspector says the stench in which the cows live was so potent that his assistants were forced to quit the stables for a time in order to recover from its sickening effects. These poor diseased animals are milked twice a day, and the nasty liquid that comes from them is doctored with chalk, burnt sugar and other drugs, until it has the appearance of good milk, and is then put into wagons labeled "Westchester County Milk," "Pure Country Milk," and other lying devices, and sold throughout the city. Of course, the greater portion of it goes to the poorer classes, those who through ignorance or inability cannot be sure of getting real milk, and put up with any white liquid that may be offered as such. And it is from these classes that the mass of infant mortality is returned. The cows in these stables are owned by a hundred or more different men; the owners of the distillery receiving for stable room and swill, nine cents per day for each cow.

We take it that no stronger evidence of the respect of our people for law can be required than the simple fact that with a full knowledge of the above facts, they have neither burned the distillery nor the stables, nor lynched a single one of the heartless creatures engaged in this wholesale destruction of children. No words of condemnation are equal to the enormity of their offence. If they were to distribute through the town a solution of prussic acid for Croton water, the crime would be none the less heinous than the selling of such reeking corruption under the name of milk. Suppose the fifteen hundred cows yield but two quarts each per day; more than 24,000 quarts of the venomous mixture will be sold weekly. It would be safe to calculate that from seventy-five to a hundred children are killed every week by having this "pure country milk" administered to them, while hundreds of adults are afflicted with fevers and scrofulous complaints springing from the same cause.

Now the question is, Shall this enormous villainy be longer tolerated? The Board of Health have full power to sweep the business out of the city. It is their duty to do so. All the bone-boiling establishments, hog pens and slaughter-houses combined, are beneath notice as compared with this diabolical milk business. It should be uprooted at once; the cows driven out of town, the stables torn down, the distillery stopped, and the whole gang of men concerned in the trade punished as severely as there is law to warrant.—*N. Y. Tribune.*

Part 3. Editorial.

EXCELSIOR!!

He who designs entering a profession, should aim to stand in its highest rank. If he considers such a hope absurd, he ought to give it up at once, and try something in which he can excel. To attain a position among the first class of any profession, does not require great genius—it requires only untiring, unconquerable fidelity of application. Thus, in the medical profession the great majority are not industrious students—after they graduate, they rather decline in their scientific knowledge, except in practical matters, and even in those they generally make few improvements. Hence, any young man of fair abilities may be sure of attaining a high and honorable position if he faithfully adheres to his profession and continues to increase in his knowledge by diligent study.

But all his diligence would produce a poor and barren result, if at the outset of his course he placed himself under the guardianship of those who say to the human mind, "thus far shalt thou go, but no further." In other words, if he studies with professional bigots who tolerate nothing but what they teach themselves, and if he graduates in certain colleges, where he is required to give a solemn pledge to adhere throughout his life to the doctrines of his professors, and to surrender his diploma whenever he deviates from what he has been taught, he may as well surrender all idea of taking an elevated position in the *true healing art*. He may please his professors and gratify a certain clique, but he can never satisfy his own conscience that he has done the best for his patients in the sight of Heaven.

Colleges which exact such pledges have only one motive. They are conscious that their science and practice are behind the times, and that their pupils will not be restricted to their narrow circle of ideas, after they have been introduced to thoughts and principles of a nobler character. Hence they seek to stifle free investigation.

In the Eclectic Medical Institute, no such pledges are exacted, for the simple reason that the Faculty, knowing that they are in possession of truth, believe that their truths do not need to be bolstered up by law or by pledges. They exact no pledges, for the same reason that the mathematician exacts no pledges to believe in his multiplication table, and an astronomer exacts no pledges to believe what he shows by his telescope. If the Faculty cannot show the superiority of their practice by clinical treatment, they do not ask belief in its excellence. If their physiological and therapeutic doctrines cannot be established by scientific experiments and by facts, they are willing they should pass away and make room for something better. They pursue the even tenor of their way *as scientific teachers*—they do not consume the time of their pupils in useless discussions and harsh denunciation of educated gentlemen who differ from them in opinion. They are content to teach their pupils the following great and philosophic improvements in medical science, knowing that those who attend their lectures invariably participate in the hearty enthusiasm which is excited by the possession of such truths.

1. They show that consumption which sweeps off about one-sixth of the human race, is not an incurable disease, and has been so regarded only because its medical treatment was formerly the very reverse of what nature demanded. On the contrary, when rightly treated in a constitution not too much undermined, it is generally curable if treated at the proper time.

2. They show that the most terrible epidemic of modern times—the cholera, which has swept off more than fifty millions of the human race, is not intrinsically the formidable disease it has been supposed, as its mortality under Eclectic treatment does not exceed five per cent. A mortality of thirty, forty or fifty per cent. can only be regarded as evidence of the incompetency and errors of the medical profession. They teach their pupils to produce better results.

3. They repudiate the melancholy idea into which so many of the medical profession have fallen (after witnessing the failures of medical practice,) that all art is impotent in the *cure* of disease, and that it is doubtful whether the medical profession is of any real utility. On the contrary, they know that the true medical art—such as they demonstrate—an art based upon ample experience, reduces the natural mortality of disease to a very trifling amount. They show that pneumonia, bilious fever, scarlatina, puerperal fever, cholera, tetanus, rheumatism, peritonitis, dysentery, &c., which are universally regarded as formidable diseases, and which are productive of a very great mortality, are not really to be considered formidable when rightly treated, their mortality becoming *a very small amount*. Even cancer and hydrophobia, diseases commonly considered by the profession incurable, they prove to be amenable to medical treatment by showing the living examples of their success, in curing those diseases which nature never cures.

4. They show that the science of therapeutics and materia medica is but in its infancy—and present in their lectures improvements which revolutionize its character, but which are probably only a prelude to still greater improvements. In Physiology, too, they show an immense field of investigation, and present new discoveries which completely revolutionize the previous philosophy of the human constitution.

The motto of the Institute is still "Excelsior," and the ardent minds of young America are invited to unite with the Faculty in their independent position, and their onward march.

The finest and most liberal minds of the medical profession are and have been in different places struggling for some one or more of the reforms advocated by the Insti-

tute. Many of its improvements in practical medicine are slowly making their way into the prevalent system of practice, but nowhere under the old authorities of the profession is there any such systematic effort for improvement, or such a concentration of improved therapeutics physiology, surgery and materia medica. B.

HINTS TO MEDICAL STUDENTS.

Many young men are deterred from attending medical colleges by very erroneous views of their character and utility. How common is it for young men who design entering the medical profession, to spend two or three years in negligent, inefficient study, or reading, as it is called, in the office of a physician, and under false views of economy, attend only one course of lectures at a medical school prior to going into practice. Thus, with a very imperfect education, they proclaim the fact to the world that they are willing to occupy an inferior rank, and do not respect themselves sufficiently to rise to the common level of professional respectability. The community know that any faithful student of his profession can obtain the degree of M. D. if he deserves it, hence public opinion will always recognize the man who fails to graduate in his profession as belonging to an inferior class. There are some fine physicians rich in practical knowledge of their profession, who have injured themselves by this mistake at the beginning.

And yet the majority of those who occupy this inferior rank, have really made as much sacrifice of time and money for their present position, as would have been sufficient to place them in an honorable standing—there was no real economy in the course they took. Every one who attempts to study medicine without studying it thoroughly in a good medical college, *loses both time and money by the operation*, as well as *professional respectability*.

For proof of this assertion, we refer to the universal experience of students and professors; according to this experience, the four months of a college session teach a student and impress upon his mind more than he generally acquires in twelve months of private study; hence by attending one session he saves the time and cost of eight months study. If his time is worth thirty dollars a month, (and if it is not, he had better never think of the medical profession,) the saving of eight months is the saving of at least $240, and he can judge for himself how much his board and clothing for eight months will amount to. Or, to view it otherwise, it shortens his time of preparation eight months, and enables him to begin his profession honorably eight months sooner, thus gaining eight months of profitable business and income, in place of eight months of expense, and if he cannot earn $240 in eight months' practice, he may consider himself a failure.

What is the cost of this course of lectures which saves him so much money and time? If the cost was $250, he would make money by paying it so as to save time—but, on the other hand, the most expensive schools in the country do not charge much over a hundred dollars *for all* their tickets for one session—consequently, it is cheaper to attend the most expensive schools in the United States, including the cost of travelling, than to dawdle away time in private reading, without collegiate advantages. But the expenses of education by the generous policy of the Eclectic Medical Institute have been reduced to what may be called almost nothing—for the sum of twenty-five dollars for a course of lectures is not more than the student would pay in all cases to his private preceptor for one year's tuition, either in money or in services. Indeed, he will hardly get any valuable instruction from a well educated preceptor for less than fifty or a hundred or a hundred and fifty dollars a year, according to circumstances. Hence, instead of looking upon colleges as too expensive for a poor student, they are in reality the only good chance a poor student can get, unless he expects to get along for nothing, living from hand to mouth, reading at odd hours, and finally putting up his name before the public as an unfinished doctor.

eager to do a cheap business for poor devils like himself—crawling along through life in a subordinate position, when he might just as easily stand up in an honorable equality with his professional brethren.

This lazy way of crawling into the profession, reminds us of a dialogue between an old fogy countryman and a "Young America" Yankee. Fogy boasted of his economy in not paying railroad fare which he saved by walking twenty-five miles on foot. "Well, now," said the Yankee, "I don't call that economy. If I had a half dollar, I would pay my fare and go to town fresh and bright and clean, and save six hours by the operation; but if I had'nt one darned copper, I'd work about two hours and a half at a wood-pile to earn the fare, then I'd go to town in an hour like a gentleman, and make a few dollars in the way of business, while you were sweating and grunting half way along the road, if you did'nt get stuck in the mud."

This illustrates exactly the difference between the young men who attend a medical college and those who neglect its advantages. The college saves time and money like a railroad, and the old fogies who trudge along on foot will spend more on their way, but come out dusty, muddy and shabby at the end of the road. N.

THE AMERICAN MEDICAL ASSOCIATION.

The editor of the Memphis Medical Recorder, after speaking of his being present at the late annual meeting of this body, says: "But we think it will become necessary to make some changes in the plan of operations. As the meetings are now conducted, the principal discussions are upon subjects of no scientific or professional interest; and the speakers are young men, giving vent to sudden and clamorous outbursts of irreverent declamation." "*So grave a body*," he jocularly adds, "with so short a session, should not waste precious time in listening to those who have nothing to say We were surprised to witness an excitement upon the indifferent question as to the place of printing the transactions, which gave rise to some very amusing explosions of eloquence, while few seemed to attract any to the materials of which they are to be composed.

No paper of any importance was read in extenso. In some cases, indeed, the main essay was not present, and in others, not yet written. In one instance, an extemporaneous speech was made by request, on the great questions connected with yellow fever, and which is to be written out for the forthcoming volume. The speech embraced little that was new, and most of that little was based upon false data."

We have not seen the New Jersey Medical Reporter since the last meeting of the Association, but if it fulfills the promises made while under the editorial charge of Dr. Parrish, it must contain some things not very pleasant to Dr. Parrish's present neighbors.

At one time, we had great hopes these subterraneous rumblings and mutterings portended a shaking of the upper strata of the old school practitioners, which would lead to a better state of things, and admit of progress in opinion and practice; but the *little animals* are so easily frightened by the bayings of the watch dogs, that we almost despair of any act on the part of the underlings which will result in their freedom from the tyranny of the leaders. But the *people* are getting to read Medical publications, and the solemn farce that has been so long and so pertinaciously played must in time come to an end.

P. S. Since the above was written, the following, in Dr. Ramsay's Blister and Critic, has arrived:

"AMERICAN MEDICAL ASSOCIATION.—The above body met at St. Louis. We hear Crittendon was hissed: Condit killed off, the d——l was to pay, and a perfect smash up. Nothing done as usual. Georgia had no delegation. We are glad of it—the game is a bad one, but we hope it will be better after a while. The body has never done the Southern profession any good, and we think the Georgia b'hoys are getting their eyes open. These jollification parties

are too common anyhow; when *liquor* goes in. science walks out. Great world, and powerful Doctors"! C.

SIGNS OF THE TIMES.

Medical Reform is moving onward, notwithstanding the *cacoethus loquendi* prompts too many abortive attempts to establish medical schools—and old physic is dying out in one direction as it is reforming in another. The old school institutions in Ohio are in a consumptive decline. Not only the Medical College of Ohio, but the Cleveland and Columbus Schools are in "the *sere and yellow leaf*" meditating on by-gone glories—there is not one flourishing old school institution in Ohio, notwithstanding their enormous expenditures for brick and mortar, and not one that can draw six pupils together for a spring session. The University of New York, (medical department) for reasons best known to itself publishes no catalogue, and it is understood, that its professors derive no revenue from their chairs, although they boast of the name of MOTT, as a surgeon. The new school under the auspices of Prof. HORACE GREEN is on the road to moral independence—as the old fogies could not quite put Dr. G. in Coventry, they have to take him as he is. The Chicago and Ann Arbor schools give evident signs of independence. Prof. ALLEN of the Michigan school uttered some very manly sentiments in his introductory lecture, expressing his contempt for medical authority so plainly that the medical society have denounced him for heresy. The Geneva (N. Y.) Medical School has given up the ghost. The two medical schools that were to have opened sessions at Pittsburgh last fall, were both blighted before birth. Another little medical school has been started in Vermont at Burlington, endeavoring to derive a little vitality from assurances that it was a regular *congregational* affair of unquestionable orthodoxy!!! which, however, did not attract a score of students. The Worcester (Mass.) College we learn, is in an embarrassed condition, since the death of Dr. Newton. The Syracuse school (we have been informed) had a very *small* class last winter. and was broken up by a fire which exposed its dissecting rooms and came near destruction by a mob—however, it was said, and we believe, it is still in operation. Altogether, to the best of our information, there has not been a hundred students in all the schools *professing* medical reform at the East. We have heard of a Physopathic or quasi Thomsonian school in the city of New York which assumes the pompous title of Metropolitan, in which, as we are informed, two professors out of the promised six attended—and twelve students were in attendance—seventeen diplomas were distributed at the end of the session!!!! Such establishments find their true level in public opinion. Physopathy or Botanico-Medicalism has found its level in Cincinnati—the places that knew it once, know it no more—its former emporium on Third street is now the dining room of the Winne House, and its cast iron sign ornaments the wall of a warehouse. Its next resting place has been abandoned, and is now occupied by Prof. Mussey and the Miami school, and over its latest repository is the sign of the "Rover Cadets." We suppose, however, it may be visible to the microscope as the cold weather returns. In the South we know of no reformatory school but one in Georgia, which attracts small classes (we do not know their number) and which honors *Samuel Thomson* as the "Great Heresiarch" of medicine, thus keeping alive a fragment of Phisopathy.

Upon the whole it is obvious that the old profession agrees to feel the outside pressure, it is dying out and slowly reforming. While botanico-medicalism and half equipped schools fail to satisfy the public mind—the manly liberal and judicious course of the Eclectic Medical Institute has been sanctioned by the public, and it is now more than ever the sole representative school of the American System of Medicine in contrast to the European system which still governs the colleges and societies. Meantime the Eclectic publications are carrying

the truth into the minds of the medical profession, and thus creating a true revolution. The following letter from the Ohio State Journal illustrates the progress of candid minds in professional reform. B.

"The American Eclectic Practice of Medicine—Dr. I. G. Jones.

"It affords us great pleasure to publish the following letter, from a source entitled to high consideration, to the author of the volume already noticed in the *Journal*. To the Doctor it must have been gratifying as it was unexpected—both being entire strangers to each other. It bears the impress of great purity of purpose, and the highest sense of professional honor."—*Ohio State Journal*.

"Weverton, Md., Dec. 13th, 1853.

"Prof. Jones—*Dear Sir:* I received the first volume of your Practice in due course of mail, after ordering it. I have carefully perused the greater part of it, and cannot well refrain a word of gratification. I have read it with infinite pleasure, in fact, much more than *profit*, not that I disagree, but that from observation and experiment I had already arrived at most of your conclusions and modes of treatment.

"Twelve years ago I graduated an Allopath, but so dissatisfied was I with the crude theories taught, and the uncertain and *un-scientific* application of remedial agents prescribed, that I conscientiously could not take upon myself the responsibility of the lives of my patients. I engaged in other pursuits more congenial, till about five years ago, I was induced by a friend and practitioner, who had thrown off the trammels of the school, to enter partnership with him. And now upon reading your book, I find myself an "Eclectic," full fledged for the flight.

"In Intermittent Fever, my treatment is precisely the same as yours. I at first tried quinine alone, and found sixteen grains would arrest the paroxysm. In my efforts to save so costly an article, I then combined a less quantity with opium, hyosciamus, stramonium, &c, and succeeded finally.—During the past fall I used the prussiate of iron with it, and have found that from eight to twelve grains of quinine, with as many of iron are equally efficient. I have treated several hundred cases annually, and never with more satisfaction than this season. There is one class of patients you have failed to provide for, in this as well as in billious fever,—those who cannot bear quinine. For such I have added more iron, and digitalis or some other powerful sedative to a less dose of the quinine, and arrested the Fever without any unpleasant effects.

"With regard to your suggestions of the cause of intermittency, I am not prepared entirely to coincide; perhaps we shall never arrive at a certain knowledge of it. The laws of nature, both animate and inanimate, is periodicity,—we have alternate day and night, winter and summer, vegetation and decay—we eat, sleep and labor periodically, the heart alternately contracts and expands, we inhale and expire. All health is made up of a sucession of alternate movements, and why may not the same law govern diseases, not only malarial but all others. In fact I think it does—and as animalculæ will hardly be said to be the cause of periodicity in health, so I think it *highly improbable* that the *sleeping* or *waking* of "animalculæ" causes intermittency in fever of malarial origin. Else why should it be quotidian or tertian, or quartan, or intermittent, or remittent, or continued? Would it not be likely that these would have their periods of activity and repose, *regularly* every twenty-four or forty-eight hours, and make all malarial fever alike as to periodicity.

"In bilious fever, I use more purgatives than you recommend, and can hardly consent to foregoe their use without the greatest caution, in view of the fact that the system is generally overloaded with effete matter, malarial poison and acrid secretions, and the intestines being one of the most extensive excretory organs an immense amount of impurity may be speedily removed by the judicious use of mild and unirritating purgatives; yet they should be properly timed and given so as, if possible, to have their effects during the excerbation. The use of "warm water and fanning," is new, but I believe, upon the reflection, to be better than cold. I have had no chance to try it. My main remedies, however, are the quinine and iron. I give them in the remission, if I can find one, but give them any how, and make a remission. I fully agree with you, that the time of giving them "is a mere question of expediency and convenience, which should have no influence in an urgent case." I have thus treated, during September and October, one hundred cases without a death. In fact, I think no ordinary fever patient ought to die.

"Your ideas of bloodletting suit to admiration. *That* is a *sin* that cannot be laid to my charge. I never bled but one patient—took only about two ounces of blood—and if I can ever forgive myself for that, I make a full promise by the light and

experience I now have, never to do the like again. Yet, if ever I were to meet with a person having too much blood, I might abstract a portion.

"My treatment of *inflammations* is almost identical with yours, except that I have used remedies selected from the Allopathic code, to produce the effects which the more appropriate Eclectic ones more readily and perhaps less injuriously accomplish.

"I would like to say much more, would time and space permit. But perhaps you will consider this a *bore* ere you read half its lenghthened trail. I felt that there must be a cogeniality of spirits, that could have at such a distance, and unknown to each other, worked out the *problem* so nearly alike—the problem that has puzzled the medical world for three thousand years, and yet left nine-tenths of them in the darkness and mysticism of error in theory and practice. Reading your work has done me good—it has confirmed me in my conclusions, and I shall go forth another season to grapple with the destroyer with a stouter heart and a bolder hand; and perhaps this testimony, from a distant State, may cheer you on in your successful course of treating the maladies to which flesh is heir. With great respect, I am yours, truly.

"JOHN REID, M.D.

TREATMENT OF CANCER.—AMERICAN PROGRESS.

In the Transactions of the American Medical Association for 1853, we find a report in "*The Results of Surgical operations in Malignant Diseases*" by Pro. S. D. Gross of Louisville. This report is noticed, as follows by the American Journal of the Medical Sciences.

"This is a most able and valuable report on a question of the deepest interest to every surgeon; in elucidation of which, it presents all the more important facts and observations derived from the writings of the ancient and modern authors, and from the communications of numerous contemporaries, with a series of practical deductions that render it at once a faithful and instructive monograph on one of the most perplexing points connected with the surgical treatment of malignant diseases."

We are therefore fully authorized to quote the Report of Pro. Gross as presenting the brightest condition of old school medical science. The following are his conclusions:

"From the facts and statements which have now been presented," he remarks, "embracing the opinions of many of the most intelligent, experienced, and distinguished practitioners in different ages, and in different parts of the world, the following conclusions may be legitimately deduced:—

"*First.* That cancerous affections, particularly those of the mammary gland have always with a few rare exceptions, been regarded by practitioners as incurable by the knife and escharstics. This opinion, commencing with Hippocrates, the father of medicine, has prevailed from the earliest records of the profession to the present moment. Nature never cures a disease of this kind, nor can this be effected by any medicine or internal remedies known to the profession.

"*Second.* That excison, however early and thoroughly executed, is nearly always, in genuine cancer, followed by a relapse, at a period varying from a few weeks to several months from the time of the operation.

"*Third.* That nearly all practitioners, from the time of Hippocrates to the present day, have been and are still averse to any operation for the removal of cancerous tumors after the establishment of ulceration, rapid growth, firm adhesions, organic changes in the skin, lymphatic invasions, the cancerous dyscrasy, or serious constitutional derangement; on the ground, that, if had recourse to under these circumstances, the malady almost inevitably recurs in a very short time, and frequently destroys the patient more rapidly than when it is permitted to pursue its own course.

"*Fourth.* That in all cases of *acute* carcinoma, or, in other words, in all cases of this disease attended with very rapid development and great bulk of the tumor, extirpation is improper and unjustifiable, inasmuch as it will only tend to expedite the fatal result, which, under such circumstances, always takes place in a very short time.

"*Fifth.* That all operations performed for the removal of encephaloid cancer and its different varieties, are more certainly followed by rapid relapse than operations performed upon scirrhus or hard cancer.

Sixth. That in nearly all operations for cancerous diseases hitherto reported, the history has been imperfectly presented, being deficient in the details which are necessary to a complete and thorough understanding of the subject in each case. This remark is particulary true in reference

to the diagnosis of the malady, the minute examination of the morbid structure, and the history of the case after the operation, as to the period of relapse, the time and nature of the patient's death, and the result of the *post-mortem* examination.

"*Seventh.* The cancerous affections of the lip and skin, now usually described under the name of cancroid diseases, are less liable to relapse after extirpation than genuine cancerous maladies, or those which are characterized by the existence of the true cancer-cell and cancer-juice.

"*Eighth.* That although practitioners have always been aware, from the earliest professional records, of the great liability of cancer to relapse after extirpation a great majority of them have always been, and still are, in favor of operating in the early stage of the disease, especially in scirrhus, before the tumor has made much progress, or before there is any disease of the lymphatic ganglions, or evidence of the cancerous cachexy.

"*Ninth.* That many cases of tumors of the breast and testicle, supposed to be cancerous, are in reality not cancerous, but of a benign character; and, consequently, readily curable by ablation, whether effected by the knife or by escharotics. It is to this circumstance that we must ascribe the astonishing success which is said to have attended the practice of Hill, of Scotland, Nooth, of England, and Flajani, of Italy.

"*Tenth.* That all operators insist upon the most thorough excision possible removing not merely the diseased mass, but also a portion of the surrounding and healthy tissues, as well as all enlarged and indurated ganglions.

"*Eleventh.* That the practice has always prevailed, and still obtains, to save, if possible, a sufficient amount of healthy integument to cover the wound; and to unite if possible, the wound by the first intention; on the ground that these precautions will tend much to retard, if not to prevent, recurrence of the disease.

"*Twelfth.* That much stress is laid by writers upon a properly regulated diet, and attention to the bowels and secretions after operation, as a means of retarding and preventing relapse.

"*Thirteenth.* That there is no remedy, medicine, or method of treatment, which has the power, so far as we are enabled to judge of its virtues, of preventing the reproduction of the morbid action after operation, no matter how early or how thoroughly it may be performed.

"*Fourteenth.* That life has occasionally been prolonged, and even saved, by operation after relapse, as in some of the remarkable cases mentioned in a previous part of this report; but that, as a general rule, such a procedure is incompetent to effect a permanent cure as a first extirpation.

In reply to all this melancholy parade of learning and *confession of incapacity* for the cure of cancer, we present the simple fact that, under the American Eclectic practice, the cure of cancer is and has been for years, one of those daily results of treatment which excites no astonishment, because it is one of the established and familiar results of Eclectic surgery.

The following table exhibiting the practice of Prof. NEWTON in cancer from September, 1846, to June, 1850, is a fair exhibition of the superiority of the American system of surgery over its antiquated European rival. In addition to the cases treated with the following results forty other cases were examined and pronounced incurable.

Where located.	*No.*	*Cured.*	*Failid*
Face and Cheek,	20	18	2
Breast, - -	25	20	5
Hand, - -	4	4	0
Womb, - -	4	1	3
Eye, - -	10	9	1
Lower Lip, -	15	13	2
Upper Lip, -	10	10	0
Nose, - -	5	5	0
Tongue, - -	2	2	0
Jaw bone, - -	2	0	2
Leg, - -	5	4	1
Scalp, - -	4	4	0
Total.	106	90	16

Males, 63; Females, 43; Married, 97; Single, under 50 years of age, 79; over 50 years, 27.

It will be an immense advance in the condition of the medical profession when the Eclectic treatment becomes known and adopted—thus reducing the mortality from cancer to a trivial amount, and saving the many thousands by whom the attack of cancer has been received as the summons of death.

B.

GEORGIA BLISTER AND CRITIC.

We wish once more to call the attention of our readers to Dr. Ramsey's Blister and Critic. We are not over partial to the application of Cantharides, but there may be those with such a peculiarity of the cuticle, that nothing else can be applied with equally good effect, and we are inclined to think Dr. Ramsey has the misfortune to have such among his patients, That he is a *humane* practitioner cannot be denied, for he vesicates with right good will, and even applies the actual cautery to those cases that milder measures will not cure. His doses no doubt, are sometimes taken with most amusing contortions of countenance, but like Scott's heroine, he puts the chalice to their lips, and with a mild, and placid smile, exclaims, "Gape, sinners, and swallow!" and the deed is accomplished.

We are getting to have daily, more hopes of the profession, for those who like Dr. Ramsey have experienced its tender mercies, and its loving kindness, are getting to repay those favors, by telling to it some important truths it long since needed to know. *We* have not designed to be remiss in the performance of that duty, and we hail with joy all who choose to unite with us in the good work. That the Doctor can be just, and even generous in regard to those who have misused him is manifested in his present attitude toward the Georgia Medical Society, and we would caution that august body in its future operations, still to remember, that justice should take the place of favoritism.

We have some hopes of, in time, getting Dr. Ramsey to become *one of us* as a practitioner, as well as an editor. We extract the following from his last:

"Eclectic Practice, *By Drs. Powell & Newton*, 1854.—We have received the above work from the press of Derby & Co., Cincinnati, Ohio. Its topographical execution is excellent, and some of the matter we admire. We are frank to confess, we do not precisely understand the bearings of Eclecticism as taught by Profs. Powell & Newton, yet, candor compels us to say, they are very courteous gentlemen, their work much better than many of the filthy mushroom and plagueriesed productions, which teem from the press of this country, which is a disgracing science, and rendering medicine a laughing stock." C.

UNQUESTIONABLE IGNORANCE.

We find the following paragraph in the British and Foreign Medico-Chirurgical Review for January, 1854. This it will be borne in mind, is the most distinguished, influential and learned Medical Journal published in Great Britain; upon all scientific subjects its dicta are received with profound reverence on account of the fact that it embodies in its pages the scientific views of the most eminent members of the medical profession. In view of these facts, we are fully authorized to quote the following paragraph as an evidence of unquestionable ignorance. The general impression which the paragraph is designed to convey, is that lobelia is a *powerful irritant*, calculated to produce intestinal inflammation, and bring on an attack of Cholera!! Dr. Litheby's personal knowledge of twenty-two deaths from lobelia is probably about as near the truth as the rest of the statement of the medicinal character of lobelia. The whole affair is evidently a piece of scientific humbug, for the purpose of demolishing Dr. Coffin and his agent; we know nothing of them, but we think they cannot be more ignorant on this subject than Dr. Litheby and the editor Dr. Kesteven:

"Poisonous effects of Lobelia.—An inquest was held on the body of a man supposed to have died of the effects of lobelia, administered by an herbalist, agent to Dr. Coffin. Dr. Letheby stated in his evidence that the case had no donbt been one of cholera, accelerated by the exhibition of so powerful an irritant. Dr. Letheby stated that, to his personal knowledge, twenty-two deaths had occurred in this country from lobelia inflata. The surgeon, Mr. Champneys, who made the post-mortem examination, deposed to having found inflammation of the stomach and rectum.—The coroner stated that he had twice sent this same individual (Stephens) before another tribunal for manslaughter for similar causes, and he had been discharged. A

special verdict was returned, to the effect that death of deceased was accelerated by improper medicines, and that copies of the depositions be forwarded to the Secretary of State for the Home Department, that measures may be taken to suppress the illegal practice of medicine."

As a further illustration of the acknowledged ignorance and backwardness of the profession we would refer to the notice of lobelia, copied in our July number, from the London Medical Times, in which its use in asthma is refered too as something new in the profession. In the same number we have copied from the American Journal of the Medical Sciences, the essay of Dr. Word on the Polytrichium Juniperum which he introduces to the profession as something entirely new, supposing himself the first to have first discovered its virtues. Thus one by one the Eclectic improvements are being introduced to the old school as *new improvements*. B.

☞ The following communication, is of that class which is extremely pleasing to editors, and to readers—terse, concise, explicit, and filled with observations and facts.

Perhaps Dr. KUNKLER will favor the readers of the Journal with the minutes of a case, together with the theory if any, which he may have, as to the method of cure. N.

TREATMENT OF PNEUMONIA BY CHLOROFORM.

BY O. A. KUNKLER, M.D.

I had occasion to use this treatment in 27 cases of pneumonia, 13 of which were between 19 and 25 years of age, the youngest 14, the oldest 63; seven were females between 22 and 30.

The patients generally came under treatment between the first and fifth day of the disease. The inhalations were commenced immediately, and of these 27 cases each took at an average in ten days, 74 inhalations; the smallest number was 27 inhalations in five days, the highest, 160 in fifteen days.

Of other remedies, an emetic was given in 2 cases, and a mild cathartic in 9 cases, besides these, no other remedies were administered during the whole course of the disease. The inhalations were made by taking a small piece of cotton or sponge and inhaling through the nostrils; each inhalation generally lasts from 10 to 12 minutes; they average from 8 to 12 in twenty-four hours; in severe cases, however, from 18 to 20 were made daily. The quantity of Chloroform employed averaged from 60 to 70 drops for each inhalation.

It is very rare that disagreeable symptoms follow the use of this remedy, such as insensibility, vertigo, or sickness of the stomach; and should any of these symptoms set in, they generally disappear rapidly upon interrupting the inhalations for a short time; in all cases there will be complete toleration after the first three inhalations. Almost immediately after the first inhalation, the majority of symptoms diminish in violence, a copious perspiration ensues, the dyspnœa, cough and pain becomes much less, and for a time ceases entirely, the system will continue under these effects for two or three hours, when the inhalations are to be repeated.

The fever generally diminishes rapidly, the pulse sinking from 110 to 70, but generally rises again if the inhalations be discontined for some time; expectoration also becomes profuse, and the patients were convalescent and able to go about between the twelfth and fifteenth day after the commencement of the attack.

The above treatment has been followed by a number of southern physicians, and with the most complete success.

Madison, Ia., May, '54.

VERY DELICATE.

A physician of this city, a few days since, visited one of his patients, and while in the house happened to recognize the aroma arising from a boiled cabbage. This caused him to denounce in no very smooth language the practice of using such "gross vegetables," and declared that this aroma would no doubt, destroy the effect of his *delicate* medicines. To obviate this he or-

dered it to be removed from the house, and gave special directions that no more should be used while he visited them. The idea of a Dutchman's olfactories being so injuriously operated upon by the aroma of a boiled cabbage, and that this could destroy the effect of that which he called medicine, was so perfectly absurd, that the lady of the house, who was the patient, ordered him to leave forthwith. We judge, however, that he has recovered from the dreadful effect of the smell of that cabbage, as he has been seen with this "gross vegetable" in his market basket several times since. We wonder if he fears that the ghost of departed medicine will be entirely driven from our city. N.

REVIEW OF NEW BOOKS.

"FRUITS AND FARINACIA THE PROPER FOOD OF MAN; being an attempt to prove from History, Anatomy, Physiology, and Chemistry, that the Original, Natural, and Best Diet of Man, is derived from the Vegetable Kingdom. By John Smith. With notes and illustrations by R. T. Trall, M. D."

The above is

"An old fashioned title page, such as presents
A tabular view of the volume's contents"

Of a work, the first and second parts of which have been published by Fowlers & Wells, and which we are happy to receive as one among the many efforts being made at the present time to enlighten the public on matters of health and longevity.

Unfortunately, we have mislaid the first part, and speak of the work only as regards part second, which continues an argument to prove that with man "his taste, in a normal condition, is the rule of his wants; he has but to consult it. To keep himself in health, he has only to acquire a knowledge of himself." Yet our author says that "no article of food in a natural condition is so calculated to rouse the appetite, when the taste has not been perverted," as the mellow fruits of genial climes, and it was by receiving such, and being guided by the unerring instincts of an unperverted nature, that "Eve was first tempted to eat of the forbidden fruit;" and the strength of this desire is cited as proof that it should be followed as an *unerring guide!*

"Nature existed before art," and "the best food for man is that which his organs are evidently adapted to assimilate without any artificial preparation." Why not assume the same premise, and reason from it in the same manner in regard to clothing? The fact is, this going back to *nature*, and prating of the laws which should govern society or man by a reference to what is assumed he was in a *state of nature*, is sheer nonsense, and greatly blinds the eyes of many philosophers, as well as hinders the advance of true science.

In regard to matters of diet, there is an abundance of proof that man can be physically and mentally developed to a goodly extent while living on an exclusively vegetable diet—but not while those vegetables are in a "state of nature" and unprepared, but rather when they have been developed by all the resources of art, and then prepared by a proper method of cooking. The experience of the world for nearly twenty years has confirmed the writer in this idea, and such the author has shown to have been the opinion of very many who have not tested the matter by personal experience.

We heartily commend the work to all, and especially to such as are, by the present high prices of animal food, almost persuaded to become vegetarians. All may not become convinced that "instinct" and "nature," in the author's sense of the terms, should be their guide, yet most, if not all, will admit that the vegetable kingdom furnishes a great abundance and variety of food, well adapted to the tastes and wants of man. C.

"A UNIVERSAL FORMULARY; containing the methods of preparing and administering officinal and other medicines. The whole adapted to Physicians and Pharmaceutists. By R. EGLESFIELD GRIFFITH, M. D. A new edition, carefully revised and much extended, by R. P. Thomas, M. D. With illustrations. Philadelphia: Blanchard & Lee. 8vo. pp. 651."

In the preface to a former edition, the author said, "The design of this work is to

present a compendious collection of formulæ and pharmaceutical processes, with such additional information as may render it useful to the physician and apothecary; and the principal aim has been to select materials most generally applicable, and of practical utility."

In carrying out this plan, the author had one very considerable advantage over many medical compilers, for in the preparation of his "Medical Botany," previously published, he had examined many works on the botanical branch of his subject, not written by "old school practitioners, and hence not often consulted by them; and in the present work, with a liberality unfortunately not often met with among his medical brethren, he has been free to acknowledge having obtained information and formulæ from sources systematically ignored by many of the illiberal and self-styled orthodox of the profession.

Another feature of the work that commends it to our favorable regards, is that not only in the Directions but in the body of the recipe, the author has entirely discarded the barbarous and absurd Latin which has been retained with such tenacity by those who frequently choose to use it as the most convenient cloak to their ignorance. In medical books, as in all scientific works, many technical and other terms must be used, which are derived from the Greek, the Latin, or the Arabic languages; and so far as there are no clear, comprehensive, and distinct synonims in the English language, the sooner they are adopted into our language and made familiar, the better for the language and the profession; but to retain the words and phrases used by the older physicians, when all medical lore was preserved only in foreign or the dead languages, is not only an indication of stolid pedantry, but often of stolid ignorance, hence we should express our gratitude to all who aid in removing these relics of folly and barbarism.

In order to carry out this common sense plan, the author has also discarded the cabalistic and abbreviated terms which have been used to indicate conditions and quantities, thus introducing definite, plain, and positive directions in these regards, which leaves no excuse for mistakes on the part of the apothecary. A change similar to this has been made *by authority* in France, and is greatly demanded here, as dangerous and fatal accidents frequently occur from mistaking the meaning intended to be conveyed by the physician's pencil or pen. This species of cabalistic mystery was perfectly consistent with the secresy and pretensions of the alchemists of the dark ages, but is inexcusable at the present time. That the student or practitioner of medicine or pharmacy may be able to understand the meaning of the abbreviations and words used, however, the writer has very properly presented a very full explanation and vocabulary, which are well worthy careful examination.

The compiler has exercised exemplary caution in his compilation as regards the number of formularies, and also in their accuracy, especially as regards *doses;* but from this general commendation, it is to be regretted that important exceptions occur.

It would naturally be supposed that the author of a "Medical Botany" would not allow important articles of the Materia Botanica to escape his notice, but even a cursory examination of the work will discover that there are quite a number of *omissions*, as well as some errors.

The *Asclepias*, which is extensively used by all classes of physicians in the South, and by Eclectics everywhere, is not mentioned except in the slightest manner, while *we* have a beautiful concentrated preparation of the proximate principle of the plant.

The *Apocynum* is mentioned, its value admitted, and directions given for making an extract; but our beautiful and useful *Apocynine* is passed by, while the *Almus Serrulatta* is not even referred to. Such also is the fact with regard to the *Embrosia Eliator*, the *Cauliphyllum Thalictrioides*, the *Crypipedium Pubescens*, the *Euonymus Americanus*, the *Gelsaminum*, *Sempervirens*, the *Helianthus Annus*, the

Leptandria Virginica, the *Rhus Glabra* the *Scutellaria Laterifolia*, the *Senecio Gracalis*, the *Stillingia Sylvatica*, and perhaps others. A lists of plants, which we have found to be of great value in Therapeutics.

Others, whose medicinal properties have been given to the world by us, and from which we have prepared Alkaloids, Resinoids, and other concentrated extracts, have either escaped notice entirely, or had their most valuable properties overlooked, and in some instances their power entirely misapprehended. As an instance of these grave errors, the author's remarks upon Podophyllum Peltatum may be cited. He says, "It is a purgative of the same character as jalap, and may be given in the same combinations." Of Podophyllin, he says:—"in cathartic power, six grains of it are equal to eight of jalap resin." An impure podophyllin had been prepared by W. S. Merrill, by precipitating the resin from a concentrated alcoholic tincture, by the addition of water." In regard to the purity of Mr. Merrill's preparation, we do not feel called upon to remark, as our townsman is abundantly able to defend the commercial and medicinal character of his preparations; but none of our practitioners, who are accustomed to use his Podophyllin would dare to give it in the large doses, directed to be used of the *pure* (?) article described by Lewis. The dose, as used by Eclectic physicians, is from ½ to 2 grains.

Did space allow, we could point to a large number of other articles which we are accustomed to use, and a great variety of indications, which we find various remedies to fill, which seem to have been unknown to the author and the editor; but we are gratified to perceive that the entire profession are giving more attention to our system of practice, and our materia medica than formerly.

We cannot recommend the "Universal Formulary" very highly to the practitioner, but to the druggist it must be of use. C.

NOTE.—To aid the profession in obtaining a knowledge of *our* remedies, their preparation, doses and uses, I shall soon publisha work containing all the desired information. N.

THORACIC DISEASES; their Pathology, Diagnosis and Treatment. By *Calvin Newton*, A.M., M.D. Fellow of the Massachusetts Medical Society, Professor of General and Special Pathology, &c. And by *Marshall Calkins*, A.B., M.D., Professor of Anatomy and Physiology in the Eclectic Medical College of Pennsylvania.

This long expected work of the late Prof. Newton has at length passed through the press and is ready for delivery. We have not had the time to give it a thorough examination; but we presume it will not disappoint the expectations of the friends of that gentleman, or the profession with which he was connected. It is a work of 440 pages, royal octavo, well executed on very good paper, with fine, open type.—Two hundred pages were written by the late Professor Newton, and the rest, embracing the latter part of the work, was prepared by Dr. Calkins, who has endeavored as far as possible, to carry out the spirit and intent of his late friend. With what success he has executed his responsible *task* must be left for the readers to *judge*. Those familiar with the writings of the late Dr. Newton will at once presume, that the portion which came from his pen will furnish a valuable contribution to the medical literature of the school to which he belonged. Prefixed to the work is an introduction of sixteen pages, containing a biographical sketch of the author. This, with the fact that a considerable portion of the work came from a gentleman distinguished in his profession, and contains his last effort in behalf of reform, and, as it were, "his last will and testament" on the subject of medicine, will render it a very acceptable offering, and a very desirable work to be in the hands of all practitioners of the Eclectic school."

This work has been noticed several times in our Journal, since it was first announced. We have not seen it, but take pleasure in copying the above extract form the notice. N.

THE

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Part 1. Original Communications.

TYPHOIDAL FEVERS—THEIR DIAGNOSIS AND TREATMENT.

BY L. C. DOLLEY, M.D.

Painful indeed has it been to me, since I have been interested in the practice of medicine, to witness the confused and to no limited extent, irrational views of the pathological character, and the most lamentable results of various measures of treatment of typhus and typhoid fevers. I am not alone in this feeling. I can hardly look in any direction, but I find those eminent in the profession, whose convictions in reference to the necessity of a new analysis of these fevers harmonize with my own. An able Southern writer recently says: "Perhaps no subject in medical literature has been so fruitful in confusion and obscurity, self-contradiction and eager controversy, as the history, pathology and treatment of fevers of this class. First, the history has been inextricably perplexed by the premature generalizations of some who have arbitrarily defined and described synochus and synocha, typhus and typhoid fevers, according to some forms of disease with which they happened to be familiar. * * * Then the pathology has suffered all the mutations which have successively revolutionized existing theories of general pathology, and these fevers have successively been attributed to alterations in the solids, alterations in the fluids, in the brain, the heart, the lungs, the viscera, and finally M.M. Louis and Bretonneau have fixed it in the glands of Peyer,—and there it has stayed, and all other appellations have given way to DOTHINENTERITIS. Again the treatment of these fevers has passed through every mode and aspect conceivable, depletion and repletion, sedative and stimulus, mercury, antimonials and quinine, and they still remain the *opprobrium medicorum:* medical statistics giving very little more support to one method than to another. All these circumstances combined to render the study of these forms of fever excessively discouraging and repulsive to the student; indeed, we believe that very few make them a systematic study, previously to entering upon the practice of medicine." (*Memphis Med. Recorder*, March '54.)

"Each day witnesses the death, in all classes of society of youths, or of persons in the prine of life, who after having always enjoyed perfect health, and while living under the best hygienic conditions, are suddenly cut down by a fever, attributed to a chill, or some other common place cause. If one enquires the reason of these unforeseen deaths, the response is alway the same, '*typhoid fever.*' This term resounds every where as a funeral knell, creating unnecessary alarm, causing fatality, and giving great embarrassment to physicians, who cannot tell what it is, nor can they tell what has become of the many fevers formerly prevailing, and of wh'ch it

has taken the place. If the typhoidian physician is asked upon what rules he basis his treatment, he does not know, but he uses blood-letting, purgatives, tonics, quinine, opium, and sometimes treats it by using nothing at all; for whether medication be resorted to or not, the disease must have its way and run its course. If the patient die, the reputation of the physician is saved by the term TYPHOID! If he recover, how noble the triumph! Typhoid fever is but a senseless phrase, no better than the *peccant humor* of olden times, which should be excluded from medical language, as "perpetuating a deplorable confusion of ideas." (*Cayol.*)

Not only on the part of many whose practice is known as allopathic, and who follow tenaciously the dictum of some old fogy author, has a fatal tendency in those cases been in no way retarded, but in many instances evidently favored; but also, and I regret to say it, have courses of medication been pursued by those styling themselves eclectics (or perchance medical reformers) which were based upon wrong views of the nature of the disease, and favored the development of certain pathological conditions, which the physician should have anticipated and carefully guarded against, knowing as I do, that the adoption of such errors and measures of treatment is not rare, and exceptional, nor confined to limited and isolated portions of the profession or the country, but rather the general rule, backed up by writers, who are more ambitious than qualified to dictate to their professional brethren: I venture to express my convictions, respecting typhoid fevers, and some measures of treatment which sooner or later must be more generally embraced. I ask a reception of my views only so far as they may appear based upon facts and observation, conclusive in their nature. It is proposed to allude to the pathology of these fevers but briefly. Neither shall I attempt to make clear and intelligible any writer's views of what he may suppose to be distinctions and peculiarities of typhus and typhoid fevers. It will be seen that I regard these fevers as essentially the same or as holding relations in their causes and phenomena so identical as to require a more common designation.

It seems that most writers have lost sight of CONDITIONS and have labored to confirm their practice and theories to NAMES AND NICE NOSOLOGICAL distinctions. They have endeavored to make separate and distinct, morbid conditions, the causes of which, have made them to mingle and mix in every conceivable manner. Can it be expected, that diseases not specific in their character, and dependent as these fevers are acknowledged to be, upon a diversity of causes, should manifest themselves in their mode of attack, their duration and in their various symptoms always the same? As well might we suppose that every surface over a vast domain of country would be farmed alike each day by the mountain and valley winds and warmed alike by the sun's rays. Why should writers make or attempt to make important distinctions between fevers, when the most essential causes and conditions relating to one are seen in the other also? And is not this true of typhus and typhoid fevers, as they are described by most of the standard authors? *It is not* difficult to produce eminent authority to show that their mode of attack is the same; that different ages are alike subject to each; that the duration of each does not materially differ; epistaxis and other head symptoms are found in both, differing in intensity according to the amount of intestinal or cerebral tendency in the case. The dry, brown or red, fissured and enlarged tongue, and incrusted teeth are common to both diseases; a variable pulse, "oppression" and "prostration," pulmonary congestion, ulcerations and sloughing from pressure, etc., are equally common in both diseases.

The only symptoms which are at all diagnostic, are the "abdominal" and perhaps those relating to the eruption. In the so called typhoid fever, the abdomen is more frequently painful on pressure, and tympanitic, and diarrhea is also much more common. But are not these peculiarities readily accounted for by supposing that, in these cases, the morbid impression is more

concentrated in the intestinal canal, and especially in the glands of Peyer and the solitary glands, or that portion of the nervous system presiding over the abdominal viscera? And may not a difference in the extent of the intestinal symptoms, and the particular part of the nervous system receiving more especially the morbid impression modify also the eruption upon the surface, causing it to be brighter in typhoid fevers and to disappear under pressure; and in typhus to be dark red or mulberry colored and ineffaceable? Do we not see scarlatina in many cases concentrated almost wholly in the pharynx constituting putrid sore throat producing inflammation, ulceration, and gangrene of the pharynx? Yet from such local symptoms we would not divide it into distinct and separate diseases. It seems not the least irrational to suppose that these and many other diseases may manifest an affinity and locate themselves upon different organs. Indeed, this view is desirable, as a means of making order from confusion and discord. When embraced, disagreement in the symptoms and diagnosis ceases; the fevers are regarded but one in their essential character, modified in their manifestations by differences in constitutions, habits, and surrounding influences.

Since arriving at the foregoing conclusions from my personal observations, I have been gratified to find, upon farther research, that similar views are advocated by a few eminent physicians both in this country and Europe. Dr. Hirsch believes that "petechial typhus, typhoid fever, lung typhus, epidemic cerebro-spinal brachnitis, bubo-plague, and angina maligna, have so close a relationship to one another that they should all be called especially 'typhus,' and be distinguished by a specific prefix." (*Brit. and For. Medico-Chir. Rev.*, April, 1854.)

Dr. Campbell, in an essay which has recently attracted considerable notice, classes all continued fevers together under the name of typhoidal fevers, of which he considers typhus and typhoid fevers as only different manifestations of similar or identical morbid action. As I regard his theory of the pathology of these fevers the most plausible of any, a brief mention of it in this connection, will be, I hope, not uninteresting. Dr. C. locates the pathology of all these fevers in the ganglionic system of nerves. He alleges that the circulation in the abdominal viscera is affected or controlled chiefly by nerves radiating from the great solar plexus; that the motions, etc., of the heart are influenced by the cardiac ganglia and plexus; the circulation in the brain by the carotid plexus and the cranial ganglia; and that of the skin by the vertebral ganglia. In typhoid fever, the proximate cause is supposed to consist of an abnormal innervation of the abdominal viscera from the morbid impression upon the ganglionic system controlling the circulation therein; and if the morbid impression is more upon the vertebral ganglion, abnormal innervation of the skin and the phenomena of typhus fever result. Cerebral or pulmonic symptoms are found in cases where the ganglia or system of nerves controlling the circulation in the head and chest are the parts affected by the morbific causes. Speaking of "typhoid" fever, he says, "There appears to be a very close relation between the amount of disease observed in any particular portion of the organism—the alimentary canal, for instance—and the degree to which it is indebted to the ganglionic system for its innervation. Thus, we find but a small amount of disease, congestion, seldom any ulceration in the LARYNX. Ulceration is somewhat more common in the pharynx, œsophagus and stomach, though still not abundant. It disappears in the DUODENUM, which receives but few sympathetic filaments, and again appears in the upper portion of the ILEUM, increasing as we descend, in direct proportion to the amount of ganglionic fibres the part receives till it reaches its maximum in the lower portion, where the nervous supply is very abundant. After which we find ulceration *occasionally* in the CŒCUM; still less frequent in the colon; till in the rectum, whose innervation is principally from the cerebro-spinal system,

it is never observed. So, likewise, with regard to the other organs. We find the liver, spleen, etc., are all liable to congestions; which can be referred to the same abnormal innervation of these viscera. From the relative unfrequency of disease in certain portions of the abdominal viscera and elsewhere, Louis, as we have seen, though admitting their diagnostic importance, is disposed to view them as secondary to the lesion in the ileum. We cannot, however, agree with him; but are compelled to regard them as the COMMON PRIMARY RESULTS OF A COMMON CAUSE which exists in the ganglionic system, and that the frequency or gravity of disease in any one of these organs, is determined alone by the amount to which the GANGLIONIC INGREDIENT mixes with or enters into its innervation, and that disease in these localities and no etiological reference whatever to that in the ileum; but when it exists, is as significant of the true pathology as is the ileitis—for it invariably indicates, both by its location and character, that its origin is ABNORMAL INNERVAVION.

This, together with another extract, will give the reader a very correct idea of Dr. C.'s theory: "Now, in the TYPHUS type, the same disease or morbific agent (its exact nature we do not attempt to define,) affects an entirely different set of nervous centres—a set of ganglia which, by their anatomical position, their internal and universal relations with the anterior and posterior roots of the spinal nerves, are plainly destined to preside over the capillary circulation of parts more superficial—the cutaneous surface. We have reference to the vertebral sympathetic ganglia; and in attributing the location of typhus fever to these ganglia, we have a ready and satisfactory interpretation of all of its destructive characteristics. The skin becomes congested and echymosed (petechial) because its circulation is dependent upon and controlled by innervation derived from these vertebral ganglia; which ganglia, being the seat of abnormal action, (perhaps paralysis,) innervation is deficient, the cutaneous circulation is retarded; in certain places there is obstruction with actual rupture and effusion, giving rise to petechiæ. The general (cerebro-spinal) system is more seriously involved in typhus than in typhoid fever, because the connection is more direct between the vertebral ganglia, (which are the seat of typhus,) and the cerebro-spinal system. In a word, then, we would locate typhoid fever in the visceral portion of the ganglionic system, and typhus in the vertebral portion."

Dr. Campbell's views possess much system and beauty, and lead us to hope that the confusion of the old nomenclature of these fevers will not long be felt, and that *typhus* will become their generical name. Supposing sufficient identity to exist between typhus and typhoid or enteric fevers to allow of their classification under the common name of typhus, I still urge the use of the term typhoid, as it is often applied, to denote the peculiar condition often accompanying ordinary fevers, which gives them more or less resemblance to typhus, in which the tongue becomes brown or black, and drowsiness, delirium, obtuseness of hearing, craving of acids, etc., are manifest symptoms. It will be observed that in this, *i. e.* my choice of a term for designating the modified bilious and other fevers, I differ most pointedly from the teachings of I. G. Jones and some others, while my position is sustained, or similar views are held by Gerhard, Jackson, Ware, and others in this country and abroad. Most culpable, indeed, does it seem to me, for writers to use or consent to the use of terms which express directly the opposite of what is meant, producing thus the worst confusion. If the word typhoid is an adjective and a descriptive word, which expresses the idea of a resemblance to typhus, why use it to express what may be said to be primitive and fundamental? thus not only distorting language, but most woefully distorting the brains of students and practitioners.

And farther, I must be permitted in this place to demur against two other views promulgated by those whose position gives them a measure of influence and authority.

First, that of Dr. I. G. Jones, that typhus is identical with congestive fevers. Had Dr. Jones's observations been more general, I may be justified in saying he could not have written as he has respecting fevers. The peculiarities of climate, etc., of central Ohio may be such as to induce modifications, which would in a measure excuse him, if he wrote for that section of country; but as his work is destined for a wide circulation, its medical philosophy and pathological deductions should have been as general. He should not have treated with entire neglect the facts and observations of others, at distances no more remote than the circulation of his own doctrines. In speaking of "typhus or congestive fevers," he says. "In the most distinctly marked cases, you will find a dry, swollen, crisped tongue, after the disease is fully developed; a pungent heat of body, and an exceedingly dry, husky, and as it were parched feeling of the skin; with all the usual symptoms of febrile action." (*Am. Eclec. Prac.* vol. ii. p. 137.) What among these symptoms is found to indicate congestion? The opposite of congestion is described. Had Dr. Jones been in practice in many other sections of country, he would have found numerous cases of fever, where the surface instead of being "dry" and "parched" and of a "pungent heat," would have indicated true congestive symptoms—a coolness or coldness of the surface and extremities, a relaxation of the capillaries, and a more or less abundant secretion of a cold and clammy sweat—instead of "all of the usual symptoms of febrile action," there might be none excepting the parched state of the tongue, excessive thirst, and internal heat. Such cases are extensively and correctly known in the profession as congestive fevers. Some of the symptoms strongly resemble those of cholera, and, like the cholera, to prevent a fatal termination, the vital forces must be aroused and a re-action brought about.

I have met with many of these cases in my practice. While the patient is suffering from the most intolerable thirst and dryness of the mouth and fauces, it is not uncommon to observe the pulse ranging from 50 to 70 per minute.

The other doctrine which I regard as out of place and erroneous, is that presented in Newton & Powell's Practice, viz. that fever is not disease, but a physiological effort to rid the system of disease. The position assumed by these writers, if I properly understand them, is, that if Eclectics do not bleed and administer poisons for fevers, they must necessarily make their pathological views differ from those who do. In dealing with allopathy, they would have us adopt the whole system or none of it; if we cannot use the lancet and calomel for fevers and inflammations, we must bid adieu to all old analyses and doctrines pertaining thereunto, no longer call fever disease, but "*an indication of disease*," and call inflammation or a condition of a part characterized by excessive heat, swelling, redness, pain and impaired function, not disease, but an evidence of disease, or evidence of a local disqualification for the performance of function. It is admitted, that a condition of a part which disqualifies it for the performance of its function is disease. Now, is not the action which causes the part to swell, to increase in temperature, to manifest redness and pain, the sole and only action which disqualifies the part for the performance of its healthy function? Does not this condition of suspended function, which is defined disease, depend upon an altered action? This altered action is called by Drs. Newton & Powell a healthy action. It appears to me that this quibbling about words results from confounding the *causes* of disease with the disease itself, or in making the cause to constitute the disease in its essence. Fever and inflammation are and should be understood as constituting the aggregate of certain symptoms, or a condition characterized by certain phenomena, necessary to a certain extent to resist and overcome physical offences and irritants. The irritant is not the disease, for this does not at once and always disqualify the part for the performance of its function, but the changes or the action which develope the symptoms do this; such

then must constitute the disease, whether it be inflammation or fever. Function-suspending action is diseased action; actions which constitute fever and inflammation suspend function, hence febrile and inflammatory actions are diseased actions. Without dwelling farther upon this point, or stopping to rectify, as I would like, other opinions relating to the pathology, etc., of typhus and typhoid fevers, which I consider not a little out of joint, I hasten to express my views respecting what I have the best reasons for believing the most successful measures of treatment.

Treatment.—The most common error in treatment committed on the part of both old and new school physicians, is in attempting to expel by active emetics and cathartics what they suppose to be the cause of the disease, which efforts serve both to diminish the vital energies of the system, and concentrate the morbid action upon the alimentary canal and other abdominal viscera, and thus make more certain what has been regarded the worst features of these fevers, viz. the enteritic symptoms. Genuine cases of "typhus" and "typhoid" (old nomenclature) fever are rare in their occurrence, excepting in seaport towns. Many physicians, after having been in extensive practice for years, are called to visit their first case, and without due thought, govern themselves in its treatment by the same principles that led them to prescribe active evacuants in the treatment of intermittent and bilious remittent fevers. If *biliousness* may have been, with the practitioner, called a bugbear of huge and portentous consequence, and particularly if his medical lineage has not been too remote from Samuel Thomson, emetics, in his estimation, are the *sine qua non*—if his predilections have been more allopathic, mercurials or other cathartics, are administered with no sparing hand, and for the consequences of either course, they might well pray to be delivered. I am happy that a few exceptions are found among the more judicious and discriminating.

The indications of treatment are, 1st. To sustain the vital forces; 2d. To diminish and counteract the tendency to intestinal irritation, (or perhaps more properly abnormal innervation;) and 3d. To eliminate through the skin and liver, such malarial and effete matter as may retard the cure; which must be done without depressing the vital forces. The indications I place in the order of their importance, and not in the succession of the remedies. In the commencement, sufficient Leptandrin may be given to move the bowels, but not powerfully, aided if necessary by enemas. In Blockley Hospital, Philadelphia, where these fevers have been treated with great success, it is customary to administer at first from five to ten grains of blue mass. Those acquainted with leptandrin will prefer it to even the mildest mercurial preparation. Tonics and stimulants must follow immediately the operation of the leptandrin. To counteract the morbid and depressing impression upon the great nervous centers, (or if Dr. Campbell's reasoning be correct, the ganglionic system,) quinine seems indispensable. To prevent and counteract the changes which are known to take place in the blood, whether they be zymotic or not, the prussiate of iron is of undoubted service. From 15 to 30 grs. of each of these should be administered in twenty-four hours, and followed up until convalescence takes place. The benefits resulting from the quinine and iron, cannot be questioned in the great majority of cases, but much less in those cases which partake of a malarious character. M. Mazade has employed quinine, 15½ grs. daily, in 71 cases of typhoid fever, and thinks it eminently useful.

In connection with the above, brandy punch (℞ Spt. vini. galli. ʒ ij.; milk ʒiij.) should be administered at regular intervals; some cases require as much as six or eight ounces a day. Under most circumstances a large spoonful every third or fourth hour will be found about the proper quantity during the greater part of the progress of the fever; but as convalescence commences, it may be used with more freedom if thought necessary. The effects of the brandy punch

in all of the cases where I have seen it administered, have been very gratifying; under its use the pulse gradually lessens in frequency, the patient becomes less stupid and delirious, the skin moist, &c. I prefer that the brandy be combined with milk as above, rather than given in any other form. In the form of "punch" much nourishment is afforded to the system, and the impression of the stimulant upon the stomach and bowels is made more congenial. It is used altogether in this form in Blockley Hospital. Dr. Todd reports eighteen cases of typhus fever treated in King's College Hospital, by the free exhibition of brandy (from a half to one ounce, every two hours) with the loss of but one. The brandy was given without milk, in connection with beef tea, etc. In all of the cases, the symptoms had become fully developed when put upon this treatment. (*Med. Times & Gaz.* Aug. 27, 1853.)

To prevent the intestinal disturbance, or to diminish it when it exists, is a great desideratum with the practitioner. The ulceration of the glands of Peyer and the solitary glands is often characteristic of the fever. If there is a natural or induced tendency of the morbid impression to the bowels, to meet the indications here, it seems there has been nothing used that will compare in its results with the turpentine mixture, prepared as follows:

℞ Ol. Terebinth. ʒ ss.
Spts. Lavend comp. ʒ j.
Mucil. G. Accacia, ʒ iv. M.

A tablespoonful may be taken every four or six hours. I have been accustomed to direct that the powders of quinine and iron (about gr. ij. of each,) the turpentine mixture and the punch be given alternately, and at equal intervals, bringing a dose of each once in from three to six hours. Various conditions will call for modifications in the treatment. When the febrile excitement is very high, the punch may be omitted, and tinct. gelseminum administered until its characteristic effects upon the nervous and muscular system are obtained. At the same time frequent sponging of the whole surface with tepid vinegar and water is of much service. Lemon juice and other acids should be allowed, when the patient desires. The use of the alkaline bath in place of the acid, as adopted by many practitioners, I regard as error of no small consequence. I have witnessed the most happy results from the acid treatment in my own practice for eight years, in all of the typhoidal cases. The practice is sustained recently by physicians of eminence. M. Vracken has recommended in typhoid fever ablutions with vinegar and water. M. Van Dromme has employed this treatment largely and with great success. Acidulated water is permitted to be drunk *ad libitum*. Of 20 cases treated in this manner, but one died. Chomel has also recommended the vinegar ablutions. (See *Brit. and For. Chirurg. Rev.*, April, 1854.) If too frequent evacuations from the bowels occur, the following pill will usually be found sufficient to control them: ℞ Sapo cas. grs. xx; ipecac grs. xx; pulv. rhei grs. xx.; pulv. opii. grs. x. M. fiat pillulæ No. xxiv. One may be given about as often as the evacuations occur.

The typhoid modifications of remittent and intermittent fevers, require or will admit of more active evacuants, though not by any means a repetition of emetics and cathartics. Usually two parts of leptandrin and one of podophyllin, given in small doses, and repeated until the bowels are moved, will be found all that is required at first. Follow immediately with the quinine and prussiate of iron, or, what I regard preferable, the following:

℞ Muriatic acid ʒ j.
Essence of tansy ʒ j.
Sulph. Quinine grs. xxx.
Simple Syrup ʒ iij. Mix.

Give a teaspoonful every hour, when the febrile excitement is not sufficient to contra-indicate. As often as the surface of the patient manifests an undue amount of heat, let it be sponged with vinegar and water. If this measure is found not sufficient to allay the fever, let 8 or 10 grs. of diaphoretic powders be given once in five

or six hours, or 40 or 50 drops of tinc. gelseminum repeated in two hours if necessary. And what I regard of very great importance in these cases also, is, that the patient's natural craving for acids be gratified. Let lemonade be taken *ad libitum*. Hard cider and many other acids need not be withheld if the patient calls for them. Under the influence of the acids and quinine, it is gratifying to see how speedily the black or brown fur upon the tongue gives place to a more natural appearance. If the tongue presents a red and dry appearance, as it occasionally does, the terebinth. mixture must be given.

I am far from claiming for the treatment here presented entire originality. Most of the measures have been adopted separately by here and there a physician. But the views presented must not suffer the charge of "new-fangled notions of the day." The large number of typhoidal cases in Blockley Hospital, when under the charge of Dr. Wm. Haines, were treated solely with the turpentine mixture and brandy punch, having premised with a small amount of blue mass. The success of the treatment will appear incredible to those of narrow sympathies, and limited charity and respect for all that pertains to Allopathy. While pneumonia and many other diseases were almost universally fatal, cases of death from typhus and typhoid fevers (regarded as essentially the same by Dr. Haines,) were very seldom. It should be observed that this institution receives a large number from emigrant vessels, and of the intemperate and broken constitutions of a great city, yet the mortality of typhus fever during the year 1852 DID NOT EXCEED FIVE PER CENT. Such results, and the convincing character of my own observations, lead me to speak with much confidence. During the last winter and fall, Doctors S. N. Jones and J. G. Dolley treated in the province of Upper Canada upwards of two hundred cases of well-marked typhus and typhoid fevers (old nomenclature) with a mortality of less than three per cent. An attack of the same which my brother, Dr. J. G. Dolley, suffered last September, and which was treated by myself, contrasted with the fatal termination of six cases (among which was that of my esteemed and promising friend, Dr. N. Shelley,) in the immediate vicinity, under the quackish and heroic treatment of evacuants, etc., and taught me wisdom. Let those who call themselves medical reformers, and have seen young and vigorous patients, yea, indeed whole families under their charge, stricken down with this disease, (I could specify such) investigate these assertions, and blush at their own conceit and bigotry.

EXPULSION OF TAPE-WORM.

BY L. OLDSHUE, M.D.

I have in my possession a portion of tape-worm which was expelled from the human system by the administration of the "Pumpkin seed orgeat and spirits turpentine," a brief relation of which case, and the course of treatment, may be of interest to some of your subscribers.

The patient, a widow lady, aged 40, had been complaining for several years of pain in the side and stomach, which at times was very severe. She had also occasional vomitings of a frothy mucus which was of an intolerably offensive odor. The tongue was always coated with a thick brown fur, and the breath extremely offensive. She had become quite thin and emaciated, although the appetite was most voracious at all times.

She had taken medicines from different physicians in Pittsburgh, Cincinnati, Louisville and St. Louis, and had never for a moment been relieved from the annoying symptoms above described. None of the medicines, however, had been prescribed for the expulsion of tape-worm.

These facts, together with the general appearance and symptoms, led me to suspect the existence of the parasite; upon mention of which, the patient informed me that a physician of Cincinnati had expressed the same opinion of the case, just as she was about to leave that city.

On the morning of the 27th December, I commenced the treatment by giving half a pint of the liquid orgeat of pumpkin seeds, prepared and prescribed as directed in the Boston Medical & Surgical Journal, vol. 45, page 201,* followed in one hour and a half with a full dose of castor oil. A large evacuation was produced but there was no appearance of the worm. The same course was repeated on the following morning with the same result, and without any mitigation, but rather an increase of the symptoms. She now complained more of a sensation as if an animal was moving about in her bowels, and believed herself, that it must be tape-worm or "some other living animal;" as she said it sometimes came up into her throat and produced much choking. I then prepared another half pint of the orgeat as before, to which was added half an ounce of spirits of turpentine. This was given all at once on the morning of December 30th, on a fasting stomach, followed in one hour with a large dose of the compound powder of jalap and cream of tartar, equal parts. In about one hour after the powder was taken it operated upon the bowels, producing a large liquid evacuation, bringing with it about thirty-six feet of tape-worm, one-fourth of an inch in width with joints from one half to three-fourths of an inch long. Although this all came away at one time, yet it was separated into a number of pieces, the longest being only nine feet, which I have preserved. The patient seemed now quite relieved, but lest a portion of the worm might still be remaining, another course of the latter prescription of orgeat and turpentine was given on the following morning to make the thing doubly sure. This last course, however, brought no more of the worm. The restorative wine bitters with quinine and was then administed as a tonic, and the patient recovered rapidly.

It is now nine months since the expulsion of the worm, and she has remained quite well and free from pains, vomiting, bad breath, etc., with normal appetite and strength, and I have no doubt the whole disease is entirely removed.

Pittsburgh, Sept., 1854.

* "CURE FOR TAPE-WORM.—Procure sufficient seed of the Pumpkin (those grown in the West Indies are the best), to make two ounces after removing the outside shell of the seed; put them into a mortar and add half a pint of water; pound them well up, and make a liquid orgeat of them, which strain through a cloth. Drink this mixture in the morning on a fasting stomach. If it does not operate in an hour and a half, take an ounce of castor oil."

Part 2. Miscellaneous Selections

PATHOLOGY OF RHEUMATISM AND GOUT.

BY PROF. J. H. BENNETT.

The present theory in regard to these affections is, that they are both connected with an increase of lithic acid in the blood. In rheumatism, this is dependent on excess of the secondary, and in gout, on excess of the primary, digestion. In rheumatism, however, there is considerable excretion of lactic acid by the skin (Todd), while in gout there is an excess of soda, which uniting with the lithic acid, produces a compound of lithate of soda, that may be detected as such in the blood (Garrod), while sometimes it exudes into the cellular tissue of the skin, constituting tophaceous deposits. In both diseases, there is an undue balance between the excess of lithic acid and the power of excretion—in rheumatism by the skin, and in gout by the kidney. This pathology serves to explain the similitudes and differences existing between the two affections. In both there is certain constitutional state, dependent on deranged digestion, during which exciting causes occasion local effects. These exciting causes in rheumatism are bad diet, hard work, exposure to cold and wet, and its subjects generally are the poor and laboring population. In gout, the causes are good diet, indolence, repletion, or indigestion, and its subjects are for the most part the rich and sedentary. The local manifestations in both are acute wandering pains, with pain and swelling—in rheumatism of the large, and in gout of the small joints, constituting the acute attack in the one, and the so-called regular attack in the other. These are combined with a tendency to various complications of the internal viscera, which are more or less dangerous to life.

The general indications of treatment are, in both diseases, so to regulate the nutritive functions as to insure a due balance

between the amount of matters entering the blood as the result of digestion, primary or secondary, and the amount of matters discharged from the economy by the excretory organs. To conduct the acute attack to a favorable termination, carefully watching the internal viscera, and being prepared to act with vigor should those become affected. Hence the treatment of these diseases resolves itself into what may be called curative and preventive—the first having reference to the acute attack, the second to the means most likely to hinder its return; the one must be carried out by remedies which act upon the blood and excretory organs, the other by the management of diet and exercise.—*Month. Jour. Med. Sci.*, Dec. 1852.

TREATMENT OF ACUTE RHEUMATISM BY NITRATE OF POTASH.

BY PROF. J. H. BENNETT.

Although the general pathology above mentioned [see preceeding article], which considers rheumatism as a blood disease, may be considered on the whole as correct, we are not yet enabled to explain by it the symptoms of an acute attack of the disease, where, in addition to the constitutional disorder, we have local pain, occasional heat, redness and swelling, with febrile symptoms. Most practical men have attributed those phenomena to a superinduced inflammation, although it has not been shown that exudation occur, or that it is followed by the usual results of that condition. Besides, its erratic character is opposed to what we know of the process of true inflammation, and calling it an unhealthy inflammation in no way clears up the mystery. The real pathology of acute rheumatism, therefore, has yet to be determined, and, as a preliminary step, a careful histological examination of the affected tissues is absolutely necessary. So far as I am aware, this has never yet been attempted, if we except some observations by Hasse, on the structure of the bones in rheumatism.

Our treatment of this disease, therefore, is purely empirical, sometimes directed against the pain, at others, against the supposed inflammation; now attempting to combat the pathological condition of the blood, then striving to remedy its effects by acting on the excretions; and not unfrequently giving specifics, in the hope that any change in the constitution, however produced, may be beneficial. In no disorder, probably, has such a crowd of opposite remedies and plans of treatment been extolled, and yet none of them can be depended on, so that it has been imagined that six weeks rest is the most useful prescription (Warren). The latest author on rheumatism endeavors to explain this by observing, that this need not be wondered at by "those who consider the true nature of the disorder, and the variety of circumstances under which the physician may be called upon to minister to his patient's relief. The bleeding, which in the young, plethoric, and robust, may be necessary to allay excessive vascular action and cause free secretion, may in the weakly induce irritability of the heart, and a consequent attack of cardiac inflammation. The opium which, in one person may prove of the greatest service in promoting free perspiration, and in allaying the general irritability of the system, may in another check the biliary and other secretions, and thus prevent the elimination of the rheumatic poison. The continued use of calomel, and the constant purging, which may be beneficial to one patient by removing large quantities of unhealthy secretions, may unnecessarily exhaust the strength of another, and tend very greatly to impede recovery. And so in regard to every remedy which has been proposed. What is useful at one time proves useless, or positively injurious at another; and the conclusion is forced upon us, that what is wanted "is far less the discovery of untried methods of treating disease, than of discriminative canons for the proper use of those we possess;"—far less the discovery of any new medicines, than the adaptation of our present remedies to the exigencies of the case." (Fuller on Rheumatism, p. 73.) These judicious observations may serve to explain the cause of our failure; but until we obtain more exact information regarding the *especial* pathology of rheumatism, it is in vain to hope for a rational treatment.

For my own part, I generally treat rheumatism on what is called "general principles;" these are, to alleviate severe pain by anodynes, diminish excessive vascular action by moderate bleeding and saline antiphlogistics, and encourage every attempt at critical discharges by diaphoretics, diuretics, purgatives, etc. Occasionally, I have tried the effects of special remedies in this disease, and watched a series of cases, all of which were treated in the same manner. Thus I have tried aconite, and believe that alone it is of little service; colchicum, also, I have given frequently, and am of opinion that in pure rheumatism it is of no advantage, although in gout it is

invaluable. This session (1851–2) you have witnessed another trial of this kind with the nitrate of potash, a remedy formerly recommended by Dr. Brocklesby, and which has been given with good effect by M. Gendrin, in the wards of La Pitie, in Paris, as recorded by Dr. Henry Bennett (Lancet, 1844, vol. i. p. 374). It has more lately been pressed on our attention by Dr. Basham (*Med. Chir. Trans.* vol. xxxii.), who tells us that from one to three ounces of the salt, if freely diluted in water, may be taken by the patient in the course of twenty-four hours, without any injurious results, but with the effect of relieving in a marked manner the swelling, heat, and pain in the joints.—*Month. Jour. Med. Sci.* Dec. 1852.

TINCTURE OF MASTIC AS A HÆMOSTATIC.

It is stated in a recent number of Schmidt's Jahrbucher, that Dr. FRANKL has found the tincture of mastic an excellent hæmostatic. He employs it in epistaxis, and in troublesome bleeding from leech-bites. It is applied to the points whence the blood issues, by means of a camel's hair pencil. Terzer, a dentist of Vienna, is also reported to have used it successfully in hemorrhage following the extraction of teeth.—*Association Medical Journal*, January 14, 1853.

ACTION OF ANTHELMINTICS.

Dr. KUCHENMEISTER, of Zittau, has examined the various vermifuges, by immersing the living intestinal worms of fowls, cats, and dogs, in albumen, at a temperature exceeding 77 degrees Farhr., and adding the anthelmintics in the form of infusion or of powder. In some cases, a mixture of warm milk and water was substituted for the albumen. The experiments were not continued for more than from forty to forty-eight hours, if the worm had not been killed before the expiration of that time. Dr. Kuchenmeister made use of electricity as the most delicate reagent for proving the occurrence of the worms. In the first place, electricity cannot be considered as a vermifuge. The author subjected a female *heterakis vesicularis*, taken from a partridge that had been killed, to the action of a rotatory apparatus, which was kept up with a longer or shorter intervals during an entire day. The animal was not destroyed by the experiment. He next tried the remedies employed for the removal of tænia, and first tested kousso in the following manner: A living *tænia crassicolis*, procured from a cat, was placed at four o'clock in a mixture of albumen and dolichos puriens. The worm appeared to be perfectly well in this mixture, and at two o'clock on the following afternoon exhibited the most vigorous movements. The tænia was now transferred to a vessel containing a mixture of infusion of kousso and some of the infused as well as some of the fresh powder with albumen. The temperature of the mixture was 30 degrees R. (99.5 degrees F.) On its introduction, the worm quickly extended itself; after some time it was found to be dead, its colour having changed to a dirty reddish yellow. Two *tænia serratæ* were placed at about half-past one in the afternoon in a mixture of albumen, and kousso; at two o'clock they were dying, and at three completely dead. Two *tænia serratæ* from the same dog was brought in contact with kousso and milk at half-past one in the afternoon, and at two o'clock were dead. Two *tænia serratæ* were placed at half-past one in the afternoon in albumen, mixed with decoction of pomegranate root with some of the powdered root; they died in three hours. Two others were placed in milk mixed with the decoction only; they died in three and a half hours. A *tænia crassicolis* was put into a mixture of albumen with ethereal extract of male fern; it died gradually in three hours and three-quarters. A number of *tænia cucumeriæ* were placed in a mixture of albumen and oil of turpentine; they were dead in an hour and a quarter.

A number of the same were put into a mixture of albumen and castor-oil; they appeared lively at first, but were dead in seven hours. Similar worms were put into a salad, composed of pieces of unwatered herring, boiled potatoes, large pieces of onion and garlic, albumen, vinegar, and a large quantity of oil. They died in eight hours. Lastly, the author tested the vermifuge powders of the brown oxide of copper; fifteen grains were administered in the course of four days to a strong cat. When the body was opened, the entire intestinal canal was found to be full of fluid, yellow, flaky feces; the intestine was softened and denuded of epithelium, especially at the termination of the ileum, where the adjoining Peyer's glands were much swollen, particularly in two situations, one of which was an inch and a half long by one-third of an inch broad; the other was nearly circular, and its diameter one-third of an inch. The cat had been purged. The tænia and ascarides it contained were lively. It would hence appear that this substance is both inefficacious as a vermifuge and dangerous to

the system. The following table contains the results of the above experiments :—

In milk boiled with kousso, tænia died in half an hour.		
In a mixture of oil of turpentine and albumen, in - -	1 to 1½	hour.
In decoction of kousso with albumen - -	1½ to 3	hours.
In decoction of pomegranate root with milk	3 to 3½	"
In decoction of pomegranate root with albumen - - - -	3	
In ethereal extracts of male fern with albumen	3½ to 4	"
In castor-oil with albumen - - -	8	"
In salmagundi with garlic and onions -	8	"

Kousso would therefore seem to be the most efficacious remedy against tænia. When pomegranate bark and male fern root fail, their failure may be owing to the habit of administering a laxative in from four to six hours after the exhibition of the vermifuge, by which the latter may be carried beyond the worm. With regard to pomegranate root, it must be observed, that in large doses it occasions diarrhœa. The same remark applies to castor-oil. The author also alludes to cold water, strawberries, dolichos puriens, and filings of tin. When tænia are placed in water containing ice, they are instantly benumbed, and if allowed to remain in it, they will always be found at the end of ten hours to be quite dead. Strawberries may be useful as a mild remedy in case of tapeworm; if large quantities of them be taken on an empty stomach, entire portions of the worm will often be passed. Dolichos puriens, with which the author tried many experiments, appears to possess no power of destroying worms. The author has also minutely studied the medicines recommended for the removal of round worms. In albumen, these worms behave as the tænia ; in water, at about 77 degrees F., they live for some days, but swells, stiffen, become longer, thicker, and more sluggish; they lose their power of suction, and their motions become slow and only partial ; they resemble leeches which have gorged themselves. In general, however, the males and young neutrals resists the effects of water longer than the mature, impregnated, egg-bearing females, which become quite rigid and inflexible, and swell considerably. Milk and whey affect the worms like water, The following are the medicines, the effects of which were tested:—

1. Camphor. An ascaris lived from eighteen to twenty hours in albumen into which some camphor had been introduced. 2. A mixture of the oil of turpentine and albumen killed some ascarides which were placed in it in from two and a half to six hours. 3. Ascarides lived forty hours in albumen and wormseed, whether the latter was employed in the form of powder or infusion. 4. Some ascarides were placed in albumen mixed with santonine; they did not die in it, nor did they die in a watery infusion of santonine. When santonine was dissolved in oil, especially in castor-oil, and mixed with albumen and ascarides, the latter died in ten minutes. An injection of santonine and castor-oil was thrown up the rectum of a cat, and produced numerous motions containing dead worms; and on killing the cat, the entire of the lower portion of the intestinal canal was ascertained to be free from worms, while four were found near the stomach and quite rigid and extended, and retaining but little life. A *tænea crassicolis*, however, was found in the intestines, and appeared to be quite uninjured and very lively. 5. A mixture of albumen and aniseed, with a strong infusion of the latter, killed the worms in about twenty-four hours. 6. Parsley, mixed with albumen, killed ascarides very slowly. 7. Flour of mustard and albumen destroyed them in about four hours. 8. In rue, the worms lived upwards of twenty-four hours. 9. The same was the case with millefoil. In contact with tansy, valerian, and chamomile, great numbers of them lived for twenty-four hours. With onions and garlic they perished in from ten to fifteen hours. A decoction of cloves, with or without albumen, killed them in twelve hours. In an infusion of ginger, with or without albumen, they lived about twenty-four hours. Petroleum, mixed with albumen, killed them in less than six hours, as did also oil of cajeput and albumen.

A series of vermifuges, taken from the class of balsamics, was tried in like manner, namely, assafetida, ammoniacum, balsam of Peru, extract of juniper, and Venice turpentine. In all these the worms lived more than twenty-four hours. Of the class of empyrematics (brenzlichen stoffe,) the following were tried: Oleum chaberti [a mixture of four parts of oil of turpentine, and one of the animal oil of Dippel], oil of amber, castor-oil, tar-water, creasote, wood vinegar, and wood soot. In these, for the most part, the worms lived from twenty-four to forty-eight hours, except the wood-vinegar, in which they lived rather more than twelve; and creasote, in which they died within two hours. Of bitters, the author tried aloes, gamboge, ox-gall, wormwood, myrrh, gentian, quassia, hops, bitter

orange, and acorus calamus; in all these the ascarides lived from twenty-four to forty hours. Of astringents, pure tannic acid, pomegranate root, kousso, extract of walnuts, cinchona bark and quina, elm bark, willow bark, the flowers and stalks of meadow-sweet, oak bark, dragon's blood, catechu, and kino. In these, the worms died in from twenty-four to thirty hours, with but two exceptions, namely, tincture of galls and pomegranate root, both of which killed them in the space of eleven hours. Of saline preparations, sulphate of soda, chloride of sodium, and the roe of the herring, were tried. In the first, the worms died in from fifteen to eighteen hours; in the second, in from two to six; and in the roe of the herring, in four hours. The following metallic poisons were experimented on; arsenic, calomel, corrosive sublimate, and the salts of tin, of lead, and of copper. Corrosive sublimate alone destroyed the worms in so short a time as two hours; all the other metalic salts required a much longer period. From these experiments it would appear that santonine mixed with oil, is a most powerful vermifuge, then chloride of sodium, the roe of the herring, garlic, onions, etc. The author advises that santonine should be given as a vermifuge, mixed with oil in the proportion of from two to five grains to an ounce of castor oil. This solution should be given in doses of a teaspoonful until the effect is produced. As auxiliary treatment, chloride of sodium, herring brine, mustard, onions and garlic, may be employed.—*Dub. Quarterly Journal*, February, 1853, from *Froriep's Tagsbereichte uber die Fortschritte der Naturund Heilkunde.*

EXPERIMENTS WITH DIGITALINE.

[PERFORMED BY M. ANDRAL IN THE HOPITAL DE LA CHARITE.]

Dr. LEMAISTRE, in an interesting memoir (*L'Union Medicale*, May, 1852) describes first the nature of the cases experimented on; second, the mode of administration of digitaline; thirdly, the various effects produced; and, lastly, draws some conclusions as to the therapeutic effect of the drug.

NATURE OF THE CASES.—Nineteen patients were experimented on, viz.: several cases of chronic heart disease; one of albuminuria; one of anemia with intermittent fever; two of phthisis; one of acephalocyst of the pleura, with all the signs of extensive pleural effusion; two of acute pleurisy; two of acute rheumatism; one joint only being affected in one case, and several in the other.

MODE OF ADMINISTRATION.—The digitaline was given in granules, according to the formula of M. Quevenne: each granule containing a milligramme (.015 of a grain.) One granule, sometimes two, was given in twenty-four hours; and the number was gradually increased to four. Six or seven granules in the day produced toxic symptoms: in one case, that of a youth of fifteen, obstinate vomiting was produced after two granules had been given. Commonly, it was on the third or fourth day, and after giving two or three granules per diem, that vomiting, diarrhea, and cephalalgia were produced. In other cases, five, six, or seven granules have been taken in the twenty-four hours without inconvenience: and, in two cases, ten and twelve were taken. The duration of treatment has varied from a few days to one or two weeks. The greatest number of granules administered during a course, has been, in five cases, respectively, 23, 33, 44, 50, and 88—the latter including two courses.

ACTION OF DIGITALINE—CIRCULATION.—The following table shows the action of digitaline in lowering the frequency of the pulse:—

Case.	Minimum of pulse before treatment.	Min. of pulse during treat.	Difference.
Dis. of the heart,	108	68	40
"	92	72	20
"	80	68	12
"	76	51	25
"	104	100	4
"	64	60	4
"	44	44	0
"	76	58	18
Phthisis,	84	76	8
"	68	64	4
Pleurisy,	108	100	8
"	108	116	—
Hydatid of pleura,	100	96	4
Rheumatism in one joint, , - -	96	80	16
Rheum. in several joints, - -	96	80	16
Anemia, - -	80	76	4

Some writers have described a much greater effect as being produced on the pulse than is shown in these tables; this has probably arisen from their having adopted, as a normal standard, the pulse of the patient at their first visit, and when they were excited by the presence of the medical attendant. Dr. Lemaistre observes that this will sometimes make a difference of twenty pulsations in a few minutes: and a great difference may even arise in a few moments. M.

Andral did not give the digitaline until he had ascertained the state of the pulse by repeated examinations during several days.

The author (from the small number of observations) does not venture to recommend digitaline for its effect on the pulse, except in heart diseases; in which, by calming the circulation, it renders the pulse regular where it was before irregular. Very small doses will often produce this effect.

Digestive Organs.—The tongue almost always remained moist, without fur. The appetite and thirst were not influenced, except when poisonous effects were produced; then the desire for food was lost. During the first days of administering the digitaline, no effect was produced on the stomach. After a certain time, slight pain occurred: and on the next day there was nausea, sometimes followed by vomiting, usually abundant and mucous, and continuing for some hours, or even an entire day. These effects did not generally follow immediately after the administration of the medicine. The almost uniform coincidence of cerebral disturbance with these symptoms leads to the belief, that the gastric disorder was in a great measure sympathetic. There was, however, probably some direct effect on the intestinal mucous membrane. At first, there were borborgymi; the abdomen at the same time became somewhat distended, then slight spasmodic pains were felt; diarrhea at last appeared, but was always scanty, and was preceded sometimes by colicky pains. All these symptoms soon disappeared, on ceasing the use of the medicine. Four or five granules *per diem* generally produced the disturbance of the digestive organs; in some cases, no such phenomena were observed.

Respiration.—In diseases of the heart, as soon as the calmative effect on the circulation was produced, the respiration, which had been oppressed, short, and anxious, became easy, full, and normal. In a case of phthisis, the patient said that his pulsation had become easier. But what conclusion can be drawn from a single case? In one or two cases the respiration was disturbed; one patient complained of a sense of weight behind the sternum, of a kind of oppression which obliged him to sit up at night, expectoration being at the same time impeded. These symptoms were evidently connected with cerebral disorder. MM. Andral and Lemaistre have not found much worthy of notice in the action of digitaline on respiration.

Kidneys.—In most of the cases, the patients passed urine more frequently; but it does not follow that the quantity of urine was always increased. In two cases of disease of the heart, and in the two cases of pleurisy, there was no increase in the quantity of urine. In the case of pleural hydatid, a little more urine was passed. In two cases of heart disease, in one case of phthisis, and in the case of albuminuria, the quantity was doubled, tripled, or even quadrupled: the urine at the same time became pale, and the specific gravity fell from 1012 and 1016 to 1008, 1004, and 1003. The diuretic effect was first observed on the third or fourth day; it continued two or three days, then rapidly decreased, and ceased entirely in some days, notwithstanding the continued use of the medicine. The diuresis was most abundant where there was œdema of the cellular tissue, which disappeared in a few days: while, in pleural effusion, the digitaline had little or no effect. The indications for the use of digitaline are then the same as for hydragogue purgatives; these succeed in cases of dropsy connected with albuminuria or heart disease, but fail in dropsy from local causes, as hydrothorax, hydropericardium, encysted dropsies, etc.

To obtain the diuretic action of digitaline, a full dose is generally required, and it must be given for three or four days. The authors believe that digitaline does not act directly on the kidneys, but that it augments their secretion by lowering their circulation.

Nervous System.—In several patients, no effect was produced; but, in a large number of cases, the patients slept from a quarter of an hour to three hours during the day, although they had slept as usual during the night. This sleep appeared only at the commencement of the treatment, and was not perceived in a few days. The sleep was calm, and in no way fatigued the patients; it arose from the direct action of the digitaline on the brain. In other cases, there was merely some lassitude. But at a later period, when toxic phenomena, as disturbance of the stomach and intestines, appeared, then there sometimes occurred a heavy sleep, from which the patients awoke suddenly, and which fatigued them much. This was much less frequent than the first-described form.

The other most frequent disturbances of innervation were the following: The patient at first experienced general *malaise;* the head felt heavy; sleep, instead of being increased, was not only diminished, but even disturbed by frightful dreams, or even abolished, and replaced by constant restlessness. These symptoms were soon followed by cephalalgia lasting for several hours,

with disturbance of vision: diplopia occurred in one case. Flashes of heat and vomiting were then observed. In a more advanced stage, the patients experienced vertigo; in other cases, there was extreme debility, and even fainting. In one case, the intellect was weakened, the countenance was dull, and questions were answered slowly. All these symptoms occurred only after the digitaline had been taken four or five days, and when the daily dose had been increased to four, five, or six granules. In one case, ten granules per diem produced no effect; while in another, two granules gave rise to symptoms of poisoning; but these were exceptional cases.

The disorders of innervation, like those of digestion, ceased or disappeared when the medicine was discontinued.

Conclusions.—Digitaline may be administered with benefit in cases of chronic heart disease, where the pulse is elevated and the circulation irregular; and in cases of dropsy arising from disease of the heart, or from an alteration in the blood. The effects over the circulation and renal secretion have been obtained by three granules a day; and four or five granules have produced toxic accidents: hence it is best not to give more than three granules, except in some rare cases. Instead of granules, an alcoholic solution may be employed, containing about three milligrammes in thirty drops. The action of digitaline seems nearly the same as that of digitalis, with the advantage of producing less irritation of the digestive mucous membrane, and being more uniform in strength.—*London Journ. Med.*, Sept., 1852.

ON THE EFFECTS OF IODINE ON THE GLANDULAR SYSTEM.

The question has been mooted, whether atrophy or absorption ever takes place in the glandular system from the use of iodine. In our preceding number (p. 495,) we have given the results of the large experience of Dr. L. Parker, which gives no countenance to the belief of the powers of iodine in promoting the absorption of the glands; and Dr. T. H. Silvester has recently (*Prov. Med. and Surg. Jour.*, Sept., 1, 1852,) adduced his observations, the result of many years' attention to this point, in support of the same conclusion. Dr. S. states that "from 1834 to 1844, a great many patients suffering under secondary or tertiary syphilis, were admitted into St. Thomas's Hospital, more especially under the care of the late Dr. Williams, who had gained a high reputation in the treatment of these morbid symptoms. Most of these patients came under my notice and particular observation, and many of the remarkable cases were entered in my note-book; but not one instance of atrophy or absorption of the large glands occurred in our experience. It was thought advisable, on the recommendation of Lugol, to test the efficacy of the iodide of potassium in scrofulous enlargement of the glands, and in order to give M. Lugol's method of treatment fair play, a most characteristic specimen of these affections was selected. A young woman, fat, florid, and fair, aged 18, was admitted with suppurating glands at the angle of the jaw, and others approaching suppuration, or hard and inflamed, extending to the chin, were conspicuously prominent. Eight grains of the iodide of potassium, in camphor mixture, were prescribed, and steadily administered, for nearly six months, without the slightest perceptible effect upon the scrofulous mass of glands, and she was presented in much the same state as at her admission. Now, it happened that in this girl the breasts were largely developed, but no change was produced in their size by the treatment adopted for the scrofulous ailment, notwithstanding the full dose, and prolonged administration of the iodide.—*Am. Journ. Med. Sci.*, Jan. 1853.

"There were at this period, before the treatment had become generally known, innumerable cases of syphilitic periostitis, in which the iodide of potassium was very successful, and yet we never experienced atrophy or absorption of either the breast or testicle during the use of this medicine. A case of simple hypertrophy of the breasts was then made the subject of experiment; eight grains of the drug were taken, steadily and continuously, for three months, but no diminution of the mammæ took place.

"A boy, aged 12, presented himself with immensely enlarged tonsils, and took the iodide nearly six months, without any impression having been made upon these organs. It would weary you to bring forward further illustration on this subject, and this negative kind of argument is, I am aware, not perfectly satisfactory, and may be destroyed by a single example of the positive power of the remedy in causing absorption of either the breast or testicle; but ten years' observation in a large hospital failed to furnish me with a single proof in favor of the opinion that atrophy or absorption of the glandular system, in its normal condition, arises from the use of iodine in any form. Experience as to the

topical application of this powerful agent, involves an inquiry into the effects of friction, stimulation, protection, and warmth, and excludes all inference as to its specific property. It must be confessed that enlarged testicles not unfrequently yield to its influence; but it will be found, on inquiry, that in these cases the system had been contaminated by the syphilitic poison. The same remark is applicable to chronic induration of the inguinal glands. It is a very remarkable fact, that the swelling of the thyroid body, in common bronchocele, vanishes under the internal use of iodine, especially the iodide of potassium. The rapidity and certainty of its removal are equalled only by that of the venereal nodes; and I have sometimes thought that there may be a vital elective attraction between the iodine and the lime, which latter forms the basis of the nodal tumor, and is probably the chief element in the thyroid enlargement.

"It still remains to be explained how it happens that tumors, enlargement, and thickenings, of a nature other than have been noticed, disappear under the use, topical or internal, of the remedy in question: the explanation is undoubtedly difficult; but I may be allowed to remark that there is an absence of permanency in the glands generally, the thyroid disappears spontaneously, the tonsils naturally at puberty, the breasts in advanced age, and sometimes the testicles and ovaries; and there are few practitioners who have not met with cases of absorption of the breasts and testicles from some unknown cause, and in morbid instances when no medicine has been taken. I have over and over again known and seen large swellings vanish under the long-continued application of a poultice, or wet lint and oil silk; and equal number of failures, where iodine, internally and externally, was had recourse to, have occurred to me."

A NEW METHOD OF AUSCULTING THE EUSTACHIAN TUBE.

BY PROFESSOR RICHTER.

[*Schmidt's Year-Book*, 1851, *No.* 4. *Jour. Pract. Med.*, Prague, 1852, vol. ii.]

Professor Richter states that the method here detailed supplies the place of Harvey's auriscope, as well as renders the use of the catheter as a means of diagnosis unnecessary, thus avoiding the introduction of an instrument into the Eustachian tube, the use of which is both difficult and dangerous. The external cartilage of the ear is bent forwards and pressed flat upon the external orifice of the ear, closing it tightly. A stethoscope, having the expanded or funnel end of small size, is placed upon the cartilage flat upon the skull, and the external orifice of the ear entirely closed. When the Eustachian tube is free, the passage of the breath through the mouth and throat is distinctly heard, as well as the sound made in speaking, whistling, or hawking. The most striking effects are observed when one is enabled to produce *consonance in the Eustachian tube*. For the purpose, the patient is requested to sing, or better still, to whistle the notes of the musical scale, if possible, the entire extent. In certain tunes, the listener, as well as the patient, will hear distinctly the consonance or accord in the ear which is closed; and even at times accompanied by a *metallic echo*, produced in the stethoscope. (The editor observes that the notes G, F, E, in the small and large octave with A's and E's, will be heard in whistling, and G and A in singing.) Should the Eustachian tube be closed, all of these effects above enumerated will be wanting.—*Amer. Jour. of Med. Sciences*, Jan., 1853.

NEW MODE OF EMPLOYING IODINE.

M. Hannon has suggested, that when iodine is to be applied to a local tumor, as to a goitre, it should not be rubbed in at once—a practice which often irritates the skin excessively—but that it should be placed between two layers of cotton wool, sewed in a bag, and tied directly over the part. The vapor of the iodine rapidly penetrates through the bag, and stains both the skin and the linen. To prevent this, a thin sheet of gutta percha or gummed silk is placed over the bag. It is indispensable to put the iodine between two layers of wadding; if placed merely in a bag, it passes through and blisters the surface like ammonia. Applied in this way, iodine enters the system with great rapidity, and appears in all the excretions.—*Med. Times & Gaz.* Sept. 4, from *Presse Medicale*.

THERAPEUTIC ACTION OF FURFURINE.

Professor Simpson has experimented with furfurine—an alkaloid which produces, in experiments with poisonous doses upon the lower animals, many of the symptoms of quinine; and the salts of which he has found to act as a tonic, if not as an antiperiodic, when exhibited to the human subject.—*Monthly Jour. of Med. Sci.*, August, 1852.

BITE OF THE RATTLESNAKE.

The following interesting account of the effects of a bite by a rattlesnake, is given in an extract from the journal of the sufferer, Lieut. J. C. Woodruff, U. S. A., in the *Buffalo Medical Journal*, July, 1852:

"Wednesday, Sept. 17, 1851. This morning, Lieutenant J. F. Parke, Topographical Engineers, U. States Army, and I, were walking out to procure some specimens of birds, and when about two miles from the Pueblo, I came within a few inches of treading upon a rattlesnake, who immediately coiled himself up and got ready to strike; jumping back, I drew out my ramrod and struck him over the back with sufficient force to break it. Being a fine specimen, I wished to preserve it without further injury, when, placing my gun upon its head, seizing it, as I thought, immediately back of the head, I picked him up, but, unfortunately, I had too long a hold, when he threw round his head and buried his fang in the side of the index finger of my left hand, about the middle of the first phalanx. The pain was intense, momentarily producing, as it were, a severe shock, and accompanied with much nausea. I immediately commenced sucking the wound, at the same time got Lieut. Parke to apply a ligature round the finger to prevent the too rapid absorption of the poison. I then scarified it freely, and continued sucking until I returned to camp.

"A man that was with us at the time, I sent immediately back to get some aqua ammonia fort. and meet us on the road, which he did when we were about three-fourths of a mile from the town. I applied it immediately to the wound. Mr. Kern hearing what had happened, returned with him, and he wished me to try, as he said, the *Western Remedy*, that is to say, get drunk. This I had often heard of, and I was determined to try its efficacy. He was supplied with a bottle of whisky, which I immediately commenced drinking; by the time I arrived at the Pueblo, I had drank half a pint. Already the glands in my axilla were getting sore and painful. Took some ammonia internally, scarified my finger freely, and held it in a basin of warm water, which caused it to bleed freely. Then commenced drinking *brandy*, at the same time held my finger in a cup of ammonia. It took one quart of fourth-proof brandy and half a pint of whisky (enough to have killed a man under ordinary circumstances) to produce intoxication, which only lasted about four hours. During my intoxication I vomited freely; soon after my recovery from this state, I removed the ligature and applied a large poultice of pulv. sem. lini. That afternoon I took ammonia internally, and some pills composed of mass hydrarg. et colocynth comp., to act as a cathartic. In the evening the pain in the axilla and finger was very severe; took pulv. Doveri. grs. x.

"Thursday, 18th. I passed a restless night without sleep, although during the night I took at least pulv. opii grs. iv. This morning, the pain in my finger is intense, and a well-marked line of inflammation extends along the arm to the axilla. I had the entire arm and hand painted with tinct. iodine, and the flaxseed poultice renewed, commenced taking a solution of potassi iodii as an alterative. The pills not having operated, I took pulv. Seidlitz, which had the desired effect. Diet, boiled rice. Several times to-day I tried to walk across the room, but each time would be seized with nausea and commenced vomiting. Took at bedtime pulv. Doveri, grs. x.

"Friday, 19th. I rested pretty well last night, but this morning my hand, arm, and the glands in the axilla, are much swollen and painful.

Repeated tinct. iodine. Diet, boiled farina. Took, on retiring, pulv. Doveri, grs x.

"Saturday, 20th. Passed a tolerable night, but my back is getting very sore, as the blankets on the stone floor make rather a hard bed. This morning the pain very great, and the swelling down my left side as far as my hip. Renewed tinct. iod. I am still attacked with nausea and vomiting on my attempting to walk.

"I removed the skin from off my finger, and it discharged freely a watery sanguineous fluid without smell. The nail is becoming loose. The broad red line following the course of the lymphatic, is now filled with a yellowish serum. The point where the fang entered, for three-eighths of an inch in diameter, is of a dark brown color. Renewed the poultice. At bedtime took mass. hydrarg. grs. v. pulv. Doverii, grs. x. Continued potassi iodidi. Diet, the same.

Sunday, 21st. Passed a restless night, being much troubled with colic; took magnesia calc. et spts. menth. pip., which relieved me, and not having my bowels open took pulv. Seidlitz, which had the desired effect. Hand much swollen and filled with serum. Diet as usual.

"Monday, 22d. Passed a comfortable night. The swelling has left my side and arm, but little remains in the hand. I can now walk a few yards without being seized with nausea; have been sitting up the most of the day. Continued potassi iodidi. Diet, mutton broth and farina.

"Tuesday, 23d. I awoke this morning much improved, the swelling and pain having left, with the exception of the finger, the first and second joint of which do not present a healthy appearance, the palmar surface having the appearance of gangrene, but the discharge is thin and watery, without smell. The granulations do not present a healthy appearance, they are rough, and many of them look as if they were sprinkled with yellow ochre. The nail is quite loose. Continued potassi iodidi. Diet mutton broth, with a little of the meat.

"Wednesday, 24th. This day we commenced our march. I placed my hand in a sling and mounted my mule; found myself rather weak, and the mule hard to manage with but one hand; the sun rather hot; this, with the jolting of the animal, caused me to suffer considerable pain; fortunately for me, after going six miles, we encamped. I removed the nail. From this time on, the finger gradually improved. I continued renewing the poultice daily until the last of October. In the mean time there was a large slough, which gradually came away, and left the last phalanx exposed in two places. The granulations required occasionally the application of nitrate of silver. After this, I made use of dressings of cer. simplex. Continued carrying my hand in a sling until the middle of November. A new nail commenced growing, and a sinus remained open in the end of the finger; upon the introduction of the probe into the latter, the bone could be felt quite rough. A discharge from this kept up until about the 7th of February, when I removed the exfoliation of the end of the phalanx, showing evidently that the fang had entered the periosteum. Soon after this, the sinus closed, leaving the finger in a deformed state, anchylosis having taken place in the first joint. The circulation is very imperfect, one of the arteries being destroyed, which renders it very susceptible of cold. The insertion of the flexor muscle has also been destroyed.

"I have heard of a number of instances of rattlesnake bites, in all of which the patient recovered if they succeeded in producing intoxication.

"Dr. Fischer C. Smith, of this city, accompanied Capt. French, A. Q. M. U.S.A., to El Paso last year, and on their return one of the teamsters was bitten by a rattlesnake; he gave him nothing but whisky, and in three days after he was driving his team. In this case, it took three pints of whisky to produce intoxication."

[Dr. Harvey Lindsly, of Washington, also relates (*Stethoscope*, Oct. 1852) the case of a soldier who was bitten by a rattlesnake, and was made dead drunk afterwards by his comrades, as an experiment in the way of cure. He recovered.

It should be remembered, however, that all cases of bite are not fatal, and it therefore requires a more extensive trial of the remedy to justify confidence in it.]

RECENT RESEARCHES ON HÆMATOLOGY.

BY MM. BECQUEREL & RODIER.

The following are the conclusions derived from recent researches:

1. In most chronic diseases, or rather as a result of various modifications in health, the three principal elements of the blood—globules, albumen, and fibrine, may be diminished or increased, singly or in combination. The associations depend on the nature of the diseases.

2. The amount of globules is diminished in the course of most chronic diseases of long duration, especially in organic diseases of the heart, in chronic Bright's disease, chlorosis, marsh cachexia, hemorrhages, excessive sanguineous discharges, fluxes, the last stage of tuberculization, and the cancerous diathesis: also, when the patient has had insufficient or innutritious food and insufficient air, damp and dark habitations, etc.

3. The albumen of the serum diminishes in Bright's disease, marsh cachexia, diseases of the heart in the third stage, extensive symptomatic anemia, and the cancerous diathesis. The albumen is also diminished as a result of insufficient food.

4. The fibrine remains at its normal standard, and even rises above it, in acute scurvey; it is diminished in chronic scurvy, and in the scorbutic state symptomatic of some chronic diseases; and it is in diseases of the heart that this state is most frequent and best marked.

5. In all the preceding cases, the quantity of water in the blood is increased much above the healthy standard.

6. The diminution in the amount of globules is shown chiefly by the following symptoms: loss of colour of the skin, palpitation, dyspnœa, blowing murmur with the first sound at the base of the heart, intermittent blowing murmur in the carotid arteries, continuous blowing murmur in the juglar veins.

7. The diminution in the proportion of albumen, even when inconsiderable, when it takes place rapidly, quickly produces dropsy. When the diminution is more chronic, dropsy is still produced; but the

diminution of albumen must be greater than when it is acute. In general, dropsy is a symptomatic mark of the diminution of albumen.

8. The diminution of fibrine is shown by the production of cutaneous or mucous hemorrhages.

9. In the anemia symptomatic of excessive hemorrhage, of insufficient food, and of the profuse fluxes, the change in the blood is characterized by low specific gravity, increase of water, diminution of globules, the albumen being of its normal quantity or sometimes slightly diminished, and the fibrine in healthy amount.

10. In chlorosis, which is an affection quite distinct from anemia, changes in the blood may be entirely wanting. When present, they consist in increase of the water, diminution of the globules, and the retention of the healthy quantity, or increase, of the albumen and fibrine.

11. In acute Bright's disease, the quantity of globules and fibrine is normal, while the albumen is diminished. In chronic Bright's disease, the globules and albumen are diminished, and sometimes the fibrine.

12. Most idiopathic dropsies are due to the diminution of albumen in the blood. They are acute or chronic, and generally have as their origin some destruction of the solid or liquid constituents of the organism.

13. In the diseases of the heart, the blood is changed in proportion as the fatal termination approaches. The changes consist in the simultaneous diminution of the globules, albumen, and fibrine, and in the increase of the water.

14. In acute scurvy, the blood does not undergo any appreciable modification. In chronic scurvy, the fibrine is remarkably diminished in quantity, and sometimes the globules are much increased. In both forms, an increase in the proportion of soda would explain the facts, but it wants demonstration.

15. All these modifications exert a great influence on the medical treatment of various morbid conditions. Each element of the blood is modified by a special therapeutic method. The diminution in the quantity of globules is combated by chalybeates; that of albumen, by cinchona and nutritious diet; the diminution of fibrine and the increase of soda in the blood, by tonic regimen and the use of vegetable acids.—*London Jour. Med.* Oct. 1852, from *Gazette Medicale de Paris*, July 31, 1852.

SCARLATINA.

Prof. BENNETT, in a clinical lecture (*Month. Jour. Med. Sci.* Oct. 1852,) after relating three cases of this disease, remarks: "Of all the eruptive fevers, Scarlatina is the most rapid in its invasion, and the most simple in its course. Great watchfulness is therefore demanded on the part of the practitioner, especially when the crisis is to be expected, so that if the pulse falters, and prostration comes on rapidly, he may be prepared to meet it. Perhaps, also, Scarlatina is the most infectious of the eruptive fevers, so that complete separation of the patient from the other members of a young family is at all times to be insisted on as soon as possible.

"A chief peculiarity of Scarlatina is, that, in addition to the general fever and characteristic eruption, the tonsils and mucous membrane of the mouth and pharynx are also inflamed. This occasions difficulty of deglutition, with soreness of the throat, symptoms which require for relief topical remedies—such as leeches, fomentations, astringent and slightly acid gargles, or a linctus, etc. If sloughing or ulceration occur, the application of the stronger acids, or the nitrate of silver, is often necessary. The difficulty of deglutition sometimes impedes the introduction of food into the stomach, and in this way assists in producing prostration, and prevents the administration of stimulants or medicine. It may also, in severe cases, impede respiration, and assist in producing asphyxia directly. A fatal result, however, when it does occur during the primary attack af Scarlatina, is generally dependent on the same causes which induce it in typhus fever—namely, congestion of the brain, as indicated by delirium, passing into coma, and followed by prostration of the vital powers. In addition to the throat complication, there are various others, all of which may require a special treatment. In the vast majority of cases, however, a general treatment, directed in the first place to subduing the excess of fever, and afterwards to supporting the strength, is indicated.

"Many efforts have been made by different practitioners to check or modify the intensity of the disease by administering various drugs, or carrying out particular kinds of treatment. Hence, during certain epidemics, or in its visitations to particular educational institutions, various practitioners have been sanguine enough to believe that their especial mode of practice has been more successful than any other. I do not consider it necessary to direct your at-

tention to the numerous plans which have been thus proposed, because all of them have been only partial in their operation, and no one of them has been more successful than another. You must remember that the causes of Scarlatina are as mysterious and unknown as are those producing every kind of fever; and that its fatality, like that of fever, is to be traced to constitutional circumstances in individuals, to unhealthy localities, or to the so-called type of the particular epidemic. Nothing, therefore, is more difficult under such circumstances than to judge whether the non-fatality observed at one time, or in a certain establishment, is referable to this or that practice. At all events, I have been unable to satisfy myself that any general rule of empirical or rational practice is to be derived from the contradictory accounts which have from time to time been made public on this subject.

"The most recent system of treatment which has been brought forward is that recommended by Dr. Andrew Wood; and I notice it in deference to the great experience that gentleman has acquired from his position as physician to Heriot's Hospital and other educational establishments in this city, which have been attacked by numerous epidemics of the disease. He considers that the most efficient and safe method of treatment consists in acting powerfully on the skin, with a view of thereby assisting nature to eliminate the scarlatinal poison from the system. As ordinary diaphoretics frequently fail, he has recourse to the following method: Several common beer bottles, containing very hot water, are placed in long worsted stockings, or long narrow flannel bags, wrung out of water as hot as can be borne. These are to be laid along side the patient, but not in contact with the skin. One on each side, and one between the legs, will generally be sufficient; but more may be used if deemed necessary. The patient is to lie between the blankets (the head of course being ouside) during the application of the bottles, and for several hours afterwards. In the course of from ten minutes to half an hour, the patient is thrown into a most profuse perspiration, when the stockings may be removed. In mild cases, the effect is easily kept up by means of draughts of cold water, and if necessary, by the use of two-drachm doses of sp. mindereri every two hours. In severe cases, where the pulse is very rapid—the beats running into each other, and the eruption absent or only partial, or of a dusky purplish hue—where the surface is cold—where there is sickness or tendency to diarrhea—where the throat is aphthous or ulcerated, and the cervical glands swollen, then he follows up the use of the vapour-bath by four or five grain-doses of carbonate of ammonia, repeated every three or four hours. Should this be vomited, then brandy may be given in doses proportioned to the age of the patient.

Carbonate of ammonia he considers to act beneficially: 1st, by supporting the powers of life; 2d, by assisting the developement of the eruption; and 3d, by acting on the skin and kidneys. Where the vapour-bath was used early in the disease, and its use continued daily, or even twice or thrice a day, according to circumstances, he has found that the chance of severe sore throat was greatly obviated. In regard to supervening dropsy, he considers that, by the use of the vapour-bath, with the other necessary precautions as to exposure, diet, etc., its recurrence is rendered much more rare. In the treatment of the dropsical cases, it was also very useful, and even might be trusted too entirely in some cases. Dr. Wood also condemns all depleting treatment, and even purgatives, during the first ten days, as not only not required, but positively dangerous, as tending to interfere with the developement of the eruption. In the later stages, as well as in the dropsy, however, he thinks purgatives are often beneficial.

"The general plan of this treatment appears to be so far rational that its object is to hurry forward the disease by applying damp heat to the skin, and by thus assisting nature to make her operations more perfect than they might otherwise be. In other words, by rendering the febrile eruption more complete, diminish the risk of its leaving behind it a tendency to subsequent disease. Whether this plan as a whole will, in practice, prove more extensively beneficial than any other, can only be determined by an extensive trial and careful comparison of the results. I propose, however, to try it in the next case which enters the wards."

The Professor subsequently tried this plan of treatment, and offers the following observations in regard to it: "On the first occasion, the vapour-bath produced little effect, but on the second copious diaphoresis was induced. Yet it so happens that the disease, instead of being shortened or rendered milder, was unusually prolonged, and was followed by rheumatism, dropsy of the inferior extremities, and by pericardial effusion. The febrile symptoms terminated by critical depositions in the urine so late as the fifty-second day. Although admitted June 29th, she was not strong enough to be dismissed from the infirmary until September 7th. This was certainly

an unfortunate case to commence the trial of a new treatment with; and yet observe, the girl had been always healthy, and there was nothing to indicate at the commencement that the sequela would be so severe or so prolonged. It would be absurd, however, to suppose that we can test the value of any kind of treatment by one case. I only give you the facts as I find them. I shall certainly continue the practice until I am satisfied either that it is really beneficial; or, on the other hand, no better than the simple treatment formerly pursued.

"It has frequently been observed, that the urine in Scarlatina, especially when dropsy supervenes, becomes albuminous. Dr. James W. Begbie, who has tested the urine in a considerable number of cases of this disease, considers its presence almost uniform. Aware of what he has written on this subject, I gave directions to the clinical clerk to test the urine daily, which was done during the whole time the patient was in the house. The result was, that on no one single occasion was the urine in the slightest degree albuminous. Even on the day when a slight deposit appeared, which was made up of casts and epithelium of the tubes, the report says, 'No albumen in the urine when tested by heat and nitric acid.' This coagulability of the urine, as well as various deposits which appear in it on critical days, must be considered as an evidence of the excretion of the morbid products which have circulated in the blood. Hence it is common, not only in Scarlatina, but in all inflammatory affections, as well as fevers. This point you must have seen me very observant of in watching for the resolution of inflammations and fever at the bedside. For the theory of its occurrence, I must refer you to my 'Treatise on Inflammation,' p. 65, and to a former lecture on 'Exudation.'—[See this Journal for Oct. 1850, p. 479.] It sometimes happens, however, that the critical discharge is comparatively slight, and that the organic elements are not dissolved so as to constitute fluid albumen. This appears to have occurred in the present case, for whilst morphological evidence of the crisis existed in the urine, in the form of cells and casts, it is distinctly stated no albumen could be detected by heat and nitric acid. Yet the girl's convalescence commenced from that day."—*Amer. Jour. Med. Sciences, January*, 1853.

PATHOLOGY OF PERICARDITIS.

A Comparative View of some of the more Important Points of the Pathology of Rheumatic and Non-Rheumatic Pericarditis, deduced from an Analysis of Cases.

Dr. Ormerod read an interesting paper on this subject before the Royal Medical and Chirurgical Society, November 9, 1852. He commenced by a reference to the researches of the late Dr. Taylor, who had satisfactorily shown that acute rheumatism was not exclusively the cause of pericarditis, and who had also called attention to the importance of granular disease of the kidney in reference to this morbid condition. The author desired to limit the use of the word pericarditis to present inflammation of the pericardium; and this analysis referred exclusively to cases of this nature. The means of investigation comprehended complete records of 1410 cases observed under nearly similar circumstances; that is, in the wards of different hospitals. Of these, 1249—88.59 per cent. were not cases of rheumatism; 161—11.41 per cent. were admitted on account of rheumatism, or suffered from it while under observation. Of the whole number, 85—6 per cent. had recent pericarditis, observed during life, or discovered after death, and were thus distributed:—

24 — 1.92 per cent. occurred among 1249 [non-rheumatic cases.
61 — 37.88 per cent. occurred among 161 [rheumatic cases.
85 — 6 per cent. 1410

The mean age of 61 subjects of rheumatic pericarditis was about 21; the mean age of 24 subjects of non-rheumatic pericarditis was 42; the extremes being 7 and 63 years. As to the different causes of the pericarditis:—

Rheumatic,	61 cases coincided with acute rheumatism.	
Non-rheumatic, of local origin,	7 ensued on inflammation of lungs or pleura.	
	2 ensued on malignant dis'se of pericard'm.	
	1 ensued on old cardiac disease.	
Non-rheumatic, of constitutional origin,	6 coincided with granular disease of the kidney.	
	4 coincided with hemorrhage or exhaust'n.	
	2 coincided with scarlatina or erysipelas respectively.	
	2 were inexplicable.	
		85

The date of the accession of pericarditis was determined in 33 of the rheumatic cases. The mean of these observations gave the 10.5th day of the rheumatic attack as that on which the pericardial complication most commonly supervened. The question whether a first or second attack of rheumatism was more likely to be accompanied by pericarditis, was beyond the reach of hospital statistics. This source of information was silent also on the question whether pericarditis be more likely to occur in severe or in the slighter cases of rheumatic fever. It might, however, be safely inferred, that the severity of the articular and pericardial affections bore no very close relationship to each other. It was certain that the most severe, even fatal pericarditis, might occur where there was but faint evidence of articular affection, and this latter condition might exist in the most aggravated and intense form without involving the addition of pericarditis to the other sources of distress. The author then entered upon the consideration of the subject of non-rheumatic pericarditis of local origin; and a question of importance here presented itself: What was the influence of pre-existing cardiac or pulmonary affections in inducing inflammation of the pericardium? The question was of equal importance in relation to acute rheumatism. The relation of pulmonary inflammation to pericarditis was thus illustrated. In the 1410 cases, the basis of this inquiry, some form of pulmonary inflammation—that is, pneumonia, pleuritis, or pleuro-pneumonia—was ascertained to exist, either by auscultation or dissection, in 265 cases. Of these,

		[pericarditis.
117 had pneumonia, of which	19	had recent
85 had pleurisy, "	6	"
62 had pleuro-pneumonia,	8	"
265	33—12.4 pr.ct.	

In the rheumatic class, pericardial inflammation commonly preceded, yet sometimes, though rarely, followed pulmonary inflammation. The non-rheumatic class told quite a different story: here pulmonary inflammation had apparently a distinct influence in inducing pericarditis, and this influence was most evident in cases of pleurisy; and clinical observation bore out the conclusion that the pericarditis was subsequent to, and probably contingent on the pulmonary inflammation.

The author then referred to the comparative fatality of non-rheumatic compared with rheumatic pericarditis, and also to the desirableness of instituting an exact comparison between Bright's disease of the kidney and acute rheumatism, in respect to their tendencies to induce inflammation of the pericardium. In conclusion, the author desired to ascertain how far the results obtained by his present analysis agreed with those of the published cases of Dr. Taylor, who had made the subject of non-rheumatic pericarditis so peculiarly his own. The deductions seemed identical, and one rose from the perusal of those elaborate clinical reports with a conviction that non-rheumatic pericarditis was more within the province of the anatomist than the physician. It was a disease with few or no symptoms, its physical signs were recognized more often by a chance discovery than on the suggestions of the disease, and its morbid changes small in amount and apparently inactive; and, where opportunity had occurred of watching the disease sometime previous to death, it had been apparently without effect on the general symptoms, its presence or absence being determined by the ear alone; and still, in these, its connection with the fatal termination had appeared to be that of coincidence rather than of cause.

Dr. Mayo concurred with the author in many of his views; but thought that the statement of non-rheumatic pericarditis being on the whole unproductive of fatal results should be received with caution. Severe diseases, which terminated rapidly in death, were sometimes attended with such slight indications of their presence as altogether to escape observation. He remembered a case strikingly illustrative of this fact. A man was brought into the Marylebone Infirmary, having suffered an apoplectic seizure. Although the symptoms were not severe, in a short time he died. After death, both lungs were found in a state of gray consolidation, and presented evidences of severe and extensive pneumonia, which had given no indications of its existence during life. The morning previous to the fatal attack the man seemed to be only slightly unwell. A case had been related in the paper in which pericarditis attacked a maniacal patient; and he thought it was an interesting question to consider how far the disturbance of the nervous system, in this and similar instances, disordered the nutrition of the part, and became a cause of pericardial inflammation.

Dr. Fuller expressed his accordance with many of the opinions set forth in the paper. There were, however, certain points on which experience had led him to form conclusions different from Dr. Ormerod. It had been stated that, according to the author's observations, rheumatic pericarditis

more frequently attended the second than the first attack of articular rheumatism. Now, the cases which had fallen under his own notice at St. George's Hospital led him to believe the reverse; these cases seemed to indicate very strongly that pericarditis most frequently accompanied the first attack of articular rheumatism. He quite agreed with the author that acute articular disease was by no means sure to be associated with pericarditis, for he had often seen severe acute rheumatism without any pericardial complication, and he thought inflammation of the pericardium should be regarded as merely one of the symptoms of acute rheumatism, as part of a general malady, which might or might not exhibit itself, and was not at all certain to do so in the most severe cases. With reference to the association of inflammations in important organs with pericarditis, out of 27 cases treated by him, pneumonia showed itself in 18, and pleurisy or acute bronchitis in 21. He felt at present, however, unable to declare in what degree the occurrence of such complications contributed to produce death.

Dr. Heale could bear testimony to the extremely slight symptoms that sometimes attended severe morbid conditions. He was summoned to an athletic, hearty-looking man, who had died with symptoms of tetanus. At the *post mortem*, one lung was consolidated throughout from the effects of pneumonia; the other was highly congested, and a strangulated inguinal hernia existed, including a portion of sphacelated intestine. He was unable to ascertain that any alarming symptoms had manifested themselves during life.

Dr. Copland thought that the author was entitled to the highest praise for having in his paper classified and grouped together the inflammations of various organs, regarding them not as simple manifestations, but as dependent on a general affection of the blood. A morbid condition of the blood diffusing itself throughout the system, exhibited itself at various points; but in general one diseased action would predominate, and mask the others. Inflammation of serous surfaces was a concomitant of Bright's disease, and such inflammation clearly arose from retention in the blood of certain deleterious principles, in consequence of the organ appointed for their elimination being unable to discharge its functions. It was of the utmost importance to look upon diseases not merely as local manifestations, but as associated exhibitions of a morbid condition diffused throughout the system.—*Med. Times and Gaz.*, Nov. 20, 1852.

TREATMENT OF AMENORRHEA.

BY H. BENNETT, M.D.

"When the advent of the menstrual flux is retarded in well-developed young females, who evidently suffer, both generally and locally, from the delay, a little judicious management will often determine its appearance. The state of the health should first be carefully scrutinized, and any general or functional derangement remedied by proper treatment. If the patient is weak and delicate, the various preparations of iron, with a generous dietary, are often of great use. If, on the contrary, she is plethoric, and subject to headache and flushing of the face, a light diet, gentle exercise, and alterative or saline medicines are indicated. A young female suffering in this way is better at home, under the eye of a devoted and attentive mother, should she be fortunate enough to possess such a parent, than in a public school, where the rigid discipline usually enforced renders it difficult to pay that attention to her state which it requires. Under the influence of these general means, the menstrual function usually manifests itself, and becomes regularized in the course of a few months. Should they prove inefficient, slight periodical stimulation of the uterine system should be resorted to. The plan I most frequently adopt is, the application of large mustard poultices to the breasts and inner and upper parts of the thighs, alternately, night and morning, during five or six days, every four weeks. The mustard poultices should be allowed to remain on until the skin reddens and begins to feel painful, but not long enough to blister it, as that would prevent their being replaced the following day. The feet may also be put in hot water night and morning, for a few minutes, and if there is any pain in the hypogastric or ovarian regions, large warm linseed poultices, sprinkled over with laudanum, may not only afford relief, but also promote the menstrual excretion. When the symptoms of local congestion are very marked, the application to the vulva of a few leeches every month, or about the fifth day of the local treatment, may be of great assistance. The commencement of this local treatment should be made to coincide with the menstrual nisus, when it manifests itself periodically. When it does not, a certain date should be taken, and adhered to at the interval stated—that is, every twenty-eight days. In such cases, the medicines known as emmenagogues, which exercise a special influence over the uterus, are scarcely, in my opinion, admis-

sible, the object being to *gently* promote the natural function, and not to violently stimulate, and probably irritate, the uterine organs.

"In amenorrhea connected with deficient uterine and bodily developement, the local treatment should be conducted on the same principles, only it generally requires to be carried out more perseveringly, and for a greater length of time. In addition to the means mentioned, I have also derived great benefit from electricity, the electric current being carried through the pelvis from the hypogastric to the sacro-lumbar region, for an hour night and morning, during the week that local means are resorted to. In these cases, it is evident that the non-development of the body is often in a great measure the *result* of the dormant condition of the uterine organs, inasmuch as I have repeatedly succeeded in rousing them to action by the local treatment above detailed, when the most judicious and persevering general treatment had failed. In these cases, I have invariably seen the bodily structures subsequently develope themselves with great rapidity. At the same time, the knowledge of this fact must not for a moment prevent our employing every possible means of invigorating the general health, of vitalizing the economy, and of promoting the regular play of the various functions. After removing any morbid functional condition which a careful scrutiny may detect, recourse should be had to the mineral and vegetable tonics, and especially to ferruginous preparations, to which should be added a generous diet, moderate foot or horseback exercise, cold bathing or spunging, early hours for retiring and rising, and residence in the country, if possible.

"When amenorrhea can be traced to a debilitating disease, such as chlorosis, phthisis, scrofula, etc., the best treatment is the treatment of the disease to which it is referrible. Thus, in chlorosis, the menstrual flux gradually diminishes, and may finally cease altogether under the influence of the progressive deterioration of the blood, without there being any uterine disease or any other uterine symptom than the scantiness and final disappearance of the secretion. As under appropriate general treatment the blood becomes healthy, menstruation returns or again becomes gradually more and more normal, without any local treatment being necessary in the immense majority of cases. The same may be said of scrofulous and other forms of constitutional debility. In pulmonary phthisis, the falling off and final disappearance of menstruation is a symptom of much more serious import, as it is generally connected with the more advanced stages of the disease, and with an amount of tubercular deposit, and of consequent marasmus, through defective nutrition, which renders the chance of a recovery very problematical.

"Amenorrhea from physical obstacles can only be remedied by surgical means. If the hymen is imperforate, or the lips of the vulva are adherent, and the menses have collected behind, a crucial incision in the centre of the bulging hymen, or vulvar protuberance, is all that is required. Care, however, should be taken, once the menstrual fluid has been evacuated, that the divided surfaces do not unite and cicatrize. This is to be prevented by the use of small spunge or cotton tents for a few days, or by the application of the nitrate of silver to the edges of the incisions—a more painful but equally efficacious process. When the vagina is partially or wholly absent or closed, either congenitally or by adhesion from accidental causes, the case is a much more serious one, and more difficult to remedy. If there is merely adhesion of the walls of the vagina, this adhesion can generally be removed by the dilatation of the vagina, coupled with the gradual and careful division of the adherent surfaces. When the vagina is partially or entirely absent, the symptoms produced by the retention and accumulation of the menses in the uterus may be sufficiently serious to render it imperative to attempt to form an artificial passage, by surgical means, to the distended uterus. In such cases, the difficulty and risk of the operation depend on the distance that separates the vaginal *cul-de-sac* or the imperforate vulva from the uterus, the operator having to make his way between the rectum and the bladder. Considerable assistance in diagnosis is derived from a careful rectal examination. It is of great importance to find a vent for these uterine accumulations of menstrual fluid, as, in addition to the suffering endured, there is positive danger to life. Cases are on record in which the distension of the uterus extended to the Fallopian tubes, and in which death occurred from the peritonitis occasioned by their rupture.

"Occlusion of the os uteri, as a congenital occurrence, is rare; but since I first recommended the use of potassa cum calce as a last resource in which its use had been followed by all but complete occlusion, and by partial retention of the menses, or at least their difficult excretion. This was evidently owing to the want of due caution at the time of application and during the period of healing afterwards. The tenden-

cy of the tissues thus treated to contract being very great, it should be counteracted, if necessary, by the occasional use of wax bougies, until the process of repair has been fully accomplished. The possibility of this accident occurring through the want of caution of the operator, does not in the least invalidate the utility of the remedy, as an exceptional and ultimate one. I have generally, but not always, found this form of occlusion easy to remove by progressive dilatation. Should occlusion of the os uteri exist congenitally, once recognized it is easily remedied by a slight incision in the region of the os, and by subsequent dilatation.

"The catamenial function appears to be more especially liable to arrest from accidental temporary influences, in those females who present the low degree of sexual vitality to which allusion has been made in the first part of this paper, and with whom menstruation appears late and with difficulty. In such constitutions, indeed, it sometimes stops for many months, or even permanently, if no treatment be resorted to, without any apparent cause. Under the influence of decided general and local treatment, the menses will often return for a time, but flag and cease as soon as the treatment is suspended. If there is no positive disease of the uterus or ovaries, the emmenagogues, such as ergot of rye, savine, etc., may be cautiously tried. I have known also the married state, especially if followed by conception, produce a complete change in the functional activity of the uterine system, and menstruation become regular and natural. It is in these cases that the application of the nitrate of silver to the cavity of the uterus, or the scarification of its mucous surfaces, has been proposed. I must confess, however, that I do not think we are warranted in thus interfering with so delicate and sensitive a region of the uterus for such a purpose. In the unmarried female, the application of leeches to the vulva, and in the married to the neck of the uterus, answers every purpose, without being open to the same objection.

"The developement of inflammatory disease in the neck or body of the uterus, or in the ovaries, and of cystic and scrofulous tumors in the ovaries, is one of the most frequent causes of amenorrhea in those in whom the function has once been fairly established, and especially of partial amenorrhea. When such lesions exist, they generally give rise to other symptoms which an attentive and well-informed observer may easily recognize. This remark, however, applies more to the uterus than to the ovaries, for important morbid changes are not unfrequently found after death in the latter organs, which during life, have given little other evidence of their existence than the modification or arrest of the catamenial functions.

"In all these cases, the amenorrhea is merely a symptom of the ovarian or uterine disease. The latter is the condition to be treated, the only indication the amenorrhea itself supplies being the advisability of having recourse to such local means as are calculated to promote menstruation, whenever nature appears to be making the least effort to establish the menstrual flux.

"In vicarious menstruation, our first effort ought to be directed to the restoration of the integrity of the uterine organs, if it be impaired. We should then, by all the means enumerated, attempt to divert the molimen hemorrhagicum of menstruation from its abnormal to its normal seat. The most important of these means is the abstraction of blood from the vulva or cervix uteri, which should be resorted to every month, a day or two before the vicarious menstruation is expected, and may be repeated after it has begun, should the strength of the patient admit of such a step. By this treatment, the menstrual nisus may nearly always be diverted into its natural channel; whereas, any attempt to stop the morbid hemorrhage, by means applied directly to the organ from which it takes place, might be productive of mischief to the system at large."—*Lancet*, April, 1852.

ON THE MUSCLES WHICH OPEN THE EUSTACHIAN TUBE.

Joseph Toynbee, Esq., F. R. S., read an interesting paper on this subject before the Royal Society on the 17th February last. He commenced by alluding to the opinion generally held by anatomists, viz.: That the guttural orifice of the Eustachian tube is always open, and that the air in the tympanum is constantly continuous with that in the cavity of the fauces. An examination of the guttural orifice of the tube in man and other animals has led the author to conclude that, except during muscular action, this orifice is always closed, and that the tympanum forms a cavity distinct and insolated the outer air. The muscles which open the Eustachian tube in man are the tensor and levator palati, and it is by their action, during the process of deglutition, that the tubes are ordinarily opened. That the act of swallowing is the means whereby the Eustachi-

an tubes are opened, is shown by some experiments, of which the following may be cited: If the mouth and nose be closed during the act of swallowing the saliva, a sensation of fulness or distension arises from the air, which is slightly compressed in the fauces, passing into and distending the tympanic cavities. Upon removing the hand from the nose, it will be observed that this feeling of pressure in the ears does not disappear, but it remains until the act of deglutition is again performed, while the nose is closed. In this experiment, the Eustachian tubes were opened during each act of deglutition; during the first act, when they were open, air was forced into the cavity of the tympanum by the contraction of the muscles of the fauces and pharynx, and the guttural orifices of the tubes remained closed until the second act of swallowing, which opened the tubes, and allowed the air to escape. That the act of deglutition opens the Eustachian tubes was inferred also from the custom usually adopted of swallowing while the descent in a diving-bell is performed; by this act the condensed air is allowed to enter the tympanum, and the sensation of pain and pressure in the ears is removed or entirely avoided. The author gives an account of the Eustachian tube and its muscles in mammalia, birds, and reptiles. In some mammalia the muscles opening the tubes appertain as in man to the palate; in others, this function is performed by the superior constrictor muscles of the pharynx. In birds, it is shown that there is a single membranous tube into which the two osseous tubes open; this membranous tube is situated between, and is intimately adherent to, the inner surface of each pterygoid muscle, and by these muscles the tube is opened. The conclusion to which the author arrives respecting the influence of the closed Eustachian tubes is, that the function of hearing is best carried on while the tympanum is a closed cavity, and that the analogy usually cited as existing between the ordinary musical instrument the drum and the tympanum, to the effect that in each it is requisite for the air within to communicate freely with the outer air, is not correct. On the contrary, the author shows that no displacement of the air is requisite for the propagation of sonorous undulations, and that, were the Eustachina tubes constantly open, these undulations would extend into the cavity of the fauces, there to be absorbed by the thick and soft mucous membrane, instead of being confined to the tympanic cavity, the walls of which are so peculiarly well adapted to the production of resonance, in order that they may be concentrated upon the labyrinth.

In corroboration of the above views, the author states, that in case of deafness, dependent simply upon an aperture in the membrane tympani, whereby the sonorous undulations are premitted to escape into the external meatus, the power of hearing has been greatly improved by the use of an artificial membrana tympani, made of very thin vulcanized India-rubber, or gutta-percha, which is so applied as again to render the tympanum a closed cavity.—*Med. Times and Gazette.*

ON THE REPRODUCTION OF NERVOUS SUBSTANCES,

AND ON THE STUCTURE AND FUNCTIONS OF THE SPINAL GANGLIA.

Dr. A. Waller, after having made many experiments on different animals, principally warm-blooded ones, of an early age, and frogs, considers himself entitled to the conclusion: "That the old fibres of a divided nerve never again anew their original structure and functions, and that the reproduction of nervous substance does not take place merely in the cicatrix itself, but also downwards into the terminating ramifications. The *old* fibres gradually waste, and after a month or later, *new* fibres are formed, which are pale and transparent, posesses no double contour, present a very unequal diameter, being on the one place very thin, on the other varicose, like the fibres of the spinal marrow. In the peripheral part of the glosso-pharyngeal nerve of a frog, three months after the section, their size was only about one-sixth to one-third of the original fibres; they resembled, therefore, much more the ramifications of the nerve in very young frogs. In the central part of the cut nerve the fibres remain unaltered. Concentrated acetic acid dissolves the membrane of the newly-formed fibres, leaving fusiform nuclei; the membranes of the original fibres are completely dissolved, no nuclei being left. The reproduction of fibres, and the return of function, proceed in the same proportion. Of great importance are Dr. Waller's experiments for the understanding of the *structure and function of the ganglia.* While, as he has previously shown, all motor nerves, separated from their cerebro-spinal centre, become entirely changed in their microscopic appearance, the peripheral part of the sensitive spinal nerves, the root of which is cut through between the spinal cord and the spinal ganglion, remains unaltered as long as the connection with the ganglion is maintained. Ten or twelve

days after having divided one or both of the roots of the second cervical nerve, he was enabled to make the following observations: 1. That part of the sensitive nerve which is situated between the place of division and the ganglion, is disorganized in the same manner as any dissected nerve in its peripheral end. 2. Tracing the disorganized fibres into the interior of the ganglion, as they are seen mixed with normal fibres, the disorganized ones appear to pass into ganglionic globules, which are likewise altered, seeming to be deprived of their contents, and to consist merely of a thin, indistinct membrane. 3. The normal fibres appear to end by very thin filaments passing into normal ganglionic globules. 4. All the fibres originating within the ganglion are in their normal state. 5. The motor fibres are completely disorganized in the whole of the peripheral part of the nerve (no motion is produced by galvanism, or any other stimulus. 6. After having divided only the posterior root. all the fibres *below* or on *the other side* of the ganlia were normal. 7. After having divided the nerve *below* the ganglion, or after having cut out the ganglion, all the fibres in the peripheral parts were disorganized. It is evident from this, that the spinal ganglion acts as a nervous centre for the sensitive fibres, but not for the motor ones. Dr. W., promises to give soon more detailed observations, as well on the same subject as on the function of the nervus vagus and sympathetic.—*British and Foreign Medico-Chirurgical Review.* January, 1853, from *Muller's Archives*, 1852, No. 4.

EXTRAORDINARY PRECOCITY IN The Development of the Male Sexual Organs and Muscular System in a Child Four Years Old.—By Robert King Stone, M.D., Professor of Physiological Anatomy in the National Medical College, and one of the Surgeons of the Washington Infirmary. (Read to the Pathological Society of the District of Columbia.)

I have the honor to present to the Society one of the most extraordinary cases of precocious development of the male sexual organs and general muscular system now on record.

Mr. Charles S———, of this District, brought his son, Theodore, to my house on the 14th of September, 1852, his birthday, for my inspection and opinion; stating that on that day he was four years old. I at once declared my incredulity, for his height and robust development seamed those of a child at least six years older than the age he mentioned. My astonishment was greatly increased, when, on stripping the boy, he offered to my view the well developed sexual organs of a man, and the pubes covered with a luxuriant growth of hair.

I was perfectly incredulous that the boy was born on the 14th of September, 1848; but his father said he could produce his certificate of nativity, and that he, with his mother, the midwife who delivered him, and fifty other responsible persons, would sware that he had stated his age correctly.

The boy is remarkable handsome, and when stripped he presents a form of great beauty, which is, in fact, a minature moddel of a perfectly developed athletæ.

The conditon of his muscular and osseous system is extraordinary; the deltoids and other muscles of the arm, forearm, back, and thorax, have the same relations to his height that those of a hard-laboring man would have of the stature of six feet. The muscles of the thigh, gluteal region, and leg, are perhaps better developed than those of the upper extremity, but in nearly the same ratio to the height.

If the child's face is concealed the examiner would declare his figure to be that of a minature man, perfectly developed, and at least 21 years of age.

There seems to be little adipose tissue about him, the muscular prominences being clear, and well defined, as if produced by constant exercise or hard labor.

The growth of hair is distinct in the axilla, but by no means so marked as that upon the pubes. As in very robust men, the lumbar and sacral regions are covered with a thick down of dark hair.

His height is now four feet one-quarter inch, and weight nearly seventy pounds; though his mother informs me he weighed seventy-five pounds in the spring, and attributes his diminution to the great number of lumbricoides which infest him.

His penis is that of a well developed man, measuring in a semi-flaccid state four and a quarter inches in length, and in the state of perfect flaccidity three and a half inches. The prepuce is short, leaving exposed a perfectly formed glans penis. I might state, also, that the papillæ of the corona glandis are in a state of hypertrophy, being distinctly salient, and exquisitely sensitive. The pubes are covered with a luxuriant growth of crisp, curling, dark-brown hair, as found in the adult state.—In the scrotum, presenting the appearance of the adult, are two firm, apparently well-developed testicles, perhaps rather under the average size of those organs in the adult. Independently of the penis, the develop-

ment of these alone would have been decidedly remarkable at that tender age.

The spermatic cords are distinct, and under the finger give the impression of perfect organs.

Carefully examined from the neck down, the appearances are those of a *perfect man*, whilst the head and face were those of a child. On examining his mouth, it was found to contain only the twenty deciduous teeth of his age, with the exception of the middle incisors of the upper jaw, which were carious to the fangs.

The head was perfectly formed, and bears a proper portion to the development of the body.

The breadth between the ears across the cerebellum was great; in fact, the anterior development of the cranium was less than the posterior; yet the relation could not be called bad at his early age.

The boy is lively, and seems intelligent, though his speech is imperfect, but he pronounced with facility after his father. He seemed unwilling to talk of his own accord before strangers; his father informs me, however, that he is very talkative at home and quite intelligent. His temper is good, and he is almost always in good-humor, but when excited by anger, his father alone can manage him, which he does by an old-fashioned, knock-down blow.

His father observed last night, when he slept with him for the first time, a constant erection of the penis, accompanied by a nickering, like an excited stallion, and for these reasons consulted me.

The boy has most always slept by himself, and on a hard pallet on the floor.—His back and shoulders are covered with the *acne simplex* of puberty. He has never been known to attempt masturbation, nor is it known that he has had sexual relations, although the organ has that appearance. The slightest touch of the penis excites it, and the organ becomes tumid and of the average adult size, during the requisite examination.

The voice is that of puberty, and has been so for some time.

On the 15th of September, I visited him, accompanied by my friend and colleague, Professor John Frederick May, who verified the preceding examination and my measurements.

He is the seventh child and third son of his mother; weighed eleven and a half pounds at birth, and fifty-six pounds at three years.

At birth, the glans penis was perfectly uncovered, and the hair on the pubes half an inch long; at one year, things were just as they are now.

Around the thorax under the axilla,			he measures	2 feet	1½ inches.
"	hips	"	"	2 "	20 "
"	thigh (middle)	"	"	1 "	9 "
Penis in semi-flaccid state		"	"		4½ i. long
"	flaccid state				2½ inches

fall in circumference.

Around the arm, below insertion of the deltoid muscles, he measures 8 inches.

Around the neck he measures 1 foot.

Around the head (above ears and over hair) he measures 1 foot 8 inches.

From meatus auditorus to meatus of opposite side across the occiput, he measures 9¾ inches.

Although his neck is full, there is no remarkable development of the laryngeal cartilages, Pomum Adami.

The next is in regard to the power of the testicles to secrete. Since I first saw this man-boy, his father has made inquiry as to this fact, and states the following to me as the result.;—

"On the 13th of September, he slept with a near relative, a married lady, the mother of several children. In the middle of the night, she was aroused by finding the boy closely clapsed to her back, and her night dress saturated. She thought he had emptied his bladder upon her, but on carrying her hand to the part, she found that it was saturated with a *very different and glutinous material* from that she expected.

I regret that I could not obtain the ejected matter to submit it to a microscopic test. The boy is extremely fond of embracing the opposite sex, though nothing further has been ascertained. In no other of the seven children born by the same mother has the same condition been observed, and in comparing an elder sister of 10 years, I found she was extremely delicate, and only half an inch taller than Theodore.

I have several times seen him during an attack of nickering, and am satisfied that it is produced by a tendency to epilepsy.

Since writing this account, I have been furnished by Dr. W. A. Williams with a certificate, stating that he has known the family of Charles S——— for the last seven years; that he knows Theodore was born in September, 1848; that he saw Theodore when a very young infant, in the arms of his mother, and knows, from having seen him almost every week since that time, that he is the same child who was presented to the Pathological Society of the District of Columbia, by Dr. R. K. Stone, on Friday Sep. 17, 1852.

Further, Dr. Williams states that he has attended the family professionally for about eighteen months, and was a student of medicine at the time that Theodore was born; and that he was aware of his precocious sexual development in January 1852, from

actual inspection, though he had been informed of it at an earlier date.

In terminating this simple statement, I may observe that the father presented extreme precocity, having experienced his first sexual indulgdnce at the age of 8 years. He informed us that between the age of 10 and 13 years he was a *better man* than he has ever been since. Delicacy forbids my detailing his prowess at an early age.

This extraordinary case will be perfectly under control for some time, and I will most willingly make any further observations which may be dictated by better heads.

It will be observed, that this is perhaps one of the most extraordinary cases on record, and I will now proceed to a hasty examination of a few of those to which reference has been made for me, in an exceedingly brief space of time, by my friend, Dr. R. D. Coolidge, U. S. A.

1 *Precocious Puberty in Males.*—An Account of a Child 3 Years Old. By Gilbert Breschet, M.D. *Philadelphia Jour. of the Med. and Phys. Sciences*, 1821, vol. iii. pp. 417–28. James A. Sarin born 20 October, 1817 ; 3 years and one month old at report ; weighs 50 pounds, 3 feet 6½ inches high ; penis when flaccid, 4 inches long, and 5½ when erect. Testicles *not enlarged* in proportion to penis.

2. *Good's Study of Medicine*, p. 73. N. Y. edition of 1829. Boiset, in the *Journal des Savans*, give a case of a boy 3 years. *Philosophical Transactions*, 1745, boy 2 years 11 months. These were cases of great salacity, and no description given. Mr. Dankes, of St. Ives, near Huntingdon, reported the "Prodigium Willinghamnese." The boy was buried at Willingham, and his epitaph was, "Born October 31, 1741, died September 3, 1747. At one year had signs of manhood, not 3 years was nearly 4 feet high ; stupendous voice, and he died of premature old age."

3. Pliny (*Hist. Nat. Lib.* 8, c. 17), reports a boy at Salamis 4 feet high, and attaining puberty at 3 years.

4. The case seen by Craterus, brother of Antigonus (*Phlegon, De Mirabilia*, c. 32), who was infant, youth, adult, father, old man, and corpse in 7 years.

5. *Milburger's Curiosities*, several cases.

6. Case reported by A. Lopez, M.D., of Mobile. *Amer. Jour. Med. Sciences*, vol. v. 1843, p. 500. Mulatto boy aged 3 years 10 months, and 15 days; weight 82 lbs; height 4 feet half inch ; width around chest 27½ inches; belly 27 inches; thigh 19 inches; arm 9½; circumference of the head 22 inches; length of penis at rest 4 ; circumference 3½; his scrotum has a fair proportion to the other developments; but the *testes* have not decended ; has wiskers ; axillæ hairy ; teeth 20, and *deciduous* ; lifts a man of 140 pounds ; covered with *acne simplex* (as Theodore S——— is) of puberty. Has spermatic odour, but not known whether he has veneral appetite; judge from stains on his shirt.

To these, I could add fom *Beck's Med. Jurisp.*, p. 519, vol. i. 1838, several cases in both sexes.

Very many cases of precocious development in the female might be adduced ; but to them I do not care to draw your attention ; it is only necessary to recall the fact that the mother of a family on the banks of the Ganges need only be 9 years of age.

There has been no time to investigate this subject fully, but I think it will be difficult to find a case comparable to the one which I now present you. In most of the cases to which reference has been made, there is something wanting ; and when we examine the totality of the appearances, there is not one, except the case described by Craterus, which approaches the proportion of Theodore S———.

Washington, D. C., *Sept.* 1852.

SPECIFIC GRAVITY OF THE BRAIN.

Dr. W. H. O. Sankey has published in the *British and Foreign Medico-Chirurgical Review* (January, 1853), the analysis of 77 observations made upon the specific gravity of the brain. These render probable the following general conclusions, viz:—

That the mean specific gravity of the gray matter, in either sex, is 1.034 ; that the density of the gray matter is somewhat below the mean in the earlier and latter periods of life ; that the highest destiny is met with between the ages of 15 and 30 years in males, and between 20 and 30 years in females ; that the density of the gray matter is, in a slight degree, lower in those persons who have died after a long illness, and greater, to a slight extent, in those subjects examined before twelve hours after death than in those examined at later periods.

That the density of the gray matter may be found in a subject after death to be .006 below the mean, without any cerebral symptoms having been present during life ; but when the specific gravity exceeds the mean by .006, then one of the following conditions has existed during life, viz: either acute cerebral disease, attended with head symptoms of the gravest character, or chron-

ic disease (in all the cases analyzed of chronic disease of the kidneys), attended either with no cerebral symptoms, or only with slight delirium.

That the mean specific gravity of the white matter after death is 1.041; that its density varies less than that of the gray matter in the sexes, or in the different periods of life; that it is much less affected by *post-mortem* changes or length of the last illness.

That in those cases in which the gravest cerebral symptoms were present during life, the density of the white matter after death may present two opposite conditions—either it may exceed the average, or it may be much below the mean.

That high specific gravity of both gray and white matter is found in conjunction with those morbid conditions of the brain connected with hyperæmia, and that a low specific gravity exists in conjunction with the opposite condition of the brain.

That no relation appears to exist between the specific gravity and the actual weight of the brain.

ON THE EXISTENCE OF SEMEN IN AGED MEN.

BY M. DUPLAY.

It is a long established notion that the secretion of semen is entirely arrested in old men, and in this way their loss of procreating power is accounted for. This idea was refuted by the researches of Fischer, who found seminal fluid in abundance in the vesiculæ and testes of a man aged 94.

After the discovery of the spermatozoa, it was then concluded that the semen of old men did not contain them, and thus accounted for their impotency. Some isolated and imperfectly conducted examinations of the fluid, apparently warranted this idea. Such an opinion, however, is not compatible with the well-authenticated cases, and too numerous to be false, of the procreating power of old men. Wishing to arrive at more positive and authentic data, M. Duplay examined the fluid contained in the seminal apparatus in 51 aged subjects.—Apart from the consistence, colour, and other less important properties, in 37 cases spermatozoa were found, which, in 27 cases, were perfectly formed, the head large, tail long, and curved; in a word, not differing from that of the adult, and in some instances as abundant.

Among these 37 examined. 8 were sixty years old; 20, seventy; and 9, eighty. Also in the 7, where the spermatozoa were as numerous as in the adult, the minimum age was seventy-three, and the maximum eighty two. In these subjects, 21 died of acute and 16 of chronic affections, giving rise to that wasted condition which, according to some observers, causes their disappearance in the adult.

Nevertheless, if this secretion possesses, occasionally, at this age, the same power and regularity in its effects as at an earlier period of life, it is not always so; for M. Duplay could not find any spermatozoa in 14 of the cases examined; also, in some, there was a remarkable modification in their structure, abundance, or seat. The tail or head was occasionally deformed, some having a very short tail, others having virtually no head. Small crystalline masses were also seen, but their nature could not be determined.

As to the quantity, the writer observed that, in 14 cases, though the spermatozoa were fully formed, they were very few in number; a few only being visible, isolated, in the midst of a liquid, containing little granules and the debris of epithelial scales.

As to their seat, the animalcules were found in 26 along the whole extent of the spermatic apparatus; in 3, the semen in the vas deferens alone contained them; that of the vesiculæ contained none; in 1, they were found in the vesiculæ, and not in the vas deferens; and in 7, in the vesicula of one side, and not in the vasa deferentia.

These remarks are not only interesting, as being scientifically curious, but deduce some corollaries of use in a hygienic point of view. Thus, if old men become less apt for reproduction, it is not exclusively in the composition of their semen that the cause is to be sought for, but in some modification of the other acts necessary to this function. It may be also added, that if the semen continues to be secreted in the aged, it must have its use; but since, physiologically speaking, nothing then stimulates its evacuation, for the purpose of reproduction, may it not be concluded that it is destined to be reabsorbed, and thus by its stimulating influence tend, in a certain degree, to keep up the vital force. This conclusion is supported by the researches of M. Gosselin, as to the existence of the same secretion in obliteration of the spermatic canals. It is proper to show the dangers which artificial ejaculations give rise to at this age, notwithstanding the abeyance and providental passiveness of those organs, to which the name of excitors may be given.—*Dublin Medical Press*, February 16, 1853, from *Gazette Medicale de Paris*.

ACTION OF LIQUOR POTASSA ON THE URINE IN HEALTH.

Prof. E. H. Parks, M.D., in an interesting paper published in the *British and Foreign Medico-Chirurgical Review* (January, 1853), records some observations instituted to determine the effects of liquor potassa on the urine of a healthy individual preliminary to a similar inquiry into its action on the diseased persons. The following is his recapitulation of the results which he has obtained:—
—*Amer. Jour. Med. Science.*

If liquor potassa be taken soon after meals, its action is that of an antacid. It combines with hydrochloric or with lactic acid, and then, doubtless, passes into the circulation. What appreciable effects it now produces is not indicated in the tables above given, but it does not increase even the water, solids, or stomach, it passes unneutralized into the circulation, and probably through veins; in so doing, it must produce an effect on the walls of the capillaries and small veins, but the extent of this cannot be known. As much as ʒij have been taken with only 4 ozs., of water, without causing epigastric pain or uneasiness (although it produced considerable temporary scalding of the mouth and throat), and without apparently producing any local effects in the stomach. In, usually, from thirty to ninety minutes after its entrance into the circulation, an increased flow of slightly acid urine occurs, which contains the whole of the potash, organic matter differing considerably from that of ordinary urine, and a relatively large proportion of sulphuric acid; the phosphoric acid and the chlorine are less changed.—Perhaps an organic acid (not uric, and probably not hippuric) is also present. The explanation of these facts is, that an albuminous compound, either in the blood itself or in the textures, has become oxidized; its sulphur, under the form of sulphuric acid, has united with potash, and, with possibly the changed protein-compound, is poured out from the kidneys. This oxidizing effect of the liquor potassa is no doubt assisted by exercise, and by copious draughts of water; but in the above experiments, exercise and fluid were abstained from, in order not to complicate the results. The amount of albumen or fibrine destroyed by one drachm of liquor potassa cannot be considerable, but if the potash were continued in large quantities, oxidation could probably be pushed to any amount. The nitrate and acetate of potash did not in a healthy system have the same effects.

After the increased flow of urine, the quantity passed per hour falls slightly below the standard. It appears to resume its ordinary composition, but its exact condition at this period has not been determined. Some observations on urine in disease would lead me to infer that the uric acid will be found to be increased.

Such were the effects of liquor potassa on the urin. The effect produced on other excretions was not obvious. The skin and the intestines appeared quite unaffected, and as all the potash was found in the urine, the reason of this is easily understood. in most of the experiments there were no subjective symptoms of any kind. On two occasions, there was rather sharp frontal head-ache, langor, depression, slight lumbar pain, and aching of the legs, after the large flow of urine. On the night of the 15th, when the flow of the urine, which was proceeding at the rate of ʒiss per hour, was augmented in two and a half hours by ʒxiv, and no fluid was supplied to the system, the pulse became perceptibly small (almost thready) and slow; it remained equal and regular—there was no thirst, no shivering, and no nausea; the skin was dry and warm. In six hours the pulse had quite regained its force and frequency, and the other symptoms had disappeared without any fluid having been taken.

After the experiments were concluded, the general health did not appear impaired; it was, if anything, better than usual.

The effect of liquor potassa on the diseased system is a much more difficult problem. The chemical conditions are not the same, and the effects of the potash are necessarily influenced by them. I will not now enter into this subject, but observe that it is necessary, when its oxidizing effects are desired, to give the potash eight or ten hours after food, to drink moderate quantities of water, and, if possible, to use exercise. The potash should be given pure, or with large doses of iodide of potassium, but unmixed with sugar. It may so far anticipate what will be hereafter said on this point, by stating, that, administered in this way, it exerts a powerful effect on the exudations of inflammations, but appears less useful in the early stages, when an antagonistic force seems to be in action.

It remains to be seen whether the varying excretion of sulphuric acid, which is unaccounted for by diet and exercise, is occasioned by greater or less alkalinity of the blood producing variations in the amount of oxidation of the albuminous compounds.

ON THE STRUCTURE, FUNCTIONS AND DISEASES OF THE LIVER,

AND ON THE ACTION OF CHOLAGOGUE MEDICINES.

C. Handfield Jones, M.D., in a communication read before the Royal Medical and Chirurgical Society, described the minute structure of the liver as consisting essentially of a mass of nucleated cells or cælloid particles, usually more perfectly formed than the cells either of the salivary or renal glands, presenting a distinct nucleus, with a nucleolar spot, an exterior envelop, and an included mass of soft, semi-solid, albuminous substance, which commonly contained a few oily molecules. In addition to these, in well-nourished livers, were numerous free nuclei, imbedded in albuminous blastema, which exhibited various stages of progress towards the mature or perfect cell. The oily contents of the cells were subject to great variation, both in the same individual and in different classes of animals;—the less perfect the type of the respiratory process, the greater the quantity of oily matter in the hepatic cells. The cells in their general mass constituted the hepatic parenchyma; this might be subdivided into smaller portions, called lobules, which were separated from each other more or less completely by fissures, the fissures themselves being continuous with canals that ramified throughout the parenchyma, and which, from containing the portal vein and its associated vessels, had been termed portal canals. In reference to the mode of distribution of the vessels, originally so well expounded by M. Kiernan, the author remarked that he decidedly agreed with Theile, who denied the existence of the vaginal branches and plexus of the portal vein mentioned by M. Kiernan. The author quoted from a paper by Mr. Paget, who had described these vaginal plexusus to be derived, not from the portal veins, but from the hepatic arteries, from which they were completely filled, when both arteries and veins were at the same time injected. The interlobular portal veins were therefore derived directly from the portal veins; and those which appeared to be vaginal branches of the portal vien were its internal roots, by which it received the blood which had served for the nutrition of the hepatic ducts and other vessels of the liver. After alluding to the mode of ramification of the hepatic artery, and the divisions of the hepatic ducts following the branches of the portal canal, the author referred to the relation which existed between the ultimate ducts and the cells constituting the parenchyma of the lobules. The prevalent opinion had been, that these cells were exactly homologous to the cells of the renal tubuli or salivary vesicles, like them growing on a free surface open to the exterior. Hence some anatomists had believed they had detected a basement membrane, forming anastomosing tubes, constituting a true lobular biliary plexus.—Others, unable to find a basement membrane, had described the ducts as continued into the parenchyma of the lobules, as channels without proper walls, mere intercellular passages. After referring to the researches and opinions of Weber, Muller, Prof. Retzeus, on the one side, and of Val Guillon, Gerlach, and Dr. Carpenter, on the other, the author stated that the views of Kolliker, who denied the existence of intercellular passages in the lobule, agreed very nearly with his (the author's), and conceded his main position, that the cavity of the ducts was quite shut off from the cells of the lobules or their interspaces. The structure of the ultimate ducts, which the author had first discovered, was peculiar, and seemed to indicate strongly that they exerted active functions, and that they were something more than mere afferent canals. The injection of the duct, in the livers of pigs, by the double method, using separately saturated watery solutions of bichromate of potass and acetate of lead exhibited an abundant yellow precipitate in the fissures; but in very few *parts did* it penetrate the lobules, which *must have* happened if there existed a lobular biliary plexus of intercellular passages. The author conceived, therefore, that the hepatic ducts did something more than merely carry out elaborated bile. The ultimate ducts were far too small and too sparingly distributed, to be able to take up the bile from so vast a mass of cells as that which constituted the parenchyma. If the ducts did not extend beyond the margins of the lobules, of which the author had no doubt, then the bile must be transmitted from cell to cell; or there was a march of cells outwards from the centre to the circumference; or else the bile, arriving at the margin of the lobules, was taken up by the ultimate ducts in some unknown way. The author thought such assumptions groundless and unnecessary; and that the pathological state of fatty liver, as well as the fatty liver occurring naturally in fishes, showed that the secretion of the parenchyma was not identical with that of the ducts, for the gall bladder could hardly contain deep-green bile, when the parenchyma was naught but a mass of oil. He concluded, then, that the parenchymal cells of the lobules did not merely secrete bile which was carried off

unaltered by the ducts, but that the cells secreted biliary material, or some of its components, which were not fully elaborated or formed into perfect bile, except by the action of the ultimate ducts. Proof was then offered that the hepatic cells did not ordinarily contain bile, although it was commonly held they did. He believed that to be a diseased or exceptional condition, not found in the hepatic cells of slaughtered or healthy animals. Furthermore, a yellow tint in the cells was no proof of the presence of bile; it showed merely the presence of pigment, and yellow pigment is found in the fat of some animals quite independent of biliary secretion. Chemistry must be resorted to, to solve the question of the presence of bile in the hepatic cells. The author had made alcoholic extracts of the livers of different animals, and having evaporated to dryness, the residue, when dissolved in water, failed to show by Pettenkoffer's test, any reaction characteristic of the presence of the bile. The author, however, did not wish to express a positive opinion, but he thought that the received opinion had need of more direct evidence, before it could be regarded as proved. He then detailed the mode in which the morphological structure of the ultimate biliary duct fulfilled the function of secretion. The chemical changes which the ultimate ducts effected, might be conceived according to the hypothesis of Lehmann; and a summary of our present knowledge might stand as follows: sugar, oil, and a yellow pigment were found in the parenchyma of the liver; bile is not found there, but in the ducts; it is inferred, then, that the ducts, through their ultimate extreme portions, *make* the bile. The author next proceeded to detail some experiments made relative to the action of cholagogue medicines, the results of which led him to belive that mercury, muriate of manganese, and colchicum, were the only ones which seemed to increase the production of yellow pigmentary matter in the cells of the liver. They also increased the production of glyco-cholite and tauro-cholite of soda; but it had to be determined whether the quantity of these principles was always proportionate to the yellow pigment. It was clear that the cholagogue action of a medicine, its emulging effects on the ducts, was distinct from that which it excited in the production of biliary pigment. One very important effect of the administration of mercury on the liver, was noticed to be congestion of this organ; an argument rather forbidding the use of the remedy in inflammation of the substance of the liver, a plan otherwise recommended by analogical experience. The author then passed to the subject of diseases of the liver; the microscopic appearances of fatty liver were detailed, and the question, what constituted true fatty degeneration of the liver discussed. Was it a simple increase in the quantity of oil naturally existing in the hepatic cells, or was it a further and more important change? He believed the latter. In the liver of animals artificially fed on oily food, and subsequently examined, the cells, as well as the inter-cellular substance were loaded with oil-molecules: the accumulation of oil was equal everywhere. But in the morbid state of fatty degeneration, the oil-drops were not inclosed in distinct cells, but appeared to lie in an indistinct and granular, or semi-fibrous substratum. Another point of difference consisted in the absence of sugar in true fatty degeneration; while in the liver of an animal, fed on oily food to produce a fatty liver, sugar could be detected. Another point of importance was the limitation of fatty degeneration to the margin of the lobules; it was not a mere accumulation of oil in the marginal cells, but a destruction of those cells; a liver thus affected presented the lobules marked out by a zone of opaque matter.—No satisfactory explanation of this tendancy of oil to accumulate in the marginal cells could be offered. Fatty degeneration of the liver might occur in very different diseases; it was by no means peculiar to phthisis. Reference was then made to the waxy liver of Rokitansky, with which the author was not sure that he was acquainted. Cirrhosis was then mentioned, and Rokitansky's description quoted, as also that of Dr. Budd, whose views expressed the opinion ordinarily received, but from which the author in some degree dissented. The author believed that an unhealthy nutritive process was the essence of cirrhosis, and might be developed in one of three situations. 1. In the larger and moderate sized portal canals, excluding only the smallest. 2. In these last, and in the fissures. 3. In the smaller canals and fissures, and in the substance of the lobules. The first form produced *hobnail* liver; the second and third, the tough, firm, dense liver, sometimes termed brawny. The author considered cirrhosis to represent essentially a degenerative process, and to arise from the effusion of an unhealthy plasma, not only in the canals and fissures, where it induced unnatural increase, but also in the external part of the lobules, where it passed into a solid form, and constituted an amorphogranular substance, compressing the capillaries and obstructing the secreting cells.—The thickening and condensation of the fi-

brous tissue in the liver were thus not so much the effect of an inflammatory action, as of a low degenerative process, analagous to that which stiffened the valves of the heart and contracted the orifices; and which view the author thought was supported by the results exhibited in a table appended to the paper. The subject of jaundice next received attention. This was a disease that manifestly resulted from the conveyance into the blood of bile pigment, a constituent of the bile which was essentially excrementitious, and intended to be cast out with the fecal matter. In many cases it existed only as retained excretion; in others it seemed to be formed in excessive quantity, as in the acute yellow atrophy of the liver. Yellow matter was often found in the central cells of the lobules, and nevertheless, there was no jaundice. It should be borne in mind, that the yellow pigment, as it existed in the cells, did not evidence the presence of biliary matter, of cholic acid, or its conjugates. The yellow matter could be extracted by alcohol, and its characteristic reaction obtained by nitric acid, but Pettenkoffer's test decided against the presence of any organic biliary acid. The deep red color of the urine in jaundice depended on the presence of bile pigment solely; no trace of cholic acid was discoverable. The author considered the majority of cases of jaundice to depend on the absorption into the blood, not of completely formed bile, but of one of its constituents only, the yellow pigment; and this might take place in one of three ways: 1, by a mechanical obstruction to the flow of bile into the intestine, through the ductus communis choledochus; 2, from inaction of the elaborating ducts; 3, with or without impairment of the action of the excretory ducts, when an increased quantity of yellow pigment was formed in the parenchyma of the liver.—*London Lancet*, June, 1852.

INFLUENCE OF OCCUPATION ON HEALTH.

A curious and interesting report has been prepared by Mr. Finlaison, the actuary of the National Debt Office, upon the subject of sickness and mortality among the male members of friendly societies in England and Wales, as shown by the returns made by them to the government for the five years, 1846—1850. It appears that the proportion on the sick list in the course of the year is one in four, or 24.99 in every 100. The proportion seems large, but some allowance may have to be made for cases of feigned illness, and the persons in question are to those who are most favorably circumstanced in regard to food, clothing, lodging, and the various conditions of health. Mr. Finlaison proceeds to divide the members of these societies into four classes;—1, those who have heavy labor, with exposure to the weather, such as agricultural and other out-door laborers—a class in which he has 353,103 cases; 2, those who have heavy labor without exposure to the weather, such as smiths, sawyers, coopers, plumbers—a class numbering 95,259; 3, those who have light labor, with exposure to the weather, such as shepherds, drovers, drivers, pedlars, messengers, custom-house officers—in number 58,709; 4, those who have light labor without exposure to the weather, such as clerks, shopmen, barbers, factory operatives, servants—in number 286,909. He found that persons engaged in heavy labor with and without exposure to the weather, have respectively 28.04 and 26.54 per cent. of their numbers sick in the year; persons engaged in light labor, 20.80 and 21.58. In round numbers, taking a census of working men disabled by illness, for every three whose work is light or moderate there are four of the class whose lot is heavy labor. The duration of sickness to each person sick is, however, upon an average, only 38 days and 40.73 in the two classes engaged in heavy labor, and 42 days 44.25 in the two classes engaged in light labor. The mortality is heaviest among the persons classed as engaged in light labor; and in-door work shows itself less favorable to longevity than out-door.

But the main difference in the distribution of sickness seems to turn upon the expenditure of physical force. "This no new thing," says Mr. Finlaison; "in all ages the enervation and decrepitude of the bodily frame has been observed to follow a prodigal waste of the mental or corporeal energies; but it has been no where previously established upon recorded experience that the *quantum* of sickness annually falling to the lot of man is in direct proportion to the demands on his muscular power. So it would seem to be, however. Therefore, whatever scientific invention of machinery to save the expenditure of bodily strength may be devised, its production should be hailed as one of the greatest of blessings to the sons of toil, and ignorantly contemned by the very class whom in reality it ultimately benefits. A study of the following digest leads to the conclusion that the inventor of any engine which paralyses the physical energies diminishes the amount of human sickness, in proportion as he, by means of his device, economises

the labor of his fellow creatures." The tables show that the liability to sickness runs up to a temporary *maximum* in the young man, and then declines, and does not attain the same per centage until advanced years. This sick *maximum* of early manhood—the effect of a premature demand on the bodily vigor is in the period from 18 to 21, except in the class engaged in out-door heavy labor, in which it appears to be at 14. The same per centage is reached, ever afterwards to increase, at the age of 48 in the class who have in-door labor, 51 in the case of in-door light labor, 57 with out-door heavy labor, and 65 out-door light labor. These last remarks relate to the proportion of persons sick, not to the duration of the sickness. The duration of sickness does not decline in manhood, but increases with the age. The severity of the railway employment according to these tables, tells upon the constitution; the men, it is said, "get weather-beaten." In the police, there's a marked increase in the amount of sickness after 40, as if the service broke down the men at an earlir period than other occupations.

PAGLIARI'S HEMOSTATIC.

BY M. SEDILLOT.

M. Pagliari, a pharmacien at Rome, professes to have discovered a styptic liquor of great power; and several of the officers of the French army have testified to its efficacy. M. Sedillot has also, on several occasions, brought forward cases in corroboration; and in the present paper he adduces additional ones, in some of which considerable vessels, although not those of the first class, furnished the blood. He says that it has been objected that compression is employed by means of bandages and charpie; but this is merely to prevent the coagula which form being removed from the mouths of the vessels; and it has only to be continued for twenty-four or forty-eight hours. So little plastic is human blood, that compression alone, unaided by styptics, would have to be so prolonged and forcible, that it would risk the formation of ulcers or gangrene in the parts to which it was applied.

M. Pagliari has now revealed the composition, which is as follows: Eight ounces of tincture of benzoin, one pound of alum, and ten pounds of water are boiled together for six hours in a glazed earthen vessel, the vaporized water being constantly replaced by hot water, so as not to interrupt the ebullition, and the resinous mass kept stirred round. The fluid is then filtered, and kept in stoppered bottles. It is limpid, slightly styptic in taste, aromatic in odor, and the color of champagne. M. Hepp, of Strasburg, has substituted white rezin for the benzoin. Every drop of this fluid poured into a glass containing human blood produces an instantaneous magma; and, by increasing the proportion of the styptic to the quantity of the blood, a dense, homogeneous, blackish mass results.

Many are the circumstances in which the surgeon may not be able to have recourse to the ligature, as in the case of friable arteries, secondary hemorrhage from deep-seated, painful, or inflamed wounds, the impossibility of seizing the artery, or where the hemorrhage results from numerous arterioles, which are too small or retracted, or from veins and capillary vessels. In all cases, in fact, where compression is now usually employed, without much benefit being expected to result from it, and often indeed proving useless or dangerous, this fluid seems indicated.—*Brit. and For. Med. Chirurg. Rev.*, Oct. 1852, from *Bull. de Therap.* tom. xlii.

ACTION AND METHOD OF PREPARING CATHARTINE.

Trenkler prepares cathartine from the unripe green berries of *rhamnus catharlica*. It resembles pure aloethine, both in a chemical and in a therapeutical point of view. One or two grains of cathartine in the form of pills usually produce one or two, or in a susceptible patient, three or four pulpy stools, without griping. Three grains form a large dose. If the first dose should fail to produce the desired effect, a second may be given in three or four hours. Dr. Grapp (of Darmstadt,) who has carefully studied its therapeutic action, employs it in torpor of the bowels, in hepatic and splenic congestions, hemorrhoids, dropsy, and gout.

By simply treating the inspissated juice of the unripe berries with alcohol and ether, we may obtain an impure cathartine in considerable quantity (oz. viij. from 12 lbs.), which acts very powerfully, and much like aloes.—*Prov. Med. and Surg. Jour.*, Oct. 13, 1852. From *Jahrb. f. pr. Pharm.* Jan., 1852.

Part 3. Editorial.

PROGRESS OF ECLECTICISM.

We are occasionally favored with a knowledge of the manner in which the views of those of our school of practice are changed from rank and objectionable *heresies* as they are termed; when they are first promulgated, into the sound and *orthodox* ideas they become after having passed the rounds of several of our orthodox journals.

Some years since when we were a more frequent correspondent of those journals than at present, we endeavored to teach the medical profession somewhat in regard to the value of our indigenous medical plants; and at times our modesty was tried by letters from various sections of the country, and from physicians prominent in the profession, thanking us for our labors, and the new information we were imparting to them.

At this time a man who had long battled for an honorable position, first against the want of an early preparatory education, and next against the prejudices and enmity of his neighbors, obained a hearing through the journals, and presented his heretical views in regard to the value of Lobelia and some other generously abused plants, and with the perseverance of youth but the experience of many years Dr. Ariel Hunton, has succeeded so far as to have his articles on "Indigenous Medical Botany," copied into most of the leading journals of the country. It is but natural to suppose that our neighbors of the Western Lancet, as well as the authors of the United States Dispensatory, are entirely unaware of the fact, that Dr. Hunton, and the writer of this article, are both *Eclectics* of long standing. That Dr. Hunton has enjoyed the petty and vile persecution of the physicians near him for forty years on account of his independent and bold Eclecticism, and that the present writer has frequently avowed his entire independence in matters of medical faith and medical practice in the columns of at least one half the medical journals of the country.

Probably it is only through ignorance of these facts, that the so-styled orthodox, or legitimate journalists and writers have allowed themselves to make use of the results of our labors. In the last number of the Lancet, our neighbors Lawson and Wood, copy one of a series of articles from Dr. Hunton, originally published in an Eastern journal, and leave their readers to infer that it was furnished originally to the Lancet. They could not occupy their pages to better advantage; and we are ready to furnish them with a series of articles on plants that have been written by Eclectics, at any time they expresse a desire for them.

At the meeting of the American Pharmaceutical Association, held in Boston in August of last year, the Massachusetts College of Pharmacy in their report, stated that:

"We are*not* able to report *satisfactorily* as to the amount of Botanical Medicines sold; as this branch of trade has undergone considerable change within a few years. What was then confined to a few herbs and simples, now embraces a wide range of vegetable medicines. Indeed, the present "Eclectic System" bids fair to annihilate the old Thompsonian practice.—The practitioners of this school place but comparatively few of our officinal articles under their ban,—and these mostly corrosive poisons,—while they are introducing new vegetable preparations, (alkaloids. so called.) If we understand the term "Eclectic" as they use it we may soon expect to see them educated into the regular practic e."

From the above extract we may learn three things. First, that the Druggists are *not* pleased to have us use, and teach others to use our concentrated remedies. They "cannot report *satisfactorily* as to the amount of Botanical Medicines sold," not because the amount is small, but because, instead of a few simples, "it now embraces a wide range of vegetable medicines."—Most people would infer that the dealers would be pleased to have these articles prescribed, but some of them *dare* not keep them for sale, *lest they give offence to their lords and masters, the "regular physicians!"*

This fear we are led to suppose, may have some influence even in Cincinnati, but fortunately for the cause of humanity, a far less number of our druggists are under its influence now than formerly. Again, the use of the concentrated preparations, is taking the place of the "corrosive poisons" of the profession, much to the injury of the druggists—and hence they cannot report in favor of the change.

The *second* fact we may learn from the above extract is, that the druggists are fully aware of the great change being wrought by us, not only in the West, but also in New England where our numbers are comparatively few.

The *third* fact is, that the druggists anticipate the time to soon arrive, when the entire profession will admit Eclectics to be as well educated, and as "regular" in their practice, as the most strenuous sticklers for the lancet and calomel. When to be considered a scientific practitioner, a man will not need to take an oath (Hippocratic, or *Hypocritical*, as the case may be,) never to say aught against the abuse of these articles, or to associate professionally with those who choose not to use them in their practice.

We earnestly pray that the anticipations of our friends of the American Pharmaceutical Association may soon be realized.—We have no wish to be separated from any physician, who practices according to the dictates of his own judgment, whatever may be the remedy he uses. We would as fully accord to others the fullest liberty of choice and of action, as we would demand it for ourself. We are of no party, sect or school—but simply a physician, exercising the right to use any remedy we please, and wishing to meet kindly and cordially all who are engaged in the noble art of healing, that we may receive and impart the results of our observation and experience, for the general good of the profession and humanity.

While such are our wishes and our feeling, we shall never quietly submit to have Eclecticism misrepresented or ignored, but shall as firmly claim for its friends the credit which is their due, as we shall accord to others that which we conceive to be justly theirs.

Last spring, a Professor of Materia Medica in one of the *legitimate* Colleges of this city, told his class that the Eclectics were far in advance of the old school physicians in their knowledge of Medical Botany, but while he was constrained to admit the fact, he also took occasion to traduce the *motives* of those who were his superiors, for the Eclectics, as he said, used this superior information for their individual benefit, while at the same time we publish to the world, all the information we have as soon as our views are verified by experence,—leaving the class to infer that HE taught and practiced his profession solely for the love of humanity. The time will soon arrive when such remarks will be valued at their true worth, and the author will be heartily ashamed of them.

Again we would remark, we condemn no man who is honest and sincere in his opinion and his practice; but we shall wage war without stint on all falsehood and pretension wherever it may present itself. C.

PROF. G. W. L. BICKLEY.

The recent resignation by this gentleman of the chair which he has heretofore filled with so much credit to himself and satisfaction to his colleagues, and the best friends of the school, in the Eclectic Medical Institute of this city, calls for a few explanatory remarks from us. From the time (Oct. 1852,) that Prof. B. connected himself with the school, he continued to labor zealously for the propagation of the great truths of TRUE medical science. Possessed of a vigorous, original and active intellect, what he did was done promptly, and in a spirit which showed how much the friends of the Institute had to expect of him. In May, 1853, he was, however, attacked with amaurosis, which has since continued to increase, so as to render it very difficult for him to read. In this condition he lectured during the winter and spring sessions of 1854. At the close of the session of last spring, he resigned his

chair, hoping to recover his sight by rest, and though we regret his departure from our midst, we trust he may long continue to be able to labor for the diffusion of science. Prof. Bickley is a young and talented man, and his friends would regret to see him thus arrested in his career of usefulness.

He goes to New York, taking with him the best wishes of his colleagues, who will still continue to regard him as a friend and gentleman worthy of confidence. A man so active and industrious as he is, cannot long remain idle, and we shall expect to hear of him—engaged in some new enterprise. N.

THE AMERICAN MEDICAL ASSOCIATION.

Although we have already in the editorial department of our September number, extracted some remarks from two of our medical cotemporaries, in regard to the meeting of this Association in May last at St. Louis; we have not the heart to keep from our readers the following, from the editor of that casket of gems, The Scalpel, of Dr. Dixon, of New York.

"Our brethren have had their seventh grand meeting at St. Louis, and, as usual, have made great proclamation of their intentions. Some of them remind us very much, in their convulsive efforts to immortalize themselves, of Macbeth's wierd sister, when she exclaims:

> 'And like a ship without a sail,
> And like a rat without a tail,
> I'll do—I'll do—and I'll do!'"

It is very necessary to have both a sail and a tail, or a rudder to steer by, if they would avoid the quicksands and rocks against which they always split. Our brethren might indeed study the philosophy and good nature of a veritable old rat with profit. They never quarrel; but when they attempt to get oil out of a narrow mouthed bottle, like sensible fellows, each takes his turn in abstracting by his tail, and lets his neighbor lick it off. Note that, dear brethren, and stop quarreling.

The disposition of several resolutions was significant. Dr. McIlvain's "The practice of professors reading lectures to their classes from the musty records of antiquity, is a miserable apology for teaching"—*laid on the table*—a wise disposition for old fogyism. Where is Proto Koino miasma? Then followed:

"The too prevalent practice of Professors in medical colleges recommending their own writings and editings as text books, is in the opinion of this association, a serious evil, trammeling, as it does, the student in the choice of books, and promoting the publication and circulating books of inferior merit,"—

Laid on the table to be sure. Who is to pay Dr. Gross for his huge compilation on diseases of the genito-urinary organs, and its *original ideas*?

"A memorial from the American Medical Society of Paris, begging the Association to recommend such educational measures as would have a tendency to remove the disgrace of ignorance," was referred to the Committee on Medical Education, and subsequently *reconsidered and withdrawn*. A most judicious movement.

The publication committee was transferred after much sharp remark, from Philadelphia to New York. Dr. Condet's friends withdrawing his name from that committee, and from the treasurership of the Association in consequence thereof.

"By the way, our Philadelphia friends are sharp. Dr. Meigs has managed to get up a most brilliantly colored edition of his wonderful book on the diseases of the uterus *published by the Association, and is selling it on his own hook?* It is a curiosity in its way. At a hasty glance, we took the plates for pomological illustrations of some new varieties of French pears, or tulips, and had our pen in hand to write out an order to the nursery-man. We were mortified at our ignorance on discovering them to be meant for illustrations of uterine disease.

"Dr. Gross is decidedly economical. He offered a resolution "declaring it to be *disorderly* for any future Committee of Arrangements to prepare a costly supper or dinner for the Association." We admire his selection of terms, and consider the word well-chosen. Knock-downs and bowie-knives are rather disorderly. We understand that there was some of that done. Gentlemen, you should not trust yourselves with the stronger liquors, but

there's no harm in a little good champagne. The blood of a doctor is naturally cold."

We do not well know how the editor of the Scalpel can deprive himself of the favor of reading *our* Journal. It is true, we never attempt to season our dishes quite up to his taste, still he might, when a little inclined to a spare diet, indulge in the perusal of our own, provided he would add his own *bi-valves*, and take a little champagne to aid the circulation of his blood. What say, Doctor? C.

TYPHOIDAL FEVERS, ETC.

Our correspondent on "Typhoidal Fevers," L. C. Dolley, M.D., makes a passing notice among others, of Newton and Powell's Practice, stating that the doctrine they inculcate, "viz: that fever is not disease, but a physiological effort to rid the system of disease," is "out of place and erroneous."

He has not informed us, nor can we imagine upon what ground it is "out of place." Before entering upon the treatment of fever, it was certainly proper that we should give our conceptions of its nature and character. That he conceives the doctrine to be erroneous, gives us no surprise inasmuch as he has shown himself to be one of an immense majority. The doctrine alluded to is not ours—the credit of it is due to that master mind, John Hunter, and if our correspondent and his numerous co-thinkers cannot understand it, the fault is certainly not ours.

Upon the truth of this doctrine, Hunter risked a world-wide reputation, and we have risked the little we have, by becoming his endorsers at this late day, and we did it without the least apprehension of suffering by it in the end.

We have not the leisure at this time to attempt a stronger or more convincing effort than is contained in the practice of Newton and Powell, and the man who cannot be convinced by it, *that fever is not disease*, should not expect to be, by anything that we could say in this necessarily brief notice.

We disclaim all notion of "quibbling," and beg, that instead of indulging in it, our correspondent will come out, frankly as we have done, and assert that *fever* is, or is not *disease*; for we hold *that* mind to be exceedingly be-clouded which cannot perceive between the two a difference of *fact*—a difference as great as that which obtains between a *negative* and an *affirmative*—finally, a difference which every student should clearly understand before he takes upon himself the responsibility of human life. N.

[The following article from Prof. F. was not placed among the original communications in consequence of its coming in too late.]

CASE OF ANEURISM OF THE AORTA.

BY PROF. Z. FREEMAN.

Mr. T——, a resident of this city, æt. 36, had been for a number of years laboring under symptoms which his physician supposed to be those of "nervous dyspepsia," although his council suggested that they might be of aneurism of the aorta; his health otherwise was good, excepting some difficulty in deglutition, which produced a sensation of stricture of the œsophagus opposite the fourth dorsal vertebra. His position was stooped, there being a bend of the shoulders forward which he could not overcome.

He had been on a tour to the Eastern States—returned apparently much relieved from his former symptoms, feeling better than he had for two or three years.

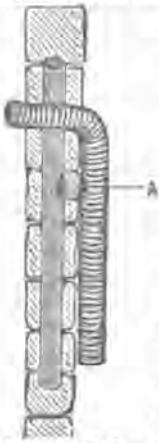
On Friday, the 8th inst., he complained of an aching pain in the precordia, and through the chest to the third and fourth dorsal vertebræ, and much difficulty in swallowing and respiration. By auscultation on the back opposite the seat of pain, the aneurismal souffle was indistinctly heard, which induced his physician to coincide with the opinion that there really existed an aneurism of the aorta.

Saturday, the 9th. Respiration more difficult; symptoms of pneumonia more

prominent; severe attacks of coughing; great difficulty in swallowing even fluids; great anxiety, debility, and pain in the forehead.

About 11 at night, while coughing severely, he vomited large quantities of blood and immediately expired.

Post mortem examination by the attending physician and myself. Found a circular opening in the posterior wall of the aorta, four lines in diameter, with defined and thickened edges, which communicated with an aneurismal sac three inches in vertical diameter and two in transverse—the floor and roof being composed of adventitious fibre, (the result of previous inflammation,) the posterior wall of the œsophagus and the anterior of the aorta and its fistulous opening. The sac was nearly filled with laminæ of organized fibrin, most dense near the surface, while the centre and near the aorta was of the consistency of coagulated and plastic blood. The œsophagus was thin at this point, and lacerated, the opening being an inch in length and half an inch in transverse diamter, with ragged edges. The stomach was found full of blood, and there was some blood in the cavity of the left pleura.



(A) Opening in Aorta.

The aneurism, no doubt, had existed for years, giving rise to many anomalous symptoms. Its continued pressure upon the œsophagus, and which increased, a little before his death, no doubt produced the painful difficulty in swallowing, and when accompanying pneumonia and dyspnea in straining to cough, the attenuated surface of the œsophagus burst at the affected point, all of his blood was poured into the œsophagus, filling his stomach and discharging from his mouth.

The opening in the aorta was defined and smooth, the result of some previous ulceration. The adhesions between the aorta and œsophagus around the sac were firm, and both were attached to the vertebral column, the aneurismal tumor, causing by pressure and absorption a slight depression in the surface of the intervertebral ligaments.

No comment is necessary, as death was inevitable.

Cincinnati, Sept., 1854.

SCARLET FEVER.

Died, all of scarlet fever, in Addison township, Meigs county, Ohio, on the 6th of August, after an illness of four days, Elcy, aged 13 years. Also, on the 13th, after an illness of eight days, Elizabeth, aged 18 years. Also, on the 16th, after an illness of eight days, James, aged 11 years. Also, on the same day, (16th,) after an illness of five days, Wm. Scott, aged two years. Also, on the 22d, after an illness of twelve days, Harriet, aged 8 years and 11 months. All sons and daughters of George and Ann McGarvey.—*Gallia Courier.*

We extract the above as a frequent occurrence. Why is this disease so fatal? Is it not because the old treatment from the very beginning breaks down and destroys the vital force—thus adding to the difficulty already existing? This in our opinion is the case, for the Eclectic treatment in this disease is not attended with a mortality of two per cent. One plan of treatment debilitates and depletes, while the other invigorates and builds up. One destroys the vital force; the other husbands and increases it. N.

THE REVOLUTION IN PUBLIC OPINION.

That sober and cautious periodical the "American Journal of the Medical Sciences" acknowledges the change in public opinion, as follows: (Jan. 1854.)

"There is little respect now, on the part of the people for authority in medicine. Formerly although there was much running after popular quackeries as they came up one after another, still the medical profession was considered, or the whole, as the repository of most of the valuable experience which had been gathered in relation to medicine. Regularly educated medical men were therefore, for the most part re-

lied upon, at least by all the intelligent. But now it is far otherwise. Quite a large part of what is ordinarily considered the intelligent portion of society, has in some communities, swelled the ranks of the patrons of quackery."

PHYSIOLOGY OF THE KIDNEYS, AND THE URINE.

The urinary organs consist of a pair of kidneys for the secretion of urine, a bladder for its retention when accumulated, a separate ureter for each kidney to convey its urine to the bladder, and the urethra for the discharge of urine from the bladder.

Location.—The kidneys are two glands, lying in the abdomen by the side of the spinal column, at the junction of the dorsal and lumbar vertebræ, corresponding to the two lower dorsal and two upper lumbar, the left kidney being a little higher than the right. (In consequence of which location, diseases of the kidneys may sometimes affect the lumbar region of the spinal cord and produce sympathetic effects in the lower limbs.)

The kidneys lie in contact with the peritoneum, which covers their anterior surface only. The right kidney lies adjacent to the duodenum and ascending colon—the lef adjacent to the descending colon, hence we may possibly confound the colic attributable to the colon with the nephritic colic attributable to the kidneys and ureters. The flatulent distension of the colon may mechanically affect the kidneys as well as the stomach and liver.

Dimensions.—Each kidney measures on an average four inches long by two inches broad, and weighs a little over five ounces in the male, and five ounces or less in the female. The left kidney generally weighs a little more than the right.

Anatomical Appearance.—The kidney is a dark red gland, externally invested by a thin firm membrane—internally, consisting of the vascular cortical portion devoted to secretion, and the tubular or medullary portion devoted to carrying off the secreted product. The cortical portion lying exterior adjacent to the investing membrane is about the sixth of an inch thick and sends prolongations inward along the tubular portions. Being composed entirely of delicate capillaries, it has not much firmness of texture.

The tubular substance, which is firmer and lighter colored, presents ten or twenty conical masses (cones of Malpighi) culminating to apices toward the cavity called the pelvis or basin of the kidney from which the ureters originate. These uriniferous cones bring the urine to the pelvis of the kidney—pouring it into those subdivisions of the pelvis called calyces. The pelvis, which receives all the urine, communicates with the cortical substance which secretes it, by subdividing and sending out a number of tubes or infundibuli which terminate in blind extremities, *calyces* or cups. (This irregularly oval cavity, the pelvis, subdivides by sending out three branches—one corresponding to the middle and one to each extremity of the kidney. These three branches subdivide into (*infundibuli*) from seven to thirteen smaller tubes, which terminate in cups or calyces.)

At the extremity of each calyx is a small conical mass, consisting of urinary tubes, which from their ramifications through the cortical part among the blood vessels, bring in the urinary secretion which is poured through the little cone in the calyx, whence it flows through the pelvis and ureter. These urine-bearing tubes (*tubuli uniferi*, about 1-700th of an inch in diameter,) ramify in an intricate plexus among the capillaries, form communications with each other, and either terminate in blind extremities, or form loops and connect with each other. (Mr. Bowman supposes the appearance of blind extremities to be an illusion.) These tubes form enlargements (sacs or capsules) so as to embrace the little Malpighian bodies or clusters of capillaries from which the watery portion of the urine is poured out. They also have along their parietes plexuses of blood vessels, containing the venous blood which is returning from the Malpighian bodies, going to the renal vein, and it is from this venous plexus that the urinary tubes perform their secre-

tion of the characteristic materials of the urine. (In fishes and amphibia, the venous blood of the posterior part of the body is also brought to the kidney to supply materials for the secretion by the uriniferous tubes. In this respect, there is an analogy to the portal circulation of the liver.) This secretion is performed like other secretions by the nucleated cells attached internally to the parietes of the tube, while the watery portion of the urine is believed to be effused without any such secretory apparatus from the Malpighian bodies, from which the watery portions of the blood escape more freely than from other capillary plexuses, because their parietes are not only unprotected by external pressure, but are subjected to the pressure of comparatively stagnant blood, which is retarded in passing through them, the capillary plexus being much more capacious than the minute artery and vein which conduct their blood. From this arrangement it is obvious that relaxation or congestion of the kidney may produce too free an effusion from the Malpighian bodies, a portion of the albumen of the serum escaping with the water and producing albuminuria.

The renal artery and vein, ureters, nerves and lymphatics, enter the kidney together on its concave side. The artery ramifies minutely in the cortical substance, forming those little bundles of capillaries called Malpighian bodies, (corpora Malpighiana) about the 1-130 of an inch in diameter, from which originate the branches of the renal vein, which runs to the inferior vena cava.

The kidney is abundantly supplied with *Lymphatics*, and has a very moderate supply of *Nerves* from the renal plexus of the ganglionic system.

The ureters (tubes which may be compared in size to a quill,) extend from the lower portion of the kidneys about eighteen inches, running behind the peritoneum to the posterior inferior part of the bladder. The actual size of the ureters becomes a matter of considerable importance when calculous substances are formed in the kidneys and have to make their escape by the ureters—producing much pain and disturbance as they pass, and sometimes producing a degree of obstruction which is fatal.

The entrance of the ureters in the bladder is oblique, between its muscular and mucous coats, and consequently acts as a valve preventing the return of the urine, and also preventing the discharge of the urine into the bladder, when it is distended by the quantity already accumulated.

Mucous Membrane. — In accordance with the usual arrangements of physiology, the surfaces over which the urine passes are protected by a mucous membrane. The urethra, bladder, ureters, pelvis, calyces, and (it is supposed) tubuli uriniferi, are all lined by mucous membrane. This continuous and similar structure would indicate a continuous and regular sympathy of the whole interior surface from the urinary tubuli in the cortical part through the bladder to the extremity of the urethra. This sympathy is shown in calculous diseases.

Bladder.—The bladder is a musculo-membranous sac lying between the *symphisis pubis* (or frontal union of the pelvic bones) and the rectum—in the female between the symphisis and the *vagina*. Hence the liability to fistulous openings between the bladder the the vagina or rectum. It is attached by three ligamentous cords to the umbilicus. When distended it lies above the edge of the pubic bones, but when collapsed, it falls behind them. It is partly covered by the peritoneum on the posterior and lateral surfaces.

As the base of the bladder rests upon the rectum and is also in contact with the sexual organs, the vesiculæ seminales, and vasa deferentia, a very intimate sympathy exists between those organs. Distension or irritation of the bladder and rectum frequently excites sexual impulses or an involuntary flow of semen, when there is such a predisposition. The evacuation of the bladder and bowels diminishes the predisposition to seminal discharges and thus moderates sexual desires, while the discharge of semen diminishes the activity of the bladder and bowels, and tends to promote constipation. The neck of the bladder, or part which runs

into the urethra is nearly horizontal in the adult, the bladder being more depressed than in the infant. The neck (in the male) is surrounded by the prostate gland.

The mucous membrane of the bladder presents slight folds when it is not fully distended, except in a triangular space at the base, which is always smooth. This triangle or trigone as it is called, lies between the two points of entrance of the ureters and the commencement of the urethra.—This space is the centre of sensibility for the bladder where mechanical irritation immediately produces the desire to empty the bladder; such irritation arising from calculous substances may produce great annoyance and desire to urinate, when there is nothing to be discharged. Muscular fibres extend along the sides of this triangle from the prostate gland to the entrance of the ureters (which may possibly assist in opening latter.)*

The bladder is composed of a muscular and a mucous layer, which are connected by an intermediate layer of cellular substance. The muscular fibres are arranged in different vertical, transverse and oblique directions, so as to compress the bladder in all its dimensions. The fibres near the mouth of the bladder assume the character of a sphincter, being adapted by their circular arrangement to compress the passage and thus retain the urine. The muscular fibres are not arranged in a compact layer, and when the bladder is distended, the interspaces between the fibres may admit the protrusion of the mucous membrane, which sometimes occurs, giving a sacculated appearance.

The muscular fibres of the bladder, like all other muscular fibres, are liable to being enlarged by unusual exertion, giving a very distinct appearance of projection on the internal surface of the bladder.

THE INNERVATION of the bladder is derived from the sacral plexus of the spinal system, and from the hypogastric plexus of the sympathetic.

* At the anterior angle of the trigone is a slight projection of the mucous membrane, called the uvula vesicæ, (caused by the prostate gland,) which is sometimes sufficiently prominent to obstruct the passage of a catheter, especially in the old.

Hepatico-Renal Circulation. — Bernard from some of his investigations has arrived at singular conclusions in reference to a connexion between the portal and renal circulation. He supposes that a portal congestion or engorgement arises during digestion, and is relieved by a communication from the portal vein to the inferior vena cava. The walls of the inferior vena cava where this reflux of portal blood is received have muscular contractility, and, during digestion, regular pulsation independent of the cardiac circulation. By the contractions of this vessel, the blood which it receives from the portal vein is thrown back through the renal veins, and thus the blood being forced through the kidneys is subjected to the necessary purification, which is usually performed by the liver, thus producing the *urini cibi*, or urine containing the elements of the food. He professes to have demonstrated this anastomosis of the portal vein and inferior vena cava in the horse, and the muscular coat of the latter—the movements he professes to have seen in the rabbit. He has also performed some experiments in absorption and elimination of substances which are favorable to his views, but not at all conclusive.

The whole theory strikes me as quite discordant with the general principles of physiology, and indeed rather *outre*. A *reversed circulation* is a great improbability—and if it could be produced by portal congestion, it would be common in all hepatic disorders, and the kidneys would suffer far more than they do from disordered liver. Nor is it probable that such an anastosis in man could have escaped the immense amount of critical research which has been bestowed by anatomists.

COMPARATIVE PHYSIOLOGY.—The urinary secretion is performed not only by all vertebrate animals, but has been detected even in insects and mollusca. This is probably owing to the fact that the process of oxidation which is necessary to life, necessarily involves the production of an incombustible nitrogenous residuum which constitutes the solid organic elements of the urinary secretion.

The kidneys, as we descend in the animal kingdom, become subdivided or lobulated—in all below the mammalia, and in a few of that class the lobulated arrangement occurs. It may also be detected in the human embryo. The fetal kidney is marked by deep fissures corresponding to its lobules, which ultimately become thoroughly united.

Age.—The kidneys are relatively larger in the child than the adult, being in the infant 1-80, while in the adult they are 1-240 of the weight of the body—a fact which corresponds with the greater activity and excitability of the nervous system in the infant.

Preponderance in youth.—As the viscera preponderate in youth in comparison with adult life we may expect the excretions of children to surpass those of adults. That this is the case, is shown by the observations of Dr. Scherer upon two children and two adults. The total of the urinary solids discharged by the children was about forty per cent. more in proportion to the weight of their bodies, than the urinary solids discharged by the adults. The extractive matters are much more abundant in the urine of adults and urea is more abundant in that of children.

(This disproportion in urinary solids is not so great as that stated by Scharling in reference to the excretion of carbonic acid from the lungs and skin, which is greater in proportion to the weight of the body in children than in adults in the proportionate ratio of 1.88 to 1.00.)

Function of the Kidneys.—The kidneys discharge water and azotized materials—they are distinguished by the amount of nitrogen which they discharge, and as nitrogenous tissues are the seat of the greatest vital force, the kidneys necessarily sustain an intimate relation to the vital energy of the whole constitution. (This fact is also shown neurologically by the location of the kidneys at the junction of the dorsal and lumbar vertebræ—a position of great vital energy.)

The kidneys act as a kind of safety valve for regulating our vascular plethora. The action of the skin is too easily checked for us to rely upon it. Majendie found that when water was injected into the blood-vessels of dogs, the increased pressure occasioned by the additional bulk was promptly relieved by urination.

Source of Excretion.—The azotic materials come from the freshly digested food, and partly from the waste of our tissues—extra consumption of food increases the solid elements of the urine, and increased exercise adds to the excretion of urea.—Drugs and other soluble but undigested substances also escape by the urine. The water is derived mainly from our drinks, but also from our solid food. Patients have often been known to pass more urine than was equal to all they drank. Fluids may be extracted from our solid food or formed by vital chemistry. The lungs take in oxygen, which with the hydrogen of food may form water.

Physiologists point out the effects of the distinct sources of urine. The urine passed after drinking (called urina potus) being watery has a lower spec. grav. 1.003. 1.009. The urine after digestion of food (urina cibi or urina chyli) being richer in solids rises to 1.028 or 1.030 in specific gravity. *The* urine secreted from the blood independent of recent food or drink, (urina sanguinis) as in the morning after a night's rest, is the fairest specimen, and its specific gravity is from 1.015 to 1.025. Owing to the effects of exercise and digestion through the day, the urine is usually more dense in the afternoon than in the forenoon. During the night in consequence of repose and fasting its density sinks to the minimum. At any period its density might be determined by the amount of food and exercise which have increased, or of rest and drink which have diminished its specific gravity.

Process of Secretion.—The watery and solid elements of urine are discharged by different apparatus—water by Malpighian bodies in which the blood conveyed by the arteries is distributed in a great ramification of capillary blood vessels, and thus delayed—(the efferent vessels having less calibre than all the capillaries.) The Malpighian bodies are little knots of capillaries

somewhat like the lymphatic glands in their structure. Each is included in the expansion of a tubulus, which receives the fluid exhaled from it.

The solid matter of the excretion is elaborated by cells lining the tubuli uriniferi. Indeed, some of these cells have been found in urinary deposits filled with the secreted crystals of lithic acid and oxalate of lime. These cells and tubes secrete urea, etc., from the blood which has previously passed through the Malpighian bodies—in which respect the secretion of the kidney resembles that of the liver in being formed from venous blood. The resemblance is still greater in fishes and amphibia, as the kidney receives venous blood from the posterior part of the body.

It has been doubted whether the urinous materials are formed by chemical processes in the kidneys or merely separated from the blood in which they were ready formed. It has been demonstrated that urinous materials exist in the blood. Urea may be detected in the blood, though in very small quantity,* even when the kidneys are acting, but if the kidneys are sufficiently diseased or extirpated, the urea accumulates in the blood until, by its influence as a narcotic poison, the brain and nervous system are deranged and a comatose condition produced. Tying the renal artery or extirpating the kidneys proves speedily fatal.

"Prevost and Dumas found 20 grains o urea in five ounces of the blood of a dog which had had both of his kidneys extirpated two days previously, and from two ounces of the blood of a cat under similar circumstances, they procured as many as ten grains of urea." (Willis. p. 11–12.)

In cases of total suppression of urine, the presence of urinous secretion may generally be recognized; the perspiration is apt to leave a urinous smell. The discharges from the stomach and bowels may have a urinous character, and even the fluid in the ventricles of the brain has acquired a similar composition. Various excreting or secreting organs may have a vicarious action—one discharging the proper fluids of the other. The kidneys, liver and mammæ are liable to such exchanges. The kidneys, when no relieved by hepatic secretions, are disposed to secrete more carbonaceous matter.

In cases of extirpation of the kidneys of animals, urea does not at once appear in the blood, but is only recognized after one or two days have elapsed. The urinous material at first escapes by the secretions of the stomach and intestines, as shown by Bernard and Barreswill, in the form not of urea, but of ammoniacal salts. This appears to be the healthy effort of the constitution, but the constitution breaks down at length and the urea accumulates. At first, the gastric juice is secreted in unusual quantity, and incessantly, and as this has the power of transforming urea in the stomach into a salt of ammonia, it is presumable that the ammoniacal secretion is thus caused. Bernard and Barreswill did not detect urea in such cases in the intestinal contents.

When urea is retained in the blood, an ammoniacal odor may sometimes be recognized in the breath. A piece of moistened litmus paper held to the mouth will give the alkaline test, and a glass rod dipped in hydrochloric acid and held in the breath will give off white fumes. The same ammoniacal character may be recognized, according to Frerichs, in the breath of animals which have had urea injected into their veins.

In scarlatina, the kidneys being often much affected, uremia has resulted, ending sometimes in coma and convulsions, and urea has been detected in the matters thrown up from the stomach. Frerichs professes not to have detected urea, but to have recognized carbonate of ammonia.

In diabetes mellitus, the sugar which is secreted by the kidneys has been detected in the blood by Bertozzi and Muller. Lithic acid must also exist in the blood, as it is deposited in the gouty concretions in the joints.

It has been supposed, however, that acid phosphates and sulphates, as they have not been detected in the blood, are formed in the kidney.

* Able chemists, however, have failed to detect it.

Diuretics.—Water being naturally disposed to pass largely by the kidneys is an efficient diuretic and an appropriate assistant to all diuretic substances which operate best in dilute watery solution. Water not only increases the urinary fluid, but according to M. Becquerel increases the amount of the solid constituents which it removes.

Alkaline diuretics, by promoting the dissolution and oxidation of animal matters, increase the true urinous secretion by the tubuli, while the vegetable diuretics which do not have this solvent power, act principally on the Malpighian bodies to produce a more watery urine. Dr. Bird says that three drachms of acetate of potash administered in 24 hours, raised the urinous materials from 416 to 782 grs. The urinary secretion is most efficiently promoted by the liberal use of liquids containing alkaline and saline substances in moderate quantities, as they are found in medicinal springs. Whenever the saline materials of any liquid are much more concentrated than those of the blood, they promote the flow of fluids into the bowels and exert a laxative influence, as water by chemical attraction flows from the rarer to the denser solutions; but when the solution is more dilute than the blood, the liquid is readily absorbed and becomes a diuretic by rousing the action of the kidneys. Infusions or decoctions, therefore, are the proper forms for the administration of diuretics—tinctures, powders or pills, not being readily absorbed, and when absorbed not being united with the diuretic element, water. Hence digitalis when administered in tincture makes a strong impression on the heart, with scarcely any diuretic influence, while in the form of a decoction it is an efficient diuretic and makes scarcely any impression on the heart. The alcohol being a stimulus directs the impressions to the heart which it excites, while water being a diuretic directs the impression to the kidneys.

The efficiency of diuretics in the discharge of a large amount of fluids must depend of course upon the presence of water in the blood in sufficient quantities, and upon the developement of the materials of the urinary secretion. It would be absurd to suppose that the secretion of urine could be indefinitely increased by merely swallowing substances considered diuretic. If but little fluid is consumed, the urinary secretion cannot be very great, and if the water of the blood is fully discharged by perspiration, but little can remain for the action of the kidneys. Moreover the absorbent power of the alimentary canal may be diminished by disease, and in that case the materials for urinary secretion are proportionally reduced. Whenever, through congestion of the liver or even dilatation of the heart, the abdominal venous system becomes congested, its capacity for absorption becomes diminished and a tendency to effusion takes its place, as blood-vessels forcibly distended by their contents are much more capable of effusion than of absorption. Hence diuretics are often inefficient when the liver is congested, and their efficacy is greatly promoted by uniting with them an efficient cholagogue. Hence the old formula of calomel and squills or calomel and digitalis. Eberle remarks that calomel does not show any diuretic power except in cases of dropsy, in which it promotes absorption of the dropsical effusion, and thus furnishes materials for diuresis. But although cholagogues are thus favorable to diuretic action, hydragogues or active purgatives are quite unfavorable, and it is necessary that a dose designed to act as a diuretic should be neither emetic nor cathartic. The efficacy of diuretics is also promoted by stimulants and tonics, which relieve the internal organs and increase the fulness of the general circulation by diverting the blood to the abdominal venous system. During the congestion of cholera, the fluids flow off by the bowels, intestinal absorption is arrested, and the urine is almost suppressed, but during active exercise and high excitement, intestinal absorption is rapid, thirst is great, the general circulation plethoric and diuresis profuse.

The general principle involved may be stated thus, viz: that urination is freer in proportion as the arterial system is in a plethoric state, containing water and other

diuretic materials—and in proportion as the abdominal venous system is freely relieved of sanguinous accumulation by the rapid flow of the blood through the liver and right heart. Hence in cholera the urine must be greatly diminished as these conditions are reversed. The blood is deficient in the arterial and superficial circulation, while it is so conjested in the abdominal venous system that absorption is arrested and its watery portions poured out.

On the same principle, another cause of suppression of urine may be recognized in stricture or intussusception of the alimentary canal preventing the passage of its contents, and consequently preventing absorption below the stricture. It is obvious that the diminution of urine in such a case would be greater in proportion as the stricture was higher up in its location.

Rapidity.—The rapidity of the excretion depends on the activity of the other organs and on the diuretic nature of the materials for excretion. Certain diuretic salts pass through the kidneys very speedily, especi ally if administered on an empty stomach, prussiate of potash administered on an empty stomach in a case of extroversion of the bladder (by Prof. Erickson) appeared in the urine even in one minute, but taken after a meal it did not appear in less than half an hour.

Salts of alkalies and vegetable acids such as the tartate, acetate and citrate of potash or soda become oxydated in the human body, and renders the urine alkaline. Tartrates of potassa and soda in the case reported by Prof. Erickson, rendered the urine alkaline in from 26 to 47 minutes after being taken. Prof. Lehmann found half an ounce of tartrate of soda rendered his urine alkaline in 13 minutes. Vegetable food favors alkalinity even when abounding in acids as the acids of fruits become oxyginated leaving alkaline bases behind. Hence under a vegetable diet the secretion is generally more free and watery.

Pure water passes perhaps more readily than anything else. The laws of endosmosis probably influence this as well as the power of secretion—as concentrated saline solutions tend to produce hydragogue effects on the bowels, while more watery solutions are apt to have a diuretic effect.

According to observations upon cases (ectopia vesicæ) in which the anterior parietes of the bladder and abdomen were missing, the urine ordinarily flows at the rate of two or three drops a minute, which is much increased after drinking. In lying down, the urine accumulates in the ureters and kidneys—in raising up it flows out freely. When lying down with the bladder well filled, the accumulation would doubless be sufficient to oppress the kidneys and retard their secretion.

Amount of urine secreted—The amount depends upon the consumption of food and drink—the amount of exercise of body and mind—and the quantity of excretion by other outlets, especially by the skin and lungs.

The quantity is therefore so variable that an average estimate is almost impossible—30 or 40 ounces daily has been regarded as a medium amount—but a much larger or smaller quantity would be compatable with health. In a case reported by M. Boissat, an old man 55 years of age and of small stature made an average during ten days 34 pounds of urine daily (the fecal discharge being but one pound.) His drink at the same time was about 33 pounds of water daily with a little wine, and his solid food 1¾ pounds. He was healthy and the father of several children—the urine was of healthy character. He had been of similar habits all his life. Dr. Desgrange refers to the case of a healthy young man of twenty years of age, who consumed 6 gallons of water daily.

The quantity of urine is greater in winter than in summer—in cold damp weather than in warm. Everything which tends to diminish the exhalation from the skin and lungs tends to increase that from the kidneys—as a chill or coldness of the surface, hence the urine is paler in the cold stage of fever. A suppression of the functions of the skin would in many cases double the amount of duty for the kidneys. The transpiration of the skin and lungs combin-

ed according to Seguin is about 18 grains per minute, (11 skin, 7 lungs,) or 33 ounces daily by the skin, and 21 by the lungs making 54 ounces per day. Prout, Willis, and Carpenter estimate the discharge from the kidneys at 30 or 40 ounces daily—according to Dr. Prout 30 ounces in summer, and 40 ounces in winter. Thirty-five ounces of daily secretion at the specific gravity of 1.020 would contain 700 grains of solid urinous material. The careful observations of Dr. Routh coincide with this estimate. Other observers have varied from 22 to 59 ounces. Becquerel considers 43 ounces for men and 47 for women the most correct estimate, and it is probably an appropriate estimate for the French population, whose wines and other dietetic peculiarities may cause a difference from the English estimates. In comparing the discharge from the kidneys with that of the lungs and skin, the estimate of Seguin for the lungs is evidently below the average, as the careful experiments of Andral and others make the daily exhalation of carbon from the lungs about eight ounces, or 18½ ounces of carbonic acid (which coincides with the experiments of Allen and Pepys) to which must be added about 18 ounces more on an average of aqueous pulmonary exhalation—assuming then 36 ounces as the average pulmonary discharge it coincides very nearly with that of the kidneys.

We may therefore regard the kidneys and lungs as about equal in their evacuations, but the action of the skin is so variable, that no satisfactory comparison can be made. Persons laboring in a hot atmosphere may loose from two to four pounds an hour, while persons with a cold skin and of sedentary habits will transpire daily by the skin but a small fraction of a pound.

The proportion between the action of the kidneys and that of the skin, lungs and bowels, is an interesting subject of inquiry. The celebrated and laborious experiments of Sanctorious, continued for thirty years, led to the conclusion that five-eighths of the ingesta passed off by exhalation and the remaining three-eighths by the kidneys and bowels.

Observer.	Daily Urine.	Daily Transpiration.	Fæces.
Kiell (Northampton, Eng.)	38 oz.	31	5
Rye (Cork, Irel'd,	39.2	56½	
Hartman,	28	45 or 6	6 or 7
De Gorter (Holl'd)	36	49	8
Sauvages (South of France.)	22	33	5
Dr. Dalton,	48½	37½	5

These general results indicate that the total transpiration exceeds the total urine, but the careful experiments of Lining in South Carolina indicate an annual average of about 59.13 oz. of urine and 54.71 oz. of transpiration—but the urine greatly exceeded the transpiration in October, November, December, January, February, March and April, while in the months of May, June, July, August, September, the proportion was reversed. Upon the whole it is evidently impracticable to fix upon any determinate ratio for secretions which are so variable—the total amount depending upon the total ingesta, and the proportions depending upon the weather and individual temperaments. Under exposure to intense heat, such as workmen undergo in foundries, gas-works, etc., a loss by transpiration of two or three pounds per hour is not unusual.

The difference produced by the seasons, giving a preponderance to the transpiration in summer and to urine in the winter, is shown in the experiments of Lining in South Carolina, and of Rye at Cork, Ireland.

	Urine. (Rye)	Transp'n.	Urine. (Lining)	Trans.
Winter,	42.7	53	73.7	39.99
Spring,	40	60	61.97	49.68
Summer,	37	63	50.39	76.23
Autumn,	37	50	50.47	52.94

The maximum transpiration 86.41 oz. was in July, and next highest amount 77.09 oz. in September. The minimum urine, 40.6 oz. was in September, and next smallest amount, 43.77, in July. The maximum of the urine, 77.86, was in February.

B.

[TO BE CONTINUED.]

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Part 1. Original Communications.

CASE OF URETHRAL CALCULUS.

BY PROF. Z. FREEMAN.

Edward George, æt. 12 years. When he was born the physician who officiated on that occasion remarked that he could live only a short time. His countenance had an old expression resembling that of an old man, and though he was a matured child, yet his flesh was so thin over his whole body, that the skin looked wrinkled and laid over in folds. He continued sickly (but apparently not of a scrofulous diathesis) until he was 8 years of age. During that time, in addition to other afflictions incident to childhood, he had both rubeola and scarlatina twice.

During his eighth year, he complained of excessive weakness in the loins accompanied with pain in the region of the kidneys, and commenced passing gravel. On one occasion he voided a large calculus which gave him much pain as it passed through the urethra. His appetite was variable, at times very good. He was leeched, etc., for the pain in the bladder, but obtained no relief. Continued laboring under pain and inflammation of the bladder, passing gravel of variable size, some like grains of sand and some larger, also, some pus and purulent mucus, until his tenth year. In August, 1852, a female physician attended him, used the "wet sheet," etc., etc., but still the pain continued—supposed it was his "ill temper that made him restless."

At this time his appetite was variable—much vomiting—pain in the kidneys, pain in the bladder, and continued spasm of the bladder. It could be felt contracting under the hand. He continually rubbed the pubic region from constant pain.

August 10, 1853. Was called to see the child in company with Dr. Hewitt—found him very much emaciated, laboring under constant pain, urine scanty, frequent and high colored. Upon sounding the bladder, we detected a calculus.

On the same day in company with the family physician who administered chloroform, we performed the "lateral operation of lithotomy," and extracted an oval calculus about six lines in transverse diameter, and dressed the wound in the usual manner, inserting an elastic tube through the incision, and left the patient in the charge of the attending physician. From some cause, the physician found much difficulty in healing the incision. It was four months from the time of the operation, before the urine ceased passing through the wound, and six months before it had entirely closed,—it would close and then a small opening of half a line in diameter would present itself, until within three months of the present time.

One day while the attending physician was dressing the wound, she lost a piece of cotton from the end of a probe into the bladder. From the time of the operation

to this accident gravel passed with the urine, but none afterward, and it was supposed by the parents that the cotton formed a neuclus for the formation of a stone.

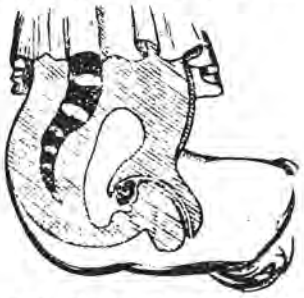
From that time forward he suffered severely from pain in the bladder, until within one month previous to his death, when the pain became excessive. He constantly rubbed his abdomen in the pubic region, and when not under the influence of opium cried incessantly for it. From one ounce to one ounce and a half of laudanum was given him daily, at one dose, a less quantity failing to narcotise him. His urine continued to pass guttatim, keeping the bed cothes moist all the time, until within three days of his death, when he was taken with excessively severe pains in the bladder as though he was attempting to expel some substance. No urine was voided after this, but a serosanguinous and purulent secretion continually oozed from the meatus urinarius.

Sept. 21. He died under the influence of laudanum. which he begged for with an irresistible importunity.

Sept. 22. In company with my brother and a friend of the family, I performed a *post mortem* examination. I found both kidneys one third larger than their normal size, the left imbedded in a mass of indurated tissue, the ureter enlarged and indurated and also so imbedded in a mass of indurated adventitious substance that I could scarcely trace it to the bladder. This kidney was much diseased; its internal surface, calyces, infundibula and pelvis of a dark brown color, enlarged and filled with a dark sanguino-purulent secretion. The canal of the urethra was open.

The right kidney was disorganized, presenting a tuberculous and ulcerated appearance, distended with fetid, thick greyish pus. The pelvis and one inch of the upper part of the ureter was distended, while at a point one inch from the pelvis the ureter was entirely closed. so that no secretion could pass to the bladder through the right ureter. The remaining portion of the ureter was open.

The bladder was contracted into a small mass about three inches in length, and one and a half inches in width, and close against the pubic bone and empty. The old wound was entirely healed, and the cicatrix presented the usual healthy appearance.—In the urethra occupying about one fourth of the anterior extremity of the prostate portion, and all of the membraneous portion was a large rough, grayish-white oval



phosphatic calculus, about one inch and a half in its longitudinal diameter and three fourths of an inch in its transverse. It was wedged firmly in the urethra and looked as though it had been forced there by muscular contraction of the bladder,(which accounts for those severe pains resembling "labor pains" which he had at the time when the urine stopped,) and the urethra was stretched tightly, and quite thin over its surface. There was no rupture of the urethra. The remaining portion of the urethra was in a normal condition.

Supposing that the piece of cotton lost in the bladder might have formed a neuclus for the formation of a stone. the parents were desirous to have a *post mortem* examination, and to see the stone opened. I sawed the stone through the centre longitudinally—it was very hard and did not crumble any more than granite. It presented a grey and laminated appearance, with a small nucleus of softer morter-like substance in the centre, but no cotton, unless the cotton is in some other part of the calculus. When it is returned to the city, I will examine it more closely and report in the next number of the Journal.

The ill-fortune of this child is seldom equalled.

I may be said truly, that "he was born under an unlucky planet."

Had means been taken after the operation to change the diathesis of the patient and prevent those calculus deposits, the case *might* have presented a very different aspect.

Cincinnati, September, 1854.

DOUBLE CATARACT AND LACERATION OF THE IRIS.

TREATED BY PROF. Z. FREEMAN.

William Bowen, æt. 30, while in bed at night, about three years since, was struck with a flash of lightning, which prostrated him, leaving him entirely senseless for a number of hours. Upon recovering from the severity of the shock, active inflammation of both eyes supervened, which terminated in soft cataract of the left eye, and hard cataract, partial opacity and conical cornea and laceration of the iris of the right eye. A fissure was made in the iris on the left side of the pupil, leaving a small vertical slip of the iris four lines in length and two in width attached to the upper and lower parts of the body of the iris, and directly in the axis of vision, leaving two irregular pupils.

Twelve months since, his left eye was operated upon by a physician in Syracuse, and the cataract partly broken up and couched. Since then, vision, though improved, has been obscure.

Oct. 1. I operated upon the right eye, removing the cataract by extraction. The pupil being dilated with the solution of the extract of belladonna, I made a flap of the upper half of the cornea. Part of the aqueous humor passed off, and the eye-ball partly collapsed. I then inserted a pair of small scizzors and clipped off the fragment of the iris both above and below (a drop of blood was upon it,) and removed it. I then dislodged the cataract, which immediately appeared in the anterior chamber, and was removed with the forceps. The edges of the wound in the cornea were placed in contact, and the lids closed; used cold water to the eye.

Oct. 2d. The edges of the wound are in apposition, and the eye presents its normally globular appearance. Conjunctiva injected, and some intolerance of light.

Treatment.—Continue the cold water dressing, and use ℞ Comp. powder senna 3 j. at night; keep very quiet.

Oct. 5. Wound healing rapidly. The vitreous humor pressing against the iris; enlarged pupil.

Oct. 9. Improving; vision improved, though still imperfect. The opacity of the cornea and the existing inflammation prevent ready vision. Continue the treatment. (The lens taken from the eye was very small, opaque and hard.)

Oct. 10. Still improving. I operated upon the left eye to-day. The previous operator had left the posterior capsule of the lens in *situ*, which hung as an opaque curtain in the axis of vision. It presented a variegated and striated appearance, and obstructed vision. Operation by couching. The membrane was quite tough, and hard to dislodge; but I forced it down into the inferior and lateral part of the posterior chamber.

Treatment.—Quietude and cold water dressing. Immediately after the operation, the patient could see more distinctly than he had for three years, and could distinguish objects as clearly (as he expressed himself) as he ever did.

Oct. 12th. Improving; vision good. Continue the treatment; use ℞ Comp. powder of senna 3 j. to assist in removing the injection from the cornea.

Oct. 13th. *Still improving; doing well.*

By the report of this case, you may see that a flash of lightning may induce inflammation of the eyes and cataract, without affecting the integrity of the optic nerve.

Cincinnati, Oct., 1854.

CLINICAL REPORTS.

Newton's Clinical Institute.

SERVICES OF PROFS. NEWTON & FREEMAN

REPORTED BY PROF. Z. FREEMAN.

Continued from page 394.

FALL SESSION.

Case 174.—Kate Darrow. Granular Opthalmia.

Treatment continued from page 393.

Aug. 30.—Discharged cured.

Case 169.—Edward B. Obtuseness of hearing.

Treatment continued as directed on page 293; also frequent shower bath to the head. Constitutional vigor improving, dizziness less, and audition improving, though it may take him some time longer to entirely recover, if he recovers at all.

Continue the treatment.

Case 170.—Thomas Turner. Gonnorrheal Opthalmia. Continued from page 394.

Aug. 28.—Inflammation of the conjunctiva much less, is still blind, has gone to the city hospital.

Case 171. Aug. 24.—Robert Boyle, æt. 25. Paralysis.

Commenced about twelve months since, caused by exposure and abusing himself in lifting, fighting, falls and sexual indulgence. Disease commenced by phrenitis, was unable to move from palsy, can now walk about a little. By swinging his arms to and fro can place his hands over his shoulders. Is weak in the back and much debilitated. Has formerly been very strong. Has pain and tenderness on pressure over the seventh dorsal vertebra; appetite good, bowels regular, urine light colored, pulse 81 per minute, a little irregular and feeble.

Treatment. ℞ Comp. syr. still. ʒj, Iridin grs x, podophyllin grs x. M. Take ʒj morning and evening until it operates upon the bowels. Apply electricity to the spine, passing the current from each hand alternately to the eighth and ninth dorsal vertebræ.

Sept. 1.—Improving; continue the treatment, and apply the electricity twice a week.

Sept. 15.—Improving; omit the former formula and use ℞ ferri phop., hydras. canadensis *aa* grs iij three times per day. Continue the electricity.

Sept. 22.—Improving; can walk to the office a distance of one mile. Treatment. Use the shower bath and friction three times per week, and electricity once per week. Continue the treatment.

Sept. 30.—Much better and stronger, every way, all pains have left him except a recent one in his left shoulder. Cannot use his hands freely yet, though much better than when he commenced treatment.

Continue as before.

Case 172.—Aug. 31.—William Nelson. æt. 30. Ascitis.

Was as well as usual to Aug. 14, when he had an attack of intermittent fever (quotidian type) which continued five days was arrested by one large dose of quinine. (He has since informed me that he took two large doses of calomel the ninth day of August which purged him severely and induced the ague.) Has had no perspiration since the 21st ult. His abdomen is very much distended, much pain from tension and pressure of the water, bowels costive, discharges have been yellowish, urine scanty and high colored. No appetite, headache in the morning, can't sleep well.

Thinks stopping his whisky caused the dropsy.

Treatment.—℞ Comp. powder of senna, bitart. potass. *aa* ʒ j; eup. prep. ʒ ss. Take one every four hours. Avoid liquids as much as possible.

This patient is quite dispirited and feeble; and though I requested him to send for me if he needed me and could not return yet to date, Oct. 10, I have no report from him. I suppose some other surgeon has tapped him, or else, instead of turning up, he has turned down.

Case 173.—Aug. 31.—Michael Dow. Diarrhea.

Commenced one week since, some pain in the bowels, and eight or nine discharges during 24 hours. Bowels seem passive.

Treatment.—℞ Comp. powder of senna ʒ j, capsicum grs x. M. Take in half a glass of cold water; keep quiet.

Sept. 3.—Discharged cured.

Case 174.—Sept. 1.—Catharine Mulligan. æt. 28. Chronic Otitis.

Caused by exposure and sitting in a current of air and taking cold. Commenced by a sensation of formication or the crawling of a bug in the ear, followed by a sting

ing and aching pain; also, headache and pain in the back of the neck. Has a slight sero-purulent discharge from the left ear, but the right is more painful, also, a sensation of a current of air passing out of both ears. Cotton plugged in the ext. meatus arrests the sensation. Has not suffered severely; parts around the ear slightly swollen; some irritation of the cervical glands.

Treatment.—℞ Comp. syr. still. ʒ ij. iodide potass. ʒ ss. M. Take ʒ j three times per day.

Sept. 5.—Improving; ears not so painful, left ear much better. some pain in the right ear, bowels costive.

Treatment.—Continue the above treatment; vesicate behind the ear with ol. tiglii; use comp. powder of senna ʒ j at night, alkaline bath every morning.

Sept. 13.—Discharged cured.

Case 175.—Sept. 10.—Pat Loftith æt. 40 years. Opthalmia and chronic ulceration of the cornea.

Been effected four weeks, pain in the temple and forehead, much intolerance to light, cannot go out until evening without suffering pain, bowels costive. The ulceration is of a peculiar kind, no suppuration accompanying it, but the conjunctiva and some of the anterior laminæ of the cornea at the point of ulceration seems dissolved, leaving clear but ragged edges,

Treatment.—Comp. powder senna ʒ j at night to operate as a cathartic; Alk. bath; vesication with cantharides plaster to the back of the neck; mild zinc ointment applied in the eyes. Previous to applying the zinc ointment I used a solution of argt. nit. ʒ j, water ʒj, M. Apply to the ulcer with a camel's hair pencil.

Sept. 13.—Improving; continue the treatment.

15.—Improving; continue the treatment substituting the comp. cath. pill for the comp. powder of senna.

Sept. 20.—Discharged cured.

Case 196.—Sept. 10.—Pat McBride.—Chronic Purulent Opthalmia.

Been affected five weeks, caused by washing himself in a tub of water where a woman had washed her sore leg. Conjunctiva injected, some chemosis, slight purulent discharge from the eyes, and much intolerance to light. Patient otherwise healthy

Treatment.—Alkaline bath every morning. ℞ Comp. powder of senna ʒ j every night. ℞ Comp. aconite collyrium, apply to the eye six times per day.

Sept. 12.—Improving; continue the treatment excepting the comp. powder of senna, use in its stead, comp. cath, pills, one every night.

Sept. 14.—Improving; omit the comp. aconite collyrium, and use mild zinc ointment four times a day.

Sept. 16.—Improving; continue the treatment.

Sept. 25.—Discharged cured.

Case 177.—Sept. 15.—Anthony Welsh, æt. 45. Felon.

Commenced twelve days since on the middle phalange of the index finger. It matured in the usual manner of felons, and opened spontaneously four days since. The finger is at present three times its normal diameter. The parts are suppurating and painful, and the opening of the abscess one inch in length upon the surface. Cellular tissue of the part engorged with immatured pus. Bowels costive.

Treatment.—Trimmed off the decomposing and loose integument, cleansed it of the detached pus and filled the opening with pulv. zinc sulph., and covered it with a cold poultice of ulmas fulva. Give ℞ comp. cath. pills ij at night. After to-day continue the elm poultice without the zinc.

Sept. 20.—Discharged cured.

Case 178.—William Redman, æt. 30.—Jaundice.

Has been affected ten days, has a slight chill every evening, no apparent fever succeeding it; some pain in the bones, appetite indifferent, nausea, slight diarrhea, urine of a yellow tinge, conjunctiva and skin of a yellow shade, tongue coated white; has taken a dose of castor oil this morning.

Treatment.—℞ Comp. cath. pill, one every hour until they purge. ℞ Pruss. iron,

hydrastin canadensis aa grs iij take one four times a day.

Oct. 3.—Improving; feels much better; he yet retains the yellow appearance. Continue the treatment.

Oct. 7,—Improving; skin and eyes clearer; continue the treatment.

Oct. 10.—Feels entirely well, skin nearly clear. Discharged cured.

Case 179.—Oct. 1.—Patrick McCarty, æt. 25. Intermittent fever (quotidian type.)

Has been afflicted more or less since June. The last attack commenced three days since, and has the usual symptoms of ague.

Treatment.—℞ Tinct. gelseminum ʒ ss, quinine grs xx. Take ʒ ss every two hours.

Oct. 4.—Improving; no paroxysm since he was here.

Oct. 7.—Discharged cured. No paroxysm since he was here before.

Case 180.—Oct. 1.—John Crawley. Intermittent fever.

Been affected twelve months; much the last month, but every day for the last week. Has the usual symptoms of ague with much lassitude and debility, bowels costive.

Treatment.—℞ Tinc. gelseminum ʒ ss, quinine grs xx. M. Take ʒ ss every three hours. Take two comp. cath. pills previous to using the above formula.

Oct. 4.—Improving; feels slight symptoms of ague at times. Take ʒ ss of the above quinine solution every two hours.

Oct. 7.—Discharged cured.

Case 181.—Oct. 1.—F. Sullivan. Subacute Bronchi, and Pharyngo-laryngitis.

Has been affected since August, caused by a cold and ague. Took much quinine at the time; coughs much every half hour during the day and at night; has a sensation of tickling in the larynx and bronchia. The pharynx presents a slightly œdematous and flabby appearance; has no pain.

Treatment.—Apply a solution of argent. nit. ʒ j, water ʒ j, to the throat internally with a probang once in two days. Use as an expectorant ℞ Syrup squills ʒ ss, tinct. lobelia ʒ j, tinct. aconite ʒ ss, syr. ginger ʒ ij. M. Take ʒ ij every three hours.

Oct. 3.—Improving; continue the treatment, and use at night ℞ Diaph. powder grs iij.

Oct. 10.—Discharged cured.

Case 182.—Oct. 4.—Owen Eastin, æt. 24. Injury.

Was injured while pitching hay one year since. The fork handle was forced against the precordia; did not feel the effect much at the time, but has felt more or less pain since.

Appetite indifferent, is well otherwise.

Treatment.—℞ Cup and scarify over the precordia and vesicate the scarifications with ol. tiglii. Use internally ℞ sol. iodide potass ʒ j, water ʒ iv. M. Take ʒ j three times a day.

Oct. 8.—Discharged cured; feels no annoyance from the above difficulty.

Part 2. Miscellaneous Selections

ON COUGH IN GENERAL, AND ON HOOPING-COUGH IN PARTICULAR

BY DR. R. B. TODD, F.R.S., PHYSICIAN TO KING'S COLLEGE HOSPITAL, LONDON.

[Cough is "a sudden convulsive expiratory effort." Irritation of any kind upon the pulmonary mucous membrane will produce *cough*;—irritation of the nasal mucous membrane will produce *sneezing*, another explusive effort. It should be observed, that the nasal branch of the mucous membrane is supplied by sentient branches of the fifth nerve, while the pulmonary surface is supplied by branches of the vagus; and it has been proved that irritation of the vagus, in any part of its course, will produce cough similar to that which occurs in any disease of the respiratory organs.]—*Braithwait's Retrospect.*

A common cause of cough—indeed, a much more common one than is generally supposed—depends on irritation of the pulmonary branches of the vagus, consequent on the pressure exerted on them by enlarged bronchial glands. Tumors, also, of various kinds are capable of exciting cough in a similar way, and the development of tubercles in the lungs may produce the same effect. Aneurisms not unfrequently give rise

to a cough, which may baffle us in our endeavors to account for its production; and, indeed, cough is often a very important symptom in the diagnosis of aneurism, and one from which we frequently derive assistance in localising the disease. An aneurismal tumor may press upon the branches of the vagus distributed to the trachea and bronchia, and thereby excite the most severe paroxysmal cough. Of this there is an excellent example now in Fisk ward. The patient is a man who was admitted for cough of this character. We carefully examined his chest without being able to discover any indications of disease in the lungs; but at length we obtained evidence of the existence of an aneurismal tumor, which, most probably by pressing upon some branches of the vagus, excited the violent cough, that constituted so prominent a feature in the case.

So, again, inflammatory ulceration of the trachea, whether primary or secondary, resulting from the pressure of an aneurismal tumor, especially about its bifurcation, where there are many branches of the pulmonary nerves, may cause a very distressing cough.

Thus, then, in reviewing the various circumstances under which cough may occur, you may enumerate the following kinds of this affection;—1st. The throat cough, the exciting cause of which may be either in the fauces or in the larynx. 2ndly. The tracheal or bronchial cough, when the trachea or primary bronchi are the irritated parts. 3dly. The pulmonary cough, when the smaller ramifications of the bronchial tubes or the lungs are the seat of irritation. 4thly. Practical men will admit, I think, the existence of a cough dependent on gastric irritation; and, lastly, in persons of highly nervous temperament, there is the nervous cough, which, in most instances, is no more than a convulsive affection of the throat muscles.

Of these forms of cough, those which most frequently come under our observation are, the throat cough and the pulmonary or lung cough. Both are very prevalent at this time of the year. The former is the common cough of ordinary colds, and may be readily distinguished by the absence of all abnormal phenomena, connected with the breathing sounds, and by the swollen and red condition of the mucous membrane of the fauces, and more or less of hoarseness. In more chronic cases, this membrane is less or not at all swollen, and assumes a dusky red hue and a lax condition. Coughs of this kind are repeatedly mistaken and treated for pulmonary coughs, and the patients condemned to take large quantities of nauseous drugs; whereas many of them are easily curable by local treatment. This kind of cough is often exceedingly violent and distressing, and it is not generally accompanied by any other sputa than throat mucus and saliva.

The more common form of lung-cough is that which attends bronchitis. This occurs generally in paroxysms; it is accompanied with expectoration, which is the more abundant in proportion to the extent and severity of the bronchial affection. We find it likewise in connexion with tubercular or other disorganization of the lung, and the more severe in proportion to the extent of pulmonary destruction and consequent bronchial irritation. Under these circumstances, an expectoration, generally copious and purulent, follows the cough; and, indeed, the presence of this matter in the bronchial tubes very frequently aggravates the cough. Another form of lung cough is short and dry, or accompanied by little or no expectoration, and apparently kept up by some permanent irritant in the lung's substance, as crude tubercles scattered among the bronchial ramifications. Such a cough is a common precursor of confirmed phthisis, or, more correctly, an attendant on its early stages.

Such are the ordinary causes and forms of cough.

Hooping-Cough. There is yet one other form so peculiar and characteristic, constituting as it does, not alone a symptom, but in truth a disease. The hooping-cough, so called from its peculiar final whoop, which is a sign that the patient is again taking breath, is not often brought under our notice in the wards of an hospital. It is much more common among the out-patients of an hospital than among the in-patients.

In the first stage, the symptoms are febrile and catarrhal, and the disease often passes for an ordinary cold. This state continues for ten or twelve days, and is then succeeded by the cough, the peculiar feature of which is, that it occurs in paroxysms, lasting some time, and following each other at various intervals and constituting the second stage of the disease; but, during the intervals between the paroxysms, the patient feels quite well, and one would hardly imagine there was anything the matter with him, except in the advanced periods of the complaint. The complete remission, which takes place, in many cases, between the paroxysms, is not the least curious feature of the disease.

[The third stage varies. The patient may recover, or certain changes may take place in the lungs and circulating system, which may lead to a fatal termination. Dr. Todd proceeds:]

Let me direct your attention to these secondary changes, which occur in the lungs and vascular system, after this disease has lasted for some time. At first, the lungs are not at all affected; so that hooping cough can no more be considered a disease of these organs, than can an aneurismal or other tumour pressing upon the vagus nerve, and in this manner exciting cough, be so regarded. After the cough has continued for a long while, however, changes take place, affecting the lungs and the general appearance of the patient. The countenance becomes full and bloated, and the capillaries distended, especially those of the conjunctivæ, which look watery and swollen; and some of these minute vessels often burst, giving rise to some chemosis. From this state of countenance, a practical eye can generally at once recognize the nature of this malady, under which the patient labours.

All these changes result from the circulation in the capillaries being retarded, in consequence of the violence of the cough. At the same time, and for a like reason, the pulmonary circulation becomes similarly affected; the secretion of the bronchial tubes becomes altered; these tubes pour forth more freely than natural a watery mucus; the lungs become congested and œdematous; more or less crepitation is heard in different parts of these organs, according to the amount of fluid in the tubes, or œdema present; and this crepitation is usually most audible towards the lower part, being sometimes more distinct in one lung than in the other. The sound on percussion over the base of the lungs is duller than natural; and this arises mainly from the œdematous state of these organs, but in part, also, from the quantity of mucus present in the bronchial tubes, and from the expiratory efforts having emptied some lobules of air more completely than others (some lobules being, perhaps, perfectly emptied in this manner, and, consequently, quite collapsed;) and, lastly, from the altered bronchial secretion plugging up the entrance to one or more lobules, and in this way preventing the free ingress of air. This condition of lung, in which the ingress of air to certain portions is prevented, and of which certain other portions have also been completely emptied of the contained air, has been long known to pathologists under the name of "carnification." A carnified lung has a fleshy look, does not crepitate under pressure, and sinks in water; and this condition may be induced by anything which causes the complete expulsion of the air out of the lung, or which entirely prevents the ingress of air into a lung previously devoid of air, as one which has never respired; and it is best seen in the lung of a fœtus which has never breathed. The most common cause of it, and that which, perhaps, developes it most completely, is the accumulation of fluid in the pleural cavity, by the pressure which it exerts on the adjacent lung. Carnification of the lung is carefully to be distinguished from hepatization. The former has nothing to do with inflammation, but merely consists in a condensation of the original pulmonary structure; the latter results from the effusion or exudation of an albumino-fibrinous material into the air-cells and finest bronchial tubes, by which the organ is rendered specifically heavier.

It was formerly supposed, that lobular pneumonia took place in hooping-cough. That pneumonia, just as bronchitis, may occur in the course of hooping-cough, is certain; but the signs which used to be considered as produced by lobular inflammation, are, in reality, due to the simple exclusion of air from one or more lobules.

In the third stage of hooping-cough, if the case goes on favorably, there is a gradual abatement of the cough; the paroxysms become fewer and less severe, and the patient gradually returns to the normal state of health. But if, on the other hand the progress is unfavorable, the symptoms become aggravated, the paroxysms more frequent, the bronchial tubes enlarged, the secretion of their relaxed mucous membrane increased, and, at length, the patient dies completely worn out and exhausted. If tubercules previously existed in the lungs in a quiescent condition, they are thrown into a state of activity, and symptoms of phthisis manifest themselves. Convulsions and coma, also, frequently accompany hooping-cough, especially in ill nourished, badly-fed children, as the disease approaches its fatal termination. In these subjects, too, hooping-cough sometimes becomes complicated with an effusion of fluid into the lateral ventricles of the brain, and the phenomena of hydrocephalous are developed.

Causes.—In entering into the consideration of the causes of hooping-cough, one of the first questions that suggests itself is, whether the malady has its seat in the lungs. That hooping-cough is clearly no disease of the lungs, is shown both by its clinical history, and by the fact, that auscultation can detect nothing abnormal in the voice or breath-sounds of a patient in the earlier stages of the complaint.

Its cause does not depend upon any peculiar state of the larynx or trachea; for there is no permanent affection of the voice, nor

of the laryngeal muscles, nor of the glottis, nor are the symptoms such as diseases of the larynx or trachea usually give rise to.

Does the disease depend upon any morbid condition of the bronchial glands? The bronchial glands are often considerably enlarged, without such a cough as the peculiar paroxysmal one of this disease. Nor would the patient enjoy the complete freedom from distress which so often exists between the paroxysms of cough.

Having, then, set aside all these so-called causes of hooping-cough, the only supposition now left us as to the true cause of the disease is, that it depends upon some peculiar irritation of the vagus itself. In fact, hooping-cough is a special disease of this nerve, the irritation being quite as complete as when the exposed nerve is mechanically stimulated. But the cough differs from that which is produced by mechanical irritation of the nerve, in its coming on in paroxysms at longer or shorter intervals from each other, the patient's health during the intervals being very good. This paroxysmal character of the disease, with the complete state of health in the intervals, except when the constitution or the lungs have become damaged by the effects of the cough, associates hooping-cough with other diseases, the peculiar phenomena of which depend upon some poison in the blood, manifesting its presence by the specific action which it exercises upon some particular tissue, and by the interference which it seems to offer to the due performance of healthy function. For certain poisons undoubtedly appear to have a peculiar affinity for certain tissues; thus the poison of measles appears to have a special affinity for the mucous membrane of the bronchial tubes and bowels, that of scarlatina for the throat, and so on of other acute specific diseases. In like manner, the poison which gives rise to the phenomena of hooping-cough, seems to have a peculiar affinity for the vagus nerve; but whether throughout the whole course of that nerve, at its centre or its periphery, it is impossible, in the present state of our knowledge, to affirm with any degree of accuracy. It is no valid objection to this view of the nature of the disease, to say, that after death, no structural alteration of the vagus can be distinguished, although Autenrieth and others state, that in case of hooping-cough examined after death, they have found the vagus in a congested condition. But congestion is much more frequently the effect, than the cause of a disease; and it may be especially so in this case. In many nervous affections, as for instance in those distressing cases of neuralgia, in which the most intense pain has existed during life, no appreciable morbid condition of the nerves supposed to be the seat of the pain can be detected on the most careful examination after death. The poison in hooping-cough, whatever it be, produces no structural lesion in the nerves, and leaves nothing behind it, of which our senses can take cognizance.

Hooping-cough, then, as far as present knowledge enables us to speak, is a disease which runs a certain course, can be communicated from one person to another, and is probably due to the influence of a poison which gets into the system, and produces its local manifestations on the vagus nerve. It is not an inflammatory affection of any part, being simply dependent on a morbid state of the blood, caused by the introduction into it of some poison from without; and whatever inflammations may occur in the course of it must be regarded in the light of complications of the disease.

Treatment.—Having advanced this view of the nature of the disease, let me make a few observations upon its rational treatment, as founded upon these opinions.

Assuming hooping-cough to be a disease depending on the presence of a morbid poison in the blood (which is the most reasonable view of its pathology), to cure the affection perfectly, we ought to find an antidote for the poison which produces it. If we could find some material which, when introduced into the system after it had received the poison, would neutralize that poison, then we should have the same power over this malady as we now possess over intermittent fever, which, as you know, is also a paroxysmal disease, depending on the presence of some morbid poison in the system, and for which an antidote has been found in bark. But since, unfortunately, no antidote for hooping cough has as yet been discovered, it should not be our practice to look on in silence, and let the patient cough it out; but our aim should be to find the means of guarding him against the bad consequences of the cough, and to protect him from all those complications to which I have referred.

As the disease does not consist in an inflammatory condition of any part, we may at once dismiss all so-called antiphlogistic plans of treatment. The plan, indeed, has had a fair trial; and if it had any real power over the disease, we should have long ere this accumulated abundant evidence to prove its superiority. The tendency of all the usual antiphlogistic measures is to weaken the nutrition of the lungs and the nervous system, and to impoverish the blood; to reduce the quantity of its coloring matter, to favor the accession of convulsions, and by the watery parts of the

blood filtering through the walls of the blood-vessels, to promote the tendency to hydrocephalous.

The first point in the treatment is, carefully to guard the patient against the occurrence of bronchitis and pneumonia, as complications of the diaease. Now, there is nothing which is so fertile a cause of bronchitis, as the admission of cold air to the bronchial mucous membrane. Consequently, the patient should be kept in a well-regulated temperature; if his illness occur in the winter, he should stay in a roomy, well-ventilated apartment, which is not too warm, but of a uniform heat. He should be kept in this apartment, and not allowed to run about the house into rooms, or upon lobbies or staircases, which must present great variety of temperature. Early and close attention to the maintainance of a uniform temperature of the atmosphere in which the child resides, may save much subsequent mischief.

The second point is to uphold the general nutrition—to keep the patient well nourished. I do not mean that the patient should be crammed or over-fed, but that his diet should be well regulated, and sufficient food of all kinds supplied, not only to satisfy the appetite, but also—and what is far more important—the real wants of the system. On this account, I object to keep children in this disease without animal food, as some so much insist on, though why they do so I cannot tell; for meat, in regulated quantities, and properly masticated, is more easily digested than almost anything else; and it differs from other alimenntary substances, in the fact that its digestion consists in a simple process of solution in the stomach.

Another practice which exercises a most favorable influence on the nervous system (and it is this that we must look to after all), is sponging the chest with *cold water* once or twice a day. The parents of weakly, delicate children often object to this plan of treatment; but by ordering a little spirit to be mixed with the water, you not only may overcome their scruples, but in giving a stimulating quality the application increases its efficacy. The sponging of the back and front of the chest, night and morning, exercises a bracing and tonic influence on the nerves, and in this way often acts very beneficially in this disease. Spiritous embrocations often do good in a similar manner.

In a large number of cases, one can get on very well without having recourse to drugs. Those which you will find most useful, and which I would recommend to your notice, are sedative and antispasmodic remedies, in virtue of the power which they possess in allaying irritability of the nervous system generally, such as the various preparations of opium and belladonna. The non-nauseating expectorants, such as chloric ether, ammonia, and perhaps senega, may be also used; and astringents, to check excessive bronchial secretion, such as alum, sulphate of zinc, tannic and gallic acids, are sometimes necessary. But you must bear in mind, that such remedies should be used with caution, especially opiates, which in infancy and childhood are at all times to be given with great care, and more particularly if the lungs have become congested. The drugs which I would recommend you to avoid, are those which have a depressing and lowering tendency, such as tartar emetic and ipecacuanha. Many children, I am quite satisfied, while suffering from hooping-cough, have died from the too free and slovenly exhibition of these emetics.

If I had an opportunity of treating hooping-cough on a large scale, I would, in cases in which the paroxysms are very frequent and very severe, and when, as yet, the lungs are free from congestion, but not otherwise, give a fair trial to the careful inhalation of chloroform, with the view of endeavoring to cut short the paroxysm. We know that we can arrest the paroxysm of asthma in this way; why, then, should we not be able to do the same with that of hooping-cough. I have also known laryngismus stridulous relieved by the use of chloroform; and it is now well proved that other convulsions of children may be checked by its means.

In the cases of delicate children, where there is great reason to fear that damage may be done to the lungs by the cough, this practice may prove very useful. But with reference to the administration of chloroform, this fact should always be borne in mind, and it cannot be too frequently reiterated, that due provision should be made for the simultaneous free admission of air, along with the vapor of chloroform. There is no point upon which some men seem to be more foolhardy than on this one: and it is by the neglect of attending to this, that the reputation of one of the most valuable remedies that has ever been applied to the relief of human suffering may be seriously damaged. I do not advise you to give chloroform so as to produce its full effect; it may be inhaled in small doses of ten or fifteen minims, which may be repeated at intervals, according to the severity of the paroxysms. When children are already in an exhausted and very depressed state, chloroform ought to be administered by inhalation, or it should be given only in the smallest quantities.

Another remedy in the treatment of hooping-cough, to which I should very much like to give a fair trial, is the application of cold water, on the splashing plan, two or three times daily, with or without the inhalation of chloroform. Such a practice must be pursued with proper precautions; first, to maintain a warm temperature of the room in which it is done; and, secondly, to have the water thrown over the child rapidly, and not so as to wet the head. To let the back and chest receive the brunt of the splash. These measures combined would tend to diminish the severity of the paroxysms, ward off the occurrence of bronchitis and pneumonia, as complications of the disease, promote the general nutrition, stimulate the nervous system, and thus protect the patient from the damaging effects of the cough.—*Med. Times and Gaz. March* 4, 1854, p. 203.

THE HEART-BROKEN.

CASES FROM OLD SCHOOL PRACTICE,

Irving once truthfully said that: "A woman's whole life is a history of the affections. The heart is her world; it is there her ambition strives for empire; it is there her avarice seeks for hidden treasures. She sends for her sympathies an adventure; she embarks her whole soul in the traffic of affection; and if ship-wrecked her case is hopeless—for it is a bankruptcy of the heart." Yet there are those in the world who, having outlived the susceptibility of early feeling, or having been brought up in the gay heartlessness of dissipated life, *laugh* at everything relating to love, and treat all that is written in reference to the heart as mere fiction of novelists and poets. But our observations have taught us to view these things differently; they have induced us to believe that there *is* such a thing as a broken heart; that there is a possibility of *dying* of disappointed love; that these wither down many a lovely woman to an early grave, and that if the old school practice of medicine is held accountable at the bar of the Eternal for a *thousandth* part of the evils of mankind, a cry for redress and atonement will issue from the countless of earth's fairest, who but lately glowed with all the radiance of health and beauty, but who, because of its fatal interference in *aiding* disease to remove those upon whom were centered their heart's rich love, have been hurried—*heart-broken*—down to

"Darkness and the worm."

Often, in looking around us, have we beheld those who were wont to contribute a full share in making earth resonant with music and mirth, and life one long spring-day of enjoyment by their vivacity and ennui-expelling sprightliness and humor, and glide noiselessly away, all wondering why such "shining marks" should be aimed by the spoiler. Debility, languor and melancholy, might be noticed; but little thought the world that the first symptom back of these was *disappointed love*—that there was a mental malady that previously sapped their strength and made them such easy preys to the pitiless banditti of the Death-King: And less still dreamed they that the old, time-honored practice of medicine had any agency in any of those cases in inducing that first symptom. Those to whom their all was plighted were smitten by disease; blood was drawn; blisters were made; teeth loosened and gums made sore by calomel; and, too, the pallor-inducing antimony was given—goaded, panting, lacerated Nature, like a captured fugitive, surrendered—life took its departure, and the icy monster bound yet other victim fast.

These remarks have been drawn forth from learning the melancholy fate of another beautiful and interesting girl whose end occurred but a very short time since. With her history we have been familiar, and our firm conviction is that had it not been for *allopathy* she might this day have been buoyant with life, light-hearted and happy. We take the liberty of stating a portion of her history, as well as the circumstances conspiring to blast her cherished hopes forever.

Two years ago, the affections of Emma T—— were won by a young man of good parentage, intelligent, generous, brave, everything we admire in manhood; and she loved him with the disinterested fervor of a woman's first and early love. The nuptial hour was fixed, and the wedding guests invited—but the marriage rites, alas! were never solemnized, and the guests assembled upon an occasion widely different from that which binds two young and loving hearts in holy wedlock. That day her betrothed was quietly laid in the silent grave! How came such sudden change? We're just about to tell. Not two weeks before the appointed wedding-day, he to whom she had given her girlhood's all, felt an increasing indisposition growing upon him, and finally yielded to the urgent solicitations of kind friends to summons the doctor. He had previously enjoyed uninterrupted health, but in consequence of a recent exposure he was seized with a "stitch in the side,"

with more or less feverish excitement accompanying it. A mild vapor bath with gentle sudorifics would have made all right again; but the doctor thought differently. Neither his teachers or his favorite authors recognized such *insignificant* agencies as these. No—no. Something *active* must be brought to bear. There was pain—was'nt that evidence of *inflammation?* He must be *bled*—he bled him. There was heat and dryness of the surface—was'nt that evidence of *fever?* He must have a *febrifuge*—he gave him "solution" (of antimony.) A little *calomel* will aid the bleeding and the "solution" in reducing the inflammation and the fever—he left him two little powders of the potent drug. On the second, third and fourth days, essentially the same treatment was pursued—blood-letting, antimony, calomel. The patient grew weaker—worse. Friends became alarmed; counsel was called. The previous treatment was sanctioned but in their combined wisdom they thought best to dispense with the daily bleedings, but to resort to *blistering*—the other treatment continued. On the sixth day, it was difficult for him either to speak or swallow because of his salivated mouth, and difficult to have his body moved because of the terrible blister. On the seventh, the pulse became alarmingly weak and wiry, and the countenance cadaverous. Stimulants were administered—efforts made to *counteract* the previous depleting—*reducing* treatment, but all in vain. They had carried depletion too far—beyond nature's power of rallying. Art could not replace what it had taken; before the rising of the eighth morning sun, the spirit of Henry F—— made its long eternal exit. And though the doctors try to send the impression abroad that "all was done that could be," his friends, *now* upon calm reflection, do not feel that all was right. Nor shall we do aught to remove that feeling, else others of that interesting family may yet submit to be sacrificed as Henry was.

Ah, "there are some strokes of calamity that seethe and scorch the soul—that penetrates to the vital seat of happiness—and blast it, never again to put forth bud or blossom," and such proved this to poor Emma T———. Her long cherished prospects blighted, she became a changed being. The proffer of the most friendly sympathies and the most delicate and cherishing attentions, society and amusement—all were futile in removing what allopathy had made *remediless*. There was an inward woe that mocked at all the blandishments of friendship, and "heeded not the song of the charmer, charm he never so wisely." She wasted away in a slow decline until last week—July 17th, 1854—when she sunk into the grave, the victim of a broken heart.

"They made her a grave where the sunbeams rest
When they promise a glorious morrow;
They'll shine o'er her sleep like a smile from the west,
Removing her heart's load of sorrow."

Ah, me! how many bright eyes grow dim; how many soft cheeks grow pale; how many lovely forms thus fade away into the tomb from the same first cause—the fatal interference of the allopathic practic of medicine! Too many—too many lacerated hearts are there because of man's perfidy, *without* physic lending agency in adding to the train. But a better day is dawning.—A pure medical philosophy is being preached and recognized, and a better, more efficient practice adopted. Nor will woman be the least among the gainers.—*Middle States Medical Journal.*

CHLOROSIS OF PREGNANCY.

M. Cazeaux recently read at the Paris Medical Society a paper, the object of which was to show, "that hydræmia or serous polyæmia is the most frequent cause of the functional disturbance in advanced pregnancy usually attributed to plethoria." The analysis of the blood of pregnant women exhibits a diminution of globules and an increase of water, differing indeed only from that of chlorosis by containing an increased quantity of fibrin.—

The quantity of fibrin is far less than in phlegmon, and the buff it gives rise to has been often observed in the chlorotic. The functional disturbances of pregnancy resemble those of chlorosis, many of these indeed being common to plethori and chlorosis. The effect of treatment confirms this view of their nature; for while here, as in chlorosis, depletion may prove a temporary and fallacious means of relieving serous plethora, it is from the employment of animal food and iron that real benefit is obtained; and this even in cases wherein local bleeding may be deemed advisable. M. Cazeaux does not, however, deny that true sanguinous plethora may be met with occasionally, and the especially in the early months.

During the animated discussion which followed, M. Duparcque admitted that pregnancy may occasionally induce a condition analogous to chlorosis; but he referred to the marked power of venesection in arresting threatened abortion from active uterine congestion; and believes that the practice followed by our predecessors of bleeding at the middle of pregnancy, on account of the then active disposition to abor-

tion, may often be advantageously imitated. A similar plethoric determination takes place at the seventh and ninth months; and when the mother does not suffer ill effects from this, it may produce cerebral apoplexy, or the state of general congestion termed asphyxia, in the infant—the plethora killing the child, though it spared the mother, when precautionary venesection has been neglected. Puerperal convulsions might often be prevented, if bleeding were instituted for the plethoric condition in which they so frequently originate. In judging of the presence of plethora, too much weight has been attached to the highly-colored condition of the skin, especially that of the face and its adjoining mucous membranes, and to the projection of the veins. But it is very common to see persons who are constantly plethoric, and who are liable to phlegmasia, congestions, and hemorrhages, exhibiting so colourless a condition of the tissues, that from the mere aspect, we might believe them subjects of chlorosis. Such persons bear losses of blood, which those of a higher colour, and apparently eminently sanguineous temperament, could not endure.

Mr. JACQUEMIER stated that he had examined the blood of about 200 women, in the eighth and ninth months of pregnancy, most of them being persons from the country. The so-called inflammatory crust was not met with so often as is usually supposed; but occured much oftener in winter (when many of the woman suffered from bronchitis and influenza) than in summer; it being met with at this latter period only once in six or even nine cases. Most frequently when the buff did exist the clot was pretty large and softish, and the serum was not in excess; the hard, retracted clot, covered with a thick buff, and bathed in a large quantity of serum, as seen in the inflammation and chlorosis, being rarely met. According to his observations, the excess of fibrin, whether absolute, or relative to the diminution of globules, is not considerable enough to habitually give rise to the production of the inflammatory crust. The diminution of globules is infinitely greater in a chlorotic person than in a pregnant woman; and all the analogy that can be traced between the two conditions may be stated in the fact, that a considerable number of women, after the middle period of pregnancy, exhibit the commencement of anemia. Clinical observations does not favor the view of the identity of the two conditions. Among many hundreds of women auscultated at the Maternite, during the last two months of pregnancy, M. Jacquemier only met with the carotid *souffle* in two or three.—*Brit. and For. Med. Chirurg. Rev.*, April, 1852, from *Rev. Medicale*, 1851, vol. i. p. 553; vol. ii. 51.

TWO CASES OF FEMALES WHO HAD ATTAIED THE AGE OF FORTY-EIGHT YEARS, WITHOUT HAVING MENSTRUATED.

Dr. HENRY OLDHAM has recorded (*Med. Times and Gazette*, March 27) the two following cases, the only instances he has met with of nonmenstruation, the females having passed the age of menstruation.—*Am. Jour. Med. Sciences.*

CASE I.—Maria B. appeared among my out-patients at Guy's, March 1, 1851. Her immediate ailments were unimportant, but I was struck with her informing me that she had never menstruated. She was 48 years of age; a tall, rather masculine woman, with large, full mamma, and a well expanded pelvis. The upper lip was without hair, but some few hairs had grown upon her chin. She was married at 15 years of age, and her sexual desires had been natural, but she has been sterile. She has suffered occasionally from pelvis and abdominal pains, but there had been no regular menstrual or periodic uterine effort, or any supplementary flux of blood or other discharge from any mucous membrane of the body. Her general health has been good, and she has lived well, in the neighbourhood of London.

The external sexual organs were fully developed, and the pubis was abundantly covered with hair. The vagina was a deep canal, normal in shape and healthy. The uterus was well placed, of natural weight and mobility, and the vaginal cervix well formed, but there was no os uteri: the site of the os could be felt by a slight dimpling, and by the speculum it could be seen; but it was quite impervious, and some small blood-vessels appeared to pass over it.

CASE II.—Mrs. ——called at my house in January, 1852, complaining of severe pains in the loins and lower abdomen—which had harrassed her for some weeks—general feebleness of health, and dyspepsia. In the course of her history, it appeared that she had never menstruated; and, at her request, I admitted her, under my care, into Guy's Hospital, January 28th, when the particulars of her history were taken by my clinical clerk, Mr. Massey, from whose report I have extracted the following detail. It may be remarked that her immediate ailments were relieved by a blister to the loins, tonic medicine, regimen, and rest; and that she has just left the hospital quite recover-

ed. Mrs. M. is forty-eight years of age; of a light, delicate frame; dark hair and eyes; a native of Norfolk; but a resident in London for the last twenty years; in poor, and sometimes very reduced circumstances. She has been twice married; both husbands have been healthy men, but she has been sterile, although her sexual feelings have been natural.

Both before and since marriage she has had leucorrhea; at no times profusely; but, since marriage, it has been muco-purulent; sometimes yielded in small lumps; and has occasionly increased in quantity; but neither from the sexual organs nor any other part of the body has there been anything like a vicarious menstrual discharge.

She has the aspect, form, and sexual development of a healthy person, without the physiological defect which she has suffered, and of which she is painfully conscious.—The mammary glands are developed, and are sometimes tender, and yield a lactesent fluid. The pelvis is well expanded; the pubis, labia, and external organs normally developed. The vagina is of normal size and shape, and the uterus well placed, moveable and free from any defect or disorder, either congenital or acquired. She has a light soft hair developed on the lips, but not more than many other women; and her voice is fairly modulated.

These instances of non-menstruation are of rare occurance. Retarded menstruation, even after the changes of puberty, have been well accomplised—a premature menstrual decline—long intervals of amenorrhea, and various forms of irregular menstruation, are met with in practice; but that a woman wanting nothing but her menstrual function, and its correlative fecundity, should pass through life without any notable deviation from health is calculated to excite suprise. The history of these two cases shows a normal state of uterus (the closure of the os in one case being probably a late occurance), vagina, external sexual organs, mammary glands, sexual instinct, and general physical and intellectual development, and an absence too of any compensating discharge in the place of the menstrual flow.

The perfection of the sexual organs allowed, in these cases, an unimpedid sexual intercourse; and yet the prudence or even the propriety of marriage, until a female has menstruated, may well be questioned.

OLD AGE.

"Andrew Drew, Esq., of Durham, N. H. is now living, and enjoying as good health as usual, at the advanced age of 100 years and 5 months. His head is as free from gray hair as when but 20 years old. Mr. D. had a wife and two sisters; his wife died at the age of 95 years; one of the sisters is now living at the age of 103 years, the other died at the age of 95. Mr. Drew lived with his wife 76 years and has always enjoyed good health; for 76 years he did not fail to be present at the annual town meeting. Several inquiries were made as to his manner of living, from which we learn he has always been industrious and temperate, used a moderate share of spirit, rose early in the morning, managed his own farming affairs, and meddled with no man's business but his own. What seems most remarkable is, that two families connected by marriage should live to so advanced an age, unless special care had been taken to preserve their health."

That longevity is an inheritance, is placed beyond a doubt. Some whole families die at an average of about 50 years, and others at a shade beyond; while some, from generation to generation, live to eighty-five and a hundred. Hill countries, however, as a general thing, are the regions where the greatest longevity is attained in the United States. The same is true of Scotland and Syria. In Russia, which is a level country, specimens of old age are occasionally recorded, which are very remarkable, when compared with the ordinary length of days in most civilized countries. But the clearness of the atmosphere in Russia, its vital purity, is what conduces to such longevity, and not the intense cold of the country. On the other hand in the desert of Arabia, old age is the peculiar inheritance of the wandering tribes. There the sun is intensely hot, but they breathe untainted air, and subsist on the simplest diet. With the few facts which we possess in regard to the conditions of mankind under different temperatures and in different localities, we shall never, perhaps, be able to solve the problem why some are destined to long life and some to an early grave. Yet we are taught by history, the public records, and daily observation, that longevity obtains from one generation to another in certain families, and that we may therefore consider it an inheritance.—*Boston Med. Jour.*

LEAD, CIDER, CHAMPAIGNE.

"Several very serious attacks of colic, with great prostration, have lately come under the cognizance of different practitioners of the French capital, the cause of which has been traced to the use of cider adulterated in the following manner. It has been

found that unprincipled brewers used wine of very dark colour, coming from the south of France, to make cider, by first taking off the colouring matter with acetate of lead, and then causing the fluid to ferment by the addition of rotten apples. They then contrive to produce, by adding a great deal of water, a clear, pungent, frothy beverage, pleasant both to the eye and the taste, and which bore a striking resemblance to good cider. This compound had of late been in great request, and its ill effects are still noticed, the symptoms being principally vomiting, unconquorable constipation, colic, leaden hue of the skin, convulsive movements, impending paralysis, and the characteristic blue line of the gums. The government have, through the Committee of Hygiene, instituted the most searching inquiries on the subject."—*Atlas* (London Newspaper), July 24, 1852.

ACTION OF MEDICINES WHICH INFLUENCE THE NERVOUS SYSTEM.

BY DR. A. B. GARROD.

We have see that the composition of the nervous tissues differ remarkably from that of other textures, in containing a large amount of phosphorized fatty matter which have been named cerebrin and phosphorised oil; that is, fats having phosphorus, in an unoxydized condition, entering into their constitution, in the same manner that iron forms an essential element of hæmatosine, or the blood pigment. We have found also, that, according to Dr. Bence Jones, the elemination of the phosphates is increased in acute inflammation of the brain, the excess in these cases doubtless arising from the increased waste of the phosphorised fats; and the conversion of the phosphorus into phosphoric acid. These facts certainly indicate that phosphorus forms an important element of the nervous system.—On reviewing the remedies which appear to have a direct influence on different portions of the nervous centres, we find that the most prominent among them are certain principles derived from the vegetable kingdom—viz., the vegetable alkeloids—bodies, all of which contain nitrogen in their composition, with the exception, perhaps, of picrotoxia; but even this requires confirmation. The parts of the nevous system upon which the action of these principles is directed differ considerably—some, as morphia, and codeia, acting on the brain; others, as strychnia, brucia, etc., on the spinal cord; others, again, as digitalia, nicotina, on the heart, through their influence probably on the ganglionic nerves.—It was formerly supposed that the essential oil of bitter almonds was poisonous, from its influence on the nerves; if such were the fact, it would prove a very striking exception to the rule which we have found to hold good in so many cases; Wobler and Frerichs have shown, that when entirely freed from prussic acid its effects are perfectly harmless.

We also find that there are bodies in the mineral kingdom which produce similar effects, among which the most striking examples are seen in the metals, arsenic and antimony; and in others, in a more or less degree. The same may also be said of phosphorus itself, when given in an unoxidized form; and perhaps, also, of ammonia.

When considering the nature of the elementary substances in our intoductory lectures, you will remember that we arranged them in certain groups and stated, at the time, that the elements in each group however, unlike in physical conditions, yet possessed properties which, in a chemical point of view, brought them in very close relation to each other. One of those classes consisted of arsenic, antimony, phosphorus and nitrogen, elements very nearly allied to, and frequently having the power of replacing, one another in compounds. Hence, then, we find that the substances which have the power of acting most powerfully on the nervous system are those which contain in their composition arsenic, antimony, nitrogen, and also phosphorus. The first two elements appear to operate when administered in any state of combination, provided they are absorbed into the blood; the two latter require to be in certain peculiar states, as they are themselves normal constituents of the animal body; and with regard to nitrogen, different amounts of this element and the different states in which it exists, appear to endow it with different properties. That different methods of combination of the elements influence greatly the effects of a substance on the economy is beautifully exemplified in the action of the different cyanides; ferrocyanide of potassium (the common prussiate) being harmless, whereas when heated to redness in a closed vessel, it is converted into a most deadly poison, from the change of the ferrocyaniade into the simple cyaniade of potassium. Again, we can trace still further analogies between these different cerebro-spinan's; thus, quinia, containing nitrogen, has its properties nearly approached by arsenic; and antimony, in its power of subduing vascular action, appears not very unlike the active principle of digitalis. Of

course we only wish these remarks to be considered as purely hypothetical; but still it is interesting to notice any circumstances which seem to throw the slightest glimpse of light on the action of any therapeutic agents.—*London Lancet*, Dec. 1852.

LEGITIMACY, PERIOD OF GESTATION.

Vice-Chancellor's Court (England), Feb. 18, 1852. *Dyson* v *Dyson*. Bill filed by infant claiming to be the child of G. W. Dyson, one of the defendants, and as such child to be entitled to certain real and personal estate, subject to his father's estate therein. It was alleged by all the defendants that, though the plaintiff was born in wedlock, he was not the child of G. W. Dyson. It was proved that G. W. Dyson left his wife in Maderia, in February, 1849; that she returned to England in August following; and that the plaintiff was born on the 8th of January, 1850.

Hare, for the plaintiff, read evidence of several medical witnesses, deposing to the possibility of the period of gestation being protracted to a period of 330 or even 336 days, and cited a case, where a foreign court had decreed a child born 333 days after access to be legitimate.

W. M. James and Nugent, for defendants, not called on.

The *Vice-Chancellor* referred to the Gardner Peerage case, where a period of non-access considerably shorter than 363 days had been held by the House of Lords to be decisive against the legitimacy of the child, and said he could not make a decree upon the present evidence in favor of the plaintiff. But plaintiff was entitled to an issue. Plaintiff's counsel refusing this, the bill was dismissed.—*Legal Exam. and Jour. of Med. Jurisprudence*, No. 7.

USE OF CHLOROFORM IN STRANGULATED HERNIA.

At a meeting of the London Medical Society, Mr. Hancock stated: "that he had lately found chloroform of great service in a case of strangulated inguinal hernia. He was called lately to operate on a man suffering from a large inguinal hernia; all the usual means with the taxis had been employed without any good result. He found, on handling the tumor even in a gentle manner, that the man was put into the greatest pain. He suggested the use of chloroform. It was employed, and in less than five minutes the hernia was completely returned. He had found, however, that this agent did not succeed in a case of femoral hernia, to which he had been called in a lady. The gut had been down for twenty-four hours, and signs of peritonitis were present. Chloroform was administered, but it took no effect. The operation was performed; the patient recovered.

"Mr. Pilcher had had no personal experience in the matter, but he had heard of the successful use of chloroform in several cases of hernia which had been brought to St. George's Hospital to be operated upon."—*Medical Gazette*, Feb. 1849.

USE OF CHLOROFORM IN HICCUP.

In the case of a gentleman, forty-six years of age, of weak constitution, and highly nervous temperament, M. Latour employed chloroform during a very severe attack, which had lasted during three hours, the convulsions of the diaphragm occurring at intervals of six or eight seconds. A bottle containing chloroform was applied to the nostrils, and removed after a few inspirations. At the first removal, a temporary cessation was produced, and three applications of the chloroform bottle entirely put a stop to the paroxysm. *L' Union Medicale*, Dec. 1847.

DETECTION OF MERCURY

IN THE BODY OF A PERSON DYING OF MERCURIAL CACHEXY.

BY M. GORUP-BESANEZ.

The subject was a woman, who, for twenty-five years, was laboriously engaged in silvering looking glasses; but who, from the convulsive tremors that were induced, had been obliged to desist from her occupation for a year prior to her death.

The chemical results obtained by following the processes of Fresenius and Babo were as follows: The lungs and heart gave no trace of mercury, a very small quantity was detected in the liver, and none in the bile. A doubtful precipitate was thrown down upon the gold plate by the brain, while the spinal column presented no traces. That any remains of it should be found after a year is remarkable; and is confirmatory of other facts, proving how long certain metals, *e. g.* antimony, may be retained in the economy. That the liver was the only organ in which it could then be detected, confirms the doctrine that metalic poisons are usually found longest in that organ.—*Chem. Gaz.*, Nov. 15, '54, from *Buchner's Repertorium*.

AGASSIZ ON THE RACES OF MAN.

We give the following from the Boston Traveler's report of Agassiz's lectures, delivered at Lowell, Massachusetts:

"We next come to the geographical distribution of the races of man; and here we must leave out of consideration all question as to the unity of the races. Professor Agassiz is conscious that his views, on some points, are not generally received; and he fully respects the motives which make the views of others almost sacred to them. He hopes that his views will be received in the same spirit as he represents them, viz: in the effort to arrive at truth.

"We will first study the limits of the range of each race on the different continents, and must consequently eliminate every element depending upon migration, as the present American races. We are to consider the primitive location of the races, that is, the distribution of man as recognized by the earliest traditions. The question is, where the races were originally placed, rather than what are the modern changes in their distribution.

"Africa has one characteristic race—the negro. But the interior of the great desert, Nubia, and Abyssinia, have races different from the negro. The Hottentot lives at the South, and the Western shores have their peculiar tribes. It was possible, even, during his recent visit to the Southern States, to recognize among the negroes those belonging to these several African tribes.

"In the East Indies, are three distinct species—the Malay, Telingen, and Negrillo, (like the negro, only dwarfish.) The Australian is a tribe peculiar to that country. The features are those of the negro, but the hair is straight and flowing. The inhabitants of Madagascar are a peculiar tribe, but our information concerning them is scanty. They are not negroes; but resemble more the inhabitants of the Sandwich Islands.

"With these facts before us, we can assert, that there is a law of distribution of the human race, as well as of the inferior races, and that these laws are in accordance with each other."

In the same manner the aborigines are subdivided into a large number of small tribes, which are circumscribed within narrow limits. They form no great nations, as do Chinese, Tartars, and Japanese of the East.

"The Caucasian race is widely distributed, and divided into many nations. Those inhabiting the eastern part of Africa, the northern part of Arabia, Mesopotamia, Asia Minor, etc., all constitute different nations, with different languages. The Teutonic Branch, including the German, Dutch, English, Danish, &c.; the Sclavonian branch, including the Russians, Poles, &c.; each have a nationality and language peculiar to themselves. But they all have a feature in common, viz: a noble expression of the face, above that of all other races, a mirror of the innermost movements of the soul; and it is this branch, also, which is capable of the highest degree of civilization.

"The Indians of North America are a distinct race, (on this point Prof. Agassiz disagrees with Dr. Pickering,) differing from the races of the Old World, as the inferior animals of North America differ in species from those of the Old World. It is only within a few years that the animals of North America have been considered not to be identical with those of Europe. The aboriginal Indian race is identical, from the Arctic regions to Terre del Fuego, the only difference being one of tribes, not of races. These tribes are divided into an infinite number of small tribes, a fact perfectly in accordance with the distribution of the inferior animals upon this continent.

"We have seen that a great mountain chain, extending from the Canadas to Patagonia, connects North and South America, and produces a certain uniformity in their faunas; that their faunas are subdued into those of the Pampas, the Antilles, the Andes, the Southern States, the Middle States, the Canadas, the table lands west of the States, and those of Oregon and California.

"The first race to be considered is one peculiar to the Arctic regions; a race differing much from any inhabiting the temperate zone, and still more from those of the tropics. This race comprises the Esquimaux of this continent, the Laplanders of Europe, and the Samoydes of Asia. They are all characterized by a broad face, short in its vertical diameter, a low forehead, and great length of body, when compared with the shortness of the legs. For more minute descriptions the works of Pickering and Pritchard must be consulted. The distribution of these races correspond very nearly to the zoological regions of the north.

"The races of the temperate zones are three. The Mongolians in Asia, the whites in Europe, and the Abrogines in America; and it is remarkable, also, that these races occupy the same territories as the faunes. In Asia, has been described the terrestial Japanese fauna, the insular Japanese fauna, the Chinese fauna, and the fauna of the Caspian regions, intermediate to that of Europe and Asia. Inhabiting precisely the same countries are the Japanese, Chinese, and Turks.

DISCOVERY OF EMBALMED BODIES.

A writer in the London *Notes and Queries* furnishes the following interesting accounts.

A few weeks ago, in clearing out the ruins of an old chapel at Nuneham Regis, in Warwickshire, which had been pulled down, all but the belfry-tower, forty years since, we thought it necessary to trench the whole space that we might more certainly mark out the boundaries of the building, as we wish to restore it in some measure to its former estate. It had been used as a stack yard, and a depository for rubbish by the tenants of the farm on which it was ever since in dilapidation. We began to trench at the west end, and came on a great many bones and skeletons, from which the coffins had crumbled away, till finding the earth had been moved, we went deeper and discovered a leaden coffin quite perfect, without date or inscription of any kind. There had been an outer wooden coffin, which was decayed; quantities of the black rotted wood were all around it. We cut the lead and folded back the top, so as not to destroy it; beneath was a wooden coffin, in good preservation, and also without any inscription.

As soon as the leaden top was rolled back, a most overpowering aromatic smell diffused itself all over the place. We then unfastened the inner coffin and found the body of a man embalmed with great care, and heaps of rosemary and aromatic leaves piled over him. On examining the body more closely, we found it had been beheaded. The head was separately wrapped up in linen, and the linen shirt which covered the body was drawn quite over the neck where the head had been cut off. The head was laid straight with the body, and where the joining of the neck and head should have been, it was tied round with a broad black ribbon. His hands were crossed on his breast, the wrists were tied with black ribbon, and the thumbs were tied together with black ribbon. He had a peaked beard and a quantity of long brown hair, curled, and clotted with blood, round his neck. The only mark on anything about him was on the linen on his chest, just above where his hands were crossed; on it were the letters "T. B." worked in silk.

On trenching toward the chancel, we came on four leaden coffins laid side by side, with inscriptions on each; one contained the body of Francis, Earl of Chichester, and Lord Dunsmore, 1653; the next the body of Audrey, Countess of Chichester, 1652; another the body of Lady Audrey Leigh, their daughter, 1640; and the fourth the body of Sir John Anderson, son of Lady Chichester by her first husband. We opened the coffin of Lady Audrey Leigh, and found her perfectly embalmed and in entire preservation, her flesh quite plump, as if she were alive, her face very beautiful, and her hands exceedingly small and not wasted. She was dressed in fine linen, trimmed all over with point lace, and two rows of lace flat across her forehead. She looked exactly as if she were lying asleep, and seemed not more than sixteen or seventeen years old; her beauty was very great, even her eye-lashes and eye-brows were quite perfect, and her eyes were closed, no part of her face or figure was at all fallen in. We also opened Lady Chichester's coffin, but with her the embalming had apparently failed, she was a skeleton, though the coffin was full of aromatic leaves. Her hair, however, was as fresh as if she lived; it was long, thick, and as soft and glossy as that of a child, and of a perfect auburn color.

In trenching on one side of where the altar had been, we found another leaden coffin with an inscription. It contained the body of a Dame Marie, daughter to Lord Chancellor Brackley. This body was also quite perfect, and embalmed principally with a very small coffee-colored seed, with which the coffin was nearly filled, and it also had so powerful a perfume that it filled the whole place. The linen, ribbon, etc., were quite strong and good in all these instances, and remained so after exposure to the air. We kept a piece out of each coffin, and had it washed without its being at all destroyed. Young Lady Audrey had earrings in her ears, black enameled serpents. The perfume of the herbs and gums used in embalming them was so sickening, that we were all ill after inhaling it, and most of the men employed in digging up the coffins were ill also. My object in sending this account is, if possible, to discover who the beheaded man was. The chapel is on the estate of Lord John Scott, who inherited it from his paternal grandmother, the Duchess of Buccleuch, daughter of the Duke of Montague, into whose family Nuneham Regis and other possessions of Warwickshire came by the marriage of his grandfather with the daughter of Lord Dunsmore, Earl of Chichester.

ARTIFICIAL PROPAGATION OF FISH.

The Perth correspondent of a Glasgow paper thus describes the hatching of fish in the Tay:—

We were furnished with ova nearly chipped, and by means of a glass vessel filled with water, and a few worsted threads acting as a syphon, enabling us to keep up a constant supply of fresh water, we were gratified by observing the little creature bursting the shell. As in the hen chick the head is the first part freed, and after a few struggles the shell is entirely thrown off. The appearance of the fish at this stage of its being is very interesting. What is to be the future fish is a mere line with a large head, having very prominent and large eyes. Along the belly of the fish, from the gill downwards, is suspended a bag of a heart shape, and out of all proportion to the size of the fish. The bag contains the heart, etc., part of the yolk of the egg (for still nourishing the fish,) and is composed of a very delicate and quite transparent membrane. Blood-vessels are spread like net-work over its surface, and the crimson tinge of the blood gives the fry a reddish appearance. Every pulsation may be seen, and the small pectoral fins which are constantly in motion. The yolk remaining in this bag is gradually absorbed, but we cannot say yet how many days elapse from the chipping of the shell till this takes place, but we shall know in a few days. The little creature is very nimble, but, owing to the size of the bag, it swims on it side. We can easily see from the helplessness of this little animal how it is preyed on, in this stage of its existence, by the fish in the river, and even by its own species. In France, the ova has been hatched in sixty days, but at Perth, owing to the water being kept at even temperature, it has taken place in fifty days.

REMEDY FOR INTUSSUSCEPTION OF THE BOWELS.

BY A. S. BALDWIN, M.D., OF JACKSONVILLE, FLORIDA.

Having recently seen in the medical periodicals, several reports of *post-mortem* examinations, in cases of intussusception of the bowels, I am induced to send you an account of a rather simple, but what appeared to me a very effectual remedy for this complaint, in a case which came under my care about four years ago, when I had despaired of affording relief by the ordinary remedies. If it shall seem to you to have sufficient merit, it may, perhaps, by giving it publicity in your journal, induce other members of the profession to give it a trial. During the last fifteen years, several cases of this complaint have come under my observation, most of which terminated fatally. The various remedies recommended were applied; among them the long elastic tube, for the purpose of throwing fluids high up into the bowels, with the hope of distending them so that the vaginated folds of the intestine might be drawn out. In some instances, at least, its use appeared to be productive of mischief, from passing through the constricted part of the intestines, so that the fluid injected was lodged in the pouch or sack existing above the point of obstruction; to effectually increase the distension already existing there; for, when the tube was withdrawn, no fluid was returned, and the distension was increased without having the effect to remove the difficulty. Injections administered by the common syringe were returned immediately, even while giving them, and had no effect to distend the lower bowel so as to aid in overcoming the obstruction, and the conclusion arrived at was, that adhesions existed between the folds of the invaginated parts of the bowel, and the obstruction was irremediable.

Circumstances which occurred to me, disposed me think that these adhesions do not take place so early, or so frequently, as many are disposed to believe. About three years ago, a case of this kind occurred in my practice, and for several days all the appliances which had been recommended had been used to overcome the obstruction, but without avail. There was a circumscribed spot, to the left of the umbilicus, and a little below it, which was painful; there was considerable distension of the abdomen, with a sensation of soreness across, but which did not amount to pain (being what is called in this country "*misery*.) Twice in this case the long tube was used, and injections thrown high up into the bowels, which, however, did not return upon the withdrawal of the tube, but added to the swelling previously existing above the point of obstruction. I was apprehensive that adhesion had by this time taken place, and as I despaired of relief by the ordinary methods, and the patient had arranged his temporal affairs and given himself up to die, I determined to distend the lower bowels, to their utmost capacity, by the injection of warm water.

An ivory tube, having a shield around it was introduced and passed up until the

shield was pressed up against the sphincter ani, a cloth was wrapped around this and pressed up firmly; the tube was now connected by an elastic tube with the pump, which was placed in a wash-basin of warm water, which was slowly injected into the bowels, pressure being kept up to prevent its return. Another basin of water was brought, half of which was thrown up. The abdomen was, of course, much distended by this quantity of fluid, and considerable rumbling and commotion of the bowels were produced, the pain at the point of obstruction was for a moment acute, causing the patient to cry out. The pressure and tube were removed, and we found he had the power to retain the injection until he could be helped to the chair, when about five quarts of the injection was passed; becoming faint, he was laid upon the bed, and brandy and water administered; he soon rallied, and passed as much more, colored by fecal matter; soon after, a copious and regular, but very offensive stool was had, in which the oil, taken several days before, could be distinguished. After this, he had no further difficulty, except debility, and a sensation of soreness at the point of obstruction, which lasted for a few days, when he returned to his work, that of a carriage-maker, and up to the present time he has had no return of the complaint. Since that time, I have not had so severe a case of this complaint, but in every case which shows a disposition to be obstinate, I resort to this mode of injection, with uniform and immediate success. Perhaps some of these would have been as obstinate as the one above detailed, if the former mode of treatment had been pursued; but I am fully impressed with the belief that, had this remedy been used with those cases which had proved fatal, some of them, at least, might have been saved. The case in which I first tried it was an unpromising one, on account of the long time which had elapsed since the attack before the remedy was used, sufficient for adhesive inflammation to have agglutinated the folds of intestine involved in the intussusception.—*Amer. Jour. Med. Sci.*, Oct. 1852.

RAPID CURE OF THE ITCH.

M. Hardy states that by the modification which he has introduced into the mode of treating the itch at St. Louis, he is now enabled to definitively cure a patient in *two hours*, so that it is in contemplation to treat all patients suffering under this disease as out-patients. The entire body is first thoroughly rubbed for half an hour with soft-soap, which has the effect of breaking up some of the furrows in which the acari are lodged. A tepid bath is next employed for one hour, in order to soften the epidermis, the patient continuing to wash himself well while in it. Finally, the patients rub each other thoroughly for half an hour over the entire surface with the sulphur ointment (lard 8 parts, sulphur 2, subc. potass 1), and the itch is cured. The various secondary eruptions, formerly confounded with the itch, may require several days for their dispersion, by means of simple baths. In 4 only out of 400 cases so treated, have relapses occurred, and 144 cases out of 145 occurring in June were so cured. In this way, the disease spreads by contagion much less than heretofore, when the patients had to wait until they could obtain admission into the hospital.

In a recent paper, however, M. Devergie expresses an opinion that this rapid cure of a disease which has often been long persistent, is a practice not to be followed, as being dangerous to present or future health. In certain forms of itch, the secretion is abundant, and when the disease has been mistaken, this may increase, so as to form a kind of purulent emunctory not to be at once destroyed with impunity. It is probable that some of the internal abscesses, which have been observed in cases of this disease, have arisen from its repercussion; and certainly in no other form of pustular eruption would the practitioner thus act. The itching or pruritus which is produced is not an entirely indifferent matter, and the habit of nocturnal scratching must not be suddenly suppressed. Even when pedicular disease or prurigo is suddenly arrested, dangerous pulmonary congestion sometimes occurs, requiring active rubefacients, although here little or no secretion has been suppressed. A single gentle friction suffices to destroy the contagious property, and it is best to complete the cure by repeating such for five or six days, than to run the risk, by too violent friction with very strong ointments, of producing the too sudden repression, or of exciting various forms of eczematous or lichenoid eruptions, which are sometimes more difficult to cure than the original disease, especially among the working classes, who are so apt to neglect the condition of their skin.—*Brit. and For. Med. Chir. Rev.*, from *L'Union Med.*, 1851, No. 95.

ACTION OF THE GASTRIC FLUID ON THE STOMACH.

After stating the important ingredients of this, in the stomach (of a dog), viz. 1.95 of lactic and muriatic acids, in 1000 parts, the ferment, i. e. the organic matters held in solution in the water, which has been known by the name of 'pepsin,' Dr. Dalton proceeds to derive: "The active principle, then, of the fluid is an organic substance, similar in its mode of action to the ferment, and which it is necessary should be dissolved in acidulated fluid. When these two essential ingredients, the organic principle and the acid, are both present, the gastric fluid has the property of dissolving the albuminoid and gelatinary matters, but all other alimentary substances, amylaceous, fatty, and saccharine, are entirely unaffected by it.

"Now comes an exceedingly interesting and puzzling question. How is it that this fluid, which dissolves muscular fibre, mucous membrane, cellular tissue, etc., etc., does not attack the walls of the stomach itself in which it is contained? How is it possible for a fluid, destructive of albuminoid substances, to be contained in an organ which is itself composad almost entirely of albuminoid tissues? This difficulty has usually been explained by referring to the vitality of the tissues of the stomach, by which they are rendered capable of resisting the chemical influence of the solvent; in the same manner as we know that the living body resists the extremes of heat and cold, while, after death, it immediately takes the temperature of the the surrounding atmosphere. M. Bernard, however, explains the matter in a very different way. According to him, the gastric fluid resembled, in its mode of action, not only the ferments, but also a large class of poisonous substances, such as the venom of serpents, the vaccine virus, the Woorara poison, etc., which are exceedingly active when introduced into the circulatiou, but still may be taken into the stomach with impunity. It is now some years since M. Bernard undertook a series of experiments, for the purpose of ascertaining, if possible, the reason of this singular peculiarity, and the conclusion at which he arrived was that these poisons had no effect when taken into the stomach, simply because they *were not absorbed*. The fact had been previously explained by supposing that the gastric fluid acts upon the virus and destroys immediately its noxious properties; that the poison is in fact digested and chemically altered immediately upon entering the stomach. Bernard, however, shows most conclusively that this is not the case. Last week, he brought into the lecture room a dog with a gastric fistula, and introducing a glass tube extracted a small quantity of gastric fluid, with which he inoculated a sparrow, by pricking it into a fresh wound into the thigh. This experiment was merely preliminary, and intended to show that the gastric fluid alone is not noxious. In effect, the sparrow appeared to suffer no inconvenience from the operation. Bernard then introduced into the stomach of the dog about ten grains of the Woorara poison (dried extract), and allowed it to remain. Between seven and eight minutes afterwards, another quantity of gastric fluid was taken from the dog's stomach, and a second sparrow, of the same size and appearance as the first, inoculated with it, and at the end of two minutes the bird was dead. Notwithstanding, the dog, as well as the first sparrow, remained perfectly unharmed.

It is proved, therefore, that these poisons are not destroyed by the gastric fluid, but are simply dissolved in it, and retain their activity, and that it is possible for an animal to have in its stomach, without suffering any harm, a poison, which, if introduced into the circulation, would be fatal in a few seconds. Now for the reasons why these substances are not absorbed, and consequently do not prove injurious. M. Bernard considers the stomach as defended from their action simply from their mucus which covers their internal surface, in precisely the same manner as the skin is defended by its epidermis. The Woorara cannot penetrate the epidermis, and consequently is not absorbed when held in the hand. Neither can it penetrate the mucus of the stomach, and is, therefore, innocuous when swallowed. To exert a poisonous action, it must be introduced into the circulation.

According to Bernard, the gastric fluid, also, to exert its solvent power, must be *absorbable* by the substances with which it is placed in contact, and, like the Woorara is prevented from attacking the walls of the stomach by the mucus which covers its surface. But there is still a greater difficulty remaining, viz: that as the gastric fluid is secreted by the mucus membrane of the stomach, it must necessarily be in contact with it when first produced. In order to reconcile this difficulty, we must recollect the manner in which Bernard considers the gastric fluid to be formed.

There are two essential ingredients in the gastric fluid, viz: the organic matter, the ferment called "pepsin," and the acid fluid in which it is dissolved. There are also two secretions in the stomach, viz:

mucus, which is exuded from the surface of the mucus membrane, and the acid fluid, which is secreted by the gastric tubules or glandules. The layer of mucus is constantly being renewed, a fresh supply being continually exuded from the surface of the stomach, and gradually pushed further and further from it by that which is secreted afterward underneath. The secretion of the gastric tubules, when first produced, is simply acidulated fluid, incapable of digesting alimentary substances. It does not contain any of the organic. This organic matter does not exist until the acid fluid has traversed nearly the whole thickness of the layer of mucus, and is consequently separated from contact with the mucous membrane. The active principle of the gastric fluid is, in fact, simply the gastric mucus which has become altered while moving from the surface of the stomach towards its cavity, which has lost, in the meantime, its viscidity, and become soluble in the acid fluid. It is, then, very easy to understand how the gastric fluid may be said to be secreted by the mucous membrane of the stomach, and yet never have been in contact with it. So certain is it that the active digestive principle is only altered gastric mucus, that we may make an artificial digestive fluid by mixing the mucus of the stomach with acidulated water. After a few days, when the mucus begins to undergo a putrefactive change, it looses its viscidity, dissolves in the water, and the solution then exhibits all the digestive properties of a true gastric fluid. It may be considered, then, as almost demonstrated that the active principle of the gastric fluid and the altered mucus of the stomach are identical.

Such is the explanation of M. Bernard. —*Prof. Dalton* in *Buffalo Med. and Surg. Journal.*

POISONOUS PLANTS OF THE ISTHMUS OF PANAMA.

(From the Botany of the Voyage of H. M. S. Herald, under the command of Capt. Kellet, R. N., during the years 1845–51.—By BERTHOLD SEEMAN, naturalist of the expedition.)—"The most dreaded of the poisonous plants are the amancay (*thevetia nervifolia*), cojon del gato *thevetia nitida*. De Cand.), manzanillo de playa (*hippomane mancinella.*), floris pondio (*datura sanguinea*), and bala (*glincidia maculata*. Kunth. It is said of the manchineel, that persons have died from sleeping beneath its shade, and that its milky juice raises blisters on the skin which are difficult to heal. The first of these statements must be regarded as fabulous, and the second be received with a degree of modification. Some people will bear the juice upon the surface of the body without being in the least affected by it, while others experience the utmost pain, the difference seeming to depend entirely upon a man's constitution. Great caution, however, is required in protecting the eyes, for if the least drop enters them, loss of sight and the most acute smarting for several days are the consequence.—The smoke arising from the wood produces a similar effect. While surveying on the coast of Darien, a boat's crew of H. M. S. Herald was blinded for some days from having kindled a fire with the branches of this tree. Whenever the natives are affected by the poison, they at once wash the injured part in salt water. This remedy is most efficacious, and as the manchineel is always confined to the edge of the ocean, of easy application. It has been stated that the Indians of the isthmus dip their arrows in the juice of the manchineel.—There are, however, various reasons for doubting this assertion: First because the poison is, like that of all euphorbiaceæ, extremely volatile, and however virulent when first procured, soon loses its power. Secondly, because its effect, even when fresh, is by no means so strong as to cause death of the human beings, not even producing, as has been stated, the slightest injury on some constitutions. The statements may, therefore, be considered as an inaccuracy, and it may rather be supposed that the Indians, like those of Guiana, obtain their poison from the two species of strychnos common throughout Panama and Darien.

"The fruit of the amancay is alone considered very poisonous; but its dangerous qualities have probably been overrated.—There is a gentleman in Panama, who, when a boy, ate of these fruits without experiencing any other effect than mere griping.

"The leaves of the bala, or, as it is also called, madera negra, are used to poison rats. The datura sanguinea appears to have always played, and still continues to play, a prominent part in the superstitions of tropical America. The Indians of Darien, as well as those of Choco, prepare from its seeds a decoction, which is given to their children to procure a state of excitement, in which they are supposed to possess the power of discovering gold. In any place where the unhappy patients happen to fall down digging is commenced, and as the soil nearly everywhere abounds with gold dust, an amount of more or less value is obtained. In order to counteract the bad effects of this poison, some sour *chica de maiz*, a beer made of Indian corn, is administered."

STOMATITIS ULCEROSA IN CHILDREN

Dr. F. W. Mackenzie, in an interesting article on this disease (*London Journal of Medicine*) says:

"These diseases are almost peculiar to the period of infancy and childhood; and as far as I have observed, occur principally in children who have been badly fed, are exposed to atmospheric vicissitudes, reside in unhealthy localities, or have been born of strumous or syphiletic parents. That it is essentially a constitutional affection, and merely occasioned by bad air, endemic influences, or unwholesome food, is, I think, certain; for I have known it to occur in robust-looking children, who had been living in healthy, open situations, and well supplied with good nourishment, and all the necessaries of life. In these cases, however, the disease was almost invariably found to have arisen from some local irritation, such as that of a carious tooth; and, when protracted, to be connected with some latent scrofulous taint; whereas, in other cases, it will arise in the absence of any local cause, and, apparently, from nothing else than a very deteriorated condition of the health.

"In the general management of these cases, we are directed to employ, locally, strong solutions of the nitrate of silver, or of the sulphate of copper or zinc, with or without astringents, stimulating, or detergent gargles, and to administer, at the same time, quinine, tonics, and a liberal diet. I formerly followed these instructions closely, but some times with equivocal success; and I am now, after repeated trials, disposed to give the preference to the following method of treatment. It consists in removing in the first place, any apparent cause of irritation, such as a decayed tooth, should it exist: and applying daily the dilute nitric acid of the pharmacopœia to the whole of the ulcerated surfaces, by means of a sponge, or camel's-hair pencil; whilst, at the same time, the sesquicarbonate of ammonia is given in full doses, combined with the citrate of iron. When the tongue is coated, and the alvine discharges are unhealthy, it is necessary to premise an emetic of ipecacuanha and squills, as well as a purgative of calomel and rhubarb. It is also necessary that the patient should be well supported by a nutritious diet, and an adequate allowance of malt liquor or wine.

"I will briefly add, the employment of ammonia in these cases was first suggested to me from observing its beneficial effects in the ulcerative affections of the mouth and throat, which occur in children in connection with scarlet fever. And, alone, it will accomplish a cure, as some of the following cases show, although less spedily than when combined with the citrate of iron and the local application of dilute nitric acid. The latter remedy appears to have a remarkable influence in improving the character of the ulceration and arresting its progress. The sloughy, dirty, yellowish appearance, which it generally presents, is soon changed for a florid, healthy, granulating surface; and this result would appear to depend upon the moderately-stimulating properties of the remedy, which are not disproportionate to the exhausted vital powers of the part."

POISONING BY MUSHROOMS.

Dr. Goudot has published, in the *Union Medicale*, the cases of seven persons poisoned by them, and of whom three died. The mushrooms were fried in butter and eaten at supper, by a family of parents, children, and a domestic. The quantity consumed by each was very much alike. The night passed quietly; but in the morning the grandfather was seized with vomiting and purging, from which, however, he recovered rapidly. The father, aged 38 years, was similary affected from morning till evening; but also recovered. On the contrary, the mother and two of the daughters were not seized untill twenty hours after eating the mushrooms, and all of them died after sixteen hours of suffering. Lastly, a female servant, aged 13 years, was not attacked until at the expiration of twenty-nine hours after the supper, and then, after vomiting, purging, and cramps, recovered rapidly.

The mother was the only person examined after death. There was a decomposition of the tissues, and abdominal viscera were softened, and the odour from them was extremely fetid.

What is, however, most remarkable, is that a seventh persou, aged 16 years, ate, the next day, mushrooms, at least half in quantity of those that had served the family the day previous. These, however, had lain in water for an hour, and were then drained and pressed. In this condition they were fried with butter and eaten. Diarrhea followed for several hours, without any other dangerous effect.

Conclusion.—The above cases seem to verify the opinion of Dr. Pouchet, of Rouen, that, if mushrooms be for some time boiled in water, their poisonous principle will be destroyed or extracted.—*Jour. de Medicine et Chirurgie*, November, 1822.

A NEW ORGANIC BASE FROM ERGOTIN.

BY DR. F. L. WINCKLER.

When ergotin, the watery extract of secale cornutum, is distilled with caustic potash, ammonia, and a volatile organic base, pass into the receiver. I have arrived at the conclusion that this alkaloid is identical with propylamin, which is the product from the decomposition of narcotine by potash, and is also a constituent of the pickle of herrings. Its odor is so peculiar, that I recognized it as being the same as that produced from the latter source.

Propylamin saturates acids completely, forming salts which are mostly (except the sulphate) soluble in alcohol. These salts smell strongly of fresh ergot. On the addition of tincture of iodine, the characteristic odor propylamin immediately disappears, and the mixture smells of iodine.—When the neutral aqueous solution of sulphate of propylamin is evaporated in a water bath, the unbearable odor of herrings is evolved; when the solution is sour, then it has the smell of ergot and all its reactions disappear. When this concentrated solution is distilled with caustic lime, without artificial heat being employed, pure propylamin passes into the receiver which smells of ammonia and all the reactions of this alkaloid then reappear. In consequence of these properties of the propylamin, it has heretofore been regarded as ammonia; but I consider that it is the odorous principle of urine, sweat, and blood, and frequently the cause of the odour which nitrogenous substances emit when treated with alkaline solutions.

The propylamin is to be considered as a conjugate of ammonia. From my former researches, I am led to the conclusion that this alkaloid exists, combined with an acid in ergot of rye, as it is present in the pickle of herrings, but cannot be obtained by the action of potash, as is the case with narcotine. I have detected formic acid in ergot, which is probably combined with the propylamin. It is not very difficult to determine whether the peculiar action of ergot on the animal economy is due to the presence of this alkaloid, because the neutral salts are soluble in water, and may be readily administered. I have also reason to believe that propylamin is a constituent of cod-liver oil, because it combines readily with iodine, and moreover, the oil is a useful agent to administer it with.

Buchner, to whom Winckler has submitted specimens of propylamin and its salts, corroborates the above statement as to its properties, and alludes particularly to the powerful and enduring odour of herrings, which it communicates to everything.—(Abridged)—*Annals of Pharmacy*, May 1852, from *Buchner's Repertorium*.

CASE OF RUPTURE OF THE UTERUS.

BY J. L. PIERCE, M.D.

On the 10th of December, 1835, when I resided in Philadelphia, I was called at one o'clock, A. M., to a colored woman, in labor with her second child. The membranes had ruptured at three o'clock the previous afternoon, and when I entered the room I found the pains were very strong, but not of the character we term "bearing down." The os uteri was dilated to the size of a half dollar piece, and I ascertained that it was a vertex presentation, and that the antero-posterior diameter of the pelvis was very much contracted. After waiting two hours, the head having advanced but little, I endeavored to take a nap. In about an hour the groans of the patient had ceased, and on going to her I was alarmed at the altered condition of things. She was as cold as death; in a profuse perspiration; the abdomen was exceedingly tender; the pulse imperceptible; and she was shaking violently. Upon making an examination per vaginum, I found that the head had receded so that it could not be touched, and there was an entire absence of pains.—Thinking to bring on a gradual return of them, I administered five grains of ergot every fifteen minutes for one hour, without effect. In this state of the case, I sent for my friend, Dr. J. K. Knorr, to confer with. On his arrival, no favorable change having taken place, we concluded to consult Dr. Janney, who immediately suggested the probability that a rupture of the uterus had taken place. On examination, Dr. J. found that this suggestion was correct, and that the child had passed into the cavity of the abdomen. He brought down the feet, and with great difficulty the body was delivered; but every effort to bring down the head by instruments, or otherwise, proved abortive, until at length it was severed from the body. After a long time spent in fruitless endeavors, as a last resort the brain was evacuated, and then by means of the guarded crotchet and blunt hook, the head was extracted. The patient bore the operation with the greatest fortitude—scarcely a complaint escaped her lips. Of coure, she was exhausted. We had her

placed in a comfortable position, and kept as quiet as possible. Some brandy was given immediately, and ten grains of carb. ammonia with twenty-five drops of acetated tinct. of opium were administered every half hour. The cold and pulseless state continued through the day and most of the night. On the following morning, a slight degree of warmth was restored to the body, and by noon, to the elbows; but the pulse was still imperceptible. The abdomen was exceedingly distended with flatus.—Frictions with ol. terebinth. and with capsici were used from the time of her delivery. Stimutants and opiates were used as freely as was deemed prudent. At 3 o'clock, P. M. her breathing became labored, and at about 7 o'clock in the evening she was released from her sufferings, thirty-four hours after delivery had been effected.

On the succeeding day, a *post-mortem* examination was made. The uterus was found severed from the vagina on its anterior portion, and the os uteri was torn on each side to the extent of several inches. The uterus was scarcely at all contracted. The antero-posterior diameter of the superior strait measured three inches; but the circumstance to which the rupture was to be attributed was the existence of a spinous process upon the superior posterior portion of the symphysis pubis, of about three-quarters of an inch in length, terminating in a sharp point. The constant and severe pressure of the fœtus for so long a period upon this process no doubt caused the vagina and uterus to give way.

OBSERVATIONS UPON TUBERCULAR DISEASES.

BY WARREN STONE, M.D., PROF. OF SURGERY, IN THE UNIVERSITY OF LA.

A recent work by Hayes Bennet, entitled "Bennet on Pulmonary Tuberculosis," explains very clearly the principles upon which the present most approved method of treatment of tubercular phthisis is founded, and the mode of operation of the principal remedies relied upon. No one will have the presumption to suppose that the pathology of this disease is entirely and accurately explained; for chemistry, however exact it may be when applied to dead matter, must be more or less at fault when applied to matter under the influence of the peculiar organic laws of the living animal; but it is sufficiently accurate to detect the difference between the various constituents of the blood in health and disease, and also to show the effect which various diets and medicines have in restoring the blood, when depraved, to a healthy standard.—Upon the result of these chemical facts mainly has been built a theory which is undoubtedly so far correct, that it will never be upset, but may be vastly improved, in a practical point, by careful experiments and observations. This book is not one to be reviewed, for it ought to be read entire by every practitioner. But I will select a few passages as texts for some observations of my own. In speaking of the cause, Mr. Bennet remarks, that "the circumstances which precede the disease, clearly indicate imperfect digestion, and assimilation as its true origin. Thus, phthisis is essentially a disorder of childhood and youth; that is, of a period of life when nutrition is directed to build up the tissues of the body." He goes on to say, that an adult, who has grown up robust, from free exercise in the open air, and wholesome and generous diet, may have his diet diminished in quantity and quality without inducing phthisis; but if it is applied to children, it is a common result. The proper way to treat consumption is to prevent it; and with our present knowledge, this can be done almost without fail, if the functions of the stomach can be maintained. Look at the bills of mortality furnished by this one disease, made up mostly of the young and beautiful, and of those at an interesting period of life, when a young family is dependent upon them for support and moral guidance; and see what a vast field is open for the amelioration of human suffering, or rather for the prolongation of human life. The diathesis is no doubt transmitted to a certain extent from parent to child, but this can in a great measure be counteracted by proper management during childhood and youth. Those who are so unfortunate as to labor under a phthisical diathesis, scarcely ever think of overcoming it in their offspring by pursuing a course calculated to render them robust, but on the contrary take great pains to prevent the development of the disease, by the most delicate care, such as is calculated to impair the digestion and diminish the appetite; so that, instead of strong, wholesome diet, they can only take such delicacies as please a capricious palate, and the development of the disease at an early period is the almost inevitable consequence. The light, the sun, the free fresh air, is as essential to the child in his growth as to a plant, and by the blessing of God, they are furnished without cost. Those that inherit a phthisical diathesis have generally a slender, delicate form, and a feeble muscular develop-

ment, which can be almost entirely remedied by proper exercise during the period of growth, and this same exercise serves to maintain a good appetite and digestion, which, with proper diet, comprising a due proportion of plain dressed animal food, will insure a robust frame in most cases. The exercise should be such as is calculated to develope the chest, so that it can receive with ease, under all circumstances, sufficient air for free decarbonization of the blood; for the imperfect performance of this function favors the deposit of tubercle. If Ramage obtained great advantage, (as he undoubtedly did in many cases,) after the disease began to show itself, by the use of his long tubes and forced inspiration, how much more may reasonably be expected by similar exercise while the chest is in its growth. Another injurious system indulgent and anxious parents fall into which is almost as injurious as want of exercise, consists in dressing too warmly. This error in dress applies to adults as well as children; because there may be a few days in the course of the winter, that may require a little extra clothing for comfort, a majority bundle up and swelter all the rest of the time, with no other effect than to prepare the system to take cold when a change in the weather does take place. The true way to dress, is to wear just enough to be comfortable in ordinary weather and undergoing the ordinary exercise, and make a temporary addition, if there is a great change of temperature, or if we are to sit or ride in the cold. No one can well take a cold when awake and in action, and no one who has not created a false unnatural state, by his habits and dress, can well suffer from the sense of feeling cold. Who does not know the effect of going with bare neck constantly in preventing or rather avoiding sore throat? What is true of a part is true of the whole. We must accustom ourselves to all these exposures and slight vicissitudes which are so often unavoidable, and then, instead of being injured by changes to a lower temperature, we will derive manifest advantage from its bracing and stimulating effects. The error has grown out of the idea that phthisis often or generally arises from colds or catarrhs. If tubercles already exist in the lungs, there can be no doubt but a catarrh may aid materially in developing phthisis, or advancing it, but it has nothing to do with the deposit of the tubercles, any more than if the effect of cold had been thrown upon the gastro-intestinal surface. The truth is, that in this unatural, artificial, delicate, susceptible state of the system, brought about by effeminate habits, the effects of cold or vicissitudes more frequently fall upon the stomach and bowels, although all the important functions are liable to be disturbed, and hence the importance of guarding against it.

This, then, should be the course with children, in order to counteract any hereditary diathesis, or to prevent its acquisition, and to establish a good substantial frame, capable of allowing full play to all its important organs. This physical training should take precedence of all other, or at least go hand in hand with the cultivation of the mind, and if both cannot be had, the latter should give place to the former.—Those who have inherited the diathesis, should be put upon their guard, so that they may observe the first change that takes place in the series that occur and end in consumption and death. While the mind is free, the appetite and digestion good and everything is going on undisturbed, tubercles will not be deposited. but if anything occurs to disturb the system, the appetite is impaired, the skin begins to lose the hue of health and slight emaciation may be observed without any sufficient cause apparent. These causes whatever they may be, whether moral afflictions or physical causes that tend to disturb and depress the system, would, in a healthy, robust subject produce slight indisposition only, that would disappear with the cause, but in one with the phthisis tubercular deposits would be the consequence. It is the duty of the physician to adopt a proper course at the very commencemcnt of the general disturbance, and not wait until unmistakable signs of phthisis make their appearance. I would not undertake to say that cod-liver oil is always to be given, but there can be no doubt that it more readily supplies the deficiencies in the blood than any other substance, and is more easily assimilated than any other fatty substance; but this, to be useful, must be properly assimilated, and many things may be given to improve the state of the stomach, and favor the introduction of the oil into the system. It is hardly to be supposed that in this state of mal-assimilation, there is uniformly but one deficiency in the blood. The preparations of iron have often a good effect upon the stomach in improving digestion, and also upon the blood which is often deficient in coloring matter. A physician in the West, Dr. McDowell, made phthisis a speciality, and gained some celebrity in its treatment before cod-liver oil was in use. In addition to a generous diet, he relied mainly upon iron, and I think the sulphate was his favorite preparation. I prefer some of the other soluble preparations. I brought

before the public two or three years ago, the idea of Benecke, of the use of the sulphate of lime, and further experience confirms me in my opinion of its value, but it would be unreasonable to expect it to be applicable to all cases. Benecke's theory is based upon the facts, that phosphate of lime is essential to cell formation in all organized beings, and that in phthisis and scrofula generally, when there is emaciation, it is found in excess in urine. I think it is most appropriate when there is a dingy, unhealthy hue of the skin, showing bad assimilation and appropriation of the nutriment. I have observed the most decided and happy effects in children who were emaciated and of unhealthy color and disturbed in their bowels, and when ossification would not take place after fractures, and when ulcers were slow to granulate, showing its influence upon the nutritive process. Vegetable bitters may be of service by improving the tone of the stomach, but plain stimulants, I believe, as a general rule, are better, taken either at the time of eating, or just after. Some injurious articles have been written to show the general and direct good effects of brandy and other alcoholic liquors in phthisical subjects, but I think it is entirely indirect, and confined to the improvement in nutrition. According to Mr. Bennet, cod oil is readily digestible under circumstances when no other kind of animal food can be taken in sufficient quantity to furnish the tissues with a proper amount of fatty material, and its effects are to nourish the body, which increases in bulk and vigor; to check fresh exudations of turbucular matter, and to diminish the cough, expectoration and perspiration. It is not necessary for a consumptive person to live on oil, like an Esquimaux. It is given for a specific purpose, and when given early as a preventative, it is only to establish fully the usual state of health, and so soon as digestion is established, proper exercise and suitable diet will maintain it, and should the disease be developed, I think that if the blood is restored to its normal condition, we have effected all that the oil is capable of, and if the appetite and digestion is good, we may relax the use of the oil, and resort to it when the stomach will not take sufficient animal food in a more palatable form. We may fatten the patient by giving large quantities of the oil if the stomach will bear it, but I do not think the disease is improved by giving more than sufficient to establish a healthy proportion in the constituents of the blood. The fourth and last chapter of this book is devoted to observations upon the use of local applications to the pharyngeal and laryngeal diseases which the author says are frequently mistaken for, or associated with, pulmonary tuberculosis. The appearance of the part is described in one case, in which a strong solution of the nitrate of silver was used with relief. He says, the fauces and upper part of the pharynx were studded over with nodular swellings, varying in size from a pin's head to that of a pea. Many of them were bright red and fungoid in character, whilst considerable patches of purulent matter adhered to several parts of the mucous membrane. Several cases are related, and due credit is given to Dr. Green, of New York, who is beyond doubt entitled to great praise for the light he has thrown upon the treatment of affections of the throat, larynx, etc.; but this treatment, to my view, is applicable only to inflammatory affections, with the exception of an occasional case of constitutional disease, where there is morbid sensibility, when local applications may be useful in connection with constitutional treatment, but only of temporary service without it. Perhaps these chronic inflammatory affections of the fauces and larynx are more common in Edinburg than in our section of the country, and the scrofulous softening, which (with the exception of the bright redness) resembles in appearance very much the case described above may be much more frequent here than they are there, but it is certain that it is not often that these chronic affections of the throat are cured by local applications alone, and it is very important to distinguish between mere local disease and constitutional disease manifested locally. This scrofulous affection of the throat seems to correspond to Wilson Phillip's dyspeptic phthisis, and the stomach and bowels are generally more disturbed than when the diathesis shows itself upon the lungs. This affection of the mucous membrane, is, I think, more likely to occur unmixed with phthisis in young subjects. In children, it often locates upon the bowels, and the mesenteric glands are accused of the mischief. In children, it more frequently fixes upon the throat, and may extend to the various ramifications of the mucous membrane in the fauces, and not unfrequently it locates upon the vagina and uterus, giving rise to leucorrhea, and if it occurs at puberty or later, there is menstrual disturbance. My attention was called to this manifestation of this diathesis upon the uterus some years ago. I was consulted for a case of vagina discharge in a young lady, who had a large family connection who were of a scrofulous diathesis, and I found the family very much alarmed, because several members had been

similarly affected, and it had ended in phthisis. Subsequent observations satisfy me that this is a very common affection. I have seen several cases of discharge from the antrum of a muco-purulent character, when the general aspect indicated this diathesis unattended with pain, which have yielded to constitutional treatment. These affections, of course, may appear at any period of life, but frequently in connection with phthisis when the character of it is not so likely to be mistaken. In the treatment, the cod liver oil will be found as useful as in tubercular affections; for there is the same deranged nutrition dependent upon the want of assimilation of fatty matter. but in addition, I think the mineral tonics. such as iron, are of essential service, and the phosphate of lime appears particularly applicable. Sydenham's white decoction, which is mainly a compound of gelatine and phosphate of lime, is a favorite remedy with the French in chronic affections of the bowels of children, and they will often fatten upon it. Local applications may be of some service where they can be properly applied. but they must be made much milder than is the present custom. I am fully convinced of the importance and efficacy of the application of a strong solution of the nitrate of silver or of caustic in substance to certain mucous inflammations, and also to unhealthy ulcers; and I am as fully convinced of the importance and efficacy of the application of a strong solution of the nitrate of silver or of caustic in substance in certain mucous inflammations, and also to unhealthy ulcers; and I am as fully convinced that there is a limit to the usefulness of these applications, even when applied to diseases in which they are appropriate, but in the affection under consideration, I have never seen strong applications of any use. Gentle, astringent and stimulating applications are generally useful, but the main dependence is upon the constitutional treatment and the restoration of healthy nutrition. This is an important subject, and shows the importance of correct pathology. Until lately, medical science has been under the influence of great minds with a single idea. The system of Brown, who stimulated every thing, was successful, until that genius Broussais discovered that everything morbid was an increased action to be regulated by blood-letting, starvation and counter stimulants, who was in turn equally successful. About this time, Andral ventured to assert and maintain, that tubercle and other morbid changes were not the result of inflammation, but vicious nutrition, and the idea has been acted upon until there is danger of our losing sight of the valuable lessons taught by Broussais. Let us look well to pathology; let us treat inflammation with all the rigor it deserves; let us feed well and encourage the digestion of those who are feeble and poor in nutritive fluid, and restrain those within wholesome limits who are robust and of an opposite temperament. In a word let us endeavor to treat everything as it deserves, walk on our feet, and leave hobbies for quacks to ride.—*New Orleans Medical News and Hospital Gazette.*

HABITUAL PRESENCE OF SUGAR IN THE URINE OF THE AGED.

BY M. DECHAMBRE.

During the great impulse which investigations into the characters of the excretions have received in the present time, we ought to be certain that some principles discovered are really due to a pathological condition, and do not, under some circumstances, exist normally. M. Bernard has shown that sugar may be physiologically produced by the liver; and the question is, what becomes of it. M. Reynoso, has suggested that is is destroyed by pulmonary combustion, and that when the respiratory function becomes impeded, it will be found excreted in the urine. M. Dechambre taking up the question at this point, argues, that if insufficient hæmatosis gives rise to glucosuria, we ought to meet with this in the aged. He refers to the well-known reseaches into the condition of the respiratory organs of the aged, carried on by himself and M. Hourmann at the Salpetriere, and described in the *Arch Gen.* for 1835. These exhibited lateral depression of the thorax, projection of the sturnum forwards, rigidity of the costo-vertebral articulations, ossification of the cartilages, and a rarefied condition of the pulmonory parenchyma, in which the cell-walls were found thinned or ruptured, and the capillary vessels obliterated. The defective hæmatosis which results from these physical changes should, then, favor the production of glucosuria; and experiments performed upon the urine of a considerable number of the aged women of the Salpetriere have so constantly exhibited it, that M. Dechambre considers himself justified in asserting that sugar exists habitually in the urine of the aged, although its presence there may be possibly explained upon some other hypothesis.—*Brit. Med. and For. Chir. Rev.* Oct. 1852.

Part 3. Editorial.

MEDICAL COLLEGES IN CINCINNATI.

There are three Old School Colleges in this city, all candidates for patronage, the prospect, however, for large classes this winter, is rather slim. We consider the Ohio Medical College upon its "last legs;" it may live through this winter, however, provided the season is not too severe. This school has a fine edifice, and lacks nothing to make it one of the best and largest Medical Colleges in the country, except a competent Faculty and a sufficient number of students. But where the Trustees will obtain these requisites is yet unknown. As it is the nature of man to live and hope "something may yet turn up" that will give them both. From present appearances they will have no Hospital privileges this winter, as nearly all the sick are sent to the Infirmary. At this time there are only a few patients in that part of the hospital edifice which has not been taken down. This College—what is left of it—is now in a worse position in this respect, than other Colleges of this city have been by the trickery of this old establishment.

The next is the Miami Medical College. This College expects to share a large portion of patronage; as to the qualifications of its Professors we leave others to judge, but as to their liberality we are free to say, that so long as they swear young men to give up their diplomas, as they did last winter, whenever they depart from the teachings of that school—the school cannot prosper, and no one having a proper regard for his own opinion or judgment, will ever submit to it. Young men who wish to have collars placed on their necks can be accommodated there. Who would follow the practice of any man if he should teach or practice cutting off a leg three times, and then three months after have to take off a "little more bone" that the parts may heal over. They have a small Hospital called St. Johns, a Catholic concern—the "Saint" may save it, but it does not look much like being "right on the school question."—"Any port in a storm," is better than a rough sea. The "Dear Sisters" and the "Holy Fathers" may furnish patients enough for College purposes, all Young Americans can see what they will see. This school is strictly of the old Fogy order, and of course we wish them more success than they had with their spring session; rumor says they had five students then and expected several others, but whether they had them or not, is problematical—their fifteen dollar scheme did not work well.

The third is the College of Medicine and Surgery. This school has, perhaps, the best Hospital arrangements of the three, as it has Uncle Sam's mariners to doctor at a "living price." The friends of this school are sanguine that it will have the largest class this winter, but as we are no prophet, we cannot inform our readers how many will be there, yet we will venture the following as the number of students (we mean students not dead-heads,) that will attend all three of the above schools. The Ohio Medical College 45. The Miami 55. The College of Medicine and Surgery 65. Total 165. This, perhaps, is as many as attended last winter—we have no certain means of knowing, not having seen any of their catalogues, (if they published any.)

We will put down the winter class of the Eclectic Medical Institute at 220. The clinical advantages this institution possesses over the others are ample, and has also one of the finest arranged amphitheatres in the city.

Our Old School friends will no doubt feel under many obligations to us for this notice—we are candid in our opinion, and if our calculations are too small, we will give the exact number of each as soon as they will make it known to us. N.

DRUNKEN DOCTORS.

Whether of law, divinity, or medicine, should be regarded as unworthy men, and under no circumstances should they be entrusted with that which strictly belongs to

their respective callings. But of the three professions, medicine is the most important, for the law only deals with your money, and this is all that can be affected even if your attorney be a drunkard and neglect your business. The minister of the gospel can only advise and counsel, while the whole matter is between you and your God, minister or no minister; while, with the physician, if he be drunk and make a fatal mistake, as all such do necessarily, a single failure is certain death. This puts the question at once beyond the reach or counsel of either lawyer or preacher.

No community should ever think of supporting a physician who is a drunkard, for even with all the lights of medical science—with a cool and careful judgment, physicians are poorly prepared to meet disease in the various ways by which it attacks the human family; and even those who have spent a life-time in cultivating their profession—in practising under the most favorable circumstances, fear and tremble many times when called to discharge its responsible duty. It may be said, however, that as the drunkard has or knows no responsibility, his position is the most desirable to such as throw this around them as a shield. We would say that no such pretext will ever and finally relieve a condemned conscience from a conviction of having done wrong. What parent can look upon such a physician with any degree of respect, when he may have caused the death of some lovely child by such habits?

We have often referred to this subject, but circumstances make it necessary for us to continue our opposition to this great evil.

A few days since, a physician was visiting a patient of our acquaintance, while he was so drunk that he could not stand without supporting himself upon some furniture in the room; and even after he had made his prescription and dealt out his medicine, he could not remember five minutes afterwards what he had done, and went to work and made out another portion of medicine. The patient did not take it, but at once dismissed the drunkard and called another physician whom he knew to be a sober man.

Let the community look out for this class of physicians. Pass every one by as you would the worst culprit in the world, for he is not fit to fill any position in life, so long as he continues such habits—he is death to his patients, a terror to his family, a disgrace to community, and nothing on earth or heaven can save him, but the loving-kindness and mercy of his God. N.

PHYSIOLOGY OF THE KIDNEYS, AND THE URINE.

[CONTINUED FROM PAGE 474.]

The minimum of transpiration, 37.45, was also in February. Hence it appears that in the depth of winter the urine was twice the transpiration, and in the heat of summer the transpiration for a short time doubled the urine.

Yet, although calculations of the gross amounts of transpiration and urine have no steady basis, as the water flows with indifference through the skin and lungs or through the kidneys as directed by circumstances—there is a ratio between the renal and pulmonary excretions (aside from the water) which has a more steady basis. The gross amount of solid materials excreted by the kidneys bears a proportion to our food and exercise, and the true pulmonary excretion, carbonic acid gas, bears a similar proportion. The total solids of the daily urinary excretion averaged in the experiments of Lehmann upon himself a little over two ounces—while the total amount of carbon exhaled by skin and lungs, according to different observers, Andral, Liebig, Scharling, Barral, etc., varies from six or eight to thirteen ounces daily. Hence there is a large preponderance of transpiration over urination except in the variable element, water. The following tabular view may serve to impress upon the memory the relative extent of the various excretions:

	Solids excreted.	Total excretion, solid, liquid and gaseous.
Lungs,	8 ounces.	35
Kidneys,	2	35
Skin, from	0.4 to 0.5	Indefinite.
		33 (Seguin)
Bowels,	1¼	5

In this estimate, the total cutaneous excretion is given according to Seguin at 33 ounces, but as it may vary from two or three ounces to six or eight pounds, it must be considered indefinite. The estimate of half an ounce of solid cutaneous excretion is based upon the opinion of Anselmino that the cutaneous transpiration contains from 5 to 12.5 per thousand of solid matter, and the estimate of Scharling that the carbon exhaled by the skin is from 1-30 to 1-60 of the amount exhaled by the lungs.

The above table shows the fallacy of the popular impression encouraged by certain nostrum dealers that the skin takes the lead of all the organs in the depuration of the body. In reality, the skin is greatly inferior to the other three channels of excretion, except as to its capacity for discharging rapidly an indefinite quantity of water. This popular error has arisen from confounding *transpiration* (the action of the lungs and skin,) with *perspiration*, which is the action of the skin alone. Disregarding the water, we may say that we discharge on an average in round numbers, twelve ounces of solid material daily—two thirds of it by the lungs, one sixth or fifth by the kidneys, a tenth or ninth by the bowels, and a twenty-fifth by the skin.

Urinary Excretion.—All substances that belong to the normal constitution of the urine may be regarded as diuretic. In other words, they have a tendency to excite the action of the kidneys. Urea, the leading urinary element, has been used as a diuretic in the practice of medicine, and in doses of ten grains three times a day, (according to to Dr. Turner,) it raised the urine from 14 to 44 ounces.

Many substances administered by the stomach pass off unchanged by the kidneys; others are much modified by vital chemistry. Salts containing alkaline bases, and vegetable acids are converted into carbonates, thus rendering the urine alkaline and causing phosphatic deposits. Acetates and lactates injected into the bloodvessels produce alkaline urine. Lithic acid, according to the experiments of Wohler and Frerichs, on men, dogs and rabbits, undergoes a chemical change if injected into the veins or introduced into the stomach, and produces an increased amount of urea and oxalate of lime in the urine. Benzoic acid passes off as hippuric acid; cinnamic acid undergoes the same change; tannic acid, when it enters the urine, is discharged as gallic acid. Muriate, carbonate and tartrate of urea, according to Dr. Bence Jones. give rise by decomposition to the presence of nitric acid in the urine.

Substances which are not very prone to oxidation or to combination with acids or bases in the blood, pass out unchanged. The preparations of mercury, arsenic, antimony, lead, copper, tin, gold, silver, bismuth, manganese and iron, are discharged by the urine with facility, when in a soluble condition, and it is believed that all soluble mineral substances introduced into the body which are not susceptible of decomposition make their appearance in the urine. This elimination is much assisted by sorbefacient diuretics, such as iodide of potassium and nitrate of potassia. Constitutions that have been poisoned by preparations of mercury and lead are efficiently relieved by iodide of potassium. Iodine and its compounds readily appear in the urine. Iodine itself appears as iodide of sodium. (Dr. J. C. Dalton took half a drachm of syrup of iodide of iron, and found his urine iodic in half an hour, continuing so for twenty-four hours. Dr. Parmeggiani, in a case of ectopia of the bladder, (at Reggio,) which exhibited to view the orifices of the ureters, found iodide of potassium in the urine six minutes after it had been administered.) It was observed by M. Melsens that when this substance was administered to persons who had suffered from lead or mercury retained in the system, the symptoms due to the poisonous substance were aggravated in consequence, as supposed, of its solutions absorption, and circulation, prior to expulsion. As this renal elimination is highly important to counteract the effects of medicine which may be retained too long, we should be guarded in the administration of medicines when the kidneys are

inactive. In granular degeneration of the kidneys, (Bright's disease,) salivation is said to be quite easily induced by the administration of mercurials. When the kidneys act with great freedom, more frequent repitition of medicines will be necessary to keep the patient under their influence.

Vegetable medicines are commonly discharged by the urine unchanged. Quinine in large doses becomes quite obvious in the urine—it has been suggested that it might be economised by recovering the amount discharged in the urine. Certain Siberian tribes, who use the *amanita muscaria* as a substitute for alcoholic liquors, are said to prolong their debauchery by using the urine in which the intoxicating element has been expelled. Asparagus imparts its smell to the urine in ten minutes. The odorous emanation of turpentine, when inhaled, immediately affects the urine. Rhubarb may impart its color to the urine in a very short time, and the red color of beets sometimes colors the urine. The coloring matter of willow bark was found in the urine of the beaver, by Von Bibra. Coloring and odorous matters generally pass into urine. The search for vegetable elements, however, is not always successful. Salicin, caffein, asparagin, phloridzin, amygdalin, and theobromine, were sought in the urine without success, by Prof. Lehmann.

Alcohol does not generally appear in the urine, but was detected by Dr. Percy in the urine of a dog, and in that of a man who had drunk a bottle of whisky. Dr. Wright collected alcohol from the urine of a man during half an hour after taking three ounces of whisky. The elements of opium appear to reach the urine, as meconic acid has been detected in the urine of animals poisoned by opium. Morphia has also been detected by Orfila in the urine of dogs after the administration of opium.

Sulphur, when used as a medicine, has sometimes appeared in the urine, and in other cases could not be detected.

Alkalies combine with any free acids which may be found in the stomach and small intestines, or in the blood, and reach the kidneys in saline combination—the alkaline excess beyond the acids thus neutralized contributes to render the urine alkaline. In their passage, they neutralize all acid conditions in the body, and favor the action of the mucous membranes which form alkaline secretions, thus exerting an antiphlogistic influence.

Muriatic, nitric, and sulphuric acids, are discharged through the urine in saline compounds—of course, in their passage they diminish the alkalinity of the blood. Organic acids, citric, tartaric, malic, gallic, succinic, acetic, and lactic, also enter the urine in combination. Hence the value of acids in typhus and scorbutus, when the alkaline and defibrinized conditions prevail.

Natural and Artificial Diuretics.—The secretion of urine is promoted by those causes which establish a determination to the kidneys, and relax the Malpighian bodies, and by those which increase the supply of fluids and solids for secretion. Hence we may enumerate, in addition to what are called diuretic medicines, the following diuretic influences, or natural diuretics:

1. The external application of cold.
2. A moist atmosphere.
3. Nourishing food.
4. Water and all liquids containing it, as milk, wine, coffee, decoctions, infusions, etc.
5. Muscular exertion and respiration, which promote the developement of urinous materials.
6. Diminution of the albumen and other solids of the blood, leaving a watery excess to be removed.
7. Excrementitious substances, adapted to removal by the kidneys.

Diuretic medicines act in four ways—1. by their character as foreign substances, stimulating the kidneys to their expulsion; 2. by promoting a local determination to the kidneys; 3. by increasing the decomposition of protein bodies which originates urinous material; 4. by promoting that relaxation of the Malpighian bodies which allows the free transudation of the watery part of the urine.

Diuretic medicines do not necessarily increase the solid elements of the urine; from some experiments of Prof. Krahmer and others, it has been inferred that vegetable diuretics merely increase the watery flow, while alkaline diuretics increase the vital decomposition and formation of urinous solids. The following table exhibits the experiments of Krahmer on digitalis, guaiacum, colchicum, squill, juniper, and Venice turpentine:

Medicines given.	Daily solids of urine.	Organic compounds.	Inorganic compounds.
None,	2.40 oz.	1.28	1.13
Digitalis,	2.45	1.28	1.17
Guaiacum,	2.43	1.38	1.05
Colchicum,	2.32	1.36	0.96
Squill,	2.25	1.04	1.21
Juniper,	2.12	0.94	1.18
Venice Turp.	1.94	1.11	0.83

On the other hand, the following table exhibits, according to Dr. Bird, the modification of the daily urine by three drachms of acetate of potash:

	Before medicine.	After medicine.
Quantity of urine,	1.075	40 fl. oz.
Spec. gravity,	1.035	10.17
Total solids,	416 grs.	782 grs.
Urea,	130.5	202.4
Uric acid,	2.6	3.5
Other organic matters,	189.3	295.5
Soluble salts,	72.0	248.4
Insoluble salts,	21.6	32.2

The tendency of alkalies to promote oxidation, softening or dissolution of tissues, and destruction of fibrine, explains their diuretic influence.

Composition of Urine.—The most important element of the urine is urea, which constitutes about 3 per cent. The analysis most commonly quoted by Physiologists is that of Berzelius, but it is almost impossible to present a standard for the composition of so variable a fluid as the urine which changes from day to day and even from hour to hour, in the same individual. After digestion it contains more solid matter; after drinking it is more watery. In the cold stage of fever it is more watery—in the hot stage it is darker, and in the progress of the disorder it becomes more albuminous. When first voided it is a clear fluid, in health, but may become turbid on cooling, by the precipitation of substances in solution. Pale yellowish green urine is associated with chlorotic and anemic conditions. A red color, derived from purpurine is attributed by Dr. Bird to hepatic derangement.

Becquerel estimates the average of male and female urine in 24 hours thus:

Specific gravity 1.01701.

Weight,	20320 grs
Solids,	568
Urea,	255 "
Uric acid,	8.1 "
Fixed Salts,	138 "
Organic matters & volatile saline combinations,	160.5 "

Carbonic acid is stated by Willis to be a regular ingredient, and doubtless should be, as it pervades the venous and arterial blood. Lehmann found 53 per cent. of its volume of carbonic acid in urine after taking champaign, and 68 after frothy beer.

Carbonate of ammonia is sometimes developed in the urine, being but slightly different in composition from urea. Decomposition converts urea into carbonate of ammonia.

Carbonate of lime is found in the urine of herbivorous animals—it is sometimes a portion of urinary calculi.

Many heterogeneous substances taken in by the stomach escape through the kidneys.

The epithelium of the mucous membranes is found in the urine and the *mucus* of the bladder and urethra, especially in catarrhus vesicæ. The *prostatic* fluid and *semen* are also occasionally found in it. The mucus appears as a cloud and gradually falls to the bottom.

Pus is frequently in the blood, in cases of inflammation and suppuration, and it escapes by the kidneys. Pus and mucus subside to the bottom—pus is distinguished from mucus by producing oily matter when digested in ether—it contains a large rough

globule much larger than the blood globule.

Bile is sometimes detected in the urine when it does not escape by the proper channels. If we pour on muriatic acid it turns green; nitric acid turns it green first, then blue, violet, red, and yellow in succession.

Kiestine is present during pregnancy.

Butyric acid has also been observed when the mother was not suckling her infant.

Albumen is often a prominent element in morbid conditions which admit of escape of serum through the kidneys, instead of water.

CHEMICAL COMPOSITION OF THE SOLIDS OF THE URINE.—One hundred parts of the solid matter of the urine consist of according to

	Berzelius.	Leh'n.	Simon.	March'd.	Average
Urea,	45.10	49.68	33.80	48.91	44.37
Uric acid,	1.50	1.61	1.40	1.59	1.52
Ex. matter, ammonia, salts and					
Chloride sodium,	36.30	28.96	42.60	32.49	35.08
Alk. sulphates,	10.30	11.58	8.14	10.16	10.05
Alk. phosphates	6.88	5.96	6.50	4.87	5.98
Phos. lime & mag.	1.50	1.97	1.59	1.81	1.72

The most important element of the urine beside the water, is urea, which constitutes about three per cent. All the other elements are so small and so variable in quantity as to render any estimate difficult. Urea and lithic acid, according to the researches of Lecanu, are the more uniform elements of the urine as to quantity, being rather constant in the same individual, while the fixed salts are very variable. The cause of this constancy is, that urea being a measure of vital activity or indication of the amount of transformation, necessarily corresponds to the general constitution and habits of the individual. The proportions of urinary elements change from hour to hour, and are every moment influenced by food, drink and exercise. There is more water after drinking—more solid matter after digestion or labor.

The solid elements of the urine may be divided into the organic substances, the inorganic or mineral elements of the secretion, the accidental constituents derived from the urinary organs or passages, and the abnormal ingredients derived from an unhealthy secretion, or from an unhealthy state of the blood.

The *organic products* are urea, lithic acid, lactic acid, hippuric acid, creatine creatinine, odorous and coloring ingredients, and sugar.

The *inorganic* constituents are the alkaline bases soda, potassa, ammonia, lime and magnesia, in various combinations with the muriatic, phosphoric, sulphuric and carbonic acids, as well as the lactic, lithic and hippuric acids.

The *accidental* constituents are the mucus, epithelium, semen and blood, from the urinary passages.

The *abnormal* or pathological elements are albumen, fibrine, bile, pus, blood, and the various poisons and heterogenous materials which may be introduced into the blood and eliminated by the kidneys.

Without attempting too minute an enumeration of the constituents, we mention the mean composition of the urine of four healthy men and four healthy women, as determined by Becquerel, and the analyses of Simon.

	BECQUEREL. (4 men and 4 women.)	SIMON. (6 analyses showing urine of a healthy man.)
Spec. gravity,	1017.01	1022.50
Water,	971.935	961.00
Solid constitu'ts,	28.066	39.00
Urea,	12.102	16.60
Lithic acid,	0.398	0.61
Fixed salts,	6.919	9.27
Organic matters,	8.647 and loss.	12.07

These analyses show the urea a little less than one half of the urinous solids. In various analyses of Lehmann, Simon, Berzelius and Marchand, the urea varies from 30 to 49.6 per cent. of the urinous solids. The lithic acid is about 1.5 per cent.—alkaline sulphates about ten per cent.—alkaline phosphates about six per cent. of the urinous solids.

The careful analysis of Berzelius in 1809 is still quoted by physiologists. In 1000 parts of urine he found—

BERZELIUS.

Water,	933.00
Solid residue,	67.00
Urea,	30.10
Uric acid,	1.00
Free lactic acid, lactate of ammonia, alcohol and water, extract,	17.14
Mucus,	0.32
Sulphate of potash,	3.71
Sulphate of soda,	3.16
Phosphate of soda,	2.94
Bi-phosphate of ammonia,	1.65
Chloride of sodium,	4.45
Muriate of ammonia,	1.50
Phosphates of lime and magnesia,	1.00
Silicic acid,	0.03

THREE ANALYSES BY LEHMANN.

Water,	937.68	934.00	932.02
Solid residue,	62.31	65.99	67.98
Urea,	31.45	32.91	32.90
Uric acid,	1.02	1.07	1.09
Lactic acid,	1.49	1.55	1.51
Water extract,	0.62	0.59	0.63
Spirit and alcohol extract,	10.05	9.87	10.87
Lactates,	1.89	1.06	1.73
Muriates of soda and ammonia,	3.64	3.60	3.71
Alkaline sulphates,	7.31	7.28	7.32
Phosphate of soda,	3.76	3.66	3.98
Phosphates of lime and magnesia,	1.13	1.18	1.10
Mucus,	0.11	0.10	0.11

As it would be difficult to impress these minute analyses upon the memory, it is sufficient for practical purposes to recollect that the urine contains about 93 per cent. of water, about three per cent. of urea, and about four per cent. of saline, irregular organic and heterogeneous substances, being chiefly the salts of soda, potassium, lime and magnesia, with muriatic, phosphoric, sulphuric, carbonic, lactic, and lithic acids.

The amounts of the principal bases and acids daily excreted are estimated by Dr. Bird as follows:

Chlorine,	10.15 grains.
Sulphuric acid,	17.3 "
Phosphoric acid,	6.4 "
Soda, Lime, Magnesia, Potassa,	106.1 "
	139.05

This would be about one-fifth of the urinous solids daily discharged.

The proportions in 1000 grains of urine are estimated thus:

Chlorine,	0.302
Sulphuric acid,	0.855
Phosphoric acid,	0.317
Soda, Lime, Magnesia, Potassa,	5.224
	6.918 grains.

SPECIFIC GRAVITY.—To obtain the specific gravity of urine, it would be a simple method to weigh a certain quantity of urine and to compare it with an equal quantity of water, which might be done by filling an open vessel or a corked vial with pure water and then with urine, taking the exact weight of each. Then, as the weight of the water is to 100 or 1000 so would the weight of the urine be to the number representing its specific gravity. A much easier method, however, would be to use an instrument called a gravimeter, or measurer of gravity, consisting of a glass bulb and tube, constructed to be heavier below and to float upright in water; the depth to which it would sink indicated by a scale would denote the specific gravity of the liquid. The greater the amount of the instrument floating above the surface of the water, the greater the specific gravity of the liquid.

The specific gravity of human urine varies so much at different times as to render it almost impossible to form any satisfactory conception of a standard or average specific gravity. It may be said that its specific gravity is usually two per cent. above water, but in some cases it is nearly as low as pure water, and in others as high as five per cent. above it—especially in cases of melituria, or saccharine urine. It is greater under animal than under vegetable

diet, as the former supplies more urea. When the amount of water is diminished by perspiration, the specific gravity is increased, hence in summer the specific gravity is commonly about 1025, and in winter when the water passes by the kidneys rather than the skin, it is usually as low as 1015. Muscular exertion and nitrogenous food supply urea—nervous excitement and abstinence diminish the urinary solids. Hence high living, active exercise and free perspiration tend to produce a very dense urine; while abstinence, nervous excitement, water drinking, and a dry cold skin, tend to produce a pale urine of low specific gravity. Hence we may expect a dense high-colored urine under the influence of fever, of hot weather, of luxurious indulgence at the table, and great bodily exertion. A robust, active man, with a warm perspiring skin, will have a dense high-colored urine, unless he drinks a great quantity of water.

On the other hand, persons with a pale, cold skin and temperate habits, in whom the nervous system predominates over the muscles, will have a pale light urine, unless they abstain from drinks, and this will be especially the case in cold weather. We find the urine thus pale and light in the cold stage of fever, under the excitement of hysteria and other states of nervous activity, and after sudden exposure to cold, checking the action of the skin.

The specific gravity of the urine is increased by all substances which are soluble, but not by those which are merely suspended. Hence all saline substances, urea and sugar, increase its density, but in albuminuria, when the urea is generally diminished and replaced by suspended albumen, its specific gravity is as low as 1.004.

The question of specific gravity is important in the treatment of disease, because if a large quantity is expelled with a high specific gravity, we know that it carries off too much of the solids of the body, and must produce an exhausting, emaciating effect, as we observe in melliturla. On the other hand, urine of too low specific gravity, if it be not very abundant, indicates either a feeble constitution, or if the person is robust, disease of the kidneys and suppression of the urea which is dangerous to life. Hence it is necessary to have a correct idea of the common specific gravity, and to be able to calculate the effect of any deviation from the usual limits.

The estimate of Dr. Prout, sanctioned by Dr. Golding Bird, recognizes 1.020 as the normal average gravity of urine in health. Dr. Routh calculates it at 1.021. Becquerel makes it 1.0189 for men, 1.0151 for women. This difference is due to the greater muscular force and consumption of food among men. A specific gravity of 1.020 indicates, according to the formula of Dr. Christison and Dr. Bird, 46.60 grains of solid material in one thousand of urine. In other words, in urine of the average specific gravity, 4¾ per cent. of the whole amount consists of solid urinous exertion. Hence a daily discharge of 40 ounces of this specific gravity would indicate nearly two ounces (1.864) of solid urinous excretion.

The following tables given by Dr. Bird from the data of Dr. Christison, will enable the reader to calculate the amount of urinous excretion in a given quantity of a certain specific gravity:

Specific Gravity.	Solids in Urine.	Water in Urine.	Weight of one pint in grains.
1000	0.00	1000.00	8750
1001	1.33	998.67	
1002	2.66	997.34	
1003	3.99	996.01	
1004	5.32	994.68	
1005	6.65	993.35	
1006	7.98	992.02	
1007	9.31	990.69	
1008	10.64	989.36	
1009	11.97	988.03	
1010	13.30	986.70	8837
1011	14.63	985.37	8846
1012	15.96	984.04	8855
1013	17.29	982.71	8863
1014	18.62	981.38	8872
1015	19.95	980.05	8881
1016	21.28	978.72	8890
1017	22.61	977.39	8899
1018	23.94	976.06	8907
1019	25.27	974.73	8916
1020	26.60	973.40	8925
1021	27.93	972.07	8933
1022	29.26	970.74	8942
1023	30.59	969.41	8951
1024	31.92	968.08	8960
1025	33.25	966.75	8968
1026	34.58	965.42	8977
1027	35.91	964.09	8986
1028	37.24	962.76	8995
1029	38.57	961.43	9003
1030	39.90	960.10	9012
1031	41.23	958.77	9021
1032	42.56	957.44	9030
1033	43.89	956.11	9038
1034	45.22	954.78	9047
1035	46.55	953.45	9056
1036	47.88	952.12	
1037	49.21	950.79	
1038	50.54	949.46	
1039	51.87	948.13	
1040	53.20	946.80	

The following table, however, is the more convenient for extempore calculations:

Specific Gravity:	Weight of 1 fluid ounce.	Solids in 1 fluid oz. Grains.	Specific Grav.	Weight of 1 fluid oz.—grs.	Solids in 1 fluid oz. Grains.
1010	441 8	10 283	1025	448 4	25.119
1011	442.5	11 336	1026	448,8	27.189
1012	442.7	12.377	1027	449.2	29.255
1013	443 1	13 431	1028	449.7	29.338
1014	443 6	14.470	1029	450.1	30 418
1015	444.0	15.517	1030	450.5	31.496
1016	444.5	16 570	1031	451.0	32.575
1017	444 9	17.622	1032	451.5	33.663
1018	445 3	18.671	1033	451.9	35-746
1019	445.8	19.736	1034	452.3	36,831
1020	446.2	20.792	1035	452.8	37,926
1021	446.6	21.852	1036	453.2	38,014
1022	447.1	22.918	1037	453.6	39,104
1023	447.5	23.981	1038	454.1	40.208
1024	448.0	25.051	1039	454.5	41.300

The above table shows that the number of grains of solid urinous material in a fluid ounce of urine, (which may be ascertained by slow evaporation) very nearly corresponds to the excess of the specific gravity of the urine over water when expressed in four figures, consequently we may take the number of grains for this excess, if we are not required to be very precise, or we may ascertain the specific gravity by weighing a pint or smaller quantity, and then take the two latter figures of the specific gravity for the solids of the urine per ounce. If the urine be of high specific gravity, the number of grains of solids per ounce exceeds by two or three grains the last figures of the specific gravity.

From the above table, it would appear that, with an average excretion of 30 or 40 ounces of average specific gravity, the daily discharge of urinous solids would be about from 623.76 grains to 831.68. Seven hundred grains might then be considered a medium amount.

A discharge of 200 ounces daily (which is common in mellituria,) at the specific gravity of 1.035 or 1.040 would imply from seventy-four to eighty-four hundred grains daily of solid excretion; an enormous addition to the usual waste or evacuation from the person. A loss of 16 ounces more than the average daily discharge of solids in the urine, must either greatly reduce the evacuation by the lungs or produce rapid emaciation, unless counteracted by an extraordinary consumption and digestion of food.

Viscidity.—Normal urine is quite fluid—but the sometimes find urine sufficiently viscid to froth upon agitation or to be capable of being drawn out into threads, or hanging together when poured out, as when it contains a great quantity of mucus diffused through it instead of sinking to the bottom. Pus alone may produce this viscidity, when the urine is in a very alkaline condition—the alkaline action rendering it very similar to mucus.

Sometimes the fibrinous and albuminous constituents of the urine give it a jelly-like appearance on cooling, owing to a partial coagulation. This is generally connected with organic disease, but might arise simply from relaxation of the Malpighian bodies. Dr. Bird also speaks of rare cases in which the urine becomes gelatinous on being heated although quite fluid when cold.—The cause of this condition he has traced to the presence of lithate of ammonia and oxalate of lime. The lithate of ammonia forms a gelatinous hydrate.

Color.—Urine is in health a clear yellow fluid varying from a nearly colorless condition to a deep orange tint. When a large quantity of fluids has taken, and at the same time the action of the skin has been checked by cold, a greater amount of water going off by the kidneys renders the urine quite pale. Nervous excitement, hysteria and the cold stage of ague also produce this effect. When first discharged, the urine is usually quite transparent, but on cooling it often becomes turbid by precipitating substances which were in solution.

The color under the different circumstances of disease varies from a pale straw color to amber, yellow, orange, pink, red, brown, black and even green.

The greenish tint is sometimes observed in watery, chlorotic and hysteric urine.—Bile is a common source of this color, and sometimes it may be ascribed to cystine.

The red color is ascribed to blood or to purpurine, and indicates either hemorrhage in the urinary passages, if from blood, or according to Dr. Bird, portal congestion and organic affections of the liver or spleen,

which produce "in many instances a deep purple or copper color often verging on crimson."

The brownish hue is found in the concentrated urine of fever, and is attributed to blood and bile.

Blue and black coloring matters have also been found in the urine in some rare cases. *Cyanourine*, a dark blue powder was discovered by Braconnot. Indigo has been recognized by Drs. Simon, Prout and Hassall.* The sesqui-ferrocyanide of iron or prussian blue has been detected in some cases—the parties had previously taken some preparation of iron. The black pigments which have been found in some rare cases have been called melanourine and melanic acid.

Accidental Coloring.—We should bear in mind that drugs which have distinct colors impart their color to the urine. Rhubarb, logwood, indigo, madder, senna etc., produce a marked coloration.—

Acidity and Alkalinity.—The acids in the urine are the muriatic, phosphoric, sulphuric, lithic, lactic and carbonic—to neutralize which are soda, potassa, ammonia, magnesia and lime. In the normal state of the urine, acidity predominates, chiefly due to the lithic and phosphoric acids. According to Andral human urine is never alkaline, unless from disease of the bladder or a paralytic condition, in which the urine acquires alkalinity from the mucus membrane, or by retention becomes ammoniacal.

It is true that strictly normal human urine is always secreted acid, but a sufficient excess of alkalies in the food and drink may readily render the urine alkaline.—Fruits and vegetables furnish alkalies combined with acids, which are decomposed by oxidation and leave an alkaline excess.—Hence herbivorous animals generally have

Indigo in the Urine.—Dr. Arthur H. Hassall in a paper recently communicated to the Royal Society, describes the appearence of *Indigo* in human urine. His paper concludes with the following propositions:

"1. That blue indigo is frequently formed in human urine, the quantity being subject to the greatest variation; in some cases it is so considerable as to impart a deep green, or bluish-green colour to the whole urine; a pellicle of nearly pure indigo also extending over the entire surface of the liquid; while in others it is so small that it can only be detected by means of the microscope.

"2. That for the formation of this indigo, it is in general necessary that the urine should be exposed to the air for some days in an open vessel, oxygen being absorbed and the blue indigo developed. Whatever facilitates, therefore, oxygenation, as free exposure to light and air, warmth and sunshine, hastens the appearance of the indigo; hence, in summer, the changes described take place much more quickly than in winter; on the contrary, these changes are retarded and even stayed by exclusion of the atmosphere. Blue indigo may even be deprived of its colour and reformed, alternately, according as air is excluded or admitted to urine containing it. From some of the cases recorded, it would appear, however, that blue indigo is occasionally formed in the system, and is voided as such in the urine.

"3. That there is usually found with the blue indigo, where the amount of this is considerable, a brown extractive, sometimes in large quantity, the aqueous solution of which, by exposure to air, yields a farther supply of coloured indigo, and which closely resembles hæmatin in its chemical manifestations and elementary composition. There is therefore great reason for believing that, in the majority of the cases here recorded, the blue indigo was derived from altered hæmatin, although it is at the same time probable that in some cases it is formed from modified urine pigment, which is itself supposed to be a modification of hæmatin. Between the greater number of the animal colouring matters there is the closest relationship in chemical composition, so that the transformation of the one into the other would appear to be both easy and natural.

"4. That the urines in which the coloured indigo occurs in the largest quantity are usually of a pale straw colour, readily becoming turbid, alkaline, and of low specific gravity. Small quantities of indigo are, however, frequently found in urines possessing characters the very reverse, that is, in such as are high-coloured, acid, and of high specific gravity; but, as a rule, in those urines the blue pigment is usually absent.

"5. That as coloured indigo does not occur in healthy urine, and since, where the amount of this is at all considerable, it is accompanied strongly-marked symptoms of deranged health, the formation of blue indigo in urine must be regarded as a strictly pathological phenomenon, apparently associated rather with some general morbid condition, than essentially with disease of any one organ; although there is reason for believing that the blue deposit is met with very frequently in Bright's disease, and in affections of the organs of respiration, it should, however, be remarked that none of the worst cases of indigo in the urine which the author met with were cases of Bright's disease.

The paper was illustrated by drawings, and a specimen of the indigo, as deposited from urine, exhibited.

an alkaline urine, and carnivorous animals under a vegetable diet acquire urine of the herbivorous character, while rabbits fed on animal food acquire acid urine. In addition to the alkaline reaction—derived from the salts of vegetable acids, Leibig suggests that, the alkaline phosphates contained in flesh, grain, etc., have an alkaline reaction, to which he ascribes the alkalinity of chyle, lymph and blood. This alkalinity of the tribasic phosphate of soda and potassa is shown in dissolving casein and albumen, and combining with the lithic, hippuric, and carbonic acids.

As to the amount of salts necessary to produce alkaline urine, no general rule can be given. Lehmann in a number of cases found the urine of persons living on a mixed diet become alkaline in two or three hours after taking ten grains of the acetate of soda. Large concentrated doses would be less efficient in rendering the urine alkaline than smaller doses, duly diluted, as they would pass off by cathartic action.—But little effect in the way of rendering the urine alkaline is to be expected when the vigorous reaction of fever is in progress, or when the individual is taking very active exercise, thus introducing much oxygen and forming acids. It is also more difficult to render the urine alkaline under animal than under vegetable diet.

An alkaline condition of the urine produces a precipitation of phosphate of lime as an amorphous sediment. If the alkalinity proceed from ammonia, phosphates of ammonia and magnesia are added to the precipitate. By adding potassa or ammonia to healthy urine, these precipitates may be obtained. In the human constitution, the fixed alkalies are developed in the urine, usually in consequence of gastric disturbance, while the volatile alkali, ammonia, arises from the decomposition of urea.

The acidity of the urine appears to be proportioned to the accumulation of free acids in the body. According to the careful observations of Dr. Bence Jones, the acidity of the urine is proportioned to the acidity of the stomach, and is greatest when the stomach is empty—least when food has been taken, after which it sometimes becomes alkaline. The most marked acidity is just before eating, the least a few hours after. About three hours after breakfast, and five or six after dinner, the acidity is at the minimum, having been overcome by the absorption of alkaline chyle.* It is a remarkable fact that the acidity was most thoroughly reduced by animal food sometimes producing even an alkaline condition. Vegetable food produced less reduction of acidity. These results appear rather inconsistent with the general results of animal and vegetable diet. Further researches will probably explain the descrepancy, or modify the conclusions of Dr. J. The subsequent experiments by Dr. Beneke have entirely failed to verify the conclusions of Dr. Jones. The experiments of M. Bernard in 1846, coincide better with the common impression as to the effect of diet. He found that the urine of dogs fed on animal food was transparent, amber colored and acid, while the contents of the small intestines during digestion were acid. On the other hand, the urine of rabbits fed exclusively on vegetables was very alkaline, turbid and whitish until after fasting 36 hours it assumed the same transparent amber colred acid character. Dividing the pneumogastric nerves of rabbits prevented the urine from becoming turbid and alkaline, giving the same character as was observed during fasting.

The cause of the acid reaction of the urine is according to Lehmann, the presence of an acid phosphate of soda. The ordinary phosphate of soda has an alkaline reaction, but in the urine the presence of lithic, lactate and hippuric acids which combine with the soda causes an excess of the

* That the change of acid to alkaline urine was produced by digestion, was shown in an experiment of M. Bernard upon the pneumogastric nerve. The urine of a rabbit which had fasted 36 hours became clear and acid, but two and a half hours after taking a meal of carrots, it became alkaline and turbid. Yet if the pneumogastric nerves were divided immediately after taking the meal, the urine retained its acidity as digestion was prevented, and after the alkaline condition was established, the section of the nerves caused the restoration of the acid condition.

phosphoric acid producing distinct acidity. But in many cases, especially in morbid urine there is more acidity than can be explained by the phosphate of soda, and in such cases free lactic and hippuric acids are believed to be present. (Lehmann.) Dr. Jones found the acidity of the urine during fasting to be entirely independent of the amount of lithic acid—the amount of acidity was greatest in the urine which contained the least lithic acid. Food, which increased the quantity of lithic acid secreted whether animal or vegetable, diminished the urinary acidity.

Lactic acid (a product of sugar by fermentation) is affirmed by Prout and Lehmann to be present in urine and denied by Leibig, who pronounced the substance to differ from lactic acid by containing nitrogen. It is a product of decomposition of various animal and vegetable substances, and is yielded largely by the muscular system in its waste according to Berzelius.

The greatest production of lactic acid in the experiments of Dr. Lehmann was under an unazotised diet—the least under animal diet; under a mixed diet it was 18 grains daily.

The muriates, sulphates, and phosphates are formed from our food which contains muriatic acid in salt, and sulphur, and phosphorus in various articles of food. which become oxydated.

Sulphuric acid.—The daily excretion of sulphuric acid is estimated at 30 grains by Vogel—at 17 by Becquerel. In acute rheumatism the amount rises as high as forty, fifty or sixty grains.

Saline and Ferruginous elements.—The amount of fixed salts daily excreted is estimated by Lehmann as follows: men 260 grains; women 222; children of 8 years 135; old men 124.

During disease the fixed salts are almost invariably decreased, the diminution being chiefly in the muriate of soda. The amount of chloride of sodium according to Lehmann is very variable, ranging from 116 grains daily to ½ of a grain. The reduction is very great in typhus, leaving but a mere trace of the salt.

During pneumonia, there is remarkable diminution of the chlorides of the urine according to Redtenbacher and Beale. (The ordinary proportion of chlorine in the urine has been estimated at 90 grains daily.) At the commencement of the attack the saline matters are greatly reduced, and the organic matters abundant. This condition attains its maximum in hepatization. Resolution restores the normal constitution of the urine, the chlorides being the last elements to be restored. During their reduction in the urine, they are abundant in the pneumonic sputa. This reduction of the chlorides has been noticed by Heller in typhus and some other diseases, and is very marked according to Dr. E. A. Parkes in acute rheumatism, the chlorides being sometimes entirely suppressed for days.

The sulphates and phosphates according to Lehmann are proportional to the consumption of nitrogenous food.

They are not generally reduced in disease like the chlorides. The urine of rheumatic fever according to Dr. E. A. Parkes contains an unusual amount of sulphuric acid, an element generally increased in fevers, attaining perhaps its highest development in rheumatic fever, and declining to the normal standard, on the abatement of the severe symptoms. The daily excretion of sulphuric acid (17 grains according to Becquerel, 30 according to Vogel.) became in one case of rheumatism as high as 55 grs. Simon suggests that sulphates and phosphates as they exist in protein compounds would bear some proportion to development of urea, the product of the decomposition of nitrogenous substances. The sulphates according to Berzelius and Lehmann are nearly double the soluble phosphates. The gluten of wheat contains from .033 to .035 per cent. of sulphur. The development of sulphates in the urine according to Dr. H. B. Jones, is augmented by taking food and in a slighter degree by exercise.—There is not much difference in this respect between animal and vegetable food. The use of sulphuric acid did not perceptibly increase the urinary sulphates unless taken in large quantity. Sulphur in substance pro-

duced a perceptible increase, and the sulphates of potassa and magnesia were recognized in the urine being most abundant in about seven hours after being taken.

The earthy phosphates of the urine (18 or 20 grains daily) may vary from ½ a grain to 30 grains, but they are less variable than other constituents.

Iron is generally imperceptible in healthy urine, according to the researches of the majority of chemists, although M. Donne states that iron is a regular normal constituent of human urine, disappearing in cases of chlorosis, and reappearing after the use of chalybeates. Traces of iron have been detected by Von Bibra in the urine of a horse, as well as in oxen and pigs. A trace has also been detected in human urine by Dumeril, and its possible presence in very minute quantity is admitted by Simon. I think we need but little chemical evidence on this subject. We know that the globules undergo decay or destruction in the blood, and that the kidneys are the natural outlet of mineral substances.

The presence of iron in the urine is an evidence of the decomposition of the blood globules, and may therefore be looked for in cases of debility and progressive anemia. Dr. J. R. Plummer, of Indiana, has detected the presence of iron in such cases by the precipitate yielded to tannic acid.* The honor of calling attention to this subject is due to Dr. G. O. Rees, who announced his views in 1851.

Urea, the leading solid element of the urine, may be obtained from its solution by adding nitric acid to urine concentrated by evaporation. (Sometimes the urine is already sufficiently concentrated by abundant secretion of urea and absorption of the water.) The nitrate of urea is thus formed, which, if sufficiently abundant, is precipitated, especially if the liquid be kept cold. By adding carbonate of potassa to this, the urea will be set free, while nitrate of potassa is formed with effervescence.

Urea, separated from the urine, presents itself in the form of long four-sided, colorless crystals, of a cool saline taste, with but a faint odor, if any. It dissolves readily in water and alcohol, and combines with acids without neutralizing them. Its chemical (atomic) composition is Hydrogen 4, Nitrogen 2, Carbon 2, Oxygen 2, the proportions of its elements by weight being

Nitrogen,	28
Oxygen,	16
Carbon,	12
Hydrogen,	4

The predominance of nitrogen in its composition establishes an intimate relation between urea and the nitrogen elements of the body which are the sources of its vigor.

The composition of urea corresponds to that of the carbonate of ammonia, plus two atoms of water; when its nitrogen and hydrogen unite to form ammonia, the carbon and oxygen remaining form carbonic acid, and the two at once unite as a carbonate. Hence a strong ammonical smell is given off wherever urine is allowed to accumulate as in stables, privies, etc. It is true that pure urea is not inclined to putrefy—on the contrary, it may be kept for years unchanged, but when any fermenting or decaying substances, such as mucus, is pres-

* "I had a case of anemia, the most strikingly developed I ever saw. The patient, a young married woman, lived on the banks of a river in a narrow valley, often suffering from intermittent fever. Finally, the healthy hue of the skin began to disappear, and rapidly vanished, leaving the surface of a startling whiteness. In a few days afterward, the patient died." * * * "This extract [the spirit extract of the urine] was re-dissolved in distilled water and tested by tannin. A very copious precipitate followed." "In the course of the next day, I observed, to my surprise, that the precipitate had assumed an evident purplish hue. On examining it daily afterwards, I found it became steadily darker till it finally acquired a deep blue color." "I poured off the supernatant liquid, washed the precipitate and dried it. It was then heated on a platinum spoon, to destroy the tannin and other organic matter present; a drop of dilute sulphuric acid added, heat again applied, quite sufficient to evaporate the surplus fluid, and then a drop of distilled water, and afterwards the ferrocyanide of potassium in solution, furnished unmistakable evidence of the presence of iron."—*Dr. J. T. Plummer, Richmond, Ia., Amer. Jour Med. Sciences, Oct.*, 1853.

ent, it readily becomes decomposed, forming carbonate of ammonia, and this change sometimes occurs even in the bladder—it also occurs in the blood whenever much urea is retained, as is shown by the discharge of carbonate of ammonia from the gastro-intestinal mucous membrane, and also by the ammoniacal odor of the breath. A solution of urea exposed to a temperature of 280° becomes converted into a solution of carbonate of ammonia. By boiling with a concentrated acid, a salt of ammonia is produced and carbonic acid given off—and by boiling with potassa, carbonate of potassa is produced and ammonia given off. As urea is chemically identical with cyanate of ammonia, the action of heat expels ammonia and subsequently cyanic acid. The vital process by which urea is formed from the digestion of flesh may be imitated by the chemist, and urea may be artificially formed from flesh by the co-operation of alkalies.

An ammoniacal state of the urine sometimes arises from disease of the bladder, or as a consequence of injuries of the spinal cord. This presence of ammonia is irritating to the bladder and causes the precipitation of carbonates and phosphates of lime and magnesia.

The *quantity of urea* daily excreted is estimated by Lecanu as follows:

	Grains Urea.	Lithic Acid.
For man, - - -	431.9	13.09
For women, - -	294.2	10.01
Children of 8 years,	208.0	
Children under 8,	138.2	3.98
Old men, (84-6) -	124.8	6.77
Children of 4 years,	69.5	

The daily average of urea is estimated by Dr. Bird at 270 grains for a man, and by Becquerel at 255 grains for an adult. These are probably too moderate estimates, while that of Lecanu is rather too high for an average. Three hundred or 320 grains would more nearly correspond with the recognized estimates of urinary evacuation (30 or 40 oz. per day.) Prof. Bischoff, however, has estimated the daily average of urea discharged from a healthy man as high as 830 grains. When the amount of urine is increased or diminished, the urea and other urinary solids undergo a corresponding increase or diminution, for although the scanty urine may be more concentrated than the copious urine, it is rarely sufficiently so to compensate for the diminution. The copious urine, although pale and watery, still contains more urinary solids than the scanty urine, as was shown in the investigations of Drs. Prout and Beneke.

The difference between males and females, and between the young and old shows that the amount of urea increases with the vital force and activity of the constitution—males developing more than females, and the young more than the old. The cause of this correspondence is that urea, being a nitrogenous product of the waste of the tissues, the amount is increased in proportion to the general activity and consequent waste of the organs—especially of the muscular system. Hence any one may increase the quantity of urea in his urine by leading a more active life or may render his urine more watery by a sedentary life. Dr. Beneke in a series of careful experiments upon himself found that whenever he felt very well with high muscular and mental activity, his urine was copious, but whenever languid, depressed or unwell, the amount was diminished. Dr. Lehmann found the discharge of urea increased more than a third by changing from moderate to severe exercise, and Simon found that after two hours of violent exertion, the proportion of urea in the urine was doubled. The effect of severe bodily exercise is tested Dr. Lehmann during a pedestrian tour was to increase the urea, phosphates, sulphates and lactic acid, while the lithic acid and extractive matters were diminished. Two analyses by Dr. Percy illustrate the same increase of the urea and diminution of lithic acid by severe exercise.

[TO BE CONTINUED.]

THE regular session of the Institute is now in progress—with a fine class in attendance. We think from present indications, that the class will be as large as any which has ever heretofore entered our halls.

AN IMPORTANT APPOINTMENT.

Henry A. Warriner, M.D., has been appointed Professor of Chemistry in the Antioch College in this State. This institution is destined soon to become one of the most richly endowed colleges in the United States. The judicious character of its peculiar arrangements and appointments is eminently calculated to make it one of the largest, most useful and popular institutions of learning of which the West can boast. In the selection of Dr. W., we consider that the institution has acted wisely, for he is just the man properly to teach the great truths of science which belong to the department of chemistry. We regret the necessity which thus dissolves the relation at present subsisting between him and the faculty of the Eclectic Medical Institute, but at the same time we are gratified to see him in this new and equally honorable and important position. N.

UNSUCCESSFUL SURGICAL OPERATION—ENCEPHALOID TUMOR.

James Brown, æt. 26, of sanguine and lymphatic temperament, visited the Clinical Institute for the purpose of having a tumor removed from the right groin and upper part of the thigh. It commenced two years since without any apparent cause, and has continued increasing in size until he called upon me.

Upon close examination, I found the tumor extending from one inch above Poupart's ligament down external to the ligament to six inches below, and from a point corresponding to the inner border of the sartorious muscle, across the thigh inwardly and backward along the border of the pelvis, rami of the pubis and ischium, under the edge of the gluteus maximus muscle two inches, down along the posterior part of the thigh to the insertion of the gluteus, a little forward and two inches lower and across to the point upon the sartorius. The tumor anteriorly was elevated about three inches above the level of the normal surface of the thigh, but internally it was not so prominent. The tumor was lobulated and divided into two distinct portions. Upon examination, neither myself nor Profs. Freeman and Cleaveland could detect any portion passing into the pelvis. It presented a superficial appearance, as though it was located external to the adductor muscles. The patient stayed at the Institute about ten days, preparing his system for the operation. During that time, the tumor had increased in size and pressed hard against the rami of the ischium and pubes, and farther above Poupart's ligament.

The vitality of his system seemed concentrating in the tumor, and his general health failing. He desired the operation, although we informed him that there was much doubt as to the result; that he might or might not be cured. There were many chances against him, and some in his favor. The tumor in a short time, from the direction in which it was growing, would soon have forced its way into the pelvis, crowding upon the urethra, bladder and rectum, thus obstructing permanently and fatally those canals; besides, his system would have gradually sunk from the extraction of vitality and its concentration in the tumor, and in all probability he would have died from hemorrhage in a few weeks.

Oct. 12. At 10 A. M., he walked into the amphitheatre and took his place upon the operating table in presence of the clinic class. He remarked at the time that "he did not know but that he would be brought out a corpse."

Dr. O. E. Newton administered chloroform, and, being assisted by Profs. Freeman and Cleaveland, I commenced the operation in presence of the balance of the Faculty. A crucial incision was made on the superficial and upper tumor, the flaps of the integument and fascia dissected back and *this* tumor removed. The anterior part of the deep-seated and internal tumor was hidden by the former, and when the pressure was taken away it became elevated. An oblique incision was made from the centre of the former wound around to the border of the gluteus muscle, the flap dissected back and the second tumor exposed. Its external border was attached to the femoral vein and artery which it had crowded

out of their natural course, and the proper tissue of the tumor seemed to have insinuated itself into the coats of the vein, (according to the character of encephaloid disease.) so that it was with much difficulty it could be dissected from it, leaving the vein so brittle that it burst in three places, under the pressure of the handle of the scalpel, while attempting to separate them. We ligated the vein above and below the lacerated part, and in attempting to trace the borders of the tumor with the scalpel, we found that it passed under the triceps adductor muscle, between those and the femor, involving the internal circumflex artery, nerve and vein, and the obturator artery, nerve and vein, its border passing into the pelvis and extending farther under the gluteii muscles than we had anticipated, involving, as we supposed, some branches of the gluteal and ischiatic arteries. The tumor could not be extirpated without cutting the adductor longus, magnus and brevis muscles; and its extent under the internal hamstring and gluteal muscles, and its vascular connection being so extensive, with no chance of ligating the cut blood-vessels without making unwarrantable incisions, the patient having already lost considerable blood, discretion demanded that we should desist and close the wound, lest the patient should die on the operating table. Profs. Freeman, Cleveland and Sherwood examined closely the extent of the tumor, and decided in favor of leaving the remaining tumor, and closing the wound. The wound was closed by interrupted suture, and dressed with adhesive straps, cotton and roller, after the usual manner, and the patient placed upon his bed.

He soon recovered from the influence of the anasthetic, but not until evening did reaction come up fully. He complained through the day and night and next day of uneasiness and aching pain in the right thigh and leg.

Oct. 13. Passed neither urine nor fæces, although he made several attempts—ate a little toasted bread and drank some tea; used wine to stimulate and assist reaction; kept his feet warm with heated bricks; his thigh and legs were much swollen, and at 3 P. M. there were some symptoms of ecchymosis. The thigh and leg continued swelling—with some symptoms of gangrene.

8 P. M. Disorganization of the limb commenced, and gas began to bubble out of one corner of the wound; the skin of the thigh very tense; loosened the bandage; continued the wine, although the patient was sinking fast.

11 P. M. He died calmly, without a truggle or a groan.

We regret that we commenced the operation, since it terminated as it did; but we considered it our duty, after a careful examination with Profs. Freeman, Cleaveland and Dr. O. E. Newton, to attempt the removal of this disease, feeling fully the responsibility of the surgeon under all such circumstances.

The question may be asked why we report this case. We will answer by saying that we hold it to be the duty of every surgeon to report his failures with as much precision as his successful cases. This is only the second case during our surgical practice in which the patient died from the operation. The other case, with all the circumstances attending it, was also reported in the Eclectic Medical Journal. N.

A HORRIBLE SIGHT.

To see a little child, only one year old, lying in the following condition: The tongue all covered with deep ulcers, its throat so swollen that it cannot swallow; its gums all sloughing, its breath fetid, one eye-ball sunken deep into the socket, with large ulcers covering both eyes, rendering the dear child entirely blind, speechless and insensible; and all this, too, done by giving it calomel (poison) for cholera infantum. We hold that no man, though he be a physician, has any more right to poison and kill a child with calomel, than he has to cut its throat. Why should not the law hold all such responsible for such acts? We are induced to make these remarks from having been called to visit such a case recently. N.

HYGIENE.

During the present course of lectures, we are giving additional attention to the science of health; being deeply impressed with the importance of its study by physicians, as well as the community generally. It is by no means necessary that the medical profession should be, as Dr. Caspar has announced in Europe, a short-lived profession. On the contrary, physicians should aim to rank with the long-lived portion of the community. They belong to the most intelligent classes, and are generally supplied with the comforts of life, and kept in active occupation. Hence, with the aid of a scientific knowledge of hygiene, they should average at least 60 or 65 years of life.

In discussing this subject, we have felt the necessity of some appropriate manual of hygiene. We know of no work which comes up to our conception of what such a manual should be. The best, perhaps, is that of Dr. Andrew Combe on Physiology, and its applications to the promotion of health and mental cultivation. B.

BOOK NOTICES,

THE AMERICAN ECLECTIC DISPENSATORY. By John King, M.D., Professor of Obstetrics and the Diseases of Women and Children, in the Cincinnati Eclectic Medical Institute; formerly Professor of Materia Medica, Therapeutics and Medical Jurisprudence in the Memphis Institute. Cincinnati: Moore, Wilstach & Keys. 25 West Fourth street. 1854. Large 8vo. pp. 1393.

We are pleased to announce to our readers and the friends of Medical Reform generally, that this great work, which has now been published a few weeks, is meeting with an almost unprecedented sale. In fact, the publishers had orders for many copies of the work ere it was issued from the press.

We had designed to give some account of its contents at an earlier date; but a work of this size and character cannot be properly examined in the time usually devoted to the consideration of ordinary books; and even after this delay, we do not feel prepared to give such an exposition of its merits as its appearance and pretensions demand. There may be errors, and even positive faults, which time and a thorough reading and comparison with itself and with other authorities would bring to light, and which in justice to the author and the profession, should not be allowed to escape our notice; but a consideration of these, if such exist, must be deferred to the future.

At present, we propose rather to give the reader a sufficiently clear idea of the scope and aim of the work, together with the manner it has been carried out, that those who are not favored with a perusal of it may be able to form an opinion of it, and thus to decide for themselves as to its value.

In the first place, the name *American* Eclectic Dispensatory pleases us much, as all the schools in medicine now claim to be Eclectic in their nature, except perhaps the Homeopathic, and the prenomen *American* strikes us as being more appropriate than the simple term Eclectic alone, as the work is peculiarly the exponent of that class of American practitioners who have made many improvements upon the European or Old School Medical System, as heretofore practiced in this country and elsewhere.

The philosophy of cure on which this mode of practice is based, is of American origin, and the great majority of remedies used by the adherents of the system, are indigenous to our country; and it is but proper that the name should correspond with the fact. So also of the policy adopted and acted upon by the practitioners of this class. Professor KING, after speaking in his preface of the nature and extent of the improvements upon the Old School philosophy, which American Eclectics can lay claim to, proceeds to reiterate the declaration of independence from all authority, except the authority of the practitioner's own knowledge and judgment, which has so often been repeated by Eclectics, in conventions and as individuals, and again asks no one to yield his judgment to the dictum

of another, however high may be his moral, professional, or social position. All practitioners of our mode of practice, it is held by Prof. KING in common with the entire body of Eclectics, must *act* for themselves, and should always think and decide for themselves. It is this, among other things, which makes the movement peculiarly an American one.

After presenting the above idea in the preface, there follows a slight sketch of the rise and progress, and present position of American Eclecticism, and an exposition of the plan of the work. together with an acknoweledgment of the sources from which ideas, facts, and assistance had been obtained.

Thus much as to preface, which, although oftentimes passed by, is frequently the most important part of a work. The remainder of the volume is divided into three parts.

In Part 1, we have an explanation of the Natural Ordersof the medicinal plants which are described in the succeeding pages of the work, together with the family of a plant, and in most instances of several plants of the class and order, with a sufficiently extended botanical description to enable the reader to decide upon almost any plants he may meet. It will be observed that in this regard the American Eclectic Dispensatory differs from the United States Dispensatory, as in the latter the botanical descriptions are in the body of the work, immediately following the name, and preceding the medicinal history of the plant. Whether the method adopted by Prof. KING is the preferable one, remains to be decided. The writer has so long been accustomed to the course pursued by the editors of the United States Dispensatory, that to him it seems the most natural and proper, and yet there may be weighty and satisfactory reasons unknown to the writer, for the alteration introduced. The Preface and the Botanical department occupy 140 pages.

Part 2, which is devoted to Materia Medica proper, and which extends to page nine hundred and eighty, has the plants arranged alphabetically, and again their individual botanical characteristics are given with sufficient accuracy. The natural and the artificial classifications are both mentioned, together with the common or vulgar names by which they are known in many parts of the country. The medicinal uses and properties of the plants are given as fully probably, as the present state of the science will allow, but the history of the introduction of the plant into use, which, while it may not aid us in the cure of disease, is of deep interest to the medical antiquarian, has been entirely discarded, as otherwise the work would have been swollen to a size altogether inconvenient. The therapeutical use, and the chemical relations and incompatibilities of each article are given in a more or less extended manner; and the method of preparation as well as the use of the different concentrated preparations has been included under each article, at least so far as was known to the author at the time the book was written.

This department is very full and complete, and this it is, which in our estimation, gives to the work its great value, both to the practitioner and the druggist, although,

Part III, which is mainly occupied with Pharmacy is of nearly if not quite equal value to the druggist. In this department, which is sufficiently full for all practical purposes, are included only those preparations, which experience has demonstrated are justly entitled to be ranked as officinal, except some quoted formula, which are considered of value. This department does not include many articles in common use by the great majority of the profession, and yet those preparations which are used by Eclectic physicians, or the great majority of them, are discussed carefully and fully, and especially their therapeutical application as far as known, is detailed with great exactness.

An omission which many may consider of no account, or even may consider a valuable feature of the work should be mentioned. The mass of the articles of the Materia Medica which are derived from the animal and mineral kingdoms, are entirely omitted. For one, we hope this omission will not obtain in future editions, as from

those kingdoms Eclectics obtain some of their most valuable agents.

The foregoing remarks upon this great work, may seem tame and cold to those who have been favored with an examination of it, but we do not design them as such. Where a work possesses so many valuable traits as this one, it can well afford to have a few censures offered if found deserving;—but we do not design our remarks to be of that character. Did we praise all that we consider worthy of laudation, we should have occasion to occupy many pages of the journal with observations, which to those not acquainted with the Dispensatory and its author might seem like fulsome flattery, or like newspaper puffs

As an expression of our opinion as to the value of the work, we cannot do better than quote the following from the report of the committee to the faculty of the Institute.

"As a whole, the committee are prepared to say that this Dispensatory is unrivaled by any similar work heretofore published, its ample size allowing a full description of the articles of our Materia Medica, unincumbered with the useless verbiage to be found in some works, it must prove of great value to all in any way connected with medical science."

This work is intended to supply the place of the United States Eclectic Dispensatory, by King & Newton, which has been several years out of print, and which, owing to the many improvements and discoveries which have since been made, required a revision and enlargement, but the multifarious engagements of Prof. R. S. Newton, as editor of the Eclectic Medical Journal, author of his Theory and Practice, and his professional duties, etc., have been such as to prevent him from devoting any portion of his time to this work: and we learn that he has therefore disposed of all his interest in it to Prof. King, who at the same time has been permitted to make use of many valuable items of information placed in his possession by Prof. Newton.

Whatever other works on Materia Medica may be in the hands of the practitioner or the druggist, no one can supply the place of the American Eclectic Dispensary, and he should do himself the favor of obtaining that the earliest convenient period. C.

Buchanan's Anthropology—Outlines of Lectures on the Neurological System of Anthropology, as discovered, demonstrated and taught in 1841 and 1842. By Jos. R. Buchanan, M.D. In four parts. Part 1. Phrenology—Part 2. Cerebral Physiology—Part 3. Pathognomy—Part 4. Sarcognomy. Printed at the office of Buchanan's Journal of Man. Cincinnati.

This long desired work has at length been published, and is now for sale at the book stores. The author has long been known as a distinguished professor of physiology, whose name is indentified with one of the most remarkable discoveries of the age, the impressibility of the human brain, and who has investigated in a bold, original manner the deepest mysteries of the science of man. His literary productions have been characterized by great originality of thought and force of expression. In the present volume we have a concise or condensed sketch of his whole system of Anthropology, being a view of the structure and functions of the brain, as the organ of the mind and the physiological governor of the body. Of course it tells all about the head, externally and internally, gives a system of Phrenology and a system of Physiognomy, explains the working of the mind on the brain, and the brain on the body—gives the philosophy of Animal Magnetism, of Insanity, of Disease, of Bletonism, Clairvoyance, Spiritualism, and nearly every other mystery in the nature of man which has puzzled the wise in past and present times.

But as for giving an account of its contents, we confess it is beyond our powers of description—its conscieness defies condensation, and its multitudinous variety of new subjects can be learned only from the pages of the book itself. The whole work is so peculiarly original and unlike anything with which we have ever been favored on anthropologial subjects, that we know of nothing with which it can be compared.—Even on the subject of Anatomy, which is regarded as a fixed and positive science, Dr. Buchanan presents new views of the subject, different from those contained in the writings of Gall, Spurzheim and Combe, and we think much more satisfactory and intelligible. It is gratifying to observe how lucidly he removes, by his clear explanations the mystery with which his various subjects have been shrouded.

The volume consits of a hundred condensed lectures on anthropology, with a preliminary review of the system of phrenology established by Gall and Spurzheim, show-

ing its deficiencies in a very conclusive manner. In these lectures we are presented with a key to the science of man—the simple method of experimental inquiry which has led to these wonderful discoveries. Psychometry is fully explained: physognomy and craniology are elucidated by engravings; the philosophy of gesture, movement and attitude is lucidly presented, and the grand correspondence of mind and matter—the sympathy of the mind with the body—things that have been vaguely appreciated by gifted seers, poets and artists—are presented in the pecise form of science, the clearness and truth of which at once satisfy the mind. This science, which he calls *sarcognomy*, is illustrated by engravings of the Greek Slave, a beautiful figure, fitly illustrtaing the beautiful philosophy of spirit and form.

But however beautiful or novel the philosophy contained in this work, the great question to be solved is whether it is erroneous and transitory or true and eternal?—That it is a profound and extraordinary work, no one will doubt, who has carefully read its pages. It announces a new science and philosophy with the same unshrinking confidence with which Kepler, Galileo and Neton brought forth their sublime discoverdees. It professes to rest on exriment and to offer demonstration, and we are confident Buchanan's Anthropology will soon supercede the fragmentary systems of Gall and Spurzheim, the metaphysicians and the phrenologists. The character of the minds which have aready espoused the philosophy of Buchanan, is a sufficient guarantee of its future caerer. Practical phrenologists who have tested its applicability, pronounce it a great improvement on the old phrenology, and acute metaphysical thinkers consider its philosophy far more rational and comprehensive than anything which has yet been published. As a whole the work is unique. We have had many writers upon special departments of the Science of Man, but Buchanan is the first who has grasped the entire subject, and presented a complete Anthropology.—*Cincinnati Daily Times.*

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"The author of these lectures is a man of profound thought, much originality and extensive research. * * We are disposed to regard its theories upon the connexion between Phrenology and Mesmerism as well as its theories of mental and physical development and relationship, as based upon truth."—*Daily Columbian. Sept.* 23.

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—"this valuable work, which treats with great ability the whole subject embraced in the title; and it is without doubt destined to create a considerable sensation n the medical world."—*Cin. Enquirer, Sept* 21.

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One of the most distinguished graduate: of the Eclectic Medical Institute, says, in a recent letter to the author of the above work,

"I feel deeply interested in your researches in the constitution of man, and especially in your system of mental philosophy and physiological organology. I make great use of the truths you have propounded in my remedial practice, ever day. I cannot by letter explain how, but in every way. Give me a call, and perhaps you would be gratified to see some of your valuable hints carried into successful operation."

The following earnest and thorough-going letter, will show how the new Anthropology is received by those who have some knowledge of the subject:

PROF. BUCHANAN—*Dear Sir:* I learn by the Express, that the much looked-for work upon Anthropology is issued for distribution. I attended a course of your Lectures during the winter session of '53-4 in the Eclectic hall, and witnessed your demonstrations in the science, which called forth an expression of heartfelt gratitude from all, for your indefatigable labor in maturing a science of inestimable worth to man. All had groped their way in comparative ignorance of themselves, and the philosophy of their motions, emotions, and modes of intellectual action, notwithstanding many had studied the old Gallian system of mental philosophy, with the slight improvements of present propagators.

I had been one of those students and engaged myself in applying the doctrines practically, yet so inadequate was the index to point fully and satisfactorily to the true character of its object, I found it necessary to substitute a little sagacity for some of its strongest points in organology. But since the revealed light of your Neurological Science has been thrown upon us, we are furnished with the most certain and reliable means to locate the organs of mind, and demonstrate their functions; and I hope by the earliest opportunity to obtain the volume which I believe will carry more salvation to man than all the * * * books that could be piled in Smith and Nixon's Hall."

☞The above work can be obtained by mail in any part of the United States, by remitting $2 to the author at Cincinnati at his risk.

THE

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Part 1. Original Communications.

INTRODUCTORY LECTURE.

Delivered by Prof. J. R. Buchanan, *Monday Evening, Nov. 6th, 1854, at Greenwood Hall.*

In the tenth year of our corporate existence under a charter from the Legislature of Ohio, we have again arrived at the annual period of Introductory Lectures—the first Monday of November—an occasion—not for the display of oratory, learning or wit—but for a systematic statement of principles and objects, duties and responsibilities—that all may understand each other correctly, and the public be rightly informed of our position and character.

Gentlemen:

You are upon the threshold of the medical profession. In entering this profession it is well that you should look around carefully, to see with what and with whom you are connecting yourselves, or what new social and professional relations you assume.

Upon this subject there are several widely prevalent errors of exceedingly pernicious tendency, and young men who have not reflected much upon professional relations and duties, are exceedingly liable to fall in with these common errors, to imbibe the common prejudices, to catch and repeat the cant phrases of the profession, and thus to perpetuate without reflection some of the most serious evils of the medical profession. What those evils are against which we should guard, I propose to show in this lecture.

Mankind are gregarious—they naturally organize themselves into tribes and nations—and the people of the same community are continually organizing themselves into parties, factions, sects and cliques. There are few greater hindrances to human improvement than this spirit of partisan association, and yet it is so seductive, so powerful in its influence, that few ever have the manhood really to think for themselves, and to stand out independent of party discipline. Indeed, the majority never think of it as an evil, never desire to be redeemed from its influence, and look with some suspicion upon that man whose manhood is too large and vigorous to wear a party yoke.

Hamilton, Madison and Jay, among the wisest founders of our present form of government, deplored this influence of party spirit, and warned us against it. They showed its destructive operation in our national congress, where members are induced to follow their party rather than their conscience, and where all measures are carried or rejected as they conform more or less to the selfish objects of the leaders of parties. Individual members of Congress may approve an important measure, but if their party has rejected it, they dare not do their duty, for fear of being persecuted by their party, and thus losing their political influence.

And while our national legislation is thus corrupted by party spirit—the people at large are demoralized by it. They are led to support any measures, and to shout for any worthless nominee put forward by intriguing leaders. I presume therefore, no one will deny that our national politics are corrupt, and that our political party organs contain a great deal of mendacity and recrimination.

How often have we seen the disciplined hosts of parties throughout our country standing ready to ratify with enthusiasm, any nomination that might be made at Baltimore, whatever might be the character of the nominee?

History is filled with the proofs of the power with which sectarian organizations absorb the consciences of mankind, and turn them away from all true conceptions of duty. Examples abound every where. It was said in the vicinity of the Mormon settlement in Illinois, that when a respectable citizen was seduced into that society, he at once became absorbed in the Maelstrom of sectarianism—lost all sense of responsibility to those outside of the society, repudiated his debts, and regarded his former friends and neighbors as enemies or "Gentiles," upon whom the society might prey at their discretion. This is the common tendency of all sectarian or party organization—it establishes a despotism within its own limits, with a steady hostility and disregard of principle in reference to all beyond its bounds.

To a great extent these same evils exist in the medical profession, corrupting its moral purity and paralyzing its capacity for improvement. So much is this the case, that when young men are about entering the profession it often happens that, instead of considering it an individual matter of their own, like preparing to be farmers, surveyors or engineers, they consider themselves recruits, about to enlist under the banner of some medical party to which they must preserve a strict allegiance. They pass through the sessions of a medical school with the feeling that they and their fellow students constitute one common body of which the faculty are the commanders, and to whom they must be as faithful as the conscript to his colors. Such a feeling is a degrading delusion. There is no such allegiance due to any body in the profession, except what is deserved by the truth, virtue and science they possess. Nor does a consociation in study and practice with any group of individuals originate any obligations to coincide with them in opinion, or to maintain any relations to them which are not dictated by the universal principles of morals. The idea that any one who has studied a profession is bound to unite with others who have studied the same profession, and to co-operate with the majority, however adverse the course of the majority may be to his own convictions is entirely fallacious. The majority have an undoubted right to adopt their own opinions and to combine in any honorable scheme for the promotion of their own or the public welfare, but the minority have just the same right, and the right of any single individual to follow out his own convictions, or his own schemes is as unquestionable as the right of the majority.

We glory in the assertion of individual rights and liberties against the despotic principle that majorities may enforce conformity to their opinion, either in medicine or religion. In religion we bow to the authority of God, and in medicine to that of Nature, but not to any inferior tribunals. We repudiate the authority of parties, and all the discipline by which they are kept together and kept in order.

But let us beware lest even in our efforts for freedom of sentiment we fall again into this common error. Let us beware while we are struggling against partisanship with all its blighting influences, that we do not find ourselves becoming a party with all the faults of party organization.

We may struggle for independence even until we become a party against the existance of parties, and thus perpetuate the evil, against which we are warring. Men who are laboring for any common object naturally desire to harmonize their action, by harmonizing their sentiments. It is so very

convenient for all parties to be unanimous in their sentiments, that the heretical, independent thinker who spoils their unanimity, becomes exceedingly inconvenient if not positively odious to some of those from whom he is compelled to differ.

Hence, whenever a large body of men have similar views and aims, there springs up insensibly among them a prejudice against all who question the common belief. This prejudice becomes deeper and stronger until it becomes perfect intolerance, and ostracism against all who cannot agree with the majority. Thus do all religious sects tend to intolerance. Thus have they in all past times grown in their intolerance, until the persecution of heretics was accounted a virtue—until wars, judicial assassinations, and burning at the stake, became the common incidents of that religion, which its founder pronounced a system of Love to God and man.

Our great republic derived a large portion of its best blood from those who fled to escape this persecution—yet even they in many instances became themselves persecutors in turn.

In medicine we see the same tendency as in religion. The same sectarianism has sway, and the man who boldly discards the fashionable dogmas of his day is liable not to imprisonment and torture, but to professional ostracism, and unless he can sustain himself against all his associates, to professional ruin.

We are proud to say that as medical Protestants, we abhor these efforts to sustain a medical hierarchy by crushing individual freedom. We are opposed to such disipline in all its forms, whether it is enforced by private inuendoes and understandings, by the formal action of medical societies, by the fierce denunciations of medical journals, by the prejudices instilled in medical schools, or by the pledges exacted from deluded young men, to surrender their own reason and adhere to the faith of their teachers, under penalty of forfeiting their diplomas, whenever they discover that the doctrines they have been taught are erroneous.

But while we are protesting against these papal errors in medicine, is it certain that we may not be like other protestants, become as intolerant ourselves?

Gentlemen—intolerance is one of the natural errors of mankind, and unless human nature has recently improved, we must expect to have our share of it. The very fact that we are arrayed against intolerance, may help to make us intolerant. We learn in our co-operative action to look with distrust and aversion at an intolerant party. We hear professors denouncing as unworthy of any recognition, members of the profession who give doses very different from their own—we observe that they denounce the most honorable and learned members of the profession in coarse and almost scurrilous language, if guilty of disbelieving their favorite ideas of therapeutics, and we believe that from such sources just and wise opinions are not to be obtained. We turn aside with disgust, and gradually become prejudiced against the professional bigot and his party—the prejudice may be increased perhaps by some personal wrong, of which we have a right to complain. It spreads and strengthens among our circle until we regard the more liberal minded portion of the profession, and the more conservative portion, as two distinct opposing parties with little or nothing in common, like rival nations of different races—we with our peculiar knowledge, performing our duties, and they with their stock of learning pursuing a distinct career. We thus fall into a trap for our own imprisonment, and sanction the most pernicious falsehood in medical politics. Or in the technical language of our profession, we run into a *foramen cæcum* where there are no farther progress, and no anastomosing branches to communicate with other channels. When men of conservative and dogmatic minds indulge their bigotry and hostility to reform, they assume that the more conservative portion of the profession constitutes its entire mass, and that all who do not coincide with them constitute insignificant outside parties, not really belonging to the medical profession. They give an epithet or name to such a party, and thus design

it as a narrow-minded affair, a mere fragment broken from the profession—a party in which the full portions of medical science are wofully reduced. If the party thus accept a name, which assigns them a limited sphere, they consent to draw the line and build a wall between themselves and the rest of the profession. Perhaps the party may consent to the arrangement because it is a party of exclusive ideas. The pure homeopathic and pure hydropathic parties accept their designation, because they are really exclusive parties, not recognizing the great mass of our therapeutic resources as valuable, but confining themselves to a certain range of medical treatment. They are willing to be walled out of the great area occupied by the profession, because they do not wish to occupy it.—They are willing to be walled out of the profession as outsiders, because at the same time the profession at large is walled out of their exclusive territory, which they hope will become the largest and most populous enclosure.

But of such party walls and subdivisions of the professional territory *we know nothing*. We recognize but one medical science—one medical profession, consisting of the accumulations of ages, of experience and observation, all of which is valuable for example, for warning and instruction. We do not demand that the unquestionable facts of accumulated experience, shall be scoffed aside to make room for some new theory, or some single principle of treatment. We do not consider any measure judicious which results in the formation of discordant parties.

All who pursue the medical profession rightly, will find in their studies a common ground which all may cultivate in harmony.

Every physician recognizes the necessity of a thorough knowledge of anatomy, as the basis of surgery, physiology, and general practice. Every one also recognizes the value of pathology and pathological anatomy—and in these two departments all physicians alike resort to writings of the ablest anatomists and pathologists, eager to learn all they can communicate, anxious to learn still more, and ready to hail with gratitude any new writer who may enlarge the boundaries of those sciences. As anatomists and pathologists, the whole profession harmonizes like the cultivators of mathematics, natural philosophy or geology—these departments are cultivated as a noble profession, and consequently are far advanced by the gigantic labors of savans whom we all delight to honor without distinction.

In chemistry the same is true—all physicians acknowledge its importance, co-operate in its cultivation, and ignore the existence of party divisions, before the shrine of this pure science.

In physiology also the profession looks to its teachers, as in chemistry, and every step of demonstrative science anterior to the present period has been received by all alike.

In operative surgery and obstetrics too, as in physiology and chemistry, the profession has fixed scientific principles in which all may agree, and in which we are happy to be instructed by the learning, the skill and experience of our predecessors and our most gifted cotemporaries.

Thus in seven departments, medicine is a pure science, and all physicians learn from the same text-books, proceed upon the same principles, aim at the same results, and look in the same direction for progress and improvement. If this were all, medicine like all other departments of science might present harmony among its cultivators.—But in the practice of the profession, different opinions are formed as to the value of particular drugs and particular measures, and hence arises the dishonorable discord of the profession. I say dishonorable because it is contrary to correct ethics, injurious to professional progress, and therefore injurious to mankind.

If A believes that in a certain disease, calomel is the best prescription—B maintains that opinion is the best, and C prefers soda to either—is that any reason that each of these three gentlemen should angrily denounce the other two as quacks and refuse to recognize them as respectable gentlemen in the profession, when if they had only

agreed with him in opinion, he would have walked arm in arm, eulogized their talents and ranked them among the best and brightest of the land?

If Dr. Smith believes that calomel in teaspoonful doses, repeated every hour, is very wholesome in cholera, and if Dr. Brown believes at the same time that the millionth part of a grain is as large a dose as ought to be given—and if Dr. Green considers brandy and pepper and hot blankets better than either, is there any sufficient reason in this that Smith and Brown and Green should fight a triangular duel over the questions between them, and that the entire profession should take sides in the quarrel?

There is one great contest in the profession at the present day which deserves to have been immortalized by the satirical pen of Dean Swift. It is the war of the *big doses* and the *little doses*. Those who administer medicine in heroic doses, and the West Americans are the leaders of the world in this respect, insist that any whose doses are as low as the thousandth or millionth of a grain must necessarily be dishonest, and however thorough their education in every department of medical science, they are loudly denounced as quacks. The *little-dose-ians* retort upon the *big-dose-ians* by declaring themselves the only true possessors of medical science, and denouncing all the principles and remedies of *big-dose-ian* practice as a farrago of absurdity and a magazine of trash. According to one party, midnight darkness rests upon those regions where the theory of Hahnemann has not yet enlightened the profession. According to the resolute of the other party, the followers of Hahnemann are wandering in outer darkness, following an *ignis fatuus* guidance or a moonlight hallucination—and eking out their system with downright imposture and fraud.

From all such contests as these, may common sense and common honesty deliver us, now and forever. Let those who will, draw dividing lines in the profession, we recognize only its unity. Let those who will, circumscribe themselves by exact boundaries, we claim free access to all that experience and science have ever taught or are now teaching. Let those who will proscribe honest but eccentric cultivators of science, we shall extend them our professional courtesy, and profit by their intelligence.

It is to be hoped, that a broad American Eclecticism, candidly recognizing all that is contributed to the healing art—neither despising nor rejecting anything which is the product of honest investigation, will ultimately harmonize medical sects and extinguish medical sectarianism.

I think no one can doubt that ultimately the medical profession will outgrow this sectarian condition—that every honest cultivator of the science will be respected, and the discoveries of each become the property of all. We cannot bring about this change at present, but we can at least announce the true principle of that American Eclecticism which in a more enlightened day will occupy this continent. And to prepare for that glorious period, let us beware of encouraging, in any way, party discord or keeping up those party boundaries which confine the intelligence or discoveries of each party to itself, instead of allowing it to flow forth and enlighten all. Whatever of good and true others may enjoy, we wish free access to it. Whatever of medical truth we may possess, is open to the world, and we wish it to go forth for the benefit of mankind.

The medical profession has a deep and permanent hostility to secret nostrums. It demands that whatever valuable medical knowledge may exist should be made accessible to the entire medical profession. But what are evils of the nostrum dealing business compared to those of medical sectarianism? At the utmost, nostrum-mongering can only conceal a few recipes, which if known would probably be but little used. But medical sectarianism conceals a large amount of highly important knowledge. The deluded followers of medical bigots and demagogues never look over the walls by which their vision is bounded. Rich libraries may be accumulated, laden with

rare and valuable knowledge, and the counters of apothecaries may be covered with new and highly important medicines; but if the books have been written or the medicines prepared by the proscribed class, the books are unread and the medicines unused. Many a valued citizen, many a blooming maiden, many a leader of society, has perished in consequence of this barbarous state of the profession—died because their medical advisers were too bigoted or too deluded to look beyond their own party for knowledge—died because their physicians were wilfully ignorant of that which might have saved them. I do not hesitate to say, that in our own country tens of thousands have been immolated by medical sectarianism, and that terrible epidemics have raged with very little relief from medical science, because the true methods of relief were to be found in books against which medical sectarianism had prejudiced the physicians.

So terrible a curse has medical sectarianism been to society, I cannot recommend anything which tends to perpetuate its power. I do not consider it necessary or judicious for a physician to make frequent reference to those epithets which refer to divisions in the profession. Frequent discussions of the comparative merits of Allopathic and Homeopathic, of Old School and New School, Conservative and Progressive, Reformatory and Hunkerish parties, are not desirable, unless such discussions are made necessary by circumstances. When we are compelled by truth to differ from our professional brethren, let us discuss the matter as men of science discuss other debatable propositions, without giving the discussion that personal character which arouses partizan feeling and confirms prejudice.

The period of combative reform is passing away, to give place to a period of more quiet diffusion of scientific truth. Protestantism in religion, which was once compelled to battle stoutly for its own existence, and retort persecution for persecution, is now sufficiently advanced and powerful to extend to Romanism a magnanimous toleration and protection. Medical Protestantism, which was once obscure, unknown and scorned, is now sufficiently known to command respect. Contests of a harsh and angry character may be necessary to protect the rights upon which a majority may be disposed to trample—but when those rights are vindicated and respected, contest should cease. I do not mean that we should slacken in our zeal for the practice and advocacy of truth, but that the question should be scientific and not personal.

A love of contest and denunciation is not the characteristic of the noblest specimens of humanity, and the man of correct feelings will rejoice when the necessity for such contests is at an end.

I would not, therefore, recommend the young physician who is fairly treated by his professional brethren, to announce himself in a defiant and challenging manner, casting suspicion and contempt upon professional rivals. Rivalry in professional practice is apt to grow embittered and personal, even with all the courtesy we can practice.

Nor is it desirable to prefix any qualification to your title of Doctor of Medicine; that title is sufficient to signify that you are properly prepared, worthy of confidence and familiar with your professional resources. That title is perfectly intelligible, but the title of Eclectic Physician is not. One will suppose it merely a new sectarian designation—another will suppose it to signify a loose and indecisive course of practice—a system composed of scraps of various doctrines, decisive in none. The physician whose doctrines bind him to an exclusive course, may well place upon his sign the word homeopathic or hydropathic; but those who do not profess to belong to a sect need no such title. Our too conservative old-school brethren show their self-respect and their good sense by calling themselves simply physicians and nothing else.

If medical *sectarianism* be justly entitled to our rebuke, there is a still more offensive *ism* which is worthy of our unmitigated contempt. I allude to medical *demagogucism*. There is a class of men (fortu-

nately there are few as yet, and if rightly condemned by public opinion there number will not increase,) whose moral and intellectual qualities do not entitle them to any honorable rank in society or in the proper and legitimate cultivation of medical science. Having no correct and elevated views of what constitutes a gentleman, a scholar or a physician, they are doomed to mediocrity and inferiority in reputation; but, unconscious of their true position, they struggle against the laws of nature to become leaders. They make a great outcry about some sectarian idea, some deformed and distorted conceptions of medical science; and although they have no learning, no originality, no eloquence nor even variety of ideas, they make up abundantly by everlasting repetition of the same story, and by scurrilous personalities against all who treat them with the contempt they deserve. They are exceedingly anxious to gain reputation by a controversy with their superiors—they issue blustering challenges which nobody notices—scurrilous pamphlets which the parties assailed never answer—foul charges and insinuations which rest in the mud where they were born.

If they find a few congenial characters, or impose upon a few misguided youth—they prolong a petty notoriety in a petty way, and make a slight impression on a few—the most intelligent of the profession being entirely beyond their reach. But so far as any impression is made, they vulgarize and demoralize. Young men who find their professional models in the lives of truly illustrious men, may rise to eminence—but they who select for imitation a medical demagogue, will be but imperfect copies of a miserable model.

Next to sectarianism and demagogueism, let me warn you against *sciolism* or superficiality. Colleges are censured for usher ing young men into the profession too rapidly—but the fault is not with them. Young men are continually engaging in the profession without collegiate assistance—and the majority of those who attend college appear eager to drop their studies and engage in practice as early as possible—as soon as they can obtain a diploma, if not sooner. Young America will not be kept back for severe and prolonged scholastic labor.

But let me here assure you that a noble edifice cannot be erected on a narrow foundation—and if you do not during your pupilage lay a broad foundation and become thorough scholars, it is not probable that you will ever be distinguished by superiority of attainments. In the busy hours of practice, there are few who make much scientific progress. The majority actually grow rusty. Now or never is the time for thorough scholarship.

The law requires but two—yet three courses of instruction are little enough to impress the truths of medical science deeply and firmly on the mind. We rejoice to know that many of our students have attended faithfully upon three courses—but if the public will sanction sciolism by employing physicians who have not even graduated—and if young men have so little self-respect as to aim at obtaining a diploma alone, without regard to qualification—if they resort to those irresponsible establisb ments where no regulations exist as to time of study, and where a diploma can be obtained by any ignoramus or knave, the profession must lose a great portion of its respectability with the public, and you must suffer in character unless you can make known the distinction between those who have and those who have not pursued the honorable course of study, and faithfully qualified themselves to perform their duties.

As the highlands differ from pestilential marshes, so should the sphere you occupy be elevated, pure and remote from affinity with those who degrade the profession. Choose your exemplars from those who have left behind them names that

"Were not born to die."

1. GALEN, in the second century, whose intellect appeared to have mesmerised the mind of the entire profession, and held it in subjugation for twelve or thirteen centuries, commenced the study of medicine at

17 years of age. He resorted to what was deemed the best school then in the world—at Alexandria—and at the age of 28 he went home to practice. Thus did he lay the foundation of a fame and a moral power which governed the profession for more than a thousand years.

2. VESALIUS, the renovator of anatomy in the 16th century, not only displayed great zeal as a student in his dissection of animals, but exhausted the knowledge of the schools by his studies at Louvain, at Paris, at Pisa, at Bologna, and other Italian universities.

3. FALLOPIUS, (the pupil of Vesalius,) whose name is perpetuated by the Fallopian tubes, did not deem his education complete, until he had visited other schools, besides the famous one of Padua.

4. HARVEY, the illustrious discoverer of the circulation of the blood, who figured in the first half of the 17th century, (1578-1658,) spent four years at Cambridge and then five years on the continent, and at the principal medical school in Europe (at Padua,) before he obtained the degree of Doctor of Medicine. Nine years of collegiate study laid a suitable foundation for that reputation which is greater now, after the lapse of two hundred years, than it was in his own day. Great men are seen best at a distance; to many of his cotemporaries Harvey appeared but a humbug—and men who are now entirely invisible, then seemed greater than Harvey. He had a noble conception of the dignity of the physician, the dignity of the true scholar. He lived up to his idea, and his example is a light to succeeding centuries.

5. Sometimes, as in the cases of Malpighi, Valsalva, and Morgagni, the zealous devotion to study enabled them to win the honors of their profession at an early age. Sometimes, as in the case of RIVERIUS (1589-1665,) a cotemporary of Harvey, whose writings passed through numerous editions, their position was gained only by perseverance. Riverius failed in his first examination for a degree. He was rejected, but having true manhood in him, this only stimulated him to redoubled efforts, and he graduated next spring at the age of twenty-two.

6. SYDENHAM, (1624-1689,) sometimes called the father of English medicine, prosecuted his studies at Oxford until he became a Bachelor of Medicine, and still a few years longer before he obtained the degree of Doctor of Medicine. There was a time when that degree was a high prize, beyond the reach often of men who were well educated and proficient in science and practice. How much has its value degenerated in our country, and how busy at this time are medical demagogues in reducing its character still lower!

7. BOERHAAVE, (1668-1738) the most eminent physician of his age, was also a most faithful student, and his attainments were so diversified and extensive that he was called the Voltaire of Science.

8. Baron VAN SWIETEN, (1700-1772,) the most distinguished follower of Boerhaave, and author of the celebrated commentaries on the aphorisms of Boerhaave, spent seven years in pupilage before he took his degree.

9. MALPIGHI, the anatomist, (1628-1694) whose name is perpetuated by the Malpighian bodies, obtained great honor by his proficiency as a student, yet was 25 years of age before he obtained his degree, three years after which he became professor at Bologna.

10. VALSALVA, (1666-1723.) the distinguished anatomist and surgeon, studied under Malpighi and took his degree at 21 years of age, but he applied himself with such zeal as to impair his health.

11. MORGAGNI, a contemporary of Boerhaave, the greatest anatomist of his time, (1682—1772) studied under Valsalva—Valsalva under Malpighi—all three eminent as anatomists—all intense students—all distinguished in their pupilage, and early called to professorships.

12. ALEXANDER MONRO, (1697—1767) the celebrated anatomist and founder of the school at Edinburgh, was well prepared for his subsequent career by studies in London under Chesselden, in Paris and at Leyden, under Boerhaave.

13. Cullen, (in the middle of the 18th century,) a standard authority with the last generation of physicians, prepared himself too by the old laborious course which has gone out of fashion here. He served his time regularly with a surgeon and apothecary at Glasgow.

14. The Hunters, whose career occupied the latter half of the eighteenth century, were men of the same stamp—men who prepared for their great duties in a manner worthy of a great undertaking. William Hunter (1718-1783) spent three years with the famous Dr. Cullen. It was ten years after this before he received the degree of Doctor of Medicine from Glasgow—having in the mean time been occupied in study and in lecturing on anatomy and surgery and in surgical practice.

John Hunter, (1728–1793,) though deficient in his early education, spent seven years in faithful study with his brother—but in fact his whole professional life was a life of intense study.

The men destined for eminence have generally been distinguished early by their indefatigable energy as students. Many have exhausted the educational facilities of their own country, and then gone abroad to obtain the advantages of the most celebrated schools in foreign countries. I commend their example to your imitation.

But it was not upon colleges alone that they relied—they continued through life laborious students. The founders of the most flourishing school west of the mountains, the learned Prof. Caldwell was a laborious student and writer up to his latest breath—upwards of eighty years of age—and in the prime of early manhood in Philadelphia, he labored mentally for eighteen hours out of the twenty-four.

My former friend, the late Prof. Harrison, (I regret that medical politics should ever have separated us,) assured me many years since, that ever since his medical pupilage, he had devoted regularly as much as five hours a day to study and reading.

But alas! how many practising physicians are there who shamefully neglect the daily study of their profession. How wicked—how inexcusable their conduct is you may judge from this fact. It requires all the time of one Professor to master the knowledge necessary to teach properly one department of medical science—and if one seventh of our entire science is enough for one man's labor, it is surely impossible for any practising physician with all his study, to master thoroughly every department of the science. It requires all his energies to master that which is practically important and *necessary*—and if he fails or falls short in study, he certainly loses much, and his patients bear the loss. The physician who does not study is a defaulter to the public, no better in principle than the absconding banker.

There is much more that I could say upon these topics, but perhaps some one more accustomed to the cant words of party may ask, "what after all is the difference between your school and others. If you, like them, recommend prolonged and profound study of the same departments and the same authors, with the same high-toned, moral and professional priciples, where is the difference?"

I shall not now undertake to state this difference for both parties. Others may define their own position. We would define ours, and leave you to judge, what is the difference.

We hold that in the medical profession as in all matters of opinion—as in politics, religion, and business—there are two parties or at least two opposite tendencies, upon which parties may be based. They are commonly known as Conservative and Progressive, Hunkerish and Reformatory,—or in more familiar slang phrase as Hold-fast and Go-ahead, or Old Fogy and Young America.

There always has been, and there always will be a progressive party—and this progressive party will increase as the world increases in science and intellectual life and liberty until it constitutes the ruling power. The American Republic is the representative of this progressive tendency.—Russia, China, and Africa represent the despotic conservatism or Hunkerish tend-

ency. They considerably outnumber us at present, but we have the most comfortable certainty that our principles will triumph over all odds. And as the American republic compares with the medical despotisms, so do the progressive American reformers in medicine wish to compare with the opponents of reform. We wish to see progressive Americanism in medicine substituted for the conservative customs of European kingdoms, and we have undoubting confidence that it will be done—for revolution is the order of Nature.

For the first fourteen centuries of the Christian era, the darkest Chinese Hunkerism ruled the profession of medicine. For twelve or thirteen centuries, the voluminous, wordy and fanciful writings of Galen—(now obsolete) were the absolute law of all—the boundaries of his writings were considered the limits of human knowledge in medicine. Only about four centuries and a half, has the human mind been emancipated from slavery—not fully emancipated to American freedom, but to the limited freedom which exists, where the despotism of one man is substituted by the weight of authority derived from a greater number.

In this imperfect freedom, what has been done by the progressive party, against conservative resistance?

The friends of progress have battled for, and successively established:

The doctrine of the circulation of the blood;

The doctrine of a multiplicity of organs in the brain;

The practice of inoculation—superseded by

The practice of vaccination;

The use of cold water in fever;

The treatment of scurvy, by acids and vegetables;

The use of quinine in fever;

The treatment of Insanity, by anodyne tonic and restorative measures;

The use of ether and chloroform, as anæsthetics;

The necessity of ventilation, by scientific methods of changing the air of apartments.

The necessity of sanitary regulations by governments to protect the health of the people.

We might name many other improvements that have gained a firm establishment against a resolute opposition, and it would be interesting to review the battles of the conservatives and progressives over each of these propositions, but many of these stories are already familiar, as standing illustrations of medical bigotry.

The progressive party are still struggling for the following improvements, which are not yet entirely established, but are in hopeful progress:

1. The treatment of consumption by nutrient, tonic, invigorating regimen—by nourishment, iron, salt, sorbefacients and exercise, instead of depletion and confinement.

2. The treatment of cholera, by a simple stimulant, and alterative and anti-spasmodic course, which is successful with 95 per cent.

3, The preservation of the vital powers of the patient, and especially of his blood against the lancet and all destructive anemiating modes of treatment.

4. The curability by improved treatment of cancerous diseases, and of a large number of forms of disease in which it has been the fashion to indulge in a gloomy prognosis.

5. The truth of the general principles of Phrenology.

6. The existence of extraordinary phenomena in the human constitution not yet fully understood, which are displayed in mesmeric experiments.

7. The improvement of the Materia Medica by a more careful attention to botany, by the preparation and use of a large number of new and valuable remedies, and the progressive disuse of the older agents for which they have been substituted.

It is evident that in proportion as improved agents are introduced, the articles for which they are substituted are gradually disused and laid aside. Hence we find many articles less necessary than they were formerly considered—a number are very seldom used, and some may be regarded as entire-

ly obsolete. Among those who have obtained a respectable knowledge of our new resources, there are very few who find any occasion to continue to use the preparations of mercury, arsenic, lead, antimony and copper in the treatment of any form of disease. Throughout the entire profession there is a great abatement in the use of mercurials, and the only reason why they are not with all nearly obsolete, is that the new resources of the materia medica are not yet sufficiently known to all.

In advocating these, and other improvements in the profession, we find some three or four thousand American physicians substantially agreeing with us—perhaps these are all who coincide in all the improvements mentioned, but there are a vast number who agree with us in one or more of the improvements named, indeed the majority of this entire profession are in sympathy with us in reference to some portion of our improvements—and the entire profession are really drifting in the direction of our position. For we have not gone off in any by-path, to be lost by the way-side; if we are in any degree separated from the majority, it is not by any eccentricity of ours, but only by pursuing boldly the path of improvement in the straight forward line of progress until there is a long space between the front ranks of our advanced position, and the rear ranks of the great caravan behind. But all the way along our march the "Vanguard of the Army" is connected with the rear-guard by different corps, which are nearer to us or nearer to the rear-guard, as they have been more active and progressive, or more tardy.

The movement of the entire body is in one direction, and if we should this day sit down and fold our arms without farther progress, some of us might possibly live to witness the arrival of the rear-guard at our present position. For the members of the profession are doing partially and slowly what we have done thoroughly and promptly—they are slowly diminishing the use of mercurials—slowly diminishing the use of the lancet—slowly improving in the treatment of cholera, consumption, and a host of other diseases—increasing in their disposition to respect and preserve the vital powers of patients—enlarging their conceptions of physiology, and of the powers of the nervous system, giving more attention to botany, adopting our new remedies, and acquiring increased confidence in the possibility of curing diseases.

Thus are we all (all who have not turned off into by-paths) tending to one common goal—there are many however who have not kept pace with our advancement in therapeutics and physiology—but permit me to remark, that all who have advanced with us, have found themselves on the right road, and experience has only given them certainty and enthusiasm. Therefore are we authorized to say that we are not sectarians, but true progressives in science, teaching to-day what the entire profession will ratify in the future.

Part 2. Miscellaneous Selections

WRY NECK CURED WITHOUT CUTTING

BY G. BUCK, M.D., SURGEON TO N. Y. HOSPITAL

The success obtained in the following cases of Distortion of the Head, commonly known as Wry Neck, induces the undersigned to make known to the profession, in order that the treatment enjoyed, which it is believed has not hitherto been applied in such cases, may be fully subjected to the test of experience.

Case First. Hester Higgins, a native of Ireland, twenty-five years of age, unmarried, was admitted to the New York Hospital on the 6th of November, 1848, at which time she had suffered from rheumatism already about seven months; all the larger joints of the body having been successively affected. About four months prior to her admission, she suffered a relapse, after having nearly recovered, and since then she has experienced but little alleviation of her ailments. Her neck, as well as most of her larger joints are painful, though not much swollen. Her tongue is slightly furred, her pulse is eighty-five, and soft; her skin moist, and bowels regular.

On the 10th January following, she had nearly recovered from her rheumatism, under treatment, except rigidity and contraction of the muscles of the right side of the

neck, by which the head was drawn downward, and toward the right shoulder. To relieve this distortion, frictions, with stimulating and oleaginous liniments were diligently employed; and subsequently, sulphuric ether was applied to the neck.—Some slight improvement resulted from the use of those means. On the 18th April, however, the condition of the neck had for some time been stationary, and all hope of future benefit was abandoned. The motions of the head were very much restricted, and any attempt to overcome the resistance of the rigid muscles by stretching them, occasioned severe pain. The rigidity did not appear to reside in the sterno-mastoid muscle, inasmuch as this muscle did not grow hard and stiff when efforts were made to elevate the head; the resistance was evidently seated in the deeper muscular and tendinous parts.

At the request of my colleague, Dr. Sweet, of the Medical Division, I saw this patient, and proposed to make cautious attempts to overcome the resistance by force, the patient being first subjected to the influence of sulphuric ether. Considering the resistance to depend on contracted muscular and tendinous fibres, my object was either to stretch or rupture them; and in doing this, no danger was apprehended to the important nerves and blood-vessels of the neck, since the forced movement necessary to accomplish this object would fall far short of the extensive motions in every direction to which these parts are accustomed naturally to accommodate themselves.

Dr. Sweet assenting to my proposal, the patient was laid upon her back in bed, with her head resting high up on the pillow, so as to be easily got at from the head of the bed. Taking the head between my hands, placing one on either side, I cautiously stretched it with a very moderate degree of force, in the direction opposite to that in which it was distorted, that is upward and to the left side. Almost immediately, every one standing round the bed (of whom there were eight or ten pupils and medical men.) was startled by a loud snapping sound of something rupturing, and at the same time I perceived that the head yielded, and could be brought almost to its natural position. It was thought prudent to proceed no further at this operation. The patient on recovering her consciousness was not sensible of any new soreness in the parts, and could bear the head to be moved much easier than before the operation. She was directed to lie as much as possible on her left side. On the following day, there was considerable soreness on the right side of the neck. On the 25th April, one week after the first operation, the soreness of the neck having very much diminished, the operation was repeated a second time.

The proceedings were the same as in the first operation, only the stretching was carried to a much greater extent, and with a much less timid hand. Several times resisting fibres were felt to yield with a rupturing sensation, till at length, no further resistance was encountered, and the head could be carried to the full extent in every direction. After the effects of the ether had passed off, the head was bandaged down toward the left shoulder. On the first of May, the bandage being dispensed with, the head had no disposition to resume its distorted attitude. On the 10th of May, 1849, the head could maintain, unaided, its erect natural position, though rotation and flexion were still limited in extent, and performed awkwardly; the patient, however, was sensible of progressive improvement in these respects. She took her discharge from the Hospital for the purpose of returning to her friends in Ireland. About one year afterward, she was heard from as continuing well, and free from any distortion or rigidity of the neck.

Case Second. In January, 1852, Maria P——, of Guilford, Connecticut, aged 12 years, and of a healthy constitution, came under my care, with the head very much distorted from being drawn down toward the chest, with the face turned to the left side. The motions of the head were also very much restricted. In the month of July preceeding, she had been attacked with sore throat and stiff neck, that left her ever since in the condition just described. She had never suffered from rheumatism in any other part of her body, and had generally enjoyed good health. I at once decided to employ the treatment which had been so successful in the preceding case; and on the 15th of January, having first etherized my patient, I performed the first operation. In order to carry the extension of the head to the requisite degree, it became necessary to have her supported in the sitting posture in a chair, and to place myself in front of her. Grasping the head between my hands, I acted on it in the various directions which resisted, but felt no sensation of rupturing fibres, in this or in any of the subsequent operations. The resisting parts, however, yielded in some measure, and allowed the head to be brought more nearly into its natural position. No pain was experienced from the operation on recovering her consciousness.

On the 19th, no effect was observed from the first operation; it was therefore re-

peated a second time, with the aid of ether. On the 24th, 26th and 30th of January, and on the 4th and 7th of February, it was also repeated, each time with the aid of ether. Though a gradual improvement was perceptible from these repeated operations, it became evident that a complete cure could only be achieved by a patient and persevering repetition of them for a long time; it was therefore judged most prudent to continue the operations without the aid of ether. The patient's courage and endurance, though put to a very severe test, proved adequate to the trial. Once every day she submitted to the stretching process, for about ten minutes each time. This was continued up to the first of March, after which it was repeated twice a day. The manner of manipulating was as follows:

The patient was seated in a chair, and her body steadied by an assistant standing behind, and holding her shoulders firmly with both hands. Placing myself in front of her, I grasped her head with my hands, in such a way as to perform most efficiently the different movements I wished to execute. These movements were varied in every direction in which resistance was encountered, my object being to streteh to the utmost the contracted muscles, and to maintain them on a stretch for certain length of time. The process was painful only during its actual performance, and ceased to be so the moment it was discontinued. On the 24th of March, the operations were suspended, while the patient tient made a visit to her family, and were resumed again on the 8th of April. During the interval no relapse took place.—The same course of treatment was continued until the 10th of May, when she returned home highly gratified at being able to maintain her head by her own efforts, in its natural erect position, and to turn it in different directions almost as well as ever she could. She was advised to continue for a long time the daily practice of performing the various motions of the head as extensively as possible. On the 13th of January, 1853, I conversed with an aunt of my patient, who had recently visited her, and who reports that she holds her head in a very natural manner, and can move it at pleasure, freely in every direction. In a word she considers herself quite well again, and without any disposition to relapse.—*N. Y. Medical Times, January*, 1853.

STARCH FOUND IN THE BRAIN.

Some *savans* in London have lately excited a deal of interest among the profession, by the announcement of the discovery of *starch* in the human brain. It appears, chemically, that it only requires to add the elements of water to those of fibrine to procure fat, ammonia, and cellulose or *starch*. It may be possible, yet, for the brain to become a "galvanic battery," as is said to be the case by some of the proselytes to the new doctrines of psychology and mesmerism. This discovery of cellulose in the brain. must naturally startle the physiologist, for it would decidedly show some relationship between *animals and plants*, as this "corpora amylacea" is said to be *identical in both*. It is really curious, that such substances should be discovered in the body. It is well known that M. Bernard has ascertained that the liver produces sugar—the discovery of which, it is said, had such an effect upon his mind, "that he did not sleep for three successive nights afterwards."—*Bos. Med. and Surgical Jouraal.*

PARACENTESIS THORACIS.

Dr. J. R. Bennett read a paper on this subject before the Medical Society of London (May 27, 1854), the chief object of which was to inculcate the importance, in cases of inflammatory hydrothorax, of not hastily resorting to the operation of paracentesis. He founded his objection to this proceeding in the early stage of the disease, both on the non-necessity of the measure, on the amenability of the disease to general treatment, and on the mischief which was likely to arise from puncturing the cavity of the chest. He showed the non-necessity of the operation, by the relation of cases in which there had been a large collection of serum in the chest, but which had been absorbed by general treatment and the use of counter-irritants, consisting either of blisters, or of the application of a very strong tincture of iodine. The medicines administered consisted of very small doses of blue pill, with squill and Dover's powders, an infusion of cascarilla, with iodide of potassium and sweet spirits of nitre. The patients were placed under non-stimulant but nutritious diet. He objected to the use of mercury—to the production of the specific effect of that medicine, which he regarded as injurious. He related a case to which he had been called in the country, of hydrothorax, in young gentleman, in whom the symptoms were not of such an urgent chacter as to require operation. He recommended the employment of remedies similar to those which have been mentioned, and with every prospect of their being useful. Another physician was called in, however, before a fair trial was given to

the measures proposed, and paracentesis was performed. The fluid was serum; but on a second operation being required, about three weeks afterwards, the matter evacuated was purulent. This illustrated one of the dangers to which tapping exposed a patient suffering from hydrothorax. With respect to the diagnosis of the nature of the fluid in the chest, this could be determined without danger by the passage of an exploratory needle. If they were found to be purulent or contained albuminous flakes, he recommended a gradual and continued drain of the fluid rather than its sudden removal. —*Lancet*, June 10, 1854.

USE OF VEGETABLE AND MINERAL ACIDS

IN THE TREATMENT, PROPHYLACTIC AND REMEDIAL, OF EPIDEMIC DISORDERS OF THE BOWELS.

An interesting paper on this subject was read before the Epidemiological Society, July 3, 1854, by J. H. Tucker, Esq.

The author commenced by alluding to the remarkable, but well-established fact, that in 1849 the cider districts of Herefordshire, Somersetshire, and part of Devonshire, were, to a great extent, exempt from the epidemic ravages of cholera, while the disease was raging around. Upon further inquiry, it was ascertained that this exemption was confined a good deal to those individuals who drank cider as a common beverage, and that those who partook of malt liquor occasionally suffered.

He also remarked that, in some parts of France and in Normandy, more particularly where cider is the common beverage, cholera is seldom known to exist; and further, that Switzerland was reported to have been free from its visitation.

Having adduced these and other facts in proof of the prophylactic power of cider, the author expressed his opinion that other vegetable acids would be found of service, such as lemon-juice, orange-juice, and sour wines made from grapes, or even from gooseberries. And as it would be found impossible to supply the whole of London with a sufficient quantity of pure cider, Mr. Tucker suggests that *vinegar* might be found a useful substitute in case of another outbreak of cholera, provided that it could be obtained in a state of purity.

In confirmation of the sanative and medicinal virtues of vinegar, the author quoted Hippocrates, who (*de natura mulcibri*) "employed white vinegar medicinally"—Plutarch and Livy, who refer to the use of vinegar by Hannibal, in his passage over the Alps, when he is said to have "softened the rocks with fire and vinegar," an operation which the author facetiously regarded as metaphorical than chemical, as the vinegar, swallowed by the troops, probably sustained their strength, and thus in effect softened the asperities of their rough way. The author also quoted from Roman history the story that "Scipio Africanus is said to have gained a great battle with a few skins of vinegar," the troops refusing to march until the general had obtained a supply. Cæsar was also reported to mention in his Commentaries the supply of vinegar to the troops; and Mr. Tucker remarked that the drink of the Romans in all their campaigns was vinegar and water, and, sustained by that beverage, they conquered the world. Modern authors (Sir John Pringle, Sir Gilbert Blane, and others) were also quoted in proof of the antiseptic and medicinal qualities of vinegar. The author then proceeded to show that acid drinks were not only preventive, but remedial in epidemic disorders of the bowels. Cases were related, in which not only persons were exempt from attacks of cholera raging around them, who drank large draughts of cider, but a case of severe cholera was also related, which yielded to the diluted juice of sour apples. The efficacy of the *mineral acids*, especially the sulphuric, in diarrhea, and especially in choleraic diarrhea, was also advocated by reference to numerous facts and authorities. He also referred to some established facts connected with the spread of epidemic dysentery in the army, showing the efficacy of vegetable acids in that disease.

In conclusion, Mr. Tucker suggested a necessary caution relative to the use of the wretched and unwholesome substitute for vinegar commonly sold in the London shops.

The discussion which followed the reading of the paper, elicited many facts in confirmation of the author's views; and, as to the efficacy of sulphuric acid largely diluted with water, in choleraic diarrhea, there was not a dissentient voice.—*London Lancet*, July 15.

The whole number of deaths in the city of Philadelphia, for the week ending July 8th, was 368; more than one half of which, were children under the age of ten years. In New York, during the same time, there were 771 deaths, 433 of which number were children under the age of ten years. It is rather unusual to have so large a portion of children among the deaths so early in the season, even in our large cities, where the infantile mortality is always very great.—*Bos. Med. and Surg. Journal.*

USE OF CHLOROFORM OINTMENT IN RIGIDITY OF THE OS UTERI.

BY G. W. RONALD, PHYSICIAN TO THE LOUISVILLE ALMS-HOUSE.

There are, with few exceptions, no accidents to which the parturient woman is subject that inflict upon her a greater amount of suffering than obstinate rigidity of the os uteri. It not unfrequently baffles the skill of the oldest and most experienced practitioner for a long time; and were we to judge from the pain dependent upon this condition of the organ, we should very readily suppose that the life of our patient was in the most imminent danger. This state of affairs, as compared with the number of births, is fortunately of rare occurrence; yet it is of sufficient frequency to make the subject of considerable interest and importance in practice. Various causes have been assigned, by different authors for rigidity of the os uteri; some attributing it to mechanical contrivances used for supporting the organ, others to the injudicious use of escharotics, whilst others again contend that morbid irritability is the principal cause, and this last conclusion seems to be more rational than either of the others. It is not my intention, however, to enter into an inquiry as to the cause of the difficulty; but to call the attention of the profession to the use of chloroform ointment, as I have found it the most expeditious, reliable, and safe mode of overcoming it. I do not pretend to say that it is a specific, for my limited experience in its use would not justify such a conclusion, having used it in but a few instances, but in these with the most gratifying results. The first time that I made a trial of it was in the Louisville Alms-house, on the 28th day of January, 1852.

Mrs. C., aged 23, a seamstress, was admitted on the 25th, reputed to be of respectable family, full and plethoric habits, nine months advanced in pregnancy with her first child. She was complaining of pain in the left side—considerable œdema of the lower extremities—bowels constipated, for which oil had been repeatedly taken, urine highly colored and scanty. Ordered a Seidlitz powder to be given, and as soon as it operated, to be followed with a teaspoonful of sweet spirits of nitre every two hours. At 7 o'clock on the morning of the 28th she was taken in labor. I saw her at 10 o'clock. Upon making an examination, the os uteri was sufficiently dilated to ascertain a head presentation, though the membranes were not ruptured. The pains were powerful and strong, continued to return at short and regular intervals, and I consoled myself with the thought that I should be detained but a short time, yet hour after hour passed and still the os uteri had made no perceptible progress towards dilatation. The woman had become restless and despondent, intense thirst, sickness at the stomach with constant retching, throwing off the water almost as soon as swallowed. If the os uteri was touched, she complained of pain; it was hot and unusually rigid, feeling as if a tight band or cord had been drawn around the neck of the organ, which was resisting and unyielding. Having waited upon nature to overcome the difficulty until the patience of the woman, as well as of her attendants, was completely exhausted, I determined to resort to some of the remedies usually recommended. Accordingly, the arm was tied, and blood abstracted to approaching syncope. Tartrate of antimony, and the warm bath, all in their turn were brought into requisition; yet the condition of the organ had changed but little, though the membranes at this time had given away and discharged a portion of liquor amnii. These means having failed to procure the desired effect, I went to the office for the purpose of making an ointment of belladonna, but was disappointed in finding none in the house. When I was in the act of sending to town for the article, it occurred to me that the ointment of chloroform might as readily relieve rigidity of the os uteri, as contraction of muscles of the extremities, that I had often seen it do, having had it applied to my own person in an attack of cholera, by my friend and preceptor, Dr. T. S. Bell. Taking this view of the subject, I determined to try it, though not without some doubts and apprehensions, for I knew not what effect it might have upon the child, or upon the hot and irritable os uteri. The ointment was prepared by taking one drachm and a half of chloroform and thoroughly incorporating it with one ounce of simple cerate; which was freely applied principally upon the external surface of the neck of the organ. At the time of the application, the woman complained of slight smarting pain, which passed off in the course of a few minutes, and had it been applied at the commencement, or during contraction of the organ, she would have made no complaint, as was fully proved in the subsequent cases in which I used it. Upon making an examination, twenty-five minutes after the application of the ointment, I was surprised to find the os uteri dilating rapidly, soft and pliant; and in one hour and twenty-seven minutes after its first application, the

woman was delivered of a fine, robust and healthy boy.

I am well aware that any manual interference on the part of the practitioner, in order to terminate protracted or lingering labor, is condemned by some of the ancient writers upon obstetrics. Dr. Blundell, in his valuable and scientific work, reminds us in every chapter that "meddlesome midwifery is bad." This I suppose no one will doubt. But surely no well-informed physician in this age of improvement and advancement, both in the arts and sciences, when everything seems to be moving on with the most telegraphic speed, will condemn the use of any remedy that we may have at our disposal for shortening the pangs of one of the most painful processes in the parturient woman.—*Western Journal of Medicine and Surgery.*

DIGESTION OF FATTY MATTERS BY THE PANCREATIC JUICE.

BY S. JACKSON, M. D., PROFESSOR OF INST. MED. IN THE UNIVERSITY OF PENN.

The different digestions or chemical processes to which the different kinds of food—albuminous, oleaginous, saccharine, or amylaceous—undergo in the alimentary canal, have been the subject of repeated investigation and experiment since Spallanzani first demonstrated them to belong to the domain of chemico-physical science.

Prout determined the differences in the nature of the alimentary substances. His observations were followed by the more accurate researches of Mulder, Dumas, Becquerel, Leibig, and the pupils of the Geissen school. They investigated the chemical elementary composition, modes of production, decomposition, metamorphoses, and other relations of those substances. The way was thus opened for acquiring a more correct knowledge of the kind of chemical process, or digestion, appropriate to each kind of aliment, and the seat or organ in which it occurred.

Approximations are being made to the solution of these interesting problems, which are not devoid of practical importance. They still remain unsettled and obscured from the conflicting statements, as to facts, of different observers, entitled equally to confidence from their intelligence, skill, and truthfulness.

It is not my intention to enter on the general question of the alimentary digestions. I shall confine myself to one alone, that of the oily or fatty matters, respecting which there exist opposing statements as to the observation of a simple phenomenon, which is, however, the principal fact of the process.

MM. Cl. Bernard and Bousingault, and Bouchardat and Sandras, had shown that these substances were converted into an emulsive fluid. This emulsion, absorbed by the lymphatics of the villi (to which the term lacteals, in my opinion, alone is properly applicable.) constitutes the milk-like fluid, named chyle, found in the lymphatics of the mesentery after a meal containing oleaginous principles; and at no other time. If the term chyle is restricted to this milk-like fluid, which gave origin to it, then chyle is not the general product of digestion, as it is generally supposed to be, but is the fatty matters of the food in a state of emulsion, and nothing more.

Subsequently, M. Cl. Bernard demonstrated that this emulsion is produced by the action of the pancreatic juice; and he assumed it to be the essential agent in its formation. The demonstration appeared conclusive, from one of the most neat and beautiful observations in physiology.

It is known that in the rabbit, the insertions of the hepatic and pancreatic ducts in the duodenum, are separated by an interval of near six inches. M. Bernard availed himself of this fact to observe, in nature—in situ—the seat and act of the conversion of fats into an emulsion. He accordingly introducted into the stomach of rabbits, after fasting, some oil along with green food, and after the elapse of a period of time, not related, the animals were opened, and the intestines exposed. No chyle or emulsion of fats was found in the mesenteric lymphatics at and below the opening of the hepatic duct, while they were distended with the chylous or fatty emulsion at and below the insertion of the pancreatic duct. Further, when the pancreatic juice is added to sweet-oil or other fluid fat, an emulsion is instantly produced; and this emulsion is very perfect and permanent. The conclusion from this experiment was, that the emulsion of the oil was the immediate result of the action of the pancreatic juice.

The correctness of this observation of M. Bernard, has been denied by MM. Bidder, Schmidt, Lehmann, Donders, and Herbert. It is asserted that M. Bernard was misled by not properly timing his observations. It is stated, that if the animal be examined one or two hours after the ingestion of oil into the stomach, the lymphatics between the biliary and pancreatic ducts are then tinged with white fatty emulsion, which, consequently, is formed independent of the pancreatic fluid. When the examination

is delayed for five or six hours after the introduction of oil into the stomach, it is alleged that the emulsion formed in the upper portion of the duodenum has then descended, and the portion absorbed has disappeared from the lymphatics, having passed on to the thoracic duct. By this time, the emulsion having reached the region of the pancreatic duct, and passed into the jejunum, the lymphatics of the mesentery of this part of the intestines are necessarily turgid with emulsified fat. It is inferred, therefore, that M. Bernard did not examine the animals on which he experimented under the period of five or six hours after giving the oil, and was thus led into a misrepresentation of the true character of the phenomena.

This simple fact, it would seem, ought to be settled without difficulty; but the reports of those who have observed the phenomena are entirely adverse to each other. My engagements in the practice of my profession interfere with experimental researches; they prevent the application of time requisite to success in experiments. Dr. James Corse obligingly offered to perform the experiments for me, submitting to my observations the phenomena on the opening of the animals.

The following are the results of this investigation:—

A number of rabbits were procured. They had been fed for some days on hay. Four of them were deprived of food for three days. Three drachms of fresh sweet-oil were then introduced into the stomach of each animal, through a tube, successively, at nine, ten, eleven, and twelve o'clock, and immediately fed with some peas. At 2 P. M., varying from five to two hours after giving the oil, they were made insensible with sulphuric ether, the abdomen opened, and the intestines and mesentery spread out.

In one only had any emulsion of the oil been formed. In that one the mesenteric lymphatics, commencing half an inch below the pancreatic duct, were turgid with white emulsive fluid. Not a single lymphatic could be seen in the transparent mesentery between the pancreatic and hepatic ducts.

On examining the stomachs, they were found distended, in each rabbit, with a green, comminuted mass of vegetable matter, which must have proceeded from the hay on which they had been previously fed, and had remained undigested. In one, a portion of the oil was free in the stomach. In all the others, most of it appeared to have been absorbed and retained by the large vegetable bolus filling up the stomach.

The above experiments indicate a source of fallacy in making this observation. The food on which the animal has fed may interfere with its passage through the stomach, and cause a longer retention of it than is suspected.

Second Series of Experiments.—To obviate the cause of failure in the preceding experiments, the remainder of the rabbits were fed for eight days on green cabbage. It was found that they suffered, and two died under this exclusive aliment. It was necessary to add wheat-bran, which was eaten with avidity, and soon restored them to a good condition.

Four more were selected and kept without food for two days. They were then fed with cabbage saturated with sweet-oil, at intervals, from 9 A. M. until 2 P. M. In this manner oleaginous matter was constantly entering the digestive apparatus for five hours, until the moment of observation. If oils emulsified in the stomach or duodenum, independent of the pancreatic juice, the lymphatics above the connection of the pancreatic duct would of course be found to contain the emulsion.

The animals were destroyed by the same process as in the foregoing experiments.

The first rabbit was feeding up to the time it was killed. The lymphatics between the hepatic and pancreatic ducts were invisible, except two, from four to six lines above the pancreatic duct. They appeared as faint white lines. Below the pancreatic duct they were distended with chyle.

The second rabbit, under the same circumstances, presented the same appearances. No chyle was contained in the lymphatics until within a few lines of the pancreatic duct, where two or three were faintly visible. Below the duct they were turgid with chyle.

The third, a well-grown rabbit, gave precisely the same results. There was no appearance of chyle in the lymphatics of the mesentery, except within a few lines of the pancreatic duct, while below they were well filled with the emulsive fluid.

The fourth, also a large strong animal, presented corresponding appearances. No chyle in the lymphatics, from the commencement of the duodenum until within a few lines of the pancreatic duct; below it they were distended with milky emulsion.

The above experiments corroborate the observations of M. Cl. Bernard, as respects the phenomena in rabbits, and do not accord with the statements of the German physiologists, MM. Bidder and Schmidt, Lehmann, and Frerichs.

An experiment relied on by MM. Schmidt, Bidder, Lehmann, and Frerichs, in opposition to M. Cl. Bernard, is wholly inconclusive. After tying the pancreatic duct in one instance, and the small intestines below the pancreatic duct in another, milk, or milk with olive-oil, was injected into the intestines, "and the lacteals were filled with white chyle." This was to be expected. What is the necessary condition for the absorption by the lacteals of the villi of fatty substances? That they exist as an emulsion. Milk is a natural emulsion, holding a fatty substance (cream) in suspension, and consequently in the condition for absorption. Milk forms an emulsion with oils, and creates the same condition. Still more extraordinary is the experiment of Frerichs, quoted against M. Bernard by Lehmann, in which he injected an *emulsion of oil and albumen* into the ligated intestine, and its absorption was considered as a refutation of M. Cl. Bernard's doctrine.

The albumen of egg forms a most perfect and a persistent emulsion with oils. The pure pancreatic juice does the same. This I have witnessed, and can state that the oil does not "soon separate again on the surface," as Lehmann asserts. The pancreatic juice, as Lehmann shows, differs very slightly from pure albumen. No other intestinal fluid possesses this character so strongly, and no other is as well adapted to emulsify the fats of our aliment.

The cystic bile is viscid from containing a larger amount of mucus derived from its mucous membrane, and by agitation forms an emulsion with oils. This emulsion has always appeared to me very inferior to that obtained from pure pancreatic juice, or albumen of egg. Neither is it persistent, the oil beginning in a few hours to separate. The hepatic bile is much thinner and contains much less mucus. It is unknown whether it will form an emulsion with fats. It may be considered doubtful. No positive facts are known as to the quantity of the cystic bile that enters into the duodenum during digestion. The probability is, that it is very small in comparison to the amount of freshly secreted hepatic bile coming directly from the liver. This view gives additional confirmation to M. Bernard's doctrine.

The liquid albuminose resulting from the albuminous principle of the food, which is found often in the intestinal canal during digestion, may, from its accidental presence, concur occasionally in the formation of the emulsion of oils. The pancreatic juice is, in the present state of our knowledge of the facts, the only intestinal humor that can exercise this office as a permanent function.

I recall a circumstance, now some twenty years past, an interesting fact in this discussion, which, at the time, was inexplicable. I assisted Dr. John Webster, late Professor of Anatomy in Geneva Medical College, in the autopsy of one of his patients, who had died after long suffering, and in a state of extreme marasmus, from severe and intractable dyspeptic symptoms. Cream had been the principal nutriment for several weeks, as rarely any other food would be retained. The disease proved to be a schirrus of the pancreas. The colon was filled with a large quantity, some two or three pounds, of a yellow fatty substance, resembling a mixture of yellow ochre and butter. A large proportion of the fatty bodies of the cream had undergone no emulsive action from the absence of the pancreatic juice, and were not absorbed.

M. Cl. Bernard came to the conclusion that the fats were decomposed by the pancreatic juice. This is not probable. The emulsion of fats is a physical, not a chemical process. It consists in the mechanical division of fats into the minutest globules, each coated with a delicate film of the emulsifying body—albumen in chyle—casein in cream. If the experiment of Bouchardat and Sandras be correctly reported, it is conclusive on this point. They gave to a dog a considerable quantity of sweet almond-oil. After some hours the animal was killed. Some of the oil, unchanged, was found in the stomach and intestines. The lacteals were filled with white chyle, as also the thoracic duct. A portion obtained from this last was treated with sulphuric ether, and the almond-oil was obtained unchanged in its properties.

The principal fact relied on by the above German physiologist to controvert M. Bernard's theory of fatty decomposition by the pancreatic juice, is of no value. Butter was given to cats and dogs, and butyric acid was sought for, but not found in the intestines. This is considered as proof that the butter was not decomposed. It proves nothing of the kind. Butyric acid readily decomposes. It cannot resist the activity of the numerous chemical reactions at work in the alimentary canal during digestion. Lactic acid is being formed incessantly in the lungs and intestines from the metamorphosis of glucose, sugar, and starch; it is as speedily decomposed. The same occurs with the bile. In the fecal matters, in a normal state of the bowels, very little of the biliary constituents, other than the coloring matter, is to be found. The conjugate biliary acids—glyco-cholic and tauro-

cholic—disappear and are destroyed. Glycocol is not found; taurin, occasionally detected in the middle of the alimentary tract, disappears at the lower portion. The albuminous materials of the food that pass beyond the stomach, are metamorphosed in the intestines. In this conflict of molecular and chemical reactions, it would be impossible for butyric acid to exist. Its absence is no evidence that it was not eliminated.

The strongest objection to M. Bernard's doctrine is, that in an emulsion of oil formed with pure albumen the fatty body is not decomposed. An emulsion is a physical, not a chemical process.

It consists in the reduction of oil to the minutest particles—globulets—each covered with a coat of albumen when it is the emulsifying body. This is all that is required to impart to fats the capacity for absorption into, and their passage through tissues.

The adoption of M. Bernard's doctrine involves an inexplicable difficulty. If the neutral fats are decomposed by the pancreatic juice before, or at the time of absorption, as they are found to exist in the adipose tissue in their original state of neutral fats, they must be recomposed again in the blood, or at the instant of their secretion. To accomplish this change, there must be a generation of oxide of lipyl and glycerin, the bases of neutral fats. It is difficult to understand how it can occur. It is true, Mulder has offered a very ingenious hypothesis to show the possibility of the formation of those bodies, in the economy, from lactic acid. But the whole matter is so entirely hypothetical, in its present state, that it does not comport with the more rigid canons of modern medical philosophy, and cannot be accepted.

The state of our knowledge may be summed up in the following conclusions:—

1. Liquid fats are not miscible with the aqueous albumino-saline fluid—liquor sanguinis—with which all the vascular tissues are saturated; it cannot enter their pores, and consequently cannot be absorbed.

2. Liquid fats, when emulsified by albumen, are reduced to minute particles, each coated with albumen. In this state they are miscible with the liquor sanguinis, moistening the tissues, can enter their pores, and are then capable of absorption. This is the sole condition for the absorption of fats.

3. The milk-like fluid, named chyle, is this emulsion of the fatty matters of the food mixed with the ordinary lymph always contained in the lymphatics of the alimentary canal, and other abdominal organs and mesentery. The molecular base of Gully is the microscopic appearance in the chyle of the minute globulets of fat coated with albumen.

4. Albumen forms a perfect and persistent emulsion with oils. The pancreatic fluid is a saturated albuminous solution, and forms with oils an emulsion equally as perfect and permanent as that of albumen.

5. The pancreatic juice is the only highly albuminous fluid in the alimentary canal, that can accomplish the formation of a perfect emulsion; and the opinion of M. Cl. Bernard, that this process is one of its functions, is, it appears to me, sustained.

6. The observations of M. Cl. Bernard, that the formation of the emulsion of fats in rabbits, is at and below the pancreatic duct, and not above it, is confirmed by the experiments reported in this communication. And, further, that the experiments on rabbits are the most reliable, as being a true exemplification of the natural process, unattended with violence and torture to the animals, more or less disturbing in their effects.

7. That M. Cl. Bernard's view of the decomposition of fats by the pancreatic juice is not proved, is opposed by the nature of the process, and by analogy with other emulsions: it is unnecessary to the accomplishment of the absorption of fats, and introduces other and complicated processes that are unknown to exist, and are mere hypotheses.—*Amer. Jour. Med. Sci.*, October, 1854.

BELLADONNA AS A PROPHYLACTIC IN SCARLATINA.

BY G. L. ANDREW, M.D., OF LAPORTE, IA.

The efficacy of belladonna as a prophylactic in scarlatina, has been the subject of a good deal of controversy, and the following facts may therefrom be interesting, as a contribution towards the settlement of this question.

The scarlet fever manifested itself here in November last, for the first time, as an epidemic, for 12 years. There was therefore, no lack of material for its ravages. The general experience was, that in the families in which it manifested itself, few members who had not previously been subjects of attack, and especially few children, escaped. When the epidemic was at its height, I commenced the use of the English extract of belladonna, in the manner recommended by Dr. Mitchell, in the 3d vol. of the Transactions of the American Medical Association; I prepared a considerable quan-

tity of the mixture, and at once distributed it to some 80 children, including all those properly belonging to my diocese, who could probably be exposed to the infection. Of those one only was attacked with scarlatina. Among the noticeable circumstances attending this trial, it is proper that I should mention two or three.

Sarah S., aged 11 years, the case just now excepted, had commenced the use of the belladonna but about four days before her seizure. The period of incubation of scarlatina is said to range from two or three to twelve or fourteen days. It is altogether supposable that the poison was already in possession, when she commenced the use of the prophylactic. Her constitution is a decidedly scrofulous one, she having suffered severely and protractedly at different times with strumous opthalmia, ozœma, otitis and glandular enlargements. Her attack, however, was an usually light one. Her brothers and two sisters, with two other children residing close by, and whose frequent visits rendered them almost as of the same family, continued the belladonna and all escaped.

Sarah Dunn, aged 12, was taken from the county almshouse into the family of Mr. S., on the seventeenth day of the convalescence of Sarah S. Hitherto she had not been exposed to the infection. The use of belladonna was neglected in her case, and in about two and a half days after her entrance into the house, she was seized with scarlatina, and removed to the country house. There were at this time six children in the house, whose ages ranged from two to seven, and from the crowded state of the establishment all attempts at isolation were useless. I placed all of them immediately upon the use of the belladonna, and though constantly in the vicinity of the patient, not one was attacked.

Mr. M., the father of four children, had the symptoms of incipient scarlatina, and the children at once commenced the use of belladonna. The father had a moderately severe attack but all the children escaped.

This, Mr. Editor, is my mite towards the settlement of this vital question. It *is* a vital question and *may be* settled. I am aware of the difficulties which surround the full and complete establishment of almost any fact in therapeutics; of the fallacies which environ medical experience and observation; and especially of the capriciousness evinced by scarlet fever in regard to the subjects of its attack; but I would respectfully submit that the inestimable benefit which would follow the establishment of this fact, if fact it be, would amply repay for the outlay of time and labor bestowed upon it. As regards the above, it is true that "one swallow does not make a summer," neither does one fact establish a general principle, yet a careful collation of cases in which an undoubtedly pure article was used, by the profession generally, would soon set this matter at rest. No authority, however high, should deter from such experiments by the promulgation of the dogma that "no experience of a merely negative character can be regarded as of much weight when contrasted with such positive experience as is on record." The carrying out of such a principle into practice would throw us back upon medical prophylaxis as it was one hundred years ago, and the world would again be desolated by variola.

P. S.—The epidemic has fully subsided in this vicinity, and I beg to add the following item as completing the lesson which I have learned during its progress, in reference to the prophylactic powers of belladonna.

The family of the Rev. Mr. S. visited some friends in this village, just as the scarlatina was taking its leave. In a few days after their arrival two of their three children were brought down with the prevalent disease. The family of Mr. C., which they were visiting, had already been on the use of ex. belladonna, and the youngest to scarlatinoid eruption. Segregation was impossible, and so it was scarcely and only at first attempted. The children, five in number, with ages ranging from 9 months to 17 years, were freely and fully exposed, every day, excepting, as before stated, a very short time at the first, and then most imperfectly. Every one escaped.

The, to me, interesting points in this case is the seemingly permanent character of the prophylaxis. The children of Mr. C. had not taken the extract for some four weeks preceding, and did not resume its use when the danger seemed thus imminent.—*American Journal Medical Sciences.*

ON COCOA-NUT OIL AS A SUBSTITUTE FOR COD-LIVER OIL.

Dr. THOMPSON says, "Among the patients to whom cocoa-nut oil was given, there were some instances of arrested phthisis, as decided as any I have been accustomed to attribute to the use of cod-liver oil, over which is possesses advantages in reference to economy and palatableness: and it is interesting to remark that its efficacy was experienced by some who had previously taken cod oil uselessly, and by others who had discontinued it on account of nausea."—*Ibid, p.* 190.

ON THE EFFICACY OF GALIUM APARINE IN CERTAIN FORMS OF CUTANEOUS, SCROFULOUS AND CANCEROUS DISEASES.

[Dr. WINN read a paper on this subject before the Medical Society of London. He stated his belief that the galium aparine possessed remedial powers in the above diseases which promised to equal if not surpass those of arsenic.]

When Dr. Winn first drew the attention of his professional friends to the properties of this plant, two years since, he was only aware of its efficacy in treating lepra; since then he has ascertained its benefit in other skin diseases. Dr. Winn then related the circumstances which led to his acquaintance with the galium aparine. A friend of his in Truro, who had suffered for many years from lepra vulgaris, and had taken all the usual remedies in vain, informed him that he possessed at last a remedy for his troublesome complaint in a common wild plant of which he did not know the name. Dr. Winn found this plant to be galium aparine, which grows abundantly in England, and on making further inquiries, learned that three other persons in that district had been cured by the same remedy, one of whom had been discharged from St. George's Hospital as an incurable patient. After a botanical sketch of the plant, Dr. Winn expressed his belief that the ancients were acquainted with it. On referring to some very old authorities, he ascertained that the galium was much in vogue as a domestic remedy in this country many centuries since; it was then highly extolled as a cure for cancer, scrofula, leprosy, and dropsy. An Italian writer, Giuseppe Terramosia, had published in Schmid's Jahrbucker an account of several cases of scrofula, in which the galium appeared to produce rapid absorption of enlarged scrofulous glands. Diebach had also recommended it for phthisis, ascites, and scrofula. Richter considered it beneficial in strumous affection. Dr. Winn wished to direct attention to the fact of galium having been efficacious in glandular affections as well as lepra; it tended to confirm the theory that the two diseases were owing to the same cause—a strumous diathesis. It was also a remarkable circumstance, and one not generally known, that arsenic is highly beneficial in glandular swellings. Mr. H. Rees, an experienced and successful practitioner in the diseases of children, informed Dr. Winn that he had tried arsenic in infantile glandular affections, and proved it to be a most efficacious remedy. When first Dr. Winn used the galium, it was in the form of a decoction; but finding this mode inconvenient, he requested Mr. Hooper, of Pall-Mall, to prepare an inspissated juice, and that able operative chemist had succeeded in making a very valuable preparation. A teaspoonful of the juice equals in strength a half pint of the decoction. In ordinary cases a drachm, taken three times daily, will be found sufficient, but in obstinate affections the dose must be doubled. The juice of the galium had been analysed by Terramosia and Robert Schwartz. The former gives as its constituents—acetate of potash, gallic acid, tannin, extractive, water. The analysis of Schwartz is somewhat different. He gives its component parts thus—galitannic acid, citric acid, rubichloric acid, chlorophylle, starch. With regard to the *modus operandi* of the galium, Dr. Winn said he had little to offer but what was merely conjectural. Many of his patients were conscious of an increased flow of urine during its use, possibly from its acting on the kidneys as a depurative agent. The class of cutaneous diseases which had been benefited under his own observation was chiefly that dependent on a case of dyscrasia, such as lepra and psoriasis. He also considered these diseases as often arising from a strumous diathesis. The gentleman suffering from lepra, whose case had been referred to at the commencement of a paper, was one of a very consumptive family. In him the family disease had manifested itself under another form. It is highly important that the fluid extract be perservingly used. Many patients have failed, no doubt, from not having given the remedy a sufficient trial. The same may be said of arsenic. Dr. Winn had tried the galium in nineteen cases of skin disease. Of these, five were cases of lepra, six of psoriasis, four of eczemea, two of lichen, one of inflamed acne, and one of ordinary-coloured syphilitic eruption. In nine of these cases the benefit derived from this medicine was very striking. In one instance of lichen circumscripta, the effect produced by substituting the galium for other remedies was almost marvellous. With regard to the efficacy of this plant in the treatment of cancer, Dr. Winn was solely indebted to the experience of Mr. Bully, of the Bucks Hospital, who had forwarded to him an account of three cases of cancer, in which the galium appears to exercise a remarkable influence in arresting the disease. Dr. Winn was recently told that large quantities of galium are sold at Covent-garden annually, and that it is chiefly used by the purchasers as an external application in case of cancer. This fact strongly corroborates Mr. Bully's observations.—*Lancet, Feb.* 11, '54, p. 155.

ON THE ACTION OF IODIDE OF POTASSIUM.

BY DR. R. W. BASHAM.

[An observation upon that so much neglected branch of medical science, Therapeutics, demands every attention. Dr. Basham makes the following important remarks on the action of iodide of potassium. He believes, that though in other forms of disease this drug presents pretty steady characteristics, yet that it is in diseases of a rheumatic character that its beneficial results are most uniformly seen. He says:]

From time to time cases have come under observation, presenting the usual symptoms of chronic rheumatic pains, gnawing and erratic, with paroxysms aggravated by atmospheric changes; and there has been diffuse tenderness of the periosteal surfaces nearest in contiguity to the skin, as the scalp, clavicles, ulna, tibia, &c.; sometimes distinct tumefaction with exquisite tenderness, and these nodal elevations in some have been evanescent, in others, presistent during the whole course of the malady. It has been frequently noticed, and practitioners of experience cannot have overlooked the fact, that some of these cases materially and rapidly improve under the administration of the iodide of potassium, while in others, with symptoms in all respects identical, no benefit has been derived or improvement become apparent till the patient has been put through a course of the bichloride of mercury and sarsaparilla.

I was once inclined to think that these varying results depended on peculiarity of constitution, and that the treatment of such cases by one or other of these remedies must remain, to a certain extent, empirical, and destitute of any settled principle. But a careful examination of all the precedent conditions in the histories of such cases exhibit the following facts:—That in all the cases in which the iodide had been productive of benefit, the patient at some antecedent period had been salivated, in some for syphilis, in others for an inflammatory or other disease; while in those cases in which no benefit was obtained by the iodide, the patient had either never taken mercury to salivation, or had suffered from syphilis or iodide, the patient had either been neglected or treated only locally. It appeared then that there were two predisposing causes to the same form of chronic periosteal rheumatism—the impregnation of the system by mercury, and the lurking and subtle influence of the syphilic virus.

In my clinical lectures for some years past, I have directed the attention of students to these facts, and impressed on them that the treatment of these cases of chronic periosteal rheumatism should be based on these principles; the first form of the disease requiring the iodide of potassium, the second form, the agency of alterative doses of some mild preparation of mercury.—*Lancet, Nov.* 19, 1853, p. 478.

CASE OF SCARLATINA PRODUCED BY INNOCULATION.

BY R. BARRINGTON COOKE, ESQ. SCARBOROUGH.

During the summer of 1850, I attended a child, aged seven years, an out-patient of King's College Hospital, who was suffering from an attack of scarlatina maligna, with sloughing sore throat. The child died, and on making a *post-mortem* examination of the body, I inflicted a small wound on the third finger of the right hand. The wound shortly afterwards became inflamed, and suppurated, the hand and arm painful; and red lines in the course of the lymphatic, extending up the arm, showed the track of absorption of the virus; the glands in the axilla likewise became painful and enlarged. During six days, I experienced a good deal of uneasiness and pain in the limb, accompanied with some irritative fever. Towards the end of the seventh day the characteristic eruption appeared over the body, accompanied with sore throat.

The swelling and inflammation of the arm now began to subside. The attack, which was not of a severe character, ran its usual course, and in about three weeks from the commencement of the illness, I was enabled, though in a weak state, to leave town, when after a short sojourn in the country I returned to my duties as physician-accoucheur's assistant. The urine was albuminous, but no œdema supervened. Three years previous I had suffered from a slight attack of the same disorder.

In concluding, I would remark, first that the mildness of the attack in my own case, as contrasted with that of the child, arose probably from the difference in age between the subject affording the virus and myself; our different positions with regard to air, diet, &c., and it may be, some degree of immunity from the effects of the previous attack; secondly, that the period of latency, or incubation, was more prolonged, owing, probably, to delay in the process of absorption through the lymphatics, whereas, in Dr. Rowland's case, the virus seems to have been at once received into the venous system.—*Med. Times and Gazette, Dec.* 17, 1848, *p.* 639.

"ON THE TREATMENT OF THE AGONY."

The "*Bulletin Gineral de Therapeutique*" contains an able and interestieg paper, by Professor Forget, of Strasburg, on the treatment of the agony, which, etymologically, signifies combat, and by application, according to Dr. Johnson, "the last contest between life and death." If our space would admit of it, we should be pleased to publish the entire paper. As it is, we can only furnish a few extracts. Prof. F.. commences with the following admonition to the physician. "Never" he says, "despair of a patient while he gives signs of life! If all practitioners were persuaded of the importance of this precept, they would find themselves less frequently deceived in their fatal prognostics; they would less frequently experience the embarassment of, so to speak, seeing the patients revive whom they had consigned to impending death; while ignorance and charlatanism would more rarely reap credit at the expense of science, by restoring life and health to those who were deserted. as it is called. by the physician." Prof. F. makes this applicable to all acute and chronic diseases actually in a state of evolution, wherein the issue is almost constantly fatal. He cites. for example, convulsive attacks in children. which, notwithstanding the grave symptoms they present, such as cerebral fever. &c., quickly get well. The different modes of dying, as described by Bichat, Barthez. and Broussais, are taken up in detail, and in conclusion, the author describes three species of "agony":—first, "by defect of innervation; second, by defect of circulation; and third, by defect of respiration." * * * "In fine," he says, "the hippocratic face; paleness; lividity of the skin and mucous membranes; half-closed eyelids; convulsed eyeballs; muscular prostration; diminution of the general sensibility, of the special senses, and of the intellectual faculties; coldness of the extremities; characteristic sweats; labored, stertorous respiration; small, irregular, soft, slow, or frequent intermittent pulse; difficult or absent deglutition:—such is the group of symptoms which can leave no doubt as to the imminence of death. But even when hope has forsaken him, the physician ought to feel it to be a sacred obligation to act so long as a breath of life remains, and even, in certain cases, when life appears to be completely extinct, as in syncope. asphyxia, lethargy. &c." The general principles of treatment of the "agony" are given, illustrated by cases—which fully demonstrate the correctness of the position taken on this subject by Prof. F., as the lives of some of his patients were saved, or prolonged for a few days, and months—when they were considered *in extreme*. We will close by quoting the following from Prof. F., which he gives as the common expression of the friends or relatives of very sick patients:—"What is the use of tormenting poor dying people?" * * * "In the first place, it is not proved that dying people are very sensible to pain; then we have just shown that these tortures may be good for something; lastly, ask the unhappy being who is suffocating, and who feels himself dying, what he thinks of your sentimental philanthropy? But. beyond all these professional considerations, there is something positive, something glorious for science. and happy for humanity. in the consciousness, based on facts both numerous and authentic, that we may succeed."—*Bos. Med. and Surg. Journal.*

BLOOD-STAINS.

In concluding the evidence given a short time since at the Marylebone Police Court, before Mr. Broughton, in the case of William Styles, Dr. Hassall made the following observations, important in a medico-legal point of view, in reference to blood stains: "That while the determination, by means of the microscope, of the nature of blood stains, even when very recent, formed on cloth, linen, and other soft and porous textures, is usually a matter of considerable difficulty, and is often impossible, the determination of such stains, however old, as are placed on glass, porcelain, wood, and other hard and smooth substances, is in general unattended with dificulty, and extremely satisfactory. This difference is to be explained thus: in the one case, the fibrin, albumen, and serum of the blood, are in part absorbed and pass into the cavities of the hairs or fibres of the wool or linen: the blood corpuscles are thus deprived of their preservative fluids, and shrink up—become misshapen or disintegrated; while, in the other case, the fibrin and albumen harden around the blood-disks in drying, and thus preserve them slightly altered in form only." Dr Hassall stated that he had frequently succeeded in identifying the blood of different animals, preserved on slips of glass, after a lapse of six years. The stains should be examined in white of egg and not in water.—*London Lancet*, March, 1852.

NOTICE OF AN ATTEMPT TO POISON WITH STRYCHNIA.

BY HENRY F. FISH, OF WATERBURY, CONN.

On the 4th of March last, a gentleman of this city brought me a small basket containing his dinner, which, he said, he had been deterred from eating, owing to the discovery of a very unpleasant bitter taste developed on biting a fried cake. The basket was wrapped loosely in a paper, and my attention was immediately called to some white grains lying near and under the bottom of the basket. On examining these, as well as the contents of the basket, with a magnifying glass, I was enabled to obtain and preserve nearly all the suspected substance, not actually absorbed by, or adhering to, the various articles of food. From the physical aspect and intense bitter taste of these small white grains, I was induced to think the suspected substances was *amorphous commercial strychnia*, combined, as that sort of strychnia generally is, with *brucia*, in just sufficient quantity to render it *chemically impure*. I employed the following means for identifying these substances.

1st. A portion of the suspected powder was boiled with water, but remained nearly, if not quite, insoluble, imparting to the water, on cooling, a slight opacity.—The taste of this mixture was purely and intensely bitter, leaving upon the tongue, for many hours, a peculiar impression.

2d. A portion of the same powder was submitted to the action of nitric acid of 44°. It was entirely dissolved, without any evolution of gas, and the mixture assumed a decided *brick-red color*.

3d. A portion of the same substance, not more than one-tenth of a grain, was moistened with strong sulphuric acid; to this a minute quantity of red ferro-cyanide of potassium was added, when a copious violet color, of remarkable beauty, was produced.

Again, some of the same powder was moistened with strong sulphuric acid, and a single drop of a strong solution of yellow chromate of potassa added. The usual violet color was decided and abundant, but not so striking in its effects, as in the preceding experiment.

If it be asked, which, of all these results, was the most satisfactory, I reply, all of them were decided and characteristic; but I regard the last with red ferro cyanide of potassium (next to the peculiar taste), as the most decided and delicate. I should think that the violet color in this experiment, could be produced by the presence of even so small a quantity as one thousandth part of a grain of the ordinary *commercial strychnia*.

The contents of the basket were bread and butter, dried beef, cheese, fried cakes and a small fruit pie. The cakes and beef had retained a larger portion of the strychnia than the other articles. On examining the upper crust of the pie, some minute particles of the strychnia were readily discerned, adhering to it. The whole have been carefully sealed up and laid aside for future examination, if necessary. Judging from the quantity found in the basket and on the paper, I should think that at least ten grains of strychnia had been thrown into the basket.

The position of the basket during the forenoon of this day, the limited number of workmen having access to the work-room, with some other circumstances, leave no doubt upon my mind, that an attempt at sure and fatal poisoning was made, and the individual suspected has since left the country.—*Am. Jour. of Pharmacy.*

INTERESTING TO PARENTS.

The following paragraph from a London publication, should arrest the attention of parents:

Poisonous Colored Confectionary.—The "Lancet" Commissioners, in reporting the result of their investigations respecting colored confectionary, expressed surprise at the extent to which deadly and virulent poisons are daily made use of by the manufacturers of these articles. One hundred and one samples were analyzed; and of the yellow, seventy contained chromate of lead, and colored gamboge; seventy-nine of the reds contained cochineal, red lead and bi-sulphuret of mercury; eight of the browns contained ferruginous earths, either Vandyke, brown umber, or sienna; two of the purples contained Prussian blue and cochineal; thirty-eight of the blue contained indigo, Prussian blue, Antwerp blue, and a sulphuret of sodium or aluminum; nineteen of the greens contained Brunswick green, or arsenite of copper. The above colors were variously combined in different cases, three and even four poisons occurring in the same parcel of confectionary. Four of the samples were adulterated with hydrated sulphate of lime; seventeen samples were adulterated with wheat flour, three with potatoe flour, and one with arrow-root.

CASE OF VESICO-VAGINAL FISTULA—CURE.

BY N. BOZEMAN, M.D., OF MONTGOMERY, ALA.

EMILY, aged about 30, property of H. W. B. Price, of Daleville, was admitted into my infirmary on the 26th of December last. She is large and stout; the mother of eight children; and had always enjoyed good health until the birth of her last one. This was in August, 1852; at which time she became the subject of the above disease. Labor lasted about sixty hours; craniotomy was then resorted to by the attending physician, and delivery speedily effected. A few days afterwards it was discovered that urine passed through the vagina—a circumstance first indicating the existence of vesico-vaginal fistula. In addition to this injury she had an attack of rheumatism, and from both of which she did not recover entirely for several months. Since then, however, her general health has been very good, menstruation regular, &c.

Upon examination of the parts, I found them as follows: uterus retroverted and slightly prolapsed; vagina quite capacious, but very much altered in appearance by the abnormal position of the womb; its anterior wall only two and a half inches, while its posterior seemed to be of the usual length. Running vertically through the anterior and a portion of the posterior lip of the os uteri, was to be seen a cleft an inch or more in length. At the anterior extremity of this cleft was the fistulous opening, partially filled by a herniated condition of the mucous coat of the bladder. It was triangular in shape; its base resting against the neck of the womb, and its apex presenting forward and sufficiently large to admit the index finger. The consequences of such a disease are too well known to require a notice in this short report.

Having satisfied myself as to the nature of the case, my attention was next directed to the mode I should pursue in an operation. Fully appreciating the difficulties which I had seen my friend, Dr. Sims.* encounter in similar cases, I of course had many misgivings as to the result of any proceeding. I determined, however, to make an effort.

Accordingly on the 11th of March, assisted by several of my medical friends, I proceeded to operate in the following manner: The patient was placed upon a suitable table on her knees and elbows. The parts were now brought into view by the lever speculum and a reflected sunlight. The edges of the fistula, formed partly by the anterior lip of the os uteri, were then freshened by means of a delicate tenaculum and small scalpel. This being done, the next, and what I considered the most difficult step, was to be taken, namely: applying the sutures and clamps in such a way as to effect perfect apposition, and thereby obtain union by the first intention. Here I had the neck of the womb, an unyielding tissue, to deal with and to remedy this, it was necessary that the compensating parts should be so adjusted that the mechanical contrivance employed would not defeat the object sought to be obtained, by creating an undue amount of inflammation. From the nature of the parts, therefore, I determined to place the clamps longitudinally, finding their upper extremities so as to be applied one on each side of the anterior lip of the os uteri, thus enabling me to secure the upper suture in the most advantageous way. The clamps were one inch in length, and contained four openings for the sutures. These were of silver wire, and were lodged one after another in their respective places, by being attached to the end of a silk thread carried through at a proper distance from the edges of the fistula, by a short, straight, and spear-pointed needle. A clamp was now secured to the distal extremities of the wire and made to occupy its place. On the proximal ends the other clamp was passed down to its place. Traction then being made upon these ends of the wire, perfect apposition of the denuded edges were effected. This was now maintained by compressing with a pair of strong forceps a small, perforated shot previously slid down upon each wire to the clamp. After this, the wire was cut off close to the shot, and the patient put to bed. The self-retaining catheter was next introduced into the bladder and then allowed to remain, excepting when its removal became necessary to clear the mucous and earthy deposit from it. This was required twice a day. During the whole treatment the patient was kept upon her back, and the bowels prevented from acting by the free use of opiates. On the fifteenth day I removed the suture apparatus, and was most happy to find union of

* J. MARION SIMS, M.D., late of Montgomery, Ala., now of New York, of whom Dr. Bozeman makes such honorable mention in the above interesting case, is at home and abroad justly regarded as the highest authority on this difficult branch of surgical practice. Dr. Sims himself says that "all we know upon this subject worth knowing, is due to America and France"—the two names which stand out in the boldest relief, being Professor Mattauer, of Virginia, and the indefatigable Jobert, of Paris. Dr Sims attributes the first successful operation for vesico-vaginal fistula in this country to Prof. Hayward, of Boston, who has operated with entire success nine times. Prof. Pancoast, of Philadelphia, has operated several times with like result.—*Editor N. O. Med. and Surg. Jour.*

the parts perfect. The patient now has entire control over her urine, and says she feels as well in this respect as she ever did.

Whether the fistula in this case was caused by the use of instruments in effecting delivery, or by the sloughing process, I cannot positively say, but am inclined to the former belief. However produced, I think it affords several points of interest; showing in the first place, to be a part of the same wound in the cervix uteri as indicated by the cleft or line of cicatrization; and in the second place, beautifully illustrates the extent of nature's efforts to repair such injuries, as well as some of the valuable resources employed by art to overcome such obstacles as she herself fails to do.

I take great pleasure in saying, that the success I have had in this case, I attribute entirely to the advantages derived from those principles of treatment laid down by Dr. Sims. Every surgeon who has or may make an application of them in the treatment of such cases as the above, must feel a sense of pride in awarding to him the praise he so justly deserves.—*New Orleans Med. and Surgical Journal.*

REMARKABLE EFFECTS OF THE INHALATION OF CHLOROFORM IN HOOPING-COUGH.

It is surprising that inhalations of chloroform should not have been suggested at an earlier period in the treatment of hooping-cough, one of the purest spasmodic affections in human pathology. Some years ago, Dr. Fleetwood Churchill, of Dublin, recommended inhalations of sulphuric ether in this affection; but the discovery of chloroform put a stop to its further experiment. The treatment of hooping cough by chloroform is attended with difficulty in very young children. First, there is no warning of paroxysmal access; secondly, inasmuch as there are eight or ten expirations to one inspiration, the chloroform becomes evaporated before the infant has inhaled a sufficient quantity. [This objection may be easily rectified.—Ed.] Finally, young children have a varitable horror of anything coming against the mouth, so as to interfere with respiration, and they struggle against it with all their power. In the case of children, however, from twelve to fourteen years, of reasonable minds, all these difficulties disappear.

Four cases, treated by Dr. Fleetwood Churchill, were in the highest degree encouraging. The first, a young girl, aged 16, who had had hooping-cough for a month, especially severe during the night. She was recommended to inhale a few drops of chloroform upon a handkerchief, when she felt the paroxysm coming on. In two days the shrill sound had disappeared, and the cough subsided in about ten days. There was the same result with a patient aged 20. In the third case, a young lady, aged 18, chloroform was administered from the commencement, the cough was instantly suspended by the chloroform, but three weeks were required for cure. The fourth case was more severe, the spasmodic attacks were more violent and prolonged; the efforts at inspiration, and the shrill sound, such as to convey the idea that something was about to give way in the chest. The inhalations of chloroform reduced the number of the paroxysms to one-half, but without diminishing the intensity of the remainder. The patient complained of headache after the inhalation, consequently it was discontinued, and two to three minims of prussic acid, with two or three minims of the black drop, were substituted thrice a-day. The improvement effected by the chloroform was permament.—*Arch. de. Med. Belg.* —*Med. Times and Gazette, Feb.* 25, 1854, p. 191.

RICH AND POOR.

It is undoubtedly true, after all, that very little of the happiness of life comes from what most persons covet so eagerly, viz: wealth and worldly consequence. The following thought is just:

"Rothschild is forced to content himself with the same sky as the poor newspaper writer, and the great banker cannot order a private sunset, or add one ray to the magnificence of night. The same air swells all lungs. Each one possesses really his own senses, soul and body—these are the property which a man owns All that is valuable is to be had for nothing in this world. Genius, beauty and love, are not bought and sold. You may buy a rich bracelet, but not a well turned arm to wear it—a pearl necklace, but not a pretty throat with which it shall vie. The richest banker on the earth would vainly offer a fortune to be able to write a verse like Byron. One comes into the world naked, and goes out naked; the difference in the fitness of the bit of linen for a shroud is not much. Man is a handful of clay, which turns quickly back again into dust.

Wretched is the man who has no employment but to watch his own digestion; and who, on waking in the morning, has no useful occupation of the day presented to his mind. To such an one, respiration is a toil and existence a continued disease. Self-oblivion is his resource, indulgence in alcohol in various disguises, his remedy, and

death or superstition his only comfort and hope. For what was he born and why does he live? are questions which he constantly asks himself: and his great enigmas are in the smiling faces of habitual industry, stimulated by the wants of the day, or fears for the future. If he is excited to exertion, it is commonly to indulge some vicious propensity, or display his scorn of those pursuits which render others happier than himself. If he seeks to relieve his insanity in books, his literature ascends no higher than the romances, the newspaper or the scandal of the day; and all the nobler pursuits of mind as well as body, are utterly lost in regard to him. His passage through life is like that of a bird through the air, and his final cause appears merely to be that of sustaining the worms in his costly tomb.—*Sir Richard Phillips.*

PREVENTIVES AND TREATMENT OF CHOLERA.

"Dr. J. P. Hobbs, of Memphis, has addressed a letter to the Mayor of Nashville, in which he states that by the use of cistern water entirely and exclusively, the cholera will disappear and never return. The doctor says that this is known to him by analysis, and by experience of twenty-four years. The editor of the Nashville Gazette says, that from his own observation in the year 1849, when the cholera was in its first stages, it was admitted by those best acquainted with the disease, that those who used rain-water where the disease was most prevalent, were free from it."

The above is copied from a newspaper. There can be no doubt that soft pure rain-water is far preferable, as a drink, to hard spring water which percolates through limestone. It is no unfrequent occurrence, however, when an epidemic is apprehended in large cities or populous towns, for the authorities to receive from various sources "sure preventives," or formulæ which are said to be "*infallible cures.*" No doubt they are often sent from the best of motives; but many of the prescriptions are so incongruous and antagonistic in their application and mode of action, that we feel inclined to caution all persons from placing any reliance upon them, when they or their friends are attacked with cholera. We have seen letters to the Mayor of our city, strongly recommending certain treatment, said to be infallible, but which, unfortunately, consisted of the use of old and unsuccessfully-tried remedies, and could be of no possible use, but on the contrary might do much harm. We would repeat what has already been said in previous numbers of the Journal, that the safest course to pursue for those who have symptoms of the cholera, is to send for a competent physician at once, and not depend on remedies which are vaunted forth in the papers, or which some friend strongly recommended.—*Bost. Medical and Surg. Jour.*

DRAINAGE IN TOWNS AND CITIES.

Nothing is more essential to health, in compact settlements, than a perfect system of sewerage. Cities are just beginning to realize the value of this great fact. Many an epidemic has its origin in the accumulation of nuisances; and few nuisances can be greater, in regard to evil consequences, even in our smaller towns and villages, than the vegetable and animal material held in solution in the drainings from sinks and privies, when allowed to urge its way along the streets or around inhabited buildings. A city may have its mortality augmented by neglecting to conduct the common surface water under ground. In this season of cholera tendency, the existence of which will not be denied by physicians, the selectmen of our towns, health officers, magistrates and police forces, should be indefatigable in abating not only every actual nuisance, but those minor deviations from a state of perfect cleanliness which at other times might pass unnoticed with impunity.—*Bos. Med. and Surg. Journal.*

DISGUSTING MEDICAL ADVERTISEMENTS.

A society has been formed in London and Manchester, called "the Union for Discouragement of Vicious Advertisments," which by the circulation of tracts calls upon the public to set their faces against papers admitting such advertisements as "Manhood," "The Silent Friend," "Nervous Debility," &c. We heartily wish the society may succeed in excluding advertisements of the kind in question, and in putting down all papers that insert them. We should feel surprised that the proprietor of any newspaper could be found sufficiently vile to publish such offensive indecent announcements, but that we know that no work is too dirty or disreputable for some people to do, and that life is clung to so tenaciously that a continued existence in a fœtid atmosphere of moral corruption is preferred by some degraded specimens of humanity to decent death and burial.—*Nottingham Journal.*

TRANSFIXTURE OF THE BODY BY A BAYONET.

The London "Medical Times and Gazette" for May, furnishes an interesting account of a man who had a bayonet forced through his body, and recovered without any unpleasant symptoms. It appears that he attempted to take the life of a soldier, but was foiled, when, to make his escape, he rushed across the barrack square towards a gate where a sentry was on duty. The sentry interposed with his carbine, in the attitude of "charging," and the consequence was, the bayonet of the sentry entered his body near the ensiform cartilage of the sternum; then passing through the abdomen, its point emerged close to the side of the spinal column, some inches lower down. In a quarter of an hour afterwards he marched to the hospital, three-fourths of a mile distant, and at the end of a fortnight was discharged from the same, to be placed upon trial for his life. "The injury was not followed by bad symptoms, nor did the subject of it require a dose of medicine for his recovery. To the circumstance of the affray having been enacted *before* dinner." says the writer, "I am disposed to attribute much of the immunity from evil which this ruffian enjoyed.—*Bos. Med. and Sur. Jour.*

POISONIG BY OIL OF TANSY.

BY W. W. ELY, M.D., OF ROCHESTER, N. Y.

The subject of the following painful occurrence, was a respectable young lady, in ordinary health, engaged at the time in teaching school. Having arrived at her menstrual period, she procured what she supposed was the essence of tansy, designing to take it to promote the catamenial discharge. On the evening of August 15, 1836, she took *one teaspoonful* of the medicine, which proved to be *oil of tansy* — From the speedy supervention of alarming symptoms a messenger was sent for me, a distance of two miles. Being unable to attend personally she was promptly visited by my partner. The oil, however, had operated so energetically and rapidly that on his arrival nothing seemed likely to be of any avail, and nothing of any consequence was done.

From the record which I made at the time, it appears that she first complained of dizziness and became insensible in about ten minutes—a succession of convulsions supervened, with frothing at the mouth, laborious respiration and irregular pulse, and she died in *one hour and a quarter* after taking the oil.

It may be proper to add that another young lady in the family, also took of the medicine at the same time, but vomited very soon, and suffered no inconvenience.—*Am. Jour. of Med. Sci.*

PATHOLOGY AND TREATMENT OF EPILEPSY.

"EPILEPSY AND OTHER AFFECTIONS OF THE NERVOUS SYSTEM WHICH ARE MARKED BY TREMOR, CONVULSION, OR SPASM—THEIR PATHOLOGY AND TREATMENT. By CHAS. BLAND RADCLIFF, M.D., Licentiate of the Royal College of Physicians, Assistant Physician to the Westminster Hospital, Lecturer on Materia Medica and Therapeutics at the Westminster Hospital School of Medicine, etc. London, 1854. 8vo. p. 144."

Those of our readers who have had an opportunity of perusing Dr. Radcliffe's treatise on the Philosophy of Vital Motion, are aware that he has advanced a new and somewhat startling theory of muscular motion. That muscular contraction is a purely physical phenomenon dependent on ordinary molecular attraction when the muscle is *not* stimulated. That the real operation of nervous and other vital agencies, and of electricity and other physical forces, is not, as usually taught, to excite or stimulate contraction in muscle and other organic tissues, but to counteract this state, and induce relaxation or expansion. In other words, that all stimulants, vital and physical, so far from producing, on the contrary antagonize, muscular contraction, which occurs only upon the suspension or withdrawal of the action of the stimulants, in a manner perfectly analogous to that which takes place in a bar of metal when heat is withdrawn.

This physiological heresy, an exposition of which prefaces the proper subject of the essay before us, is enforced and illustrated by a series of arguments and illustrations of a most acute and plausible character, which cannot but arrest attention, even though they fail to carry conviction of the truth of Dr. Radcliffe's theory of vital motion.

Upon that theory is based, in the volume before us, the pathology and treatment of epilepsy, and other nervous affections marked by tremor, convulsion and spasm, as, the tremors of delicate and aged persons, chorea, paralysis agitans, delirium tremens, the rigor and subsultus of fever, the tremor of mercurial poisoning, and those depend-

ent upon the retention of urea in the blood; in the convulsions of cerebral disorder, of uterine disorder, and of intestinal disorder, and the convulsions of death; laryngeal spasm, cholera cramps, tetanus, ergotism, catalepsy, and rigor mortis.

Whatever estimate may be formed of Dr. Radcliffe's views of the nature and cause of muscular contraction and relaxation, and the correctness of the application of these views to explain the pathology of epilepsy and cognate affections, there can be little doubt that his theory of these diseases has a surer basis in truth—in many, at least, of its features—than that commonly received.

On an analysis of the leading phenomena of epilepsy, Dr. R. shows that neither the vascular, nervous, nor muscular systems present any indications of morbid excitation, but the reverse.

The condition of the skin, the state of the pulse, and the general diminution of the temperature of the surface, but especially of the extremities, indicate a very decided depression of the circulation. During the height of the fit, the state of the circulation is one of prostration, verging upon actual extinction.

The entire condition of the epileptic indicates the same want of activity in the nervous as in the vascular system. "The intellectual and memorial faculties fail day by day under the blight which eventually obliterates them. On the eve of the fit, the patient is rarely otherwise than silent, sad, moody, and still; in the fit, he is bereft of all sensibility, consciousness, and volition, and for sometime afterwards he is stupid, confused, and exhausted."

"Arguing from the state of the pulse and the respiration in epilepsy, it would appear," Dr. R. remarks, "that the medulla oblongata, the spinal cord, and the sympathetic ganglia, are in the same condition of inactivity as the brain. Nay, it cannot be otherwise, for the functional energy of these organs, as of the system generally, must be in direct relation to the activity of the circulatory and respiratory changes. It is to be observed, also, that the remarkable want of tone, which is a very marked peculiarity of the epileptic, is indicative of the want of energy in the spinal cord, if it be a function of this organ to supply this tone."

The depressed condition of the muscular system is evinced in the epileptic by the remarkable inadequacy to exertion; in the slowness with which the system rallies after fatigue, as well as in the pallid and soft condition of the muscles on dissection, which condition contrasts very strongly with the normal redness and consistency of these organs.

"Viewed in this manner," says Dr. R., "the vascular and nervous systems of the epileptic, as well as the mobile structures in which the convulsive phenomena are manifested, are seen to present unequivocal evidences of inactivity, and this inactivity—so far at least as the vascular and nervous systems are concerned—is found to be most marked in the fit itself."

The causes, or supposed causes, which operate in the induction of epilepsy are, according to Dr. R., all of a depressing nature.

"Thus," he remarks, "the seizure is referable, not to joy, but to fright and fear—not to any natural excitement, but to the exhaustion consequent upon excess and abuse—not to good cheer, but to hunger and privation. It happens at night, when the vivifying influence of the sun is withdrawn, rather than the day. Much obscurity hangs over these matters, from the careless manner in which the most incongruous agencies have been grouped together as exercising the same influence upon the system, and much obscurity is inevitable from the difficulty of untying the complex knot which holds together the several influences acting upon the body; but there is no doubt, and every reason to believe, that these several causes of the fit are of an exhausting and not of an exciting character."

On a review of the foregoing facts and considerations, Dr. R. considers it to be sufficiently evident that—

"Epilepsy cannot be caused by any excitement of the muscles consequent upon the excessive supply of nervous or any stimulus. On the contrary, everything is in harmony with the physiological premises, and, as might be anticipated from these premises, the convulsion would seem to depend upon *want* of vital stimulation, which want had allowed the molecular attraction of the muscles to come into play and gain the ascendancy."

Although we are not prepared to give our assent to the position which Dr. R. attempts to establish, namely, that all stimulants, vital and physical, in place of exciting or promoting, on the contrary antagonize muscular contraction, we nevertheless admit the correctness of his views in relation to the condition of the circulatory, nervous, and muscular systems in the epileptic—everything connected with the phenomena and progress of his morbid condition, evinces diminution of vigor—of vital energy—a depression of their normal functions; each of these systems is in a condition of *under*, and not of *over activity*.

Dr. R. endeavors to show that the same depressed activity in the vital functions ob-

tains in all the affections allied to epilepsy—those, namely, of which tremor, convulsion, or spasm constitute a prominent system. The evidence of depressed vital energy are in many of these affections sufficiently apparent, and even in those where the evidence is of a less striking character, it will not be found wanting, upon a careful analysis of the circumstances under which the convulsive or spasmodic phenomena present themselves, and the condition of the circulatory, nervous, and muscular systems preceding and attending them.

"The subjects of nervous trembling," Dr. R. remarks, "have a certain delicacy of constitution which cannot be overlooked, and if not women, they have the feminine habit of body in a very marked degree. Those who tremble from old age or from shaking palsy, present unequivocal marks of decrepitude and decay—the listless wish, the snowy or hairless head, the fireless countenance, the wasted limb, the feeble pulse. Chorea is almost peculiar to females, and to females whose parents were infirm or aged, or who themselves have become enfeebled by improper or injudicious habits. It often originates during some severe and exhausting disease, and is always accompanied by signs of debility. The atony of the circulation is usually indicated by paleness of the lips, face, and tongue, by pastiness of the skin, by effusion into the serous cavities, and by rheumatic deposits."

Convulsion happens most frequently in women and children, and but rarely in men, and this fact is an argument that other convulsive disorders besides epilepsy are connected with a state which is characterized by weakness rather than by strength.

"Spasm, again, occurs more frequently in women than in men, and most frequently in the more irritable and weakly of women. Cramp is the constant companion of tremulousness. It increases with the advances of age, and is almost permanent when nervous tremors become intensified into palsied tremors. The subjects of catalepsy, in like manner, are more delicate and impressible than they ought to be. Their skin is usually pale and dingy, their pulse readily disturbed, their general appearance either hysterical or apathetic. A cataleptic boy, a patient of my own, was as irritable, uncertain, and fretful as an infant. His apprehension was slow, his memory weak, his head large, his eyes staring, his complexion sallow and venous, his hand cold and clammy, his pulse slow and feeble; and lastly, the state in *rigor mortis* is expressed by the name."

The consideration of the pathological condition of the vascular, nervous, and muscular systems in the several diseases marked by tremors, convulsions, and spasm, is followed by a chapter on periodicity. The views of the author in reference to this interesting subject are far from satisfactory, and cannot be received in their full extent as explanatory of the periodicity of disease until established by more convincing facts than have as yet been adduced in their support.

After noticing the indications of periodicity in the physiological phenomena of plants and the lower order of animals, Dr. R. observes:

"In spite of every cause of purturbation, there are many evidences of periodicity in man. It is something more than accident which so often causes man to be stunted, stolid, and passionless in countries where cold reigns without a rival. It is something more than accident which times the periodical changes of women by the lunar orbit. There are, indeed, frequent irregularies in all these cases, and particularly in the last, and these may be supposed to be the natural results of the changing periods of food and passion, but the law is apparent above every irregularity.

"It would appear, then, that there are certain periodical changes in vital phenomena which reflect more or less distinctly the movements of the sun and moon, some of them corresponding to the day, others to the month, and others to the year; and that these changes are more and more conspicuous the lower the grade of organization in which they are displayed—more so in woman than in man, more in animals at the foot of the scale of being than those at the summit, and most of all in the plant.

"Returning now to the bedside, it may be expected that the signs of periodicity will always be masked and obscure in man, but they will be manifested most distinctly in him who is most deprived of that active inherent life which constitutes the badge of distinction between man and the plant, and not in the person who is acted upon by inflammation, or who is excited in any other way. And so it is.

"There can be no doubt as to the obscurity of the evidences of periodicity even where that obscurity is least, as in epilepsy and in affections alied to epilepsy; but there can also be no doubt as to the existence of these evidences. Thus, on looking at a number of cases, it is found that convulsion and spasm occur more frequently about the time of new moon, than about the time of full moon, and more frequently in the winter months. Of these evidences

of diurnal, monthly, and annual periodicity, the diurnal are the most frequent, and the best established; but all are sufficiently frequent and obvious to convince any one who will take the trouble to seek after them for himself, or to consult the admirable little treatise of Dr. Mead: 'De imperio solis ac Lunæ in corpora Humana et morbis inde oriundis.' They are not, perhaps, sufficiently frequent and obvious to allow any theory to be based upon them, but it is impossible to omit noticing that the greater frequency of convulsion and spasm in the night, at the times of the new moon, and during the winter months, is in accordance with the preceding pathological doctrines, and that, being thus in accordance, it is an additional confirmation of the correctness of those doctrines.

"It appears, therefore, that the signs of morbid periodicity are manifested most distinctly in the person who is most deprived of that inherent life which constitutes the badge of distinction between man and the plant, and not in the person acted upon by inflammation, or who is excited in any other way: and being so, they furnish an important confirmation of doctrine, and a new rule of treatment. The confirmation of doctrine is obvious, for in this point of view the signs of periodicity become only so many additional evidences of that constitutional want of innate strength which appears to be the prominent fact in the pathology of epilepsy and of the cognate disorders. A new plan of treatment is equally obvious, for if the signs of periodicity depend upon a simple want of innate strength, then it becomes necessary to abandon all those leeching and starving plans of treatment which have originated in the supposition that they depended upon internal inflammation, or fever, or some other state of excitement, and to adopt in their stead all the means which are calculated to arouse and invigorate the downcast and flagging powers of the system."

The general plan of treatment for epilepsy and the affections allied to it, laid down by Dr. R., is unquestionably the correct one. At the same time we think he depends too exclusively upon a tonic and stimulating course, to the exclusion of all other remedial measures, however strongly they may seem to be indicated by the morbid condition of various organs which is so often associated with epilepsy and the cognate diseases.

A full diet of nutritive and easily digestible animal food, without the usual quantities of farinaceous and green vegetable matters, is insisted upon by Dr. R., as essential in all cases of epilepsy.

The propriety of such a diet in all cases in which the patient can be induced to take it is admitted. In many cases, however, the appetite and digestive powers of the stomach are so impaired in the epileptic, that the patient is either averse to taking food of a proper kind, or if he can be induced to do so even to a very moderate extent, it produces considerable distress and other unpleasant symptoms. In such cases, the digestive powers of the stomach must be restored by an appropriate course of treatment before the full animal diet, recommended by Dr. R. can be carried into effect, with any hopes of deriving from it the desired restorative and invigorating effects.

Dr. R. is in the habit of recommending a very liberal allowance of alcoholic stimulants to his epileptic patients; and he states that, from the result of this practice, he is fully satisfied that there is no disease in which they are more needed. He believes epileptics to be benefitted by the use of coffee, and injured by the use of tea.

That there may occur many cases of epilepsy, in which the use of alcoholic stimulants are required, we admit; but we fear that, to allow their "very liberal use" in all cases, indiscriminately, would be apt to do far more injury than good. We can see no objection to the substitution of coffee for tea.

The epileptic's habits should be so ordered as to save the strength as much as possible. Hence Dr. R. very properly advises celibacy, abstinence from any severe study, and from bodily exercise.

"Often," Dr. R. remarks," I have found a patient to improve in a marked and unmistakable manner as soon as he had had the resolution to conquer the fidgetiness which is invariably connected with debility, and to force himself to rest; and often I have known a patient begin to retrograde if he had begun to try his strength too soon. Only the other day, I had a note from a medical gentleman, in which he told me that a patient about whom he had consulted me, had gone on very well so long as he had made a point of riding to his place of business, and that the fits had returned as soon as he had begun to disregard this direction."

As tonics in epilepsy, Dr. R. prefers quinia and iron.

Of turpentine he speaks in the highest praise, as "the remedy which stands foremost among those which have rendered unequivocal service in epilepsy." Its nauseous taste, however, and the irritation which it excites in the urinary and generative organs, have always been a serious objection to it, and the result has been that

comparatively few patients have the resolution to persevere in its use as long as is necessary to insure permanent benefit. Dr. R. was, in consequence, induced to substitute naphtha for turpentine, and found that in doses of half a drachm to a drachm it produced the same decided relief as the turpentine; but it was scarcely less disagreable, and patients could not be induced to take it for any length of time.

"After this," says Dr. R., "it occurred to me to try camphor, and this I did in doses of two or three grains, either alone or in combination with quinia or iron, one or both, according to circumstances. Being given in the form of pills, it was free from the principal objection applying to the two former stimulants, and it had this peculiar advantage, that instead of irritating the urinary and generative organs like turpentine, it exercised, or seemed to exercise, a direct quieting influence upon them. In other respects, as tried in several cases, the result was not less satisfactory.

"Next in order of time I gave a fair trial to chloric ether, and still with very decided benefit. Under ordinary circumstances, I gave half-drachm doses of this preparation, either alone or in combination with the ammonio-citrate of iron, or quinia, or naphtha, and in all cases it proved to be a very favorite and effective remedy, particularly with children. Sometimes I substituted Hoffman's anodyne in place of the chloric ether; and sometimes, when the need of the stimulant has seemed to be very urgent, I have associated the two, but it has always seemed that this form of ether is far less efficacious than chloric ether.

"In cases where, and at times when, an occasional stimulant effect was necessary, I have recommended the aromatic spirit of ammonia, either alone or in combination with ether, and the result has usually been certain and satisfactory."

In addition to internal stimulants, Dr. R. employs, externally, counter-irritants, and the hot bath.

Dr. R. recommends a hot bath daily, and an additional one whenever any unusual depression tends to the apprehension of a fit. From the adoption of this practice, he has seen many instances of marked and decided benefit.

"This plan," he remarks, "seems to be equally desirable in long-standing cases, where there is much cerebral congestion, and theoretically and practically there is much reason to believe that this is what might be expected, especially if a towel dipped in cold water be wrapped around the head of the patient while he remains in the hot bath.

"In actual practice," says Dr. R., "I have rung changes upon these different stimulants, either giving them alone or combining them with iron and quinia, substituting one for another according to the changing circumstances of the case, and always allowing at the same time a liberal supply of dietetic stimulants, upon which, indeed, hope is mainly to be based, and I have every reason to be satisfied with the results. I have never met with a patient who has not been benefited; for even where the case has been of long standing, and the fits have kept their ground, there has been a manifest diminution of intellectual torpor, the face has lost a good deal of the brutalized expression which had been creeping over it, and the distressing nervous headache has disappeared, if that symptom had been present—and I have met with many patients who have been completely cured.

"If there is one time more than another when stimulants are necessary, it is on the eve of the fit. Then, vigorously administered, they will often prevent the paroxism. Nor are they contra-indicated in the fit itself. At this time, all that is usually required is to raise the head as much as possible, so that the blood may not gravitate into it, and to unloose the neckerchief and shirt-band; but if more is required, it is still upon stimulants that dependence must be placed, and this equally, whether the circulation be in a syncopal or asphyxial state. Indeed, under these circumstances, the proper course is to dip a door-key or hammer-head into boiling water, and apply it to the pit of the stomach, or to put the patient into a hot bath, or to take advantage of a moment of quiet and inject a turpentine enema into the rectum. Nor are stimulants contra-indicated after the fit, except perhaps during the first few moments of the reaction which follows upon the collapse, and this only in some instances, for often this reaction is not up to the normal standard. Nay, they are not necessarily contra-indicated by the mental excitement which occasionally supervenes upon the fit, for this excitement is usually, if not always, of an asthenic character.

"All these considerations are in harmony with what might be gathered from a simple inspection of the state of the pulse (the true key to practice,) and the conclusion is that stimulants will be found to be proper remedies for epilepsy, if they are given with true discrimination, and regulated in quantity according to the heat or coldness of the season."

With regard to tracheotomy as a remedy in epilepsy, Dr. R. remarks that it is not

easy to come to a decision, inasmuch, especially as there is an insufficiency of evidence on the subject.

"Still," he observes, "it is clear that it does not fulfil all the original expectations of Dr. Marshall Hall concerning it. It does not prevent convulsion. It does not always, or even usually, make the convulsions lighter. It does not prevent danger, for of the few patients upon whom the operation has been performed, three have died either in the fit or in connection with the fit, and of these three the opening in the windpipe was free from obstruction—at least in one. Under these circumstances, it becomes a question whether the benefits of the operation are sufficient to counterbalance the associated inconveniences and dangers, even where (which rarely happens) the asphyxial symptoms are consequent upon spasmodic closure of the larynx—and this question must remain in abeyance for the present.

"—— As to the rest, it only remains to be said that the accustomed rules of treatment must be applied to the correction of any special source of exhaustion, and particularly of those which are peculiar to female epileptics."

In reference to the treatment of affections allied to epilepsy, Dr. R. recommends a similar invigorating tonic, and stimulating course. The general conclusion is—

"That epilepsy and the cognate disorders must be treated upon the same principles, and that upon these principles every cause of depression and exhaustion must be sought after, and stimulants must be trusted to as the grand agents in recovery. In a word, physiology, pathology and therapeutics, concur in showing the necessity of a complete revolution in everything relating to the theory and practice of the maladies which have been under consideration, and they also justify the hope that in future the theory will not be a subject of mystery, or the practice a source of conjecture, perplexity, and failure."

The essay of Dr. Radcliffe is well deserving of an attentive perusal on the part of the medical practitioner. The views of the author in reference to the nature of muscular contraction, and the influence exercised upon it by nervous and other vital agencies and by physical forces may, it is true, receive but little favor; nevertheless, his general conclusions as to the pathological conditions under which tremor, convulsion and spasm ordinarily occur, which are by no means necessarily dependent upon the truth of his physiological doctrines, as well as his general directions for the treatment of those affections of which tremor, convulsion or spasm is the prominent characteristic, are worthy of serious consideration.—*Am. Jour. Med. Sci.*, Oct. 1854.

RELIGIO MEDICORUM.

Messrs. Editors.—If your eye has not met with the enclosed, from the New York Churchman of July 1st, I shall feel very glad to have brought it to your notice; much more so, if your judgment should coincide with mine, that it deserves, either in whole or in part, such a circulation as it would get in your wide-spread sheet. How will it cheer the drooping spirit of some unostentatious toiling brother who has not always rejoiced in the sympathy of the clerical profession! J. U. G.

July, 4, 1854.

The American Medical Monthly for May has a very thoughtful and judicious paper in defence of the medical profession, which we have for some time been intending to notice. The paper was drawn forth by an article that appeared some while since in Harper's Magazine, entitled "The Sacredness of the Human Body," from the pen of Prof. Tayler Lewis, attacking the recent legislation of this State for legalizing anatomical dissections, and charging the profession with peculiar tendencies to scepticism and materialism. For ourselves, we must confess no little surprise, that a man of such large and liberal thought, as Prof. Lewis has approved himself to be, should have felt called upon to take up arms against the law in question. For experience, we think, has amply proved the necessity of dissections to be so strong that the law cannot possibly prevent them, so that its wiser course manifestly is, to endeavor to regulate them. And it seems to us that by judicious regulations all the evil of them may be removed, and all the good secured. For is it not plain enough, that when legal provision is made for meeting the demands of science (and in this case the demands of science are the demands of humanity), society will both be and feel more secure against those illegal modes of supply which have hitherto been used, and the evil of which stands much less in the *fact* than in the *fear* of them? However, it is not our purpose to undertake a vindication of the law in this matter. So we will but add a short extract from the paper in hand, in answer to the question put by Prof. Lewis —"Why must the human body be dissected over and over again ten thousand times?" which is to use a very strange question:

"What are the *facts* upon this subject, and what are the necessities for continual

dissections?" To state them briefly, they are, that there is continual occasion for the performance of surgical operations that life may be saved; that these operations may be required at the hands of any member of the medical profession without a moment's notice, and without a moment's opportunity to consult books or friends; that the knowledge requisite for their performance cannot be obtained from books, or plates, or preparations, or models, and is only to be acquired by each individual, who is an applicant to be admitted to the medical profession, first obtaining it for himself; that by means of the information thus derived, as one of the essential requisites, the average duration of human life in civilized countries has been materially lengthened, while diseases before incurable are found to yield to the deductions of scientific observation. To illustrate each of these statements would be easy; but our space does not permit it."

But our main interest in the paper draws to what the writer says touching the charge of materialism and scepticism brought against medical men. And here our observation and sympathy are entirely with the writer. Nor can we understand either the wisdom or the justice of making such charges. Sceptics and materialists, no doubt, there have been, and are, in the medical profession; and so there are, or something as bad, in the clerical: but the number of such is in proportion by no means so large as to furnish any just ground of reproach upon them as a class. If, in such cases, the faults of a few are to be thus visited on the whole, what profession can escape? Therefore, the thing is unjust. And it is equally unwise. For the medical profession have, and it cannot be taken from them, for they deserve it, very great influence. Whatever may be said of individuals among them, they are as a class known to have great solidity of judgment and rectitude of character. Their ministrations are needful to all, and sure to be sought by all; and the nature of their work cannot but give them but great power over the opinions and sentiments of those to whom they minister. It is wise, then, to think of drawing people to christianity by representing the medical profession generally as not believing in it? So that, even if the thing were true, sound policy would pronounce it one of those truths that are to be spoken with a good deal of discretion and reserve. It is indeed but a scion of that old and mischievous error which would still be seeking repugnances and making issues between Revelation and Science, as if the word of God could be more authentic and sure than his works.

We have been thrown, much, into the company of medical men. And the experience we have had of them yeilds no sort of countenance to the charge thus brought against them. Our firm conviction is, that there is no class of men from whom there is more to be learned which the clergy ought to know, or less that it is wisdom to be ignorant of. Nor do we believe that any profession numbers, proportionally, more, or more intelligent and earnest supporters of religion, of good morals, and sound learning, of everything, indeed, that looks to the well-being of society. The church certainly reckons among them a great many of her most useful members. It is in her sacred walks that we have been most used to meeting with them; and we have seldom failed, according to our poor capacity, to find them at once right-hearted, sound-minded, and free-handed in her cause. The numerous and pestilent quackeries that beset their profession, and the experience they are obliged to have of them, enables them, in a peculiar degree, rightly to understand and appreciate the no less numerous and pestilent quackeries that swarm in religion. On many accounts, indeed, they deserve well of the church and of the clergy. That, as a class, they are not easily humbugged, arms them with a strong title to confidence in a cause where, as it is not "of an age, but for all time," men are not apt to fix their interest or their pleasure in cheating or in being cheated. Moreover, we have private as well as public reasons for standing up for them in such a measure as we can, and with such strength as we have. For we have ourselves known what it is to be poor and friendless, and to have some not ignoble aspirations which we were without the means of answering; and in such cases there have always been some of them to stand by us: in other words, we have found too many generous benefactors among them to see them touched without feeling a little touched ourselves.

We have slid, unawares, into a much longer ventilation of our own thoughts on the subject, than was our purpose at starting. We will close with a liberal extract from the paper in question:

"However Professor Lewis may *think*, the members of the medical profession *know*, that there is greater good to be done, not only to the bodies, but, indirectly, to the souls of men, by the prolongation of human life resulting from increased and thorough knowledge of anatomy, than by the anxious preservation of that '*appearance* of entirety which the conceptive faculty demands.' For years they have obtained this knowledge, though unaided and and opposed by ignorant law makers,

have conferred the boon of prolonged life upon rich and poor by themselves incurring the greatest risks.

Having found that, by a law appropriating to their use the bodies of a class who are without friends to suffer pain in consequence of their use, the science would be pursued, 'with the least sacrifice of feeling and the least of moral detriment,' they have proposed and obtained, in a few States, such an enactment. And in this they were right. The law was not desired that *more* subjects might be had, but that they might not bring with it the risk of ignominious punishment.

"But we cannot dwell longer upon this.

"A subject, forced upon us by the spirit of Professor Lewis's article, must, however, occupy a little space. That so learned a man as he, has repeated the stale slanders against our noble profession which are found in this article, is a painful thought. Neither are these things very uncommon among educated men. We could endure it from those who are not familiar with literature and history; but when Prof. Lewis accuses the whole medical profession, as he has done, of materialism and scepticism; when the learned Dr. Cogswell, of the Astor Library, takes occasion to go out of his way, in describing that institution, to sneer at medical men for not working without a fee, when no class of men render so much service gratuitously, it is time that we repelled the charges publicly.

"Professor Lewis asserts that the air of the dissecting room is unfavorable to a belief in the doctrine of the resurrection. The argument which would be necessary to render the error of this statement palpable, is simple, but for its illustration we must occupy more space than is at our command. We are compelled, therefore, to be content with asseriing (and our assertion should be as authoritive as that of Professor Lewis), that there is no class of educated men who are, as a body, more sincere, firm, and intelligent believers in this great doctrine than physicians. They, at least, understand that, when they say 'I believe in the resurrection of the body,' they do so because it is the teaching of the Scriptures, and not that of any human master. 'With what body do they come?' is not *their* question. It is in the sectarian class-room, not in the anatomical theatre, that this inquiry is mooted. The man who studies by dissection the structure of the human body, too often meets evidences of design not to ask who is their designer—and too often meet ultimate facts beyond which he cannot go, not to learn to submit his reason to the confession that there are many things beyond it. In Professor Lewis's own words, 'Fathers, and schoolmen, as well as modern metaphysicans, have filled volumes with arguments in respect to what constitutes bodily identity. Yet still—faith clings to the dogma and will not let it go.' And no one's faith clings more closely, and less doubtingly, than that of the members of the medical profession.

"It is not any more correct that we are materialists. Though we cannot discuss this topic, we will add that we can conceive of no better remedy for the mind folded in the cold, heartless embrace of materialism, than to pursue *thoroughly* the study of anatomy.

"We do not claim that of our profession (we do not include in its ranks the half-educated and cheating empiric), all the members are free from scepticism and error. But what we do assert is, that they have not had, neither do they have, occasion to fear comparison, in these respects, with any class of the community; and therefore the jibs and sneers, so freely bestowed upon us by other, educated men, are as undeserved as they are unkind. When men, as cultivated, as pure, as refined, as wise as any, claim that, for the study of their science and the good of the public health and morals, there is need of the study of anatomy, and point out the best way, in their opinion, for accomplishing it, it is neither in accordance with sound logic nor Christian principle for men of education and influence to point the long finger of scorn at them, and stir up the less-thinking populace by the cry of Ghouls, Vampires, and infidels."
—*Boston Med. and Surgical Journal.*

BITE OF THE VIPER IN FRANCE.

M. C. Dumeril, a professor in the Garden of Plants at Paris, was walking on the 12th of October, 1851, in the forest of Senart. He observed a viper, whose large size induced him to suppose that it might be a new species, and resolutely seized it with his hand, intending to kill it by breaking the spine; but whether the animal was not held with a sufficiently powerful grasp, it turned and bit him no less than five times in his hand and arms before the professor could succeed in destroying life.

He was fortunately accompanied by his son, a physician, who sucked the bites and applied lunar caustic. Still, the poison continued to operate. Dumeril, after fainting twice, was attacked with vomiting, and continued in a dangerous condition for twenty-four hours. He has, however, perfectly recovered.—*Revu Medicale*, Oct. '51.

AMERICAN ECLECTIC DISPENSATORY.

THE AMERICAN ECLECTIC DISPENSATORY.—By J. KING, M.D., Prof. of Obstetrics in the Cincinnati Eclectic Medical Institute, and formerly Prof. of Materia Medica in the Memphis Institute. Cincinnati: Moore, Anderson & Keys, 1854, pp. 1391.

The publishers of the American Eclectic Dispensatory, having politely sent us a copy of that work, we have taken pains to give it a careful examination, although pressed for time.

That a numerous sect of medical practitioners should grow into existence, become organized into societies, and have schools for medical instruction, embracing all the branches of regular institutions, adapted to their peculiar tenets, and with a materia medica, to a large extent botanical and indigenous, within ten years past, is certainly a phenomenon in the medical history of the United States of no ordinary interest. To trace out the history of this sect—which calls itself *Eclectic*, and which assumes to be catholic in selecting the good principles and agents of all medical systems—is neither our object, nor are we in command of the proper data to do it correctly; yet it may be well to remark, *en passant*, that had it not been for Samuel Thompson, who is now so carefully forgotten, and who was the originator of the so-called system of *Thompsonianism*, which a few years spread over this land like an epidemic, and gained credence with hundreds of thousands, *Eclecticism* would probably have been yet unborn. Thompsonianism formed the material basis, and gave the impetus to botanic medicine; the zealous energy of its early, earnest and bigoted practitioners, spread Thompson's ideas, especially over the Western States; the idea that each individual head of a family should in medicine, as in religion and politics, think and act for himself, presented so inviting an aspect to the yeomen of the land, that his medical system was adopted as a revelation, and Lobelia and Capsicum were extolled as the universal panacea for American diseases. In process of time, the practice fell into the hands of special persons; these became gradually more enlightened and less bigoted, some of them attended the lectures and clinical instruction of the medical schools, and returning among their associates modified their practice. The writings of Beach have doubtless had an influence, and the strong predilection of Prof. Tully, of New Haven, for our indigenous Materia Medica, upon which he dwelt pointedly in his lectures, induced some able men to turn their attention to the botanical practice. Meanwhile, the narrow limits of the Thompsonian Materia Medica had widened; to emetics, stimulants and diaphoretics, cathartics, alteratives and refrigerants, had been added, from the universal repudiation of mineral medicines, one after the other of the metalic and saline remedies were introduced, until in modern Eclecticism, with the exception of mercurials, antimonials, arsenicals and some others, the whole range of the metallic Materia Medica, with an extensive array of vegetable medicines, have been embraced, requiring for their description and arrangement the massive volume now under consideration. At present, some half dozen schools teach the doctrines of Eclecticism, and are gradually raising the *status* of their graduates, and it is probable that in a few years they will gravitate more and more towards regular medicine, until they are assimilated, carrying with them some valuable views and agents.

In thus alluding to the origin and progress of Eclecticism, it is with no disposition to decry its merits or bring it into disrespect; but rather as an explanation of what may be esteemed a remarkable episode in the history of American medicine and pharmacy.

Our limits will not admit of a detailed notice of the "Eclectic Dispensatory" of Dr. King. The author remarks:

"It may not be known to some of the readers of this work, that a great amount of highly important knowledge, in reference to the therapeutic value of remedies, and especially of our Native American plants, has been accumulated by liberal-minded physicians in America; which knowledge, owing to various causes, has never been yet sufficiently brought before the medical profession generally, and has not been embodied in the voluminous standard works of Pereira, Wood & Bache, Dunglison, etc. This knowledge being especially American in its origin, and having produced a marked peculiarity in the practice of a large number of American physicians, we deem it proper to style this work the "AMERICAN Eclectic Dispensatory," to distinguish it from other works, which contain only the ideas and views which are common to both American and European physicians."

Our author, after enumerating more than one hundred and twenty indigenous plants, and numerous, so-called *principles*, as aletrin, apocynine, caulophylin, &c., the knowledge of which, he claims as the fruits of Eclecticism, remarks:

"The extensive use of the foregoing articles, and their consequent substitution on many occasions, for the favorite remedies formerly in use, constitute a practical improvement, the value of which, can scarcely be estimated; and the simplest statementof what we believe and know to be true, as regards the superior success in practice, resulting from these improvements in the Materia Medica, would be regarded by those entirely unacquainted with the facts, as the language of extravagant enthusiasm. For their truth, we can but appeal to the final tribunal, *universal experience;* and it is partly with the view of facilitating this appeal by candid physicians, that this volume is laid before the public; in which, we trust, every medical reader will find sufficient information, in reference to the favorite remedies of Eclectic physicians, to enable them to enjoy in practice, what we deem the richest fruits of modern clinical experience; constituting the most recent and important practical improvements in the healing art."

These extracts will exhibit that Eclecticism has a good opinion of itself, whatever may be the esteem of others, a trait usual to reformers; yet like many other movements in the same direction, it embraces many old ideas and old agents in new dresses and new shapes, commingled with some originality.

But to return to our task. The work is divided into three parts. The first 130 pages, are devoted to a succinct description of the natural orders of plants contributing to the Materia Medica, with the characters of the genera ranged under each, which supercedes the necessity of noticing them in the second part of the work.

The second part, devoted to the Eclectic Materia Medica, embraces 840 pages; and describes 540 distinct articles, both vegetable and mineral. Among the latter, are chromic, hydriodic, hydrochloric, nitric, nitromuriatic, phosphoric and sulphuric acids, alum, muriate of ammonia, salts of iron, zinc, lead, potassa, soda, etc., iodine, bromine, sulphur, phosphorus, and many other inorganic bodies. In the description of substances, the author generally ranges them under their scientific name, and gives the vulgar names after. The specific characters then follow, then the history including habitat, parts used, and chemical characters, followed by an account of the medical properties and uses. A striking feature of this part of the work, is the almost total absence of references to authorities or discoverers, unless they be Eclectic; a stranger to the subject, glancing over these pages, would suppose the Eclectics were a highly scientific and learned body, that they had extensively investigated the chemical relations of their Materia Medica; but this arises from the fact that the author rarely gives credit to chemical writers and investigators. Long processes for new principles, complex arrays of constituents, and intricate reactions, are numerously given without allusion to their authors, (in most instances,) unless they be Eclectics, when they are brought forward in bold relief. The injustice of this course, and its egotistical results, deserve to be pointed out. The author, at the conclusion of the preface, acknowledges his indebtedness to a long list of works, as the U. S. Pharm., U. S. Dispensatory, Pereira, Christison, Dunglison, Mohr and Redwood, Journal of Pharmacy, etc. etc.; but the discoverers and observers themselves, who have given time and talent to eliminate the knowledge of facts, are, in general, left unnoticed. One of the chief difficulties with the author of a Dispensatory is to investigate the accuracy of chemical, botanical and therapeutical statements, and to give the authorities upon which they rest, that the reader may satisfy himself, if disposed; or subsequent authors consult the original memoirs. But our Eclectic author feels satisfied to declare results and make assertions, leaving the reader to believe or doubt his statements without redress. One of the most prominent features in that part of Dr. King's work which is strictly Eclectic, is the account of the "principles," "resinoids," or "concentrated remedies," which are adopted in practice. Their nomenclature of these substances is entirely adverse to chemical science, inasmuch as it conveys the idea of distinct neutral proximate principles; when in most instances, they are merely complex associations of distinct principles, in which one or more predominate, and they seem to have got the idea, that to purify an organic principle, is to strip it of its therapeutic power. Why then is not extract of bark stronger than quinine or cinchonine? or crude resin of jalap more effective than jalapine? Perhaps no one of the Eclectic remedies has been more extolled than the resin of podophyllum peltatum, Dr. King claims the discovery of the therapeutic value of this resin, which he had used in an impure state some eighteen years ago. Wm. Hodgson, Jr., had previously isolated this resin in a modified state; but its true nature and place among chemical principles, was not discovered until John R. Lewis proved its close analogy to jalapin in being soluble in ether; Mr. Lewis, who made his experiments in the summer of 1846, under our directions, isolated podophyllum resin

in a colorless state, and we well remember when he imprudently took six grains of it, producing bloody stools, griping and vomiting with much debility. Our author, at page ix. of his preface, remarks, "but unfortunately for the purity and medicinal activity of Lewis's podophyllin, it requires *six grains to act as an ordinary cathartic*, while that of Merrell requires only half a grain to a grain and a half, thus proving the latter to contain three or four times as much of medicinal activity of the root, as the former."

The *aloesin* of Robiquet, and the *aloin* of the Messrs. Smith, of Edinburg, are described in detail in separate chapters, without any allusion to their discoverers; and so of other principles.

In speaking of ethereal oil (extract) of capsicum, Dr. King states that it is frequently filled with "*crystals* of capsicin in dendroid forms." These apparent crystals are the solid, fatty matter which separates from the ethereal extract, and which has been described by Dr. Plummer, of Richmond, Ind. (Amer. Jour. Pharm. vol. 24, page 32.) Pure capsicin has never yet been isolated; the so-called capsicin of Bracconot, is a mixture of principles. (See U. S. Disp. 10th edition.)

So far as our examination has extended, we cannot find a single instance in this work of a real chemical analysis of eclectic origin, and the obscure and ignorant manner in which writers in the eclectic journals announce and describe their discoveries, goes to corroborate this. The numerous plants which are brought forward as Eclectic remedies, embrace many of undoubted value, and which owe their virtues to distinct principles—chemically distinct—these afford an ample field for discovery. Let correct chemical research be applied, and the impure compounds which now figure as "principles," and which are a stigma on the science of the Eclectics, will soon give way to the true, active, proximate principles where these exist. The graduates of the Philadelphia College of Pharmacy have done more in this field, than any other class of investigators, in the pages of the American Journal of Pharmacy, witness the analyses of Lobelia, Hydrastis, Podophyllum, Rhus, Populus, Veratrum, Prunus, etc.

Having been thus candid, as regards some of the short-comings of Dr. King's book, it would ill become us to pass over the real merits of the work, which embodies a large number of facts of a therapeutical character, which deserve to be studied. Many of these are crude, but yet are capable of being advantageously adopted by physicians, especially country physicians who have the advantage of more easily getting the plants. To trace much of this knowledge to its original germs, we would have to go back to the Indian tribes and the early settlers of the West, who learned from them, or by accident, the virtues of a large number of our native plants. Quack doctors and herb doctors have aided. We have only to look back in the history of regular Therapeutics, to find a similar origin of the knowledge of some of its valuable remedies; and it is but the other day, since the ignorance of a negro slave started the train of circumstances, which developed the remarkable qualities of the Gelseminum of our Southern States, and which now figures in the list of substances "strictly eclectic." The attention which is now being given by the Eclectics, in classifying and arranging facts and observations relative to American plants, will certainly be attended with excellent results; and we may look for their greater progress when more real science becomes commingled with their recorded observations.

The third portion of the work, on Pharmacy, is arranged as in the United States Dispensatory, with a preliminary chapter on the generalities of practical pharmacy. Eclectic pharmacy is largely indebted to William S. Merrell, a druggist of Cincinnati, who has contributed a chapter to Dr. King's work, on the "Composition of Vegetables and their proximate principles," &c. page 994-1004, and another on the "Fluid Extracts," at page 1067, in which he has given correct views of the selection and adaption of menstruæ, the means of extraction, etc.; which are the more necessary, as a large number of those who prepare eclectic medicines are inexperienced.

In glancing over this part of the book, one might easily think he was looking at the United States Dispensatory, but he is soon disabused of the error, by meeting with such names as the following *Extractum Caulophylli Hydroalcohalicum. Extractum Ptelæ Hydroale: Ferri et Salicina tartras Lotio Hydrastis et Aconiti, Pilulæ Podophyllini Comp: Pulv: Leptandrini Comp: Troschisi Dioscoreini*, &c. &c. In fact, the pharmacy of eclecticism proper, is strictly *galenical;* the exact chemical preparations are nearly all those of our shops. Such preparations as *Ferri et morphia citras. Ferri et salicinicæ tartras. Ferri et quiniæ tartras*, which are brought forward as the discoveries of Prof. J. Milton Sanders, are, like the citrate of iron and quinine of our own shops, inexact and empirical preparations, especially when made by the directions given; and it is a little to be wondered at, that so odd and ill assorted a

combination as tartrate of iron and morphia should have found the prominent place Dr. King has given it, with so special a parade of the claims of the discoverer.

The galenical preparations, extracts, syrups, tinctures, etc., peculiar to the eclectic dispensatory, are mostly well constructed preparations, containing the virtues of the ingredients used; and we have no doubt but many of them are valuable agents. An account of one of these. Leptandrin, we have copied at page 505, to which the reader is referred.

It would afford us much pleasure to extract a number of other articles from the Eclectic Dispensatory, that would give a better idea of the peculiar views and opinions of this sect of practitioners; but the length of this article admonishes us to stop; yet we cannot close without adjudging to Dr. King the merit of having improved on the works of his predecessors, in giving perspicuity and order to the vast mass of material collected under the name of botanical medicine, and for his determination to oppose the wholesale quackery of eclectic chemical institutes. The eclectics have opened a wide field for the rational therapeutist, and the organic chemist; and we hope that physicians and apothecaries will not be repelled by a false pride or an unjust feeling of contempt, from reaping the harvest which will accrue to observation and experiment. Although the Eclectics have "stolen our thunder" largely, they have also *thundered* a little themselves; and raised the *status of* a large number, who might have yet been Thomsonians or even quacks, and for this they are to be commended.

As regards the book itself, it is gotten up in a highly creditable manner, is well printed on good paper, and, so far as we have examined, contains but few typographical errors.—*American Journal of Pharmacy*, November, 1854.

FERRATE OF POTASH AN ANTIDOTE FOR ARSENIC.

Chattel has found that one drachm of ferrate of potash precipitates, in an insoluble form, forty grains of arsenic, and that the hydrated peroxide of iron is much less effectual, as one ounce of it only precipitates five grains of arsenic; consequently, he recommends the above salt as an antidote. Whether the strong alkaline action of the ferrate will prevent its being so used, remains to be seen. It has not as yet been given in a case of poisoning.—*Annals Pharmacy*, May, 1851.

NEW REMEDY FOR TÆNIA, ETC.

Tænia is of so rare occurrence with us, that no individual practitioner sees enough of it to enable him alone fairly to test any medicine. I therefore beg to call the attention of my medical brethren to a remedy readily obtained, cheap, and pleasant, which I believe will be found quite sufficient. In 1852 I reported a case of radical cure of tænia, by the use of an emulsion of pumpkin seeds, after the oil of terebinth and even kousso had signally failed. The seeds abound in fixed oil, which is the anthelmintic principle, and has been employed with the happiest effect in half-ounce doses twice in the day, followed by an ounce of castor-oil.—Prof. Paterson, in *Philadelphia Medical Examiner.—Lancet, Feb.* 4, 1854. *p.* 132.

INDIANA MEDICAL JOURNAL.

The first number of a new periodical, with this name, has been received, and will be placed upon our list of exchanges. It comes to us well filled with practical and interesting matter, furnishing abundant evidence of the ability of its editors and correspondents. Drs. W. H. Byford and Hugh Ronalds, professors in the Evansville Medical College, are the editors; and from their position, their reputation as teachers, and knowledge of the wants of the profession in regard to medical literature, we feel assured that the Journal will take a high rank among the numerous Medical Journals now published in the country. It is to be issued quarterly, at two dollars a year, payable in advance.—*Bos. Med. and Surg. Journal.*

Part 3. Editorial.

CALOMEL AND BLEEDING.

The enquiry is very often made, do Eclectic Physicians give calomel and resort to general blood-letting—and does the Eclectic Medical Institute of Cincinnati teach or recommend either? In answer to these enquiries we will say, that true Eclectic Physicians do not use either for the very reason that they know them to be injurious to the human system, and one of the great evils of the old system of practice, and as such, they are discarded by the Institute and all Eclectic physicians, not however, before a better system had been discovered.

N.

PROGRESS OF ECLECTICISM.

Extracts from Letters.

J. J. De La Hay, M.D., of Taylorsville, Christian co. Illinois. says that the Eclectic system of medicine is now fully established in his vicinity. The success which has attended his practice has convinced all unprejudiced observers of the reality of the claims of our system. The Dr. says that he was opposed in every possible way when he first located there; this was no doubt from wrong information in regard to this subject. He also says he can locate five or six good Eclectic physicians in his county.

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Dr. J. D. Collins, of Madisonville, Hopkins co. Kentucky, sends two cases of Phlegmasia Dolens. He speaks of his method of treating these cases as "a new treatment," and as a new and successful method presents his cases to the Journal, as follows:—

"Case 1. Mrs. L., æt. 21, a lady of delicate appearance was delivered of her first child about six months previous to my first call, which was on the 14th November, 1853. I was informed on my arrival, that some four days previous, she was attacked with chills and hard rigors during the day and night, succeeded by deep seated pain in the left lateral hypogastrium, and extending down the left leg with swelling. Upon examination I found the limb much swollen and of a shining white color—considerable enlargement of inguinal glands, and a hard cord running down the inside of the thigh, extremely sensitive to the touch, more so about the calf of the leg than elsewhere, pulse 130 per minute, countenance pale, tongue furred but moist, bowels constipated no action on them for several days, urine scanty and high colored, skin very dry and patient manifesting great uneasiness; the temperature of the limb much elevated.

Treatment.—Gave a cathartic to relieve the bowels, and applied a cold wet roller from the toes to the body of the left side—and a blister to the left groin just over the exit of the femoral vein. Left sulph. quinia and tinct. aconite and directed them to give five grains of quinia with ten drops tinc. aconite every four hours in cold water, and to keep the roller wet with cold water until the temperature of the limb was reduced to the normal standard.

16th. Found the patient much improved, pulse 98, skin moist, limb much less painful, its temperature much reduced; cathartic had acted well; blister drawn finely; patient slept tolerably well last night; ordered the blister to be dressed, and the quinia and aconite, and wet roller continued.

18th.—This morning the patient expressed herself as well; had suffered but little pain since my last visit—pulse 72, soft and full, skin moist, temperature of limb normal, swelling almost entirely reduced, bowels had acted spontaneously, appetite good enough—ordered sulph. quinia and pruss. iron in two grain doses every six hours for a few days, to sustain circulation, etc.; from this time she recovered without any untoward circumstance. One of the peculiarities of this case was, that the phlegmasis did not set in until about six months after the birth of her child.

"Case II. Was called 4th January, '54, to see a woman of color, found her complaining of very severe pain in the left groin and leg, which she said had been running for some days, the leg was immensely swollen and extremely sensitive to the touch, pulse 142, tongue furred, white but moist, bowels very costive, the swelling I found had extended to the left buttock and labia pudenda. This woman had been delivered of a child about 16 days previous to my visit, and the pain and swelling commenced ten days after her delivery.

Treatment.—A cathartic of podophyllin and leptandrin, applied a blister to left groin, bandaged the limb from the toes to the body with cold wet roller, and directed as soon as the bowels were acted upon she should have sulph. quinia and tinct. aconite ss. five grains every four hours in cold water; and directed that the roller should be kept constantly wet with cold water unless it should produce chilliness.

Jan. 5. Cathartic acted well, blister had drawn finely, but still the patient was suffering very much, as much as the day previous, pulse 126, skin a little soft—continue the quinia and aconite and wet roler.

Jan. 7. This morning found the patient much improved, pulse 86, soft and full, skin moist, limb less swollen and much less painful,—says she "feels almost well;" directed another cathartic and continuation of quinia and aconite every six hours, and tightened the bandage. They were to let me hear from her in two days, which they did, reporting her well; except the leg appeared to be a little swollen and rather stiff. We directed a few adhesive straps

round the leg merely for the purpose of giving it support for a short time until it would be reduced to natural dimensions. The case then recovered without further difficulty."

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Edward Hopkins, M.D., of Sylvania, Wis., communicates the following:

"Having treated many cases of Scorbutic Diarrhea, I will offer the following recipe, which I have found very efficient, but not as pecific:

℞ Opii pulv. grs. j,
Disulphate of quinia, v,
Gum. catechu pulv x. M.

Give a powder every six hours. The dose and the time of giving it should be varied according to the indication of each individual case.

Regimen should be particularly observed; the food should be light and nourishing; meat soups with good vegetables well cooked and thoroughly seasoned with salt, is the food adapted to such cases.

The above prescription has cured cases of Scorbutic Diarrhea of some months standing, that have resisted a great variety of treatments."

BOOK NOTICES.

The Modern Horse Doctor: Containing Practical Observations on the causes, nature and treatment of Diseases and Lameness in Horses. Embracing the most recent and approved methods, according to an enlightened system of Veterinary therapeutics, for the preservation and restoration of health. With illustrations. By *George M. Dadd*, M.D., Veterinary Surgeon, author of the Anatomy and Physiology of the Horse, and the Reformed Cattle Doctor. Sixth Thousand. Boston. John P. Jewett & Co. 1844. pp. 432.

The above title to a work recently placed in our hands may not appear very attractive to the readers of our Journal, yet we are of the opinion, when once the book is taken in hand for examination, it will be found difficult to lay it aside, until it has won the favorable attention of the reader.

We find in most villages and cities, Hereditary Horse Doctors, as we find self-made Botanic and Indian Doctors, whom no one would suppose *could* have been made Doctors by any one but their own immaculate selves,—and truly do they always bear the impress of their origin. These *natural* or self-made functionaries on man and beast, are so generously endowed by Dame Nature, that they disdain to be the recipient of any knowledge or information, obtained from books or other sources; and as *they* know of no better modes of practice than those they have discovered and adopted, they are positive the world has none to offer to their research. Hence they possess a most sovereign contempt for all *book* knowledge.

Doctor Dadd is one of these favorites, who being educated in London, and after the most approved European ideas of Veterinary practice, has manifested an independance of research and thought, until he has discarded entirely the immense doses, the poisons, and the blood-lettings of his teachers. He now has assumed the position of a teacher, and is giving lessons both by his writings and by his practice, of the greatest value to Humanity and Animality. He writes plain. *enlightened, educated*, common sense, and is sure to produce a vast change in the theory and the practice of the Veterinary art. His theories of disease are obtained from a familiar acquaintance with European writers, confirmed or modified by personal observation and experience; and his practice is such as will commend itself to all unprejudiced men,—based as it is on the same principles so successfully advocated and practiced by Eclectics on the Human subject.

Heretofore many lovers of the proud and gentle horse have been deterred from attempting a cure of his ailments, because Veterinary authors have recommended a course of treatment so utterly discordant to the dictates of reason and of humanity, but those who read this work, will perceive there is no occasion either to neglect this noble companion of man, or to treat the brute in a manner to prove the physician more brutal than the patient. As all physicians are supposed to take a personal intesest in at least *one* horse, we advise them at their earliest convenience, to add "The Modern Horse Doctor" to their libraries.

Dr. Dadd is also the author of "The American Reformed Cattle Doctor, a work of deep interest to those engaged in rearing cattle and sheep. N.

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