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LECTURE IV.

Inflammation—Blood Letting—Abstinence.

GENTLEMEN:

When medical men hear that I am in the habit of treating all kinds of disease *without* Blood-letting, they generally open their eyes with a stare, and ask me what I do in INFLAMMATION. Inflammation!—who ever saw any part of the body *on fire*, or in FLAMES? for the word, if it means any thing at all, must have something like that signification. To be sure, we have all heard of "*spontaneous* combustion," but I confess I never saw it, and what is more, nobody that ever did! What, then, is this inflammation—this term which our great modern doctors so dogmatically assure us is the head and front of every corporeal disorder? It is a metaphor merely—a theoretical expression, which, torture it how you please, can only mean a quicker motion and a higher temperature in the moving atoms of a given structure, than are compatible with the healthy organization of that structure. When you find a considerable degree of heat and swelling, with pain and redness in any part, that part in medical language is *inflamed*. Now, what are these phenomena but the signs of approaching structural *decomposition*? During the slighter corporeal changes, the coincident variation of *temperature* is not always very sensibly perceptible; but whenever there is the least tendency to decomposition, this thermal change is sure to be one of the most prominent features. The phenomena of inflammation, then, very closely resemble, if they be not indeed identical with, the chemical phenomena which take place preceding and during the decomposition of inorganic substances. Now, when this kind of action proceeds unchecked, the result in most cases, is a tumour containing *purulent matter*, which matter, being a new *fluid* product, differs entirely in its appearance and consistence from the original tissue, in which it chanced to become developed. This tumour we call *abscess*. And how is it to be cured? In most instances, the matter, after working its way to the surface, escapes by an ulcerated opening of the integument, while in others, an artificial opening must first be made by the knife of the surgeon. In either case, the part in which the abscess was situated, generally recovers its healthy state by the reparative powers of nature. But there is yet another mode in which a cure may be effected, namely, by *Absorption*; that is to say, the matter of the abscess may be again taken up into the system, and by the inscrutable chemistry of life, become once more a part and parcel of the *healthy* fabric of the body!—being thus again reduced to the elements out of which it was originally formed. How analogous all this to the operations of the chemist, who, by means of the galvanic wire, having first reduced *water* into its elemental gases, again converts these, by electrical means, into the water from whose decomposition they proceeded! Such, and many more chemical operations, Nature daily performs in the animal body; and that she does all this through the electric or galvanic medium of the BRAIN and NERVES, cannot possibly admit of dispute, when you come to consider that under the influence of a Passion (the most unquestionable of *cerebral* actions) large abscesses, and even solid tumours, have often disappeared in a single night. Gentlemen, there is not a passion,—Grief, Rage, Terror, or Joy,—which has not as effectually cured abscesses and other tumours, as the most powerful agents in the materia medica. The writings of the older authors abound in instances of this kind. But there are yet other terminations to the inflammatory process. For example, after having proceeded, to a certain extent, in the way of change, but still falling short of actual purulent decomposition, the atoms of the inflamed part, by the renewal of a healthy condition of the body generally, or by the direct application of cold or other agency, may again, with more or less quickness, subside into the degree of motion and temperature characteristic of their natural revolutions. This termination is called *Resolution*. When the inflammatory action is more than usually

rapid, the result may be the complete death of the part implicated,—a black inorganic mass being left in the place of the tissue which it originally composed. This last we term *Mortification* or *Gangrene*.

But, Gentlemen, medical men extend the term inflammation to some other morbid processes, which, under the various names of Gout, Rheumatism, and Erysipelas, we shall in another lecture, have the honour to explain to you. A great many books have been written upon the subject of Inflammation, but I must own I never found myself one whit the wiser after reading any of them. Their writers, in almost every instance, use language which they do not themselves seem to have understood, otherwise they would have confined themselves to one sense, instead of including under the same term, states the most opposite. Were I to tell you that the word "Inflammation" is used by many writers when a part is more than usually *cold*, you would think I was laughing at you; yet there is nothing more true, and I will give you an instance.—A carpenter had his thumb severely bitten by a rattlesnake; and the effects of the venom are thus described by one of the most learned of living medical writers, Mr. Samuel Cooper:—"The consequence was, that in ten or twelve hours, the whole limb, axilla, and shoulder became very *cold* and enormously swollen up to the neck; in fact, the whole surface of the body was *much below* the natural temperature. The swelling, you know, is produced by that kind of INFLAMMATION which is called diffuse *inflammation* of the cellular tissue."—[MR. S. COOPER'S *Lecture in* MED. GAZETTE.] Gentlemen, was there ever such an abuse of words—such an abandonment of common sense as this? The arm was "*very cold*"—"much *below* the natural temperature,"—yet it was *inflamed*—on fire!

Restricted to the sense in which I have already spoken of the term, namely, heat, swelling, and pain, "inflammation," like "fever," or any other abstract word, may be used as a "counter to reckon by," and, like almost every other phonomenon of disease, it is a developement of previous constitutional disturbance. I do not speak of immediate local inflammation produced by a chemical or mechanical injury—leaving that to the surgeons to elucidate or mystify, according to their particular inclinations; I talk of inflammation from a general or constitutional cause. Has an individual, for example, exposed himself to a cold draught, or to any other widely injurious influence, he shivers, fevers, and complains of pain, throbbing, and heat in the head, chest, or abdomen, phenomena gradually developed according to the patient's predisposition to organic change in this or that locality. Phrenitis, Pneumonia, Peritonitis, (technical terms for inflammation of the *Brain*, *Lungs*, and *Membranous covering* of the Bowels,) are consequences or features, not *causes* of the constitutional disorder. But are the symptoms of inflammation in such parts equally intermittent with the diseases of which we have already treated? Listen to Lallemand:—"In inflammation of the brain," he tells you, "you have spasmodic symptoms, slow and progressive paralysis the course of the disorder being *intermittent*." So that inflammation, like almost every other morbid action, is for the most part a feature or developement of intermittent fever. Dr. Conolly, in his Cyclopædia of Medicine, says "diurnal *remissions* are distinguished in EVERY attack of inflammation." Now, if you prefer the evidence of another man's eyes to your own, this statement ought to be more than convincing, for it comes from the enemy's camp. Gentlemen, it is the language of an opponent, the Editor of the British and Foreign Medical Review—the same individual who lately told his readers that the *Unity of Disease* was a silly book. If it was so silly as he says, why was he so silly as to abuse it? But against his authority,—if *authority*, in these days, be still permitted to take the place of *examination*—you have the opinion of Sir Astley Cooper, who, with his usual candour and good feeling, at once pronounced it to be a "valuable work." Now, who in his senses would think of comparing these two men together,—Astley Cooper, the father of English surgery, and John Conolly, the *Mad*-doctor?—"Hyperion to a satyr!" But, Gentlemen, you have no idea what tricks these *medical* Reviewers are in the habit of playing. Some time ago I showed up one of them in a way he will not soon forget. Dr. James Johnson, were he here, would know the person I mean; for *he*, Gentlemen, as I have already told you, reviewed my "Fallacy of the Art of Physic as taught in the Schools, in the Medico-Chirurgical Review." A most unlucky business it turned out for him, for were I to tell you how I replied to his criticism, you never could again hear his name mentioned without laughing. Why has he not, in revenge, "cut up" the *Unity* of Disease? The editor of the Medical Gazette, not long ago, pretended to Review that work. He did not, however, like Dr. Conolly, call it a silly book;—he admitted, on the contrary, that it had "both pith and point" but he contended that it was only a straw thrown up at a lucky moment when the wind of medical opinion was turning against the "bleeding mania,"—a mania which he said he also reprobated. I wrote to him to ask,

if that were really the case, why he Mr. Editor had never reprobated that mad practice before, and knowing it to be so murderous in its effects, as he said he did, how in common humanity he allowed my strictures upon it to remain so long unnoticed in his pages; while all the years that these strictures had been before him, he had not only continued to fill his journal with cases treated after the sanguinary fashion, but had even held them up to the world as *models* of practice! True, in one or two instances, where the person he quoted was his enemy, he had certainly hinted that the treatment was bad. But these were very sorry exceptions. So far from my book being a straw which showed which way the wind blew, I was the first, (I maintained) who had the courage, alone, and in the face of much opposition, to set *that wind* a-blowing; and I added, that before I died I hoped to raise such a *stormy* one as would purify the medical atmosphere of some of its present corruption and foulness! But of that letter my good friend the Editor took no notice whatever; nor was I surprised at it, for the Medical Gazette, as some of you may know, is a mere organ and supporter of the College of Physicians; and so much the slaves of that body are the booksellers who publish it, that when about two years before, I sent them the MSS. of this very Unity of Disease, they actually refused to bring it out for me on any terms!—the editor of the Gazette can best tell at whose instigation,—for he is, or was then at least, the examiner of all their medical manuscripts, and therefore perfectly acquainted with that particular secret. Like a good servant, doubtless, he had too much regard for his employers to permit them to usher into the world such a terrible exposure of their professional patrons. Before quitting this matter, I may mention, that I am frequently asked why my writings have never been taken up by the *Lancet*, the Lancet which talks so constantly and so grandiloquently of its reforming and liberal politics! I can suggest a reason;—that periodical is now the organ of the Apothecaries. Mr. Wakley, its proprietor, was, in early life, a medical reformer, and much good he certainly at one time did in that character. *Now*—but I shall say nothing more of him on this occasion except *Cave canem!*

To return to inflammation. Whether the particular condition, so called, be termed erysipeloid, gouty, rheumatic, scrofulous, it is still *remittent;* and if you question the patient, he will almost in every case admit that it was preceded or accompanied by cold or hot fits or both. May not inflammation, then, yield to Bark—to Quinine? The late Dr. Wallace of Dublin maintained the affirmative, dwelling more particularly on its good effects in that disorganizing inflammation of the eye, termed *Iritis*. in which disease he preferred it to all the routine measures, which, *on the strength of a theory*, medical men have from time to time recommended as *antiphlogistic*. During an attack of Ague, he tells us, *Iritis* with inflammatory affection of other parts of the eye, occurred in the person of a patient under his care. "For the former complaint, namely, the intermittent fever, he administered Bark; by the exhibition of which, he was surprised at seeing the *inflammatory affection of the Eye*, as well as the fever, *disappear*." This was the case which first led him to suspect the fallacy of the blood-letting system in inflammation of the Eye. Now I shall tell you what first led me to entertain similar doubts of its efficacy. A medical officer of one of Her Majesty's regiments serving in India, couched a woman for cataract. The next day, the eye having become inflamed, according to received practice he bled the patient; but scarcely had he bound up her arm, when she fell as if she had been shot, and lay to all appearance dead. With the greatest difficulty, he succeeded in recovering her from this state; but it was not until four long hours had passed, that he felt that he could safely leave her with ordinary attendants; for during the greater part of that time, when he ceased to chafe her temples or otherwise call up the attention of the brain by the application of stimulants to the nose, mouth, &c., she relapsed into a death-like swoon. More than once he was even obliged to inflate her lungs to keep her from dying. But, in this case, gentlemen, the blood-letting did NOT cure the inflammation; for the next day the eye was more painful and inflamed than ever, and the poor woman, after all the blood she had lost—and who will say that she was not bled enough?—did not recover her sight. It is now many years since that case came under my observation, and it made an impression on my mind I shall never forget. Had that woman died, would not everybody have said that the gentleman who had bled her had killed her? and very justly too, though he, good man, only conscientiously put in practice what he had been taught to consider his duty. You see, then, that blood-letting *even to the point of death*, is *no cure* for inflammation; and that it cannot *prevent* its developement, I shall furnish you with ample evidence before I finish this lecture. Meantime, I will tell you what can do both—Bark and Opium. These are the remedies to give before an operation, and they are also the remedies best adapted for the relief of inflammation after it has come on;—and their

beneficial influence will be more generally certain in the latter case, if you first premise an emetic, and wait till its action has ceased before you administer them.

"The Peruvian Bark," says Heberden, "has been more objected to, than any of these medicines (Bitters) in cases of considerable inflammation, or where a free expectoration is of importance; for it is *supposed* to have, beyond any other stomach-medicine, such a strong bracing quality, as to *tighten the fibres* (!) still more, which were already too much upon the stretch in inflammation, and its astringency has been judged to be the likely means of checking or putting a stop to expectoration." *All this appeared much more plausible when taught in the* SCHOOLS OF PHYSIC, than probable, when I attended to fact and experience. The unquestionable safety and *acknowledged use* of the Bark, in the *worst stage* of inflammation, when it is tending to a MORTIFICATION, affords a sufficient answer to the first of these objections; and I have several times seen it given plentifully in the confluent small pox, without lessening in any degree the expectoration."

Some time ago, I was called to see a young gentleman, who had a swelling under the arm-pit, extending to the side. The skin was red and hot, and the tumour so painful as to have deprived him of all rest for the three previous nights. Though suppuration appeared to me to have commenced, I at once ordered Quinine, and begged him to poultice the tumour. By these means he was perfectly cured in three days, the swelling having, in that period, completely disappeared. The subject of this case was, in the first instance, attacked with shivering and fever, which had repeatedly recurred, but disappeared under the use of the quinine. Matter, I have no doubt, was absorbed in this instance, but so far from this absorption producing shiverings,—which, according to the doctrine of the schools, it ought to have done,—the very reverse took place.

I shall now give you one of many instances of indubitable and palpable inflammation —if the word have a meaning at all—as a proof of the value of Opium in the treatment of this affection

Case,—An old officer, Major F., 89th foot who had previously lost one eye by acute Ophthalmia, notwithstanding a vigorous *antiplogistic* discipline, had the other attacked in a similar manner with great pain, redness, and throbbing. I found him leaning his head over a chair-back, his face indicative of intense agony. For ten nights, he assured me, he had been unable to tolerate any other position, and it was only towards morning, when overcome by suffering, that he could, at last, obtain any thing like repose. The pain came on at bed-time in an aggravated degree, and remitted principally in the afternoon. Three grains of opium which I directed him to take half an hour *before* the recurrence of the expected paroxysm, procured him a whole night of profound sleep, and his eye, in the morning, to his astonishment, was free from pain, and only slightly vascular. He had been repeatedly bled, leeched, purged, and blistered, without even temporary benefit—indeed, the gentleman who attended him, in the first place, plumed himself upon the activity of his treatment.

But how, you may ask me, can PLEURISY and PNEUMONIA be cured without Blood-letting? What are Pleurisy and Pneumonia? Any rapid tendency to *atomic* change in the substance of the lungs, from the real pain and presumed increase of temperature at the same time developed, is termed Pneumonia—*vulgo* inflammation of the lungs. A similar tendency to change in the *atomic* relations of the membrane (*pleura*) which covers the outer surface of the lungs, or of that portion of it which is continued over the inner surface of the chest, is called the Pleurisy. Now, authors have thought it a fine thing to be able to tell pleurisy from pneumonia, but the thing is impossible; and what is more, if it were possible, so far as the treatment is concerned, it would not be worth the time you spend in doing it. Such distinctions only lead to interminable disputes, without in the least tending to improvement in practice. This much, however, I do know,—both diseases are developements of intermittent fever, and both may often co-exist at one and the same time. And in the Medical Gazette there is an excelleut case of the kind, which, as it in a great measure illustrates the chrono-thermal doctrine and treatment in both, I shall give to you in the words of its narrator. "The patient's symptoms were difficult respiration, dry cough with stringy expectoration pulse full. The disease commenced with an intense *fit of shivering*, followed by *heat* and a severe cough. Every day at noon there was an *exacerbation* of all the symptoms, commencing with very great shivering, cough, and *intolerable pain in the chest*, a fit of *suffocation*, and finally *perspiration*;—at the end of an hour the paroxysm terminated. Ammoniacal mixture was first given, then *two* grains of *Quinine* every two hours. The very next day the fit was scarcely perceptible; the day after, there was no fit at all. An observation worthy of remark is, that the symptoms of PLEURO-PNEUMONIA,—which continued throughout in a very slight degree, it is true, in the intervals of the paroxysms —disappeered completely, and in a very short

time, by the effect of the sulphate of quinine."

Who are the persons most subjected to inflammatory disease of the chest? Medical *theorists* answer, "strong healthy labourers, and people much exposed to the air." How these gentlemen deceive themselves! If I know any thing at all upon any subject, I know that the fact in this case is just the reverse. The subjects of chest-disease in my experience have been almost all persons of a delicate habit, many of them confined to badly ventilated rooms, and the greater number broken down by starvation, bloodletting, or previous disease. Some of you may have heard of M. Louis, of Paris, a physician, who for many years has made chest-disease his study. Speaking of his consumptive patients, who became the subjects of *inflammatory* disease, he has this observation: "As we have already remarked in speaking of *Pneumonia*, the invasion of *Pleurisy* coincides in a large proportion of our patients with *the period of extreme weakness and emaciation*."—Dr. Cowan's translation of Louis.

Now, what is the usual treatment of Pleurisy and Pneumonia? Does it not almost entirely consist in blood-letting, starving and purging—with blisters and mercury sometimes? But what are the results?—relapse or repetition of the paroxysm from time to time,—long illness,—weakness ever after, and death too often. Even in these cases of extreme emaciation, M. Louis applies leeches! Contrast the case I have just given you from the Medical Gazette, with the case and treatment of an individual, whose omnipotent power of setting a theatre in a roar may be still fresh in the recollection of many of you —the celebrated Joe Grimaldi. The very name excites your smile!—but upon the occasion to which I refer, the poor clown, instead of being in a vein to move your laughter, very much wanted your sympathy. "Monday, the 9th of October," says Mr. Charles Dickens, "was the day fixed for his benefit, but on the preceding Saturday, he was suddenly seized with severe illness, originating in a most distressing impediment in his breathing. Medical assistance was immediately called in, and he was bled until nigh FAINTING. This slightly relieved him, but shortly after he had a relapse, [return of the paroxysm?] and four weeks passed before he recovered sufficiently to leave the house. There is no doubt, (continues Mr. Dickens) but that some radical change had occurred in his constitution, for previously he had never been visited with a single day's illness, while after its recurrence, he never had a single day of perfect health." If you reflect that medical relief was *immediately* called in, you may be inclined, like myself, to ascribe poor Grimaldi's damaged constitution, not so much to the effect of the original disorder, as to the sanguinary treatment adopted in his case. Whether or not he had the additional medical *advantage* of being starved at the same time I do not know; but lest it might be inferred that this continued illness was owing to the neglect of this very excellent part of *antiphlogistic* practice, I may just hint that there have been such things as inflammation of the lungs *brought on* by starvation. Witness the verdict of a coroner's jury, in the case of a pauper, who died not long ago in the White Chapel Work-House. "That the decease died from *inflammation* of the lungs, produced by exposure and *want*." The verdict in question was only in accordance with the evidence of the surgeon of the work-house.

In acute disease of the chest—whether involving the *pleura* simply, the interstitial substance of the lungs, or the *mucous* or *muscular* apparatus of the air-tubes, your first duty is to premise an emetic. So far from acting exclusively on the stomach, medicines of this class have an influence primarily *cerebral*, and they therefore act powerfully upon every member and matter of the body. By emetics you may change the existing relations of the whole corporeal atoms more rapidly and effectually, than by any other agency of equal safety in the Materia Medica. Every kind of chest-disease being a mere feature or developement of fever, whatever will relieve the latter will equally relieve the former. The value of emetics in the simpler forms of fever, few will be sufficiently bold to deny; and the quickness with which the same medicines can alter the state of the inflamed part may be actually *seen* by their effects on the eye, in the inflammatory affections of that organ. You have only to *try* them in chest-disease to be satisfied of their inestimable value in cases of this kind. Instead, therefore, of talking of the temporary good you have occasionally seen done by the lancet in inflammation of the chest, call to mind the many deaths you have witnessed where it had been most freely used—to say nothing of the long illnesses which have been the lot of such as have escaped the united bad effects of a chest-disease and loss of blood. Whatever salutary influence, as a *present means of relief*, blood-letting may produce, it is infinitely inferior to what you may obtain by emetics—a class of remedies which possess the additional advantage of giving that relief, without depriving the patient of the material of healthy constitutional power. Their influence, moreover, as a *pre-*

ventive against return of the paroxysm, is very considerable,* while blood-letting, so far as my experience goes, has only, on the contrary, appeared to render the patient more liable to a recurrence.

Lord Bacon tells us in his Works, that if disciples only knew their own strength, they would soon find out the weakness of their masters. What led him to this conclusion? What but the fact that, with all his ability, even Lord Bacon himself had been duped by his teachers?—and why did Des Cartes say, that no man could possibly pretend to the name of philosopher who had not at least once in his life doubted all he had been previously *taught*? He too had been hoodwinked by his pretended masters in philosophy. But *you*, perhaps, will say all this took place in old times—the world is quite changed since then; professors are now the most enlightened and respectable men alive; they go to church, where they are examples of piety; they never were *found out* in a lie; are not subject to the passions of other men; have no motives of interest or ambition,—in fact, they are all but angels. Now, I only wish you knew the manner in which most of these very respectable persons get their chairs—the tricks, the party work, the subserviency, meanness, and hypocrisy practised by them for that and other ends—and you would not so tamely submit your judgment to their theoretical dreams and delusions. Young men, be MEN,—and instead of taking for gospel the incoherent and inconsistent doctrines of the fallible puppets whom interest or intrigue has stuck up in Academic Halls, —use your own eyes, and exercise your own reason! Here, then, I give you a test by which you may know the best practice in inflammatory diseases of the chest—a test that cannot possibly deceive you. Take a certain number of pleuritic and pneumonic patients—bleed, blister, and physic these after the most orthodox fashion, so that you shall not be able to tell, whether the continued disease be the effect of the primary cause, or the heroic measures by which your patients have been worried during their illness. Take another equal number similarly afflicted, and treat them chrono-thermally,—that is to say premise an emetic, and when, by means of this, you have obtained a remission of the symptoms, endeavour to prolong such period of immunity, by quinine, opium, or hydrocyanic acid, and then compare the results of both modes of practice. If you do not find an immense saving of suffering and mortality by the latter mode of treatment, I will consent to be stigmatised by you as an impostor and deceiver—a cheat—a quack—a person, in a word, who would rather teach error than vindicate truth. Remember, however, before you begin, that the Chrono-Thermal System professes, as its chief feature of superiority over every other, to make *short work* with disease,—a circumstance not likely to recommend it to those whose emolument, from the manner in which things are now ordered, arises principally from long sickness and much physic!

I am often asked how I treat *Enteritis*,—Inflammation of the Bowels—without the Lancet? Before I give my answer, I generally ask—Can medical men boast of any particular success from depletion in this disease? If so, why have they been always so solicitous to get the system under the influence of calomel,—or why do they prescribe Turpentine in its treatment? Is it not because the nature of the relief afforded by the lancet has either been temporary or delusive, or, what I have myself found it to be, absolutely hurtful in the majority of cases? "The symptoms of Enteritis," says Dr. Parr, "are a *shivering*, with an uneasiness in the bowels, soon increasing to a violent pain,—occasionally at first *remitting*, but soon becoming continual. Generally the whole abdomen is affected at the same time with spasmodic pains, which extend to the loins, apparently owing to flatulency. The pulse is small, frequent, generally soft, but sometimes hard, and at last irregular and intermittent—the extremities are cold—the strength sinks rapidly." "Perhaps," he adds, "bleeding is *more seldom necessary*, in this disease than in any other inflammation; for it rapidly tends to mortification, and should it not at once relieve, it soon proves fatal." In a letter which I received from staff-surgeon Hume, he says: "I am satisfied that Pneumonia and *Enteritis*, diseases which are at present the bugbears of the faculty, are indebted for their chief existence to the remedies employed in ordinary ailments, namely, bleeding, and unnecessary purging. I never saw a case of either, (and I have seen many) of which the subject had not been the inmate of an hospital previously, where he had undergone the usual *antiphlogistic* regimen,—or had been otherwise debilitated, as in the case of long residence in a warm climate." Now, Gentlemen this is the language of an experienced Medical Officer of the Army, one who, having no interested end to serve, and who would not take private practice if offered to him, is at least as worthy of belief as those whose daily bread,

* This statement, when I first published it, was denied by Physicians, but it has been since confirmed by Dr. Seymour, of St. George's Hospital, who recently made some remarks upon the power of Emetics in "altering the *Periodicity* of Disease."

depends upon the extent and *duration* of disease around them. My own practice in Enteritis I will illustrate by a case. I was one evening requested by the Dowager Duchess of Roxburgh to see her butler; I found him with severe pain of abdomen, which would not brook the touch, furred tongue, hard pulse, and hot skin; he told me he had *shivered* repeatedly, that the pain was at first *intermittent*, but at last constant. He had been seen in the morning by a gentleman, who had ordered him Turpentine and Calomel —a proof that he also considered the case as one of inflammation of the bowels. The patient having obtained no relief, I was called in. I gave him an emetic, and went up stairs to await the result. In about twenty minutes I again saw him. The vomit had acted powerfully, and with such relief that he could then turn himself in bed with ease, which he could not before do. I then prescribed prussic acid and quinine. In a few days he was as well as ever. Instead of bringing *theoretic* objections to this method of treating inflammation of the bowels, let practitioners only *put it to the proof*. Is it possible that they can be less successful with the new practice than with the old, under which, when they save a patient in this disease, they are fain to boast of it as a wonder!

I shall now enter at some length upon the subject of

BLOOD-LETTING.

While with one class of practitioners, Medicine is reduced to the mere art of purgation, with another class it consists in the systematic abstraction of blood; every means being resorted to in the mode of doing this, from venesection, arteritomy, and cupping, to the basest application of the leech. In the remarks, Gentlemen, which I am now about to make on the subject, instead of discussing the preferrable mode of taking blood away, I shall bring before you some facts and arguments that may convince you of the perfect possibility of dispensing with the practice altogether.

"The imputation of novelty," says Locke, "is a terrible charge amongst those who judge of men's heads as they do of their perukes, by *the fashion*—and can allow none to be right but the received doctrine." Yet, in the words of the same acute writer:—"An error is not the better for being common, nor truth the worse for having lain neglected; and if it were put to the vote any where in the world, I doubt, as *things are managed*, whether Truth would have the majority; at least while the *authority of men*, and *not the examination of things*, must be its measure." In the same spirit Lord Byron asks:

"What from this barren being do we reap?
Our senses narrow, and our reason frail,
Life short, and TRUTH a gem that loves the deep,
And all things weighed in *Custom's* falsest scale.
Opinion an omnipotence—whose veil
Mantles the earth with *darkness*—until right
And wrong are accidents—and men grow pale
Lest their own judgments should become too bright,
And their free thoughts be crimes, and earth have too much light.

The operation of blood-letting is so associated in the minds of most men, with the practice of physic, that when a very sensible German physician, some time ago, petitioned the King of Prussia to make the employment of the lancet *penal*, he was laughed at from one end of Europe to the other. This you will not wonder at, if you consider that the multitude always think "whatever *is* is right;" but a little reflection will teach you that there must have been a period in the world's history, when the lancet was unknown as a remedy; and that many centuries necessarily elapsed before it could even be imagined that loss of blood might alleviate or cure disease. Nations, nevertheless, grew and prospered. To what daring innovator the practice of physic owes the *Curse* of the lancet, the annals of the art leave us in ignorance; but this we know, that its introduction could only have been done during the infancy of Medicine; when remedial means were yet few, and the mode of action of remedies totally unknown. It was the invention of an unenlightened, possibly, a sanguinary age; and its continued use says but little for the after-discoveries of ages, or for the boasted progress of medical science. Like every other lucrative branch of human knowledge, the Practice of Medicine at one time was entirely in the hands of the priesthood. Might not blood-letting have been first introduced as a sacrifice or expiation on the part of the patient for his supposed sins against an offended deity?—for that till very lately was the *ecclesiastical* cause of all disease. I am the rather inclined to this idea, from the fact that when one of the kings of Spain made his peace with the Inquisition, after a bitter quarrel with that body, they condemned him as a penance to lose a pound of his blood, which was afterwards burnt in public by the common hangman!

Of what is the body composed? Is it not of Blood, and Blood only? What fills up the excavation of an ulcer or an abscess? What reproduces the bone of the leg or thigh,

after it has been thrown off dead, in nearly all its length? What but the *Living* BLOOD, under the electrical influence of the brain and nerves! How does the slaughtered animal die? Of loss of blood solely. Is not the blood then, in the impressive language of scripture, "the life of the flesh?" How remarkable, that while the value of the blood to the animal economy should be thus so distinctly and emphatically acknowledged, Blood-letting is not even once alluded to, among the various modes of *cure* mentioned in the sacred volume. We have "balms," "balsams," "baths," "charms," "physic," "poultices," even,—but loss of blood never! Had it been practised by the Jews, why this omission? Will the men who now so lavishly pour out the Blood, dispute its importance in the animal economy?—will they deny that it forms the basis of the solids,—that when the body has been wasted by long disease, it is by the blood only it can recover its healthy volume and appearance? Has not nature done every thing to preserve to animals of every kind,

"The electric Blood with which their arteries run!" BYRON.

She has provided it with strong resilient vessels—vessels which slip from the touch, and never permit their contents to escape, except where their coats have been injured by accident or disease. Misguided by theory, man, presumptuous man, has dared to divide what God, as a part of creation, united; to open what the Eternal, in the wisdom of his omniscience made entire! See then what an *extreme* measure is this! It is on the very face of it a most unnatural proceeding. Yet what proceeding so common, or what so readily submitted to, under the influence of authority and custom? If, in the language of the Chemist Liebig, the blood be indeed "the SUM OF ALL THE ORGANS that are being formed," how can you withdraw it from one organ without depriving every other of the material of its *healthy* state? Yet enter the crowded hospitals of England—of Europe—and see how mercilessly the lancet, the leech, and the cupping-glass, are employed in the diseases of the poor. Look at the pale and ghastly faces of the inmates. What a contrast to the eager pupils and attendants thronging around their beds—those attendants with bandage and basin, ready at a moment's notice to take from the poor creatures whatever quantity of *life-blood*, solemn Pedantry may prescribe as the infallible means of relieving their sufferings. Do that, I say, and refrain, if you can, from exclaiming with Burns, "when Poverty is sick, the doctors mangle it!" What are the causes of the disorders of this class of people? In the majority of cases, defective food, and impure air. By these has their blood been deteriorated—and for what does the (so termed) man of science abstract it? To make room for better? No!—goaded on by the twin-goblins, "congestion" and "inflammation," to deteriorate it still further by starvation and confinement. Gentlemen, these terms play in physic much the same thing as others, equally senselessly misused, play in the common affairs of the world—

Religion, freedom, vengeance, what you will,
A word's enough to raise mankind to *kill*,
Some *party*-phrase by *cunning* caught and spread,
That GUILT may reign, and WOLVES and worms be fed. BYRON.

The first resource of the surgeon is the lancet,—the first thing he thinks of, when called to an accident, is how he can most quickly open the floodgates of the heart, to pour out the stream of an already enfeebled existence. Does a man fall from his horse or a height, is he not instantly bled?—has he been stunned by a blow, is not the lancet in requisition? Nay, has an individual fainted from over-exertion, or exhaustion, is it not a case of FIT—and what so proper as venesection!

You cannot have forgotten the fate of Malibran—the inimitable Malibran—she who so often, by her varied and admirable performances, moved you to tears and smiles by turns. She was playing her part upon the stage—she entered into it with her whole soul, rivetting the audience to the spot by the very intensity of her acting. Just as she had taxed the powers of her too delicate frame to the uttermost—at the very moment she was about to be rewarded by a simultaneous burst of acclamation, she fainted and fell—fell from very weakness. Instantly a medical man leapt upon the stage—to administer a cordial? No—to bleed her—to bleed a weak, worn, and exhausted woman! And the result?—she never rallied from that unfortunate hour. But, Gentlemen, Malibran was not the only intellectual person of the thousands and tens of thousands who have prematurely perished by the lancet. Byron and Scott—those master-spirits of their age—those great men who, like Ariosto and Shakspeare, not only excited the admiration of cotemporary millions, but whose genius must continue, for generations yet unborn, to delight the land that produced them—they too fell victims to the lancet—they too were destroyed by hands which, however friendly and well-intentioned, most undoubtedly dealt them their death-blows. Is not this a sub-

ject for deep reflection? To the cases of these great men we shall recur in the course of this lecture; but for the present, we must turn to other matters—to events that have just passed before our eyes. The affair of Newport, in Wales, is still the topic of the hour. You must therefore remember it to its minutest detail—the attack by the rioters upon the town—the gallant and successful stand made by Captain Gray and his little detachment of the 45th regiment—the prisoners captured, and the investigation which afterwards took place In the course of that inquiry a prisoner, when under examination, fainted. What was done with him? He was carried out of court and immediately bled! On his return the newspapers tell us, an extraordinary change had come over his countenance. From being a man of robust appearance, he had become so wan and haggard, so altered in every lineament, the spectators could scarcely recognize him as the same prisoner. Yet, strange to say, not one of the many journals that reported this case, introduced a single word in condemnation of the utterly uncalled for measure, which brought the man to such a state;—so much has Custom blunted the sense of the public to this the most dangerous of all medical appliances!

Gentlemen, a coroner's inquest was held upon a person who died suddenly. I shall read to you what followed from the Times newspaper, of the 20rh. December, 1839, suppressing, for obvious reasons, the name of the witness. "Mr. ———, surgeon, stated that he was called upon to attend deceased, and found him at the point of death. He attempted to BLEED him, but ineffectually, and in less than a minute from witness's arrival, deceased expired. Witness not being able to give any opinion as to the cause of death from the symptoms that then exhibited themselves, he afterwards, with the assistance of Dr. Ridge, 37 Cavendish Square, made a post-mortem examination, and found that a large cavity attached to the large vessel of the heart, containing blood, had burst, and that that was the cause of death." So that while the man was actually dying of inanition from internal bleeding, the surgeon, utterly ignorant, according to his own confession, of the nature of the symptoms, deliberately proceeded to open a vein!—How happens it that the lancet should be so invariably the first resort of IGNORANCE!

In every case of stun or faint, the employment of this instrument must be a superadded injury;—in all, there is a positive enfeeblement of the whole frame, evidenced by the cold surface and weak or imperceptible pulse; there is an exhaustion, which loss of blood, so far from relieving, too often converts into a state of utter and hopeless prostration. True, men recover though treated in this manner, but these are not *cures*,—they are *escapes*.

How few the diseases which loss of blood may not of itself produce. If it cannot cause the eruptions of small-pox, nor the glandular swellings of plague, it has given rise to disorders more frequently and more immediately fatal than either. What think you of cholera asphyxia—Asiatic cholera? Gentlemen, the symptoms of that disease are the identical symptoms of a person bleeding *slowly* away from life! The vomiting, the cramps, the sighing, the long gasp for breath —the leaden and livid countenance which the painter gives to the dying in his battle-pieces —these are equally the symptoms of cholera and loss of blood! Among the numerous diseases which it can produce, Darwin says —"a paroxysm of gout is liable to recur on bleeding." John Hunter mentions "lock-jaw and dropsy," among its injurious effects, —Travers, "blindness," and "Palsy,"—Marshall Hall, "Mania,"—Blundell, "dysentery,"—Broussais, "FEVER and convulsions!" "When an animal looses a considerable quantity of blood," says John Hunter, "the heart increases in it frequency of strokes as also in its violence." Yet these are the indication for which professors tell you to bleed! You must bleed in every inflammation, they tell you. Yet is not inflammation a daily effect of loss of blood! Magendie mentions "pneumonia" as having been produced by it,—completely confirming the evidence of Mr. Hume upon that point. He further tells us that he has witnessed among its effects "the entire train of what people are pleased to call inflammatory phenomena;—and mark," he says, "the extraordinary fact that this inflammation will have been produced by the very agent which is daily used to combat it." What a long dream of false security have mankind been dreaming!—they have laid themselves down on the laps of their medical mentors,—they have slept a long sleep;—while these, like the fabled vampire of the poets, taking advantage of a dark night of barbarism and ignorance, have thought it no sin to rob them of their life's blood during the profoundness of their slumber!

Gentlemen, the long shiver of the severest ague, the burning fever, the fatal lock jaw, the vomiting, cramps, and asphyxia of cholera, the spasm of asthma and epilepsy, the pains of rheumatism, the palpitating and tumultuous heart the most settled melancholy and madness, dysentery, consumption, every species of palsy, the faint that became death, these—all these—have *I* traced to loss of blood. Could arsenic, could prussic acid, in

their deadliest and most concentrated doses do more? Yet I have heard men object to use the minutest portions of these agents, medicinally,—men who would open a vein, and let the life-blood flow until the patient fell like an ox for the slaughter, death-like, and all but dead, upon the floor! Do these practitioners know the nature of the terrible power they thus fearlessly call to their aid? Can they explain its manner of action even in those cases where they have supposed it to be beneficial? The only information I have been able to extract from them upon this point, has been utterly vague and valueless. Their reasoning, if it could be called reasoning, has been based on a dread of "inflammation" or "congestion." From the manner in which they discuss the subject, you might believe there was no remedy for either but the lancet. Ask them why they bleed in ague—in syncope—in exhaustion or collapse?—they tell you it is to relieve congestion. After a stun or fall?—it is to prevent inflammation.—Bleeding, in all my experience, I have already stated to you, never either relieved the one, or prevented the other! Gentlemen, did you never see inflammation of a vein AFTER bleeding—inflammation caused by the very act! I have known such inflammation end fatally. Did you never know the wounds made by leech-bites become inflamed, AFTER these reptiles had exhausted the blood of the part to which they were applied! And how came that about? Simply because, however perfectly you exhaust any part of its blood, you do not thereby prevent that part from being again filled with it—or rather, you make it more liable to be so, by weakening the coats of the containing vessels! Hundreds thousands have recovered from every kind of disease, who never were bled in any manner; and many, too many have died, for whom the operation, in all its modes, had been most scientifically practised! Have I not proved that every remedial agent possesses but one kind of influence, namely, the power of changing temperature? Let the schoolman show me that the lancet possesses any superiority in this respect—any specific influence more advantageous than other less questionable measures; and I shall be the last to repudiate its aid in the practice of my profession The beneficial influence of blood-letting, where it has been beneficial in disease, relates solely to temperature To this complexion it comes at last, and to nothing more—the equalization and moderation of temperature In the congestive and non-congestive stages of fever—the cold—the hot—the sweating—the lancet has had its advocates. Blood-letting, under each of these circumstances, has changed existing temperature. Why, then, object to its use? For this best of reasons. that we have remedies without number, possessing each an influence equally rapid, and an agency equally curative, without being, like blood-letting, attended with the insuperable disadvantage of abstracting the material of healthy organization. I deny not its power as a remedy in certain cases; but I question its claim to precedence, even in these. Out of upwards of TWELVE THOUSAND CASES of disease that have, within the last few years, been under my treatment, I have not been compelled to use it once. Resorted to, under the most favovrable circumstances, its success is any thing but sure, and and its failure involves consequences which the untoward administration of other means may not so certainly produce. Have we not seen that all diseases have remissions, and exacerbations—that mania, asthma, apoplexy and inflammation, are all remittent disorders? From the agony or intensity of each of these developements of fever, you may obtain a temporary relief by the use of the lancet; but what has it availed in averting the recurrence of the paroxysm? How often do you find the patient you have bled in the morning ere night with every symptom in aggravation. Again you resort to bleeding, but the relief is as transitory as before. True, you may repeat the operation, and re-repeat it, until you bleed both the blood and the life away. Venesection, then, in some cases, may be a temporary though delusive relief. The general result is depression of vital energy, with diminution of corporeal force!

Dr. Southwood Smith, physician to the London Fever Hospital, has published a book purposely to show the advantages of bleeding in fever. One of his cases is so curiously illustrative of his position, that I shall take the liberty of transcribing it from the Medical Gazette, with a running commentary by the Editor of that periodical:—"The case of Dr. Dill demands our most serious attention, and deserves that of our readers. It is adduced as an example of severe cerebral affection, in which case, Dr. S. affirms, 'the bleeding must be large and early as it is copious.' 'I saw him,' says Dr. Smith, 'before there was any pain in the head, or even in the back, while he was yet only feeble and chilly. The aspect of his countenance, the state of his pulse, which was slow and labouring, and the answer he returned to two or three questions, satisfied me of the inordinate, I may say the ferocious attack that was at hand—p. 398'

"Whatever may be the opinion of our readers, as to the above signs indicating a ferocious cerebral attack, they will one and all agree with us, that the ferocious attack

was met with a ferocious treatment; for an emetic was given without delay, and 'blood was taken from the arm, to the extent of twenty ounces.' This blood was NOT inflamed. Severe pains in the limbs and loins, and intense pain in the head, came on during the night—and early in the morning blood was again drawn to the extent of sixteen ounces 'with great diminution, but not entire removal of the pain.' Towards the afternoon he was again bled to sixteen ounces. 'The pain was now quite gone—the blood from both these bleedings intensely inflamed.' [*Inflamed*, according to Dr. Smith's notions—but mark, in his own words—the *first* blood drawn was "NOT inflamed." Were the lancet a preventive of inflammation, how came the blood to be inflamed AFTER SO many bleedings?]

"During the night the pain returned, and in the morning, notwithstanding the eyes were dull and beginning to be suffused, the face blanched, (no wonder!) and the pulse slow and intermittent, and weak, twelve leeches were applied to the temples—and as these did not entirely remove the pain, more blood, to the extent of sixteen ounces, was taken by cupping. The operation afforded great relief—but the following morning, the pain returned, and again was blood abstracted to sixteen ounces. 'Immediate relief followed this second operation; but *unfortunately*, the pain returned with great violence, towards evening; and it was now impossible to carry the bleeding any further.' Typhoid symptoms now began to show themselves; 'the fur on the tongue was becoming brown, and there was already a slight tremor in the hands.' What was to be done? Ice, and evaporating lotions were of no avail;—but happily for Dr. Dill, the affusion of cold water on the head, 'the cold dash,' was thought of and employed—and this being effectually applied, the relief was 'instantaneous and most complete.' So that this case, announced as a severe cerebral affection, and treated in anticipation, by copious blood-letting, BEFORE there was any pain in the head while the patient was yet only feeble and chilly, which grew worse and worse as the blood letting was repeated, until, after the abstraction of NINETY OUNCES of blood, the patient had become in a 'state of intense suffering,' and 'imminent danger,' and was relieved at last by the cold dash—this case, we say, is brought forward as a specimen of the extent to which copious blood-letting may sometimes be REQUIRED!! Most sincerely do we congratulate Dr. Dill on his escape, not from a dangerous disease, but from a DANGEROUS REMEDY."—*Medical Gazette.*

Could any case more forcibly exemplify the utter inefficiency of blood-letting, in almost all its forms, either as a certain remedy, or a preventive of fever? Yet such is the force of custom, prejudice, education, that this case,—and, I have no doubt, thousands like it, so far from opening the eyes of the physician to the London Fever Hospital, only served to confirm him in his error. He had his *methodus medendi*, and he pursued it; and notwithstanding the total inefficiency of his vaunted remedy, he gives the case at length, as a perfect specimen of the most perfect practice—Mark the result of that practice!—but for the "cold dash," the patient must have perished. It is even now a question whether he ever recovered from those repeated blood-lettings,—for he died not many months after. Happy would it have been for mankind, that we had never heard of an Anatomical or "Pathological School,"—happier for Dr. Dill, for to that school, and its pervading error of imputing effect for cause, may we fairly attribute all this sanguinary practice

Lord Byron called medicine "the *destructive* art of healing." How truly it proved to be so in his own person, you will see, when I give you the details of his last illness:—"Of all his prejudices," says Mr Moore, "he declared the strongest was that against Bleeding. His mother had obtained from him a promise, never to consent to be bled, and, whatever argument might be produced, his aversion, he said, was stronger than reason. 'Besides, is it not,' he asked, 'asserted by Dr. Reid, in his Essays, that less slaughter is effected by the lance, than *the lancet*—that minute instrument of mighty mischief!" On Mr. Millengen observing that this remark related to the treatment of nervous but not of inflammatory complaints he joined, in an angry tone, 'Who is nervous, if I am not?—and do not those other words of his, apply to my case, where he says, that drawing blood from a nervous patient, is like loosening the cords of a musical instrument, whose tones already fail, for want of a sufficient tension! Even before this illness, you yourself know how weak and irritable I had become; and bleeding, by increasing this state, will inevitably kill me. Do with me what else you like, but bleed me you shall not. I have had several inflammatory fevers in my life, and at an age when more robust and plethoric; yet I got through them without bleeding. This time, also, will I take my chance.'" After much reasoning, and repeated entreaties, Mr. Millengen at length succeeded in obtaining from him a promise, that should he feel his fever increase at night, he would allow Dr. Bruno to bleed him. "On revisiting the patient

early next morning, Mr. Millengen learned from him that having passed, as he thought, on the whole, a better night, he had not considered it necessary to ask Dr. Bruno to bleed him. What followed, I shall, in justice to Mr. Millengen, give in his own words:—"I thought it my duty now to put aside all consideration of his feelings, and to declare solemnly to him how deeply I lamented to see him trifle thus with his life, and show so little resolution. His pertinacious refusal had already, I said, caused much precious time to be lost; but few hours of hope now remained, and unless he submitted immediately to be bled, we could not answer for the consequences. It was true, he cared not for life, but who could assure him that unless he changed his resolution, the uncontrolled disease might not operate such disorganization in his system, as utterly and forever to deprive him of reason! I had now hit at last upon the sensible chord; and partly annoyed by our importunities, partly persuaded, he cast at us both, the fiercest glance of vexation, and throwing out his arm, said, in the angriest tone, 'There you are, I see, a d—d set of butchers,—take away as much blood as you like, but have done with it!' We seized the moment, (adds Mr. Millengen,) and drew about twenty ounces. On coagulating, the blood presented a strong buffy coat; yet the relief obtained did NOT correspond to the hopes we had formed; and during the night the fever became stronger *than it had been hitherto*, the restlessness and agitation increased, and the patient spoke several times in an incoherent manner.'" Surely this was sufficient to convince the most school-bound of the worse than inoperative nature of the measure. Far from it. "On the following morning, the 17th April, the bleeding was repeated *twice*, and it was thought right also to apply blisters to the soles of his feet!" Well might Mr. Moore exclaim: "It is painful to dwell on such details." For our present purpose, it will be sufficient to state, that although the "rheumatic symptoms had been completely removed," it was at the expense of the patient's life; his death took place upon the 19th, that is, three days after he was first bled—[*Moore's Life of Byron.*] Now I ask you, what might have been the termination of this case, had an emetic been substituted for the lancet, and had the remission been prolonged by quinine, opium, or arsenic! I solemnly believe Lord Byron would be alive at this moment; nay, not only is it possible, but probable, that a successful result might have ensued, without any treatment at all. When describing the effects of a former fever, Lord Byron himself says: "After a week of half delirium, burning skin, thirst, hot headache, horrible pulsation, and no sleep, by the blessings of barley water, and *refusing to see my physician*, I recovered." Facts, like these, are indeed, stubborn things!

I have preferred to give these two instances of what I conceive to be decided malpractice, to any of the numerous cases which have come under my own observation, as the first named gentleman was well known to many of the medical profession, while the death-scene of the noble poet, will arrest the attention of all who take an interest in his genius.

In the generality of cases of disease, gentlemen, it matters little what may have been the primary Cause. The disease or effect, under every circumstance, not only involves change of temperature, but produces more or less interruption to the two vital processes Digestion and Respiration. In other words, it impedes *sanguification*, or the necessary reproduction of that Living fluid, which, throughout all the changes of life, is constantly maintaining expenditure. This being in the nature of things one of the first effects of disorder, let us beware how we employ a remedy, which, if it succeed not in restoring healthy temperature, must inevitably hasten the fatal catastrophe—or, in default of that, produce those low chronic fevers, which, under the names of dyspepsia, hypochondria, hysteria, mania, &c., the best devised means too often fail to alleviate, far less to cure. With the free admission, then, that the lancet is capable of giving *temporary* relief to local fulness to blood, and to some of the attendant symptoms, I reject it generally, upon this simple and rational ground that it cannot prevent such fulness from returning—while it requires no ghost from the grave to tell us that its influence upon the general constitution, must, in every such case, be prejudicial. If the source of a man's income is suddenly cut off, and he still continue to spend as before, surely his capital must, as a matter of course, diminish.—Beware then, how under the exact same circumstances of body, you allow a doctor to take away the little capital of blood you possess when disease comes upon you,—remember there is then no income—all is expenditure. And I care not whether you take inflammation of any considerable internal organ,—the Brain, Liver, or Heart, for example,—or of any external part, such as the knee, or ankle joint—with the lancet, you can seldom ever do more than give a delusive relief, at the expense of the powers of the constitution. The man of routine, who has not heard my previous lectures, giving up Fever, perhaps, and a few other disorders, which the occasional obstinacy of a refracto-

ry patient, contrary to "received doctrine," has taught him, may yield to other means than blood-letting—will ask me what I should do without the lancet in apoplexy? Here the patient having no will of his own, and the prejudices of his friends being all in favour of blood-letting, the school-bound member of the profession has seldom an opportunity of opening his eyes. Mine were opened by observing the want of success attending the sanguinary treatment; in other words, the number of deaths that took place, either in consequence, or in spite of it! Was not that a reason for change of practice? Having in my Military Hospital no prejudices to combat; and observing the flushed and hot state of the patient's forehead and face. I determined to try the cold dash. The result was beyond my best expectations. The first patient was laid out all his length, and cold water poured on his head from a height. After a few ablutions, he staggered to his feet, stared wildly round him, and then walked to the hospital, where a smart purgative completed his cure. While in the army, I had a sufficiently extensive field for my experiments; and I seldom afterwards lost an apoplectic patient.

But, Gentlemen, since I embarked in private practice, I have improved upon my Army plan. With the purgative given after the cold dash, I have generally combined quinine or arsenic—and I have also, upon some occasions, at once prescribed hydrocyanic acid without any purgative at all. This practice I have found highly successful. That Quinine may prevent the apoplectic fit, I have proved to you, by the case given by Dr. Graves. The value of Arsenic in apoplexy has also been acknowledged, even by members of the profession; but whether they have been acquainted with the true principle of its mode of action, in such cases, is another thing. Dr. A. T. Thomson recommends it "in threatened apoplexy, after Cuppings and Purgings, when the strength is diminished and the complexion pale;" that is, you must first break down the whole frame by depletion—you must still further weaken the already weak vessels of the brain, before you take measures to give their coats the degree of strength and stability, necessary to their healthy containing power! Upon what principle would *you*, Gentlemen, prescribe arsenic in threatened apoplexy? Surely, upon the same principle that you would prescribe it during the remission in ague—to prolong the period of immunity—to avert the paroxysm. Long after the Bark came into fashion for the cure of Ague, practitioners still continued to treat that distemper, in the first instance, by depletion, till the complexion became pale. Do they treat it so now?—No; they have become wiser!—why then do they go on from day to day, bleeding in threatened apoplexy? In the case given by Dr. Graves, depletion—repeated depletion, did not prevent the recurrence of the apoplectic fit—but quinine was at once successful. Sir Walter Scott had a series of fits of apoplexy. What did the bleeding and starving system avail in his case? It gave him, perhaps, a temporary relief, to leave him at last in a state of irrecoverable prostration. Mr. Lockhart, his biographer, tells us how weak the bleeding always made him. But how could it be otherwise, seeing that I have proved to all but mathematical demonstration, that whatever debilitates the whole body, must still further confirm the original weakly condition of the coats of the blood-vessels, which constitutes the tendency to apoplexy. Had the cold dash been resorted to during the fit, and had quinine, arsenic, or hydrocyanic acid been given during the period of immunity, who knows but the Author of Waverly might still be delighting the world with the wonderful productions of his pen!

Shall I be told there are cases of apoplexy, where the face is pale, and the temperature cold? My answer is—these are not apoplexy, but *faint!*—cases which the cold dash or a cordial might recover, but which the lancet, in too many instances, has perpetuated to fatality! If the practitioner tells me that the cold dash by no possibility can cure an apoplexy, where a vessel is ruptured with much *effusion* of blood on the brain; my reply is, that in such a case he may bleed all the blood from the body, with the same unsuccessful result! In the case of effusion of blood in an *external* part, from a bruise, for instance, could any repetition of venesection make the *effused blood* re-enter the vessel from which it had escaped? No more could it do so in the brain, or any other part. Why, then, resort to it in this case? If it be said, to stop bleeding, I answer that it has no such power. Who will doubt that Cold has? Surely, if the mere application of a cold key to the back very often stops bleeding from the nose, you can be at no loss to conceive how the far greater shock of the cold dash may stop a bleeding in the brain? When, on the contrary, there is no vascular rupture, but only a tendency to it, the cold dash will not only contract and strengthen the vascular coats so as to prevent them from giving way; but will moreover rouse the patient from his stupor, by the simple shock of its application. But from theory and hypothesis, I appeal to indubitable and demonstrative fact.

Let the older members of the profession seriously reflect upon the ultimate injury

which may accrue to their own interests, by opposing their school-follies and school-prejudices to palpable and demonstrative truth. So long as colleges and schools could mystify Disease and its nature, any treatment that these proposed—no matter how cruel or atrocious—would be submitted to in silence; but, when people find out that every kind of disorder, inflammation included, may be conquered, not only by external, but by internal means, they will pause before they allow themselves to be depleted to death, or all but death, by the lancet of either surgeon or physician. The world will not now be deluded by the opposition of men, who stick to their opinion not so much because they have long supported it, as that it supports them—men who, in the words of Lord Bacon would dispute with you whether two and two make four, if they found the admission to interfere with their interests.

Will any practitioner be so bold as to tell me that inflammation of any organ in the body is beyond the control of internal remedies? For what, then, I ask, do we prescribe mercury for inflammation of the liver and bowels? Why do we give colchicum for the inflamed joints termed gout and rheumatism? Do not these remedies, in numerous instances lessen the temperature, pain, and morbid volume of these inflammations, more surely and safely than the application of leech or lancet? If, for such inflammations, then, we have influential internal remedies, why may we not have medicines equally available for diseases of the lungs? Have I not shown you the value of prussic acid in such cases? But I shall be told of the danger of such a remedy in any but skilful hands. In the hands of the ignorant and injudicious, what remedial means, let me ask, have not proved, not only dangerous, but deadly?—has not mercury done so?—Are purgatives guiltless? How many have fallen victims to the lancet! With prussic acid properly diluted and combined, I have saved the infant at the breast from the threatened suffocation of croup; and I have known it in the briefest space of time relieve so called inflammation of the lungs, where the previous pain and difficulty of breathing were hourly expected to terminate in death. True, like every other remedy, it may fail—but have we no other means or combination of means for such cases? With emetics and quinine I have seldom been at a loss; and with mercury and turpentine I have cured pneumonia.

But will the inflamed heart yield to anything but blood-letting! Fearlessly I answer, yes! and with much more certainty. With emetics, prussic acid, mercury, colchicum, silver, &c., I have conquered cases that were theoretically called inflammations of the heart and which the abstraction of half the blood in the body could not have cured. So also has Dr. Fosbroke, physician to the Ross Dispensary, a gentlemen who had the felicity to be associated with Dr. Jenner in his labours, and one, in whose success and fortunes that illustrious man took the warmest interest. [See Baron's life of Jenner.] In some of the numbers of the lancet Dr. Fosbroke has given several cases of Heart-Disease, which he treated successfully without blood-letting, and, with a rare candour, he admits that a lecture of mine on the heart and circulation had no small influence in leading him to dismiss blood-letting in the treatment of them.

The human mind does not easily turn from errors with which, by early education, it has been long embued: and men, grey with years and practice, seldom question a custom, that, fortunately for them at least, has fallen in with the prejudices of their times. For myself, it was only step by step, and that slowly that I came to abandon the lancet altogether in the treatment of disease. My principal substitutes have been the various remedies which, from time to time, I have had occasion to mention; but in a future lecture I shall again enter more fully into their manner of action. That none of them are without danger in the hands of the unskilful, I admit;—nay, that some of them, mercury and purgatives, for example, have, from their abuse, sent many more to the grave, than they have ever saved from it, is allowed by every candid and sensible practitioner. But that was not the fault of the medicines, but of the men, who, having prescribed them without properly understanding the principles of their action, in the language of Dr Johnson, "put bodies of which they knew little, into bodies of which they knew less!"

Gentlemen, I have not always had this horror of blood-letting. In many instances have I formerly used the lancet, where a cure, in my present state of knowledge, could have been effected without; but this was in my noviciate, influenced by others, and without sufficient or correct data to think for myself. In the Army Hospitals, I had an opportunity of studying disease, both at home and abroad. There I saw the fine tall soldier, on his first admission, bled to relief of a symptom, or to fainting. And what is *fainting?* A loss of every organic perception—a death-like state, which only differs from *death*, by the possibility of a recall. Prolong it to permanency and it *is* death! Primary symptoms were, of course, got over by such measures—but once having entered the hospital walls, I found that soldier's face become familiar to

me. Seldom did his pale countenance recover its former healthy character. He became the victim of consumption, dysentery, or dropsy; his constitution was broken by the first depletory measures to which he had been subjected.

Such instances, too numerous to escape my observation, naturally led me to ask—Can this be the proper practice? It was assuredly the practice of others—of all. Could all be wrong? Reflection taught me that men seldom act for themselves; but take, for the most part, a tone or bias from some individual master.

By education most have been misled;
So they believe, because they were so bred.

But, Gentlemen, I had the resolution to think for myself—aye, and to act, and my conviction gained, from much and extensive experience, is, that ALL diseases may not only be successfully treated without loss of blood, but that blood-letting, however put in practice, even where it gives a temporary relief, almost invariably injures the general health of the patient. Englishmen! you have traversed seas, and dared the most dangerous climes to put down the traffic in blood;—are you sure that in your own homes there is no such traffic carried on—no GUINEA TRADE?

In connection with Blood-letting in the treatment of inflammation, we generally find

ABSTINENCE OR STARVATION

recommended. Beware of carrying this too far!—for "Abstinence engenders maladies." So Shakspeare said, and so nature will tell you, in the teeth of all the doctors in Europe! Abstinence, Gentlemen, may produce almost every form of disease which has entered into the consideration of the physician; another proof of the unity of morbid action, whatever be its cause. You remember what I told you of the prisoners of the Penitentiary; but I may as well restate the facts at this lecture. In the words of Dr. Latham, then, "An ox's head, which weighed eight pounds, was made into soup for one hundred people; which allows one ounce and a quarter of meat to each person. After they had been living on this food for some time they lost their colour, flesh, and strength, and could not do as much work as formerly. At length this simple debility of constitution was succeeded by various forms of disease. They had scurvy, diarrhœa, *low Fever*, and lastly, diseases of the brain and nervous system.

"The affections," Dr. Latham coutinues, "which came on during this faded, wasted, weakened state of body, were headache, vertigo, delirium, convulsions, APOPLEXY, and even mania. When blood-letting was tried (why was it tried?) the patients fainted, after losing five, four, or even fewer ounces of blood. On examination, after death, there was found *increased vascularity* of the brain, and sometimes fluid between its membranes and its ventricles." Is not this a proof of what I stated to you in my last lecture, that the tendency to hemorrhagic developement does not so much depend upon fulness of blood, as upon weakness of the coats of the containing vessels?—starvation, you see, actually producing this disease—in the Brain at least.

Every tribe of animals conveys its food to its mouth in its own way—but in all the higher animals, man included, the substances composing the food are converted into blood in precisely the same manner. Crushing and comminuting it by their teeth, they all reduce it by the aid of their saliva to a *pulp*, and by the action of their tongue and other muscles convey it in that state to the gullet,—the *Epiglottis*, or valve of the wind-pipe, shutting simultaneously, so as to prevent all intrusion in that quarter—though some of you, when attempting to speak and eat at the same time, may have had the misfortune to let a particle enter the "wrong throat:"—I need say nothing of the misery of that. When the food reaches the stomach, into which it is pushed by the muscular apparatus of the gullet, a new action commences. Pooh, pooh! I hear you say, all this we know already—but, Gentlemen, what *you* know may be news to somebody, and as I see strangers listening with apparent attention, I will proceed as I have begun. Well, then, to continue. Once in the stomach the food becomes mixed with the gastric juice, a secretion peculiar to that organ, and this secretion works so great an alteration upon it, that it is no more the same thing. It is now what medical men term Chyme—but this is not the only change it has to undergo; for scarcely has the chyme left this great receptacle of gluttony, and entered the small intestines, when it receives a supply of another juice from a gland called the Pancreas—and yet another from the ducts of the Liver, a still larger gland; and this under the mysterious name of Bile, some of you may possibly have heard of before! By this last juice it is turned of a white colour, and from Chyme its name becomes Chyle,—why, upon my word, I forget. But as nothing in nature will go on constantly the same without change, the chyle, for very good reasons of its own, must needs separate into two parts—one nutritious, the other the reverse—one portion enters into the formation of every part of the body—the other is excrementitious, and must be expelled from it. For the nutritious portion a million of mouths are ready—ready, like sharks, to make the most of it These belong to a system of vessels, called from the milky ap-

pearance of their contents, Lacteals—and they pervade the greater part of the entire alimentary canal. A great receptacle, (the Thoracic duct) receives them all, for it is their common point of re-union; and this again under a new name, (the receptaculum Chyli) passing upwards along the front of the spinal column, quietly drops its contents, pulp, chyme, chyle, what you please, into the left subclavian vein, a large blood-vessel leading under the left collar bone to the heart. Here the chyle is no longer chyle—meeting and mixing with the blood, it becomes Blood in fact, to be sent first by the right chamber of the heart through the lungs, and then by the left chamber circulated to all parts of the body. In that now *living* state it successively takes the shape of every organ and atom of the body; again in the shape of the excrementitious secretions, to pass in due time to the earth from which its elements were first derived.

The food of animals supports them only in so far as it offers elements for *assimilation* to the matter of the various organs and tissues composing their frames. While a single secretion still continues to be given *off* from the body—while the kidneys or bowels, for example, continue to perform their office, however imperfectly,—it must be manifest to you, that without some corresponding dietetic *increment*, elemental atoms of the animal organism must sooner or later be so far *expended* as to leave it in a state incompatible with life. How, then, let me ask, can you reconcile Healthy organization with Starvation-practice? How can you expect to find even the appearance of health after having practised the still more barbarous and unnatural proceeding of withdrawing by bloodletting a certain portion of the *sum* of all the organs that are being formed? The *quantity* of food which animals take, diminishes or increases in the same proportion as it contains more or less of the substance which chemists term *azote* or *nitrogen*. This, as you well know, is most abundant in animal food, but all vegetables possess more or less of it. Rice perhaps contains less than any other grain, and that is the reason why the Asiatics can devour such quantities of it at a time, as they are in the habit of doing. You would be quite surprised to see the natives of India at meal-time. Sitting cross-legged on their mats, a great basin of rice before them, with mouth open and head thrown back, they cram down handful after handful, till you wonder how their stomachs can possibly contain the quantity they make disappear so quickly.

The most cursory examination of the human teeth, stripped of every other consideration, should convince every body with the least pretension to brains, that the food of man was never intended to be *restricted* to vegetables exclusively. True, he can subsist upon bread and water, for a time, without dying, as the records of our prisons and penitentiaries can testify; but that he can maintain a state of health under such circumstances, is as utterly and physically impossible as that the lion and the panther should subsist on the restricted vegetable diet of the elephant. The dental organization of man partakes of the nature of the teeth of both graminivorous and carnivorous animals—his food should, therefore, be a mixture of the elements of the food of both, and with this mixed nourishment, the experience of centuries tells us, he supports life longest. How wretched, on the contrary, is the person doomed, however briefly, to an exclusive diet. Sir Walter Scott thus describes the effect of what he terms "a severe vegetable diet," upon himself. "I was affected," he says, "while under its influence, with a *nervousness* which I never felt before nor since—a disposition to start upon slight alarms; a want of decision in feeling and acting, which has not usually been my failing; an acute sensibiliiy to trifling inconveniences, and an unnecessary apprehension of contingent misfortunes, rise to my memory as connected with vegetable diet." How can a dietetic system, which so shakes the entire frame, by any possiblility give strength and stability to the weaker parts of the body,—those parts whose atomic attractions are so feeble, that every breath that blows upon the whole organism, shakes them to pieces? Must it not, in the very nature of things, make the man predisposed to consumption more certainly consumptive,—and so on, throughout the whole catalogue of hereditary disease? That abstinence is proper, in the commencement of most *acute* disorders, nobody will doubt. The fact is proved by the inability of the patient to take his accustomed meal; his stomach then is as unfit to digest or assimilate nutriment, as his limbs are inadequate to locomotion. Both equally require rest. But to starve a patient who is able and willing to eat is downright madness. No animal in existence can preserve its health, when fed on one kind or food exclu ively. The dog, when restricted to sugar alone, seldom survives the sixth week,—and the horse, if kept entirely upon potatoes, would waste away day by day, though you were to give him as much of that particular diet as he could devour;—he would die of a slow starvation. How many persons, even in the upper walks of life, are every day starved to death. The apothecary has only with a mysterious shrug to whisper the word "inflammation," and it is quite astonishing to what miserable fare

people of all conditions will submit. Instead of an exclusive vegetable diet being a cure for all complaints, as your medical wiseacres assure you, I know no complaint except small-pox and the other contagious diseases, that it has not of itself produced. The only thing it is good for, in my view of the matter is to keep the patient to his chamber, and the doctor's carriage at the door. You see what a profitable practice it must be for the apothecary,—and I'll bet you my life the physician who first brought it into fashion made his fortune by it. Not a nurse or nostrum-vender in the kingdom, but would be sure to cry him up to the skies! Not an apothecary from Gretna Green to Land's-End, but could tell you of some miracle worked by him; and the world hearing the same thing eternally rung in its ears, how could it possibly doubt the greatness of "Diana of the Ephesians!"

I am every day asked by my patients what diet they should take. I have the same answer for all—whatever they like best themselves, if they do not find it disagree. Their own experience of what agrees and disagrees with their own particular constitutions, is far better than any theory of yours or mine. Why, bless my life! in many chronic diseases the diet which a patient can take to-day would be rejected with disgust to-morrow; under such circumstances, would you still, according to common medical practice, tell a sick man to go on taking what he himself found worried him to death? Gentlemen, I hope better things of you.

The only general caution you need give your patients on the subject of diet, is moderation; moderation in using the things which they find agree with themselves best You may direct them to take their food in small quantities at a time, at short intervals, intervals of two on three hours for example, and tell them to take the trouble to masticate it properly before they swallow it, so as not to give a weak stomach, the double work of mastication and digestion,—these processes being, even in health, essentially distinct. Unless properly communicated and mixed with saliva, how can you expect the food to be any thing but a source of inconvenience to persons whom the smallest trifle will frequently discompose? I remember having read an anecdote of the late Mr. Abernethy, which is so apropos to what I have just been telling you, that I do not know that I can better finish what I have to say upon the subject of diet, than by letting you hear it. even at the risk of its proving to some of you a twice-told tale:—An American captain, on being one morning shown into his consulting room, immediately, in Yankee fashion, emptied the contents of his mouth upon the floor. The man of medicine stated, keeping his hands in his pockets, according to his custom, until the patient should explain. "What shall I do for my dyspepsy?" asked the American captain. "Pay me your fee and I will tell you," replied the doctor.—The money was produced and this advice given, "instead of squirting your saliva over my carpet, keep it to masticiate your food with." Now, upon my word, he could not have given him better advice.

Gentlemen, I shall conclude this lecture by reading to you a few of my communications I have received from medical men of repute, since I first published my doctrines in 1836. Dr. Fosbroke, of Ross began his medical career as the associate of the immortal Jenner; he lived in his honse, and materially assisted to propagate his great doctrine of Vaccination. You will therefore fully appreciate the evidence of a gentleman so distinguished in the history of medicine. From a letter which I received from him in January 1840; I shall read to you a passage or two:—

"In April 1835, our acquaintance and free communication commenced; and though I pricked up my ears, like one thunderstruck, at your wholesale denunciation of blood-letting, and your repeated asseverations, that in a practice embracing the treatment of several thousands of patients per annum, you never employed a lancet or a leach,—your assertions made an impression, though it was slowly and reluctantly received." That it strengthened by time, Gentlemen, you will see by the next extract.—"Nothing can be more striking than the great disparity between the proportion of persons who were bled in the two first years of my Ross practice, 1834 and 1835, (in which latter year I first became acquinted with your views,) and the three following years, 1836, 1837 and 1838. In the former two years, I bled one in seven, in the fourth only one in twenty-eight—and in the fifth year I bled NONE! The year 1839 is now concluded, and again in all that time I have NOT bled a single individual!"

"Your crime is, that you are before the age in which you live. If you had done nothing else but put a bridle upon Blood-letting, you would deserve the eternal gratitude of your race, instead of the calumny and oppression of the two-legged fools—the Yahoos, who persecute their greatest benefactors. But how can you expect to be more fortunate than your predecessors in this respect? The health of Sir Humphrey Davy was affected by the ingratitude of his country. 'A mind,' said he, 'of much sensibility might be disgusted, and one might be induced to say—why should I labor for public ob-

jects only to meet abuse? I am irritated more than I ought to be, but I am getting wiser every day,—recollecting Galileo and the times when philosophers and public benefactors were burnt for their services.'—Whence is all this? Pride, poverty, disappointment, difficulty and envy—and 'envy,' said Janner to me in his last days, 'is the curse of this country.' These are kept up by the canker of party and the taint of corruption.

"One of the greatest obstacles to reform of blood-letting and blistering, will be the prospective loss of guineas, half-guineas, five shillings and half-crowns. I saw a farmer last summer come into a druggist's shop.—Some one had told him 'he must be cupped,' so he drove a bargain, and stepped into a back room. 'That fool,' said I, 'does not want cupping.' 'He does not look as if he did,' said the druggist, 'but we can't afford to let him go without.'"

Gentlemen, the next two communications are from an army medical officer, Staff-surgeon Hume, a gentleman who, from the nature of his duties, has the very best opportunity of testing any particular practice—and one who, were he to give a false report, must be at once contradicted by regimental records. His statements may therefore be relied upon with somewhat greater confidence than the reports which annually emanate from the Medical Officers of Civil Hospitals and Dispensaries throughout England. From the tables of Mr. Farr, we learn, that these officers make the deaths at their institutions infinitely less than the average number of deaths of sick and well throughout the country! so that, if their reports be correct, sickness would appear to be actually a protection against death! Mr. Hume first writes from Dover, 6th December, 1838, "My object in writing is to congratulate you on the moral courage you have evinced in your last two works. I have been now nearly thirteen years in the service—mostly in charge of an hospital, and it will be gratifying to you to know that an old fellow-student adopts and carries out your principles in his daily practice. I have NOT used the lancet these last TWO YEARS. My cases yield readily to warm baths, cold effusions, emetics and quinine. You may ask me where I have been? Four years in Jamaica, the rest in North America and Home Service. If you had seen Marshall's Digest of the Annual Reports of the Army Medical Officers since 1817, you might have quoted it as a proof of your startling fact—the Unity of Disease. The more I read your book, the more I am convinced it is based on truth, and consistent equally with common sense and nature's laws. However little this age may appreciate your labors and the persecution you are likely to suffer from a certain class of doctors, every liberal mind must do justice to your unwearied zeal. Your holding up to ridicule the most fatal of all medical errors—bleeding a patient into a temporary calm and incurable weakness, ought to stamp you as the benefactor of mankind."

The same gentleman again writes to me from Naas Barricks, Ireland, 5th December, 1839. "It is now twelve months since I wrote to you, saying that I had not used the lancet for the two previous years;—and I am now more convinced than ever of its utter inutility in the treatment of disease. Every day's experience confirms me in the truth of your doctrines. During the last year, I have neither bled, leeched, nor cupped in any case—and I have not had a single death of man, woman, or child. The depot was never more healthy, and I attribute this principally to my abstaining, during the last THREE years, from every kind of depletion in the treatment of disease. I am satisfied that Pneumonia and Enteritis. (inflammation of the lungs and bowels) which are at present the bug-bears of the faculty, are indebted for their chief existence to the remedies used for ordinary ailments—namely, bleeding, starvation, and unnecesnsary purgiug I never saw a case of either (and I have seen many) in which the patient had not been the inmate of an hospital previously, where he had undergone the usual antiphlogistic regimen, or had been otherwise debilitated—as in the case of long residence in a warm climate. I am not surprised at the opposition you meet with. It has ever been the lot of those who have done good to humanity to be offered up as sacrifices at the altars of ignorance, prejudice and obstinacy. It is a fact related by Harvey. he could not get a physician above the age of forty to believe in the Circulation of that Blood whose VALUE in the economy you have so forcibly proved. Although I yield to you, as your just due, the origin of the improved principle of treating disease, I take credit to myself for being one of the first to carry it into effect, and I am doubtful whether a person in private practice could ever so far overcome prejudice as to use the cold bath with the confidence I do in every kind of fever. Its power, together with a warm one, is truly wonderful in equalizing the temperature of the body. When I compare the success of my treatment during the last few years, with that of my previous experience, I feel inclined to curse the professor who first taught me to open the vein with a lancet. Yours most truly,

T. D. HUME.

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Article I.

Definition of Insanity—Nature of the Disease.

By Insanity is generally understood some disorder of the faculties of the mind. This is a correct statement, so far as it goes; but it does not define the disease with sufficient accuracy, as it is applicable to the delirium of fever, inflammation of the brain, and other diseases which are distinct from insanity.

Insanity, says Webster's Dictionary, is "derangement of the intellect." This is not merely too limited a definition, but an incorrect one, for in some varieties of insanity, as Prichard remarks, "the intellectual faculties appear to have sustained little or no injury, while the disorder is manifested principally or alone, in the state of the feelings, temper or habits."

We consider insanity, *a chronic disease of the brain, producing either derangement of the intellectual faculties, or prolonged change of the feelings, affections, and habits of an individual.*

In all cases it is a disease of the brain, though the disease of this organ may be secondary, and the consequence of a primary disease of the stomach, liver, or some other part of the body: or it may arise from too great exertion and excitement of the mental powers or feelings; but still insanity never results unless the brain itself becomes affected.

In former times, insanity was attributed to the agency of the devil, and the insane were supposed to be *possessed* by demons.—Something of this opinion is still prevalent, and it appears to have been embraced by our Pilgrim Fathers.

Cotton Mather, in his life of William Thompson, thus remarks:—"*Satan,* who had been after an extraordinary manner irritated by the evangelic labors of this holy man, obtained the liberty to *sift* him; and hence, after this worthy man had served the Lord Jesus Christ, in the church of our New English *Braintree,* he fell into that *Balneum diaboli,* a black *melancholy,* which for divers years almost wholly disabled him for the exercise of his ministry."

Still we find this learned and good man saw the connection between the diseased mind and bodily disease, as he thus observes: "There is no experienced minister of the gospel, who hath not in the cases of *tempted souls,* often had this experience that the ill cases of their distempered bodies are the frequent occasion and original of their *temptations.* There are many men, who in the very constitution of their *bodies,* do afford a bed, wherein busy and bloody devils, have a sort of lodging provided for them. The mass of blood in them, is disordered with some fiery acid, and their brains or bowels have some juices or ferments, or vapors about them, which are most unhappy engines for devils to work upon their souls withal. The vitiated humors, in many persons, yield the steams, whereunto Satan does insinuate himself, till he has gained a sort of possession in them, or at least, an opportunity to shoot into the mind, as many fiery darts, as may cause a sad life unto them; yea 'tis well if self-murder be not the sad end, into which these hurried people are thus precipitated. New England, a country where splenetic maladies are prevailing and pernicious, perhaps above any other hath afforded numberless instances of even pious people, who have contracted those melancholy indispositions, which have unhinged them from all service or comfort; yea, not a few persons have been hurried thereby to lay violent hands upon themselves at the last. These are among the unsearchable judgments of God?"

We believe, however, that such opinions are no longer embraced by intelligent persons, who have paid much attention to insanity. By such, insanity is regarded as a disease of the body, and few at the present time, suppose the mind itself is ever diseased. The immaterial and immortal mind is of itself, incapable of disease and decay.—To say otherwise, is to advocate the doctrine of the materialists, that the mind, like our bodily powers, is material, and can change, decay, and die. On this subject, the truth appears to be, that the brain is the instrument which the mind uses in this life, to manifest itself, and like all other parts of our bodies, is liable to disease, and when diseased, is often incapable of manifesting harmoniously and perfectly the powers of the mind.

Insanity then, is the result of diseased brain just as dyspepsia or indigestion is the result of disordered stomach; but it is only one of the results or consequences of a disease of this organ. The brain may be diseased without causing insanity; for although we say, and say truly, that the brain is the organ of the mind, yet certain portions of the brain are not directly concerned in the manifestation of the mental powers, but have other duties to perform. Certain parts of the brain confer on us the pow-

er of voluntary motion, but these portions are distinct from those connected with the mental faculties. Hence we sometimes see though rarely I admit, individuals paralytic, and unable to move, from disease of the brain, whose minds are not at all, or but very little disturbed. In such cases there is some disease of the brain, but of a part not concerned in the manifestation of the mental powers. We recently saw an aged gentleman, who had been for several weeks, paralytic on one side, whose mind was not obviously affected. He died, and on examining his brain, a portion of the interior of one half of the brain was found much diseased, while the outer part was apparently in a healthy state.

From such cases, and numerous other observations, we are quite sure that the outer part of the brain is connected with the mental powers, and the inner portion with voluntary motion. These parts of the brain differ in color and structure. The outer is a greyish red color, and different from every other part of the system, while the inner part is beautifully white and resembles the nerves.

Again the brain appears to be a double organ, or it is divided into halves, or hemispheres of like form and function, and therefore, though one side or one half of the brain may be affected, the powers of the mind may still be manifested by the other.

We may say then, that insanity is an effect of a disease of only a part of the brain —the outer or grey part. In most cases, insanity is the consequence of very slight disease, of a small part of the brain. If it was not so, the disease would soon terminate in death—for severe and extensive disease of the brain soon terminates in death. We see however, numerous instances of insane persons, living many years, and apparently enjoying good health. We have seen several persons who have been deranged 40 and even 50 years, during which time they enjoyed in other respects, good health. On examining the brain after death, in such old cases of insanity, but little disease of this organ is often found, though a little, we believe may always be found; sometimes only an unusual hardness of the outer portion, but in so delicate an organ as the brain this is sufficient to derange its functions, just as a little disorder of the eye or ear, though not sufficient to affect the health, will disorder hearing and vision.

It is as if, in some very complicated and delicate instrument, as a watch for instance, some slight alteration of its machinery, should disturb, but not stop its action.

Thus we occasionally find that violent mental emotions—a great trial of the affections—suddenly to derange the action of the brain, and cause insanity for life, without materially affecting the system in other respects. Esquirol relates the case of a young lady, who for several years expected to marry a person to whom she was engaged, and much attached. He finally deserted her and married another, on hearing of which she immediately became deranged, and for years remained in this condition, rejecting the attention of all other men, and constantly talking of her former lover, whom she still loved.

In this Asylum is an interesting patient, who became deranged suddenly, three years since, in consequence of the murder of her son. Her whole time and thoughts since that period, have been engrossed in searching and calling for her son, whom she believes to be concealed in the building, or beneath the furniture. Thus she lives in hopes of soon seeing him.

Garrick used to say that he owed his success in acting King Lear, from having seen the case of a worthy man in London, who, when playing with his only child at a window, accidentally let it fall upon the pavement beneath. The poor father remained at the window, screaming with agony, until the neighbors delivered the child to him dead.—He instantly became insane, and from that moment never recovered his understanding, but passed the remainder of his days in going to the window, and there playing in fancy with his child, then dropping it and bursting into tears, and for awhile filling the house with his shrieks, when he would become calm, sit down in a pensive mood, with his eyes fixed for a long time on one object. Garrick was often present at this scene of misery, and "thus it was," he said, "I learned to imitate madness."

Sometimes, however, a severe trial of the feelings and affections produces death.

This is not merely the assertion of poets and novelists. Esquirol mentions the case of a young lady of Lyons, in France, who was engaged to be married to a young man of the same place. Circumstances suddenly occured which determined the parents to prevent their marriage, and the young man was sent away. Immediately on learning this she became deranged. After five days spent in vain efforts to relieve her, the parents, to prevent her death, had the young man recalled, but it was too late—she died in his arms.

In such cases, and we could cite many, death does not occur from apoplexy, nor from the exhaustion following long-continued and great excitement, but from the want

of sleep; the grief is too overwhelming for "poppy or mandragora, or all the drowsy syrups of the world," to medicine to repose.

Such was the sudden insanity and death of Haidee, described by Byron, and so true to nature and so beautifully, that we transcribe it.

"The last sight which she saw was Juan's gore,
And he himself o'ermaster'd and cut down;
His blood was running on the very floor
Where late he trod her beautiful, her own;
Thus much she view'd an instant, and no more,—
Her struggles ceased with one convulsive groan.

Day-lav she m t' at state unchanged, though chill,
With nothing livid, still her lips were red;
She had no pulse, but death seem'd absent still;
No hideous sign proclaimed her surely dead.

At last a slave bethought her of a harp;
The harper came, and tuned his instrument;
At the first notes, irregular and sharp,
On *him* her flashing eyes a moment bent,
Then to the wall she turned, as if to warp
Her thoughts from sorrow through her heart re-sent,
And he began a long, low island song
Of ancient days, ere tyranny grew strong.

Anon her thin, wan fingers beat the wall
In time to his old tune; he changed the theme,
And sang of love—the fierce name struck through all
Her recollection; on her flashed the dream
Of what she was, and is, if ye could call
To be so being; in a gushing stream
The tears rush'd forth from her o'erclouded brain,
Like mountain mists at length dissolved in rain.

Short solace, vain relief!—thought came too quick,
And whirl'd her brain to madness; she arose
As one who ne'er had dwelt among the sick,
And flew at all she met, as on her foes;
But no one ever heard her speak or shriek,
Although her paroxysm drew towards its close.
Hers was a frenzy which disdained to rave,
Even when they smote her, in the hope to save.

Food she refused, and raiment; no pretence
Avail'd for either; neither change of place,
Nor time, nor skill, nor remedy, *could give her*
Senses to sleep—the power seemed gone forever.

Twelve days and nights she wither'd thus; at last,
Without a groan, or sigh, or glance, to show
A parting pang, the spirit from her pass'd."

A little injury of the brain—a slight blow on the head, has often caused insanity, and changed the whole moral characer—usually for the worse, sometimes for the better. We have known a most exemplary and pious lady—a most excellent wife and mother, whose mind had been highly cultivated—transformed by a little injury of the head, into one of the most violent and vulgar beings we ever saw, and yet the intellectual powers were not very much disturbed. For a considerable time she continued to take good care of her family, so far as related to household duties, but her love of reading, of attending church, and all affection for her family and neighbors was gone, and she became so violent that her friends were obliged to place her in a Lunatic Asylum. The celebrated Dr. Parry refers to a case in which, to use his own words, "an accidental blow on the head perverted all the best principles of the human mind, and changed a pious Christian to a drunken and abandoned felon"

Such cases teach us to be cautious and tolerant in instances where change of character and misconduct are connected as to time, with injury or disease of the head, or even with general ill health.

Now and then an injury of the head seems to improve the intellect, and even the moral character. Instances of the former are not very uncommon. The disease or injury of the brain appears to give more energy and activity to some of the mental faculties. This we often see in the delirium of fever. The following very curious case was related to Mr. Tuke, of the Retreat for the Insane near York, England:

"A young woman, who was employed as a domestic servant by the father of the relater, when he was a boy, became insane, and at length sunk into a state of perfect idiocy. In this condition she remained for many years, when she was attacked by a typhus fever; and my friend, having then practiced some time, attended her. He was surprised to observe, as the fever advanced, a development of the mental powers. During that period of the fever, when others were delirious, this patient was entirely rational. She recognized, in the face of her medical attendant, the son of her old master, whom she had known so many years before; and she related many circumstances respecting this family, and others, which had happened to herself in earlier days. But, alas! it was only the gleam of reason; as the fever abated, clouds again enveloped the mind; she sunk into her former deplorable state, and remained in it until her death, which happened a few years afterwards."

Numerous cases are on record where a blow on the head by depressing a portion of the skull has caused the loss of speech, memory, and of all the mental faculties for many months; but which were restored on trephining and raising the depressed bone.

As we have said, sometimes the moral character is improved by injury or disease of the head. Dr. Cox, in his *Practical Observations on Insanity*, relates such cases. We sometimes see the same results from severe illness. Most experienced physicians must have noticed striking and permanent changes of character produced by disease. The insanity of some persons consists merely in a little exaltation of some one or more of the mental faculties of self-esteem, love of approbation, cautiousness, benevolence, &c.

A man received a severe wound on the upper part of his head, after which his mind became some affected, especially as related

to his benevolent feelings, which were perpetually active towards man and beast. He was disposed to give away all that he had, and finally was placed in a Lunatic Asylum, in consequence of the trouble which he made in his endeavors to benefit others and relieve suffering. Whenever he saw any cattle in a poor pasture, he would invariably remove them to a better; and whenever he heard of a destructive fire or shipwreck, he would hasten even to a great distance to endeavor to afford relief.

Among the insane in Lunatic Asylums, we sometimes see not only exhibitions of strength, mechanical and musical skill, powers of language, &c., far superior to what the same individuals ever exhibited when sane, but also a remarkable increase and energy of some of the best feelings and impulses of our nature, prompting them to deeds of self-sacrifice and benevolence, which remind us of the somewhat insane but ever memorable act of Grace Darling—

"Whose deeds will live
A theme for angels, when they celebrate
The high-souled virtue which forgetful earth
Hath witnessed."

In such instances, fear and every selfish feeling appears to be lost or overcome by the intensity of the benevolent impulse.

From the preceding remarks we see that insanity is often but an effect of a slight injury or disease of a part of the brain, and in many instances only a few of the faculties of the mind are disordered. From this we infer that the brain is not a single organ, but a congeries of organs, as maintained by the illustrious Gall and his celebrated successors Spurzheim and Combe. Thus each mental faculty has an especial organ, and therefore certain faculties may be disordered by disease of the brain, while others are not affected; a fact every day observed in Lunatic Asylums, but which we know not how to explain if we believe the brain to be a single organ.

We very rarely find the whole mind destroyed or disordered in insanity, except in cases of long continuance, or of unusual severity. A majority of patients in Lunatic Asylums have considerable mind left undisturbed, and some of them conduct with propriety, and converse rationally most of the time, and on all but a few subjects.

We have seen an individual who believed that he directed the planets and caused the sun to shine and the rain to descend when he chose, yet he was a man of much intelligence and conversed rationally on other subjects, and was remarkable for gentleness of manner and amiability of disposition.

We could cite very many cases nearly similar, and to those who have frequently visited this Asylum, we can appeal for the verification of the statement—that patients decidedly insane on one or more subjects, still manifest acute and vigorous minds, and appear to be sane on others.

Having seen that insanity consists in the derangement of one or more of the faculties of the mind, produced by disease of only a part of the brain, we conclude there is no one faculty of the human mind but may become disordered. If, therefore, we actually knew what mental faculties mankind possess, we might then know all the various forms of insanity, all the varieties of mental aberration to which these faculties are liable. But we do not know. Philosophers have ever disagreed as to the number of the faculties of the human mind, and even as to what constitues a faculty.

We shall not however particularise their views, but briefly allude to the constitution of the human mind, appealing to common observation for the correctness of what we assert on this subject.

In contemplating the phenomena of mind, we can not fail to perceive the variety of its faculties, and that there is an obvious general division of them into intellectual and moral, the latter comprehending the propensities and impulses.

These faculties, both the intellectual and moral, are originally possessed by all, and are alike dependant upon a healthy state of the brain for their proper manifestation. In some they are far more active and energetic than in others, owing in most cases we believe to original formation of the brain, and in others to education. That the intellectual faculties can be greatly improved by cultivation, every one knows, and by many, too many we fear, this is regarded the most important and sole object of education,—as if the moral powers, the propensities, and impulses, were not a part of the mind, and not capable of improvement.

But however important the cultivation of the intellect may be, it certainly is not more so than the cultivation and improvement of the moral powers. We do not wish to undervalue the intellect, or discourage efforts for its improvement, but we wish that all might realise the superiority of our moral nature over intellect itself.

The intellectual faculties are but a part of our mental powers, and contribute but little in fact towards forming what we call the *character* of an individual. We call to mind our acquaintances and notice that their characters are very different, but this difference does not arise from the difference in their in-

tellectual faculties, but in their moral powers. That one man knows more of the Greek language or mathematics, or has more knowledge of commercial or political affairs or of some mechanical art, or has the ability to acquire knowledge of many subjects faster than another, does not cause the difference we perceive in what we denominate the character. The character is determined by the moral faculties or propensities, by the affections, benevolence, love, selfishness, avarice, &c. The difference in the activity and energy of these, create the differences we see in the characters of men; these constitute the man himself, or the *soul* of man, while the intellectual faculties are but instruments to administer to the wants and demands of the propensities.

Without these propensities or moral faculties, the intellectual powers would not be exerted at all, or but feebly. The stimulus or urgency of the impulses of our moral nature, of benevolence, love, avarice, &c., impel men to action—to gratify these the human race have forever toiled.

Now it is to these important faculties, the propensities of our moral nature, that we wish to call particular attention. Not merely to the importance of their early cultivation and improvement, but to the fact that they as often become deranged as the intellectual. They as truly use the brain for manifesting themselves; consequently when certain parts of the brain become diseased, they become deranged, and not unfrequently without the intellectual powers being noticeably disturbed. A man's natural benevolence or propensity to acquire, or to love, may become deranged from disease of the brain as truly as his powers of comparing, reasoning, &c.

Yet evident as this is from Physiology and Pathology, and from daily observation in Lunatic Hospitals, it is a fact, and an alarming fact, that when disease causes derangement of the moral faculties, and changes the character and conduct of an individual, he is not deemed insane, provided the intellectual powers are not obviously disordered.

It may be said that such a person has reason still left to guide him, as is evidenced by his ability to converse rationally on many subjects, and even to reason well against the very crime that he commits. All this may be true, and yet the person may not be accountable, for although reason is given to prevent us from doing evil, it cannot be expected to resist a diseased and excited impulse.

Let not this be applied to crimes committed during voluntary intoxication, for though when thus intoxicated a man may be momentarily insane, yet it is voluntary insanity produced by gross misconduct, of which no one can avail himself to escape the legal consequences of crime. Still in such cases the crime must be the immediate result of intoxication, and while it lasts, to make a man accountable, as has been decided by Judge Story and other legal authorities. If committed afterwards during delirium tremens induced by intoxication, he must be acquitted on the ground of insanity, as he can not be held accountable for the immorality of the cause of his insanity, a disease which he can not succesfully feign or voluntarily induce.

The disbelief in a kind of insanity that does not disturb the intellect, arises perhaps from the common phraseology, that the affections, passions, and moral qualities, have their seat in the heart and not in the brain, and therefore are not likely to be disordered by disease of the latter organ. But in fact, the orderly manifestation of our moral faculties, our affections, and intellectual powers, are alike dependant on the healthy state of the brain. The heart has nothing to do with either.

We wish to repeat, that there is no faculty of the mind but may become deranged by disease of the brain. Disease of one part of this organ may cause the derangement of some of the intellectual faculties, while disease in another part may not disturb the intellect, but derange the moral powers or propensities. Thus we see blows on the head and wounds of the brain, sometimes destroy only one or two of the intellectual faculties such as the memory of words, or the memory of places, and at other times to effect an entire change of the moral character.

But while the injury that affects the intellect is acknowledged to cause insanity, the injury that changes the moral character is not supposed to have this effect. The subject of the former is considered an object of concern and pity, while the latter is considered a depraved and wicked being deserving of punishment. Numerous cases have fallen under our observation, where a great change in the moral character occurred and lasted a year or two, and then the intellect became affected. This change of character was noticed and lamented, but those thus affected were not considered insane until the intellect itself became involved; while in fact they were insane from the first.

We wish all to be assured that a sudden and great change of character, of the temper and disposition, following disease or injury of the head, although the intellect is not disturbed, is an alarming symptom; it is

often the precursor of intellectual derangement, and if not early attended to, is apt to terminate in incurable madness.

Within a few days we have seen two cases of insanity, both said to be quite recent, but on inquiring particularly of their friends we found that they had noticed a striking change of character for several months before they thought of insanity. In one the change was from being naturally very generous and benevolent, to the opposite extreme of selfishness, and as they expressed it, of stinginess. In the other, the change was from great mildness and amiability of disposition, to that of extreme irrascibility and moroseness. Now these persons were not deemed insane until their intellects were disturbed; but we regard the previous change of character as truly the consequence of disease of the brain as the disturbance of the intellect, and this is now the opinion of their friends.

Derangement of the intellectual faculties seldom occasions much dispute—every one easily recognizes it—but not so with derangement of the moral powers. Most persons have seen individuals who are crazy, and consider themselves qualified to judge whether a person is deranged or not, yet on inquiry we find that nearly all expect irrational and incoherent talk from those that are deranged, or wild and unnatural looks, or raving and violent conduct. Their opinions respecting insanity are derived from having seen raving maniacs, and not from observation in Lunatic Asylums; for in the latter may be found many whose insanity consists in derangement of the affections and moral powers, and not in disturbance of the intellect.

Owing to such limited and erroneous views respecting insanity, many persons are not disposed to believe in a kind of mental disorder that may impel men to commit crimes, unless such individuals exhibit derangement of the intellect, or conduct in a manner that they have been accustomed to see deranged persons conduct.

But notwithstanding this common opinion regarding insanity, it is a well established truth, that there is a form of insanity, now called by many *moral* insanity, arising from disease of the brain, which may impel men to commit great crimes, while the intellect is not deranged, but overwhelmed and silenced by the domination of a disordered impulse.

Sometimes insanity seems to arise from some defect of the organs of sense, from change in the nerves of sensation. It is said that in those who are troubled with hallucinations of sight or of hearing, some disease of the nerves of the eye or ear is found. Still, in such cases there must be in addition some defect in the power of comparison, or insanity would not result. Comparison is one of the most important of the faculties of the mind, and the one most liable to be affected in insanity, or in any disease of the brain, as in headache for instance.

Disorder of the nerves of sensation may also lead to insane ideas and conduct. Some have believed themselves converted into inanimate substances. One man thought himself changed into a teapot, another into a barrel which was rolled along the street, and another into a town-pump to which no rest was given day nor night.

Mr. Connolly, in his work on Insanity, tells of a respectable merchant in London who fancied himself metamorphosed into a seven shilling piece, and who took the precaution of going round to those with whom he had dealings, requesting of them as a particular favor that if his wife should present him in payment they would not give change for him.

In all these cases—for they all admit we think, of one explanation—there was some affection of the nerves of sensation, and also some disorder of the faculty of comparison.

In some cases of mental disorder, there seems to be almost complete annihilation of sensation. This is the case with those who believe themselves dead; they feel not, and fully believe that they have ceased to exist, yet such persons will often talk rationally on other subjects. Most of their mental faculties are in perfect condition, and sometimes by exciting some of the most predominating impulses or passions, such persons are cured.

One of the Princes of the Bourbon family of France, imagined himself dead, and refused to eat. To prevent his dying of starvation, two persons were introduced to him, in the character of illustrious dead like himself and they invited him after some conversation respecting the world of shades to dine with another distinguished but deceased person the Marshal Turenne.

The Prince accepted this very polite invitation, and made a very hearty dinner; and every day, while the delusion continued, in order to induce him to eat, it was necessary to invite him to the table of some ghost of high rank and reputation.

Dr. Mead relates, that an *old bell ringer* at Oxford University, imagined himself dead, and ordered the bell to be rung, as was usual on the occurrence of a death at that place. The bell *was* rung, but in a most awkward and unusual manner; the old ringer could not bear this, and leaped from his bed, and hastened to the belfry to show how it should.

be rung; he then returned to his room that he might die in a proper way, but the exercise and passion proved so beneficial that his delusion was broken up, and he soon recovered.

As I have already mentioned, some persons decidedly insane on some subjects, exhibit greater intellectual power on others during their mental derangement, than when they are sane. The following is an instance.

A general in the French army, who had the entire confidence of Napoleon, and who had been directed by him to superintend some immense military preparations at Boulogne, became much fatigued by his duties, which exposed him most of the day to the hot sun. Suddenly he quitted the work, and accompanied by one of his aids, set off for Paris, announcing on his way that he was the bearer of a treaty of peace with England. He traveled with great rapidity, not allowing himself time to eat, and paid postillions largely to hasten his speed. Arriving at Paris, the public funds rose from this news of the treaty. Not finding Napoleon at the Palace of the Tuilleries, he hastened to St. Cloud, and, in disordered dress, penetrated to the apartment of the Emperor, and announced to him what he alone, of all whom the general had met, knew to be incorrect. In fact, Napoleon was the first to discover his insanity, and committed him immediately to the care of physicians.

The insanity of the general continued through the summer, during which time he wrote comedies and plays which were much admired, and he also conceived or invented an improvement in firearms, and begged to have permission to visit a founder in order to have a model made from drawings he had himself prepared. His physician reluctantly yielded to his request, on his giving his word of honor that he would not go elsewhere. He went and returned, and eight days afterwards went again and found the model completed, and then gave orders for 50,000 models to be made. This order for 50,000 models was the only symptom of insanity that he exhibited during the whole affair. He soon however became worse, then paralytic, and died insane.—But the efforts of his diseased mind have survived him; his writings are still read and admired, and his invention was soon found to be quite an improvement, and has since been adopted in the French armies.

In some cases of insanity, the faculties of the mind are so acute, that it is exceedingly difficult for a stranger to detect the mental aberration. The late Lord Erksine, in his speech in defence of Hadfield, for shooting at the King at Drury Lane Theatre, in order to demonstrate how cunning and acute in reasoning insane persons frequently are, and consequently how difficult it sometimes is to discover their insanity, referred to the following cases, which we quote in his own words:

"I well remember (indeed I never can forget it,) that since the noble and learned judge has presided in this Court, I examined for the greater part of a day, in this very place, an unfortunate gentleman who had indicted a most affectionate brother, together with the keeper of a mad-house at Hoxton, for having imprisoned him as a lunatic, whilst, according to his evidence, he was in perfect senses. I was, unfortunately, not instructed in what his lunacy consisted, although my instructions left me no doubt of the fact; but, not having the clue, he completely foiled me in every attempt to expose his infirmity. You may believe that I left no means unemployed which long experience dictated, but without the smallest effect. The day was wasted, and the prosecutor, by the most affecting history of unmerited suffering, appeared to the judge and jury, and to a humane English audience, as the victim of the most wanton and barbarous oppression.—At last Dr. Sims came into Court, who had been prevented by business, from an earlier attendance, and whose name, by the bye, I observe to-day in the list of the witnesses for the crown. From Dr. Sims I soon learned that the very man whom I had been above an hour examining, and with every possible effort which counsel are so much in the habit of exerting, believed himself to be the Lord and Saviour of mankind, not merely at the time of his confinement, which was alone necessary for my defence, but during the whole time that he had been triumphing over every attempt to surprise him in the concealment of his disease. I then affected to lament the indecency of my ignorant examination, when he expressed his forgiveness, and said with the utmost gravity and emphasis, in the face of the whole Court, "I AM THE CHRIST," and so the cause ended. Gentlemen, this is not the only instance of the power of concealing this malady; I could consume the day if I were to enumerate them; but there is one so extremely remarkable, that I cannot help stating it.

"Being engaged to attend the assizes at Chester, upon a question of lunacy, and having been told that there had been a memorable case tried before Lord Mansfield in this place, I was anxious to procure a report of it, and from that great man himself (who within these walls, will ever be

reverenced, being then retired in his extreme old age, to his seat near London, in my own neighborhood) I obtained the following account of it. 'A man of the name of Wood,' said Lord Mansfield, 'had indicted Dr. Monro, for keeping him as a prisoner (I believe in the same mad-house at Hoxton) when he was sane. He underwent the most severe examination by the defendant's counsel without exposing his complaint; but Dr. Battye, having come upon the bench by me and having desired me to ask him what was become of the PRINCESS whom he had corresponded with in cherry-juice, he showed in a moment what he was. He answered that there was nothing at all in that, because having been (as every body knew) imprisoned in a high tower, and being debarred the use of ink, he had no other means of correspondence but by writing his letters in cherry-juice, and throwing them into a river which surrounded the tower, where the Princess received them in a boat. There existed, of course, no tower, no imprisonment, no writing in cherry-juice, no river, no boat; but the whole the inveterate phantom of a morbid imagination. I immediately, continued Lord Mansfield, 'directed Dr. Monro to be acquitted; but this man, Wood, being a merchant, in Philpot Lane, and having been carried through the city in his way to the mad-house, he indicted Dr. Monro over again, for the trespass and imprisonment in London, knowing that he had lost his cause by speaking of the Princess at Westminister; and such,' said Lord Mansfield, 'is the extraordinary subtlety and cunning of madmen, that when he was cross-examined on the trial in London, as he had successfully been before, in order to expose his madness, all the ingenuity of the bar, and all the authority of the Court, could not make him say a single syllable upon that topic which had put an end to the indictment before, although he still had the same indelible impression upon his mind, as he signified to those who were near him; but conscious that the delusion had occasioned his defeat at Westminster, he obstinately persisted in holding it back. This evidence at Westminster was then proved against him by the short-hand writer.'"

In a future number we shall resume the subject of this article, and we beg our readers to keep in view the statements advanced in this, as we purpose to refer to them in connection with the Medical Jurisprudence of Insanity, and an explanation of some cases of moral insanity that have much embarrassed both physicians and jurists.

Dr. STEVENS' ADDRESS,

At the opening of the Annual Session of the New-York Medical College: Crosby street.

It is to be regretted that a full and accurate report of this remarkable production has not been laid before the profession and the public. The notices of it which have appeared in the city journals, have been confessedly mere "meagre outlines" of a really rich and elaborate performance. It is, therefore, to the private reports of judicious and intelligent medical gentlemen who heard it delivered, rather than to any other source, that we are indebted for the information which we have received concerning it, and on which we chiefly found our reflections and remarks.

All reports concur in representing that the object and tendency of this Sessional Address, beyond the immediate and temporary occasion which called it forth, were to check the present liberal and humane efforts of many enlightened men to rescue medical knowledge from its inveterate prejudices and trammels, and thus enable it to keep pace with the general intelligence of the age.

Accordingly, the Address proceeded, in the true snuff-colored, old fashioned style, first to claim for medical science, as it now stands, a dignity and maturity rivaling any other; and secondly to deprecate free investigation and progress, under the venerable scare-crow jealousy of "dangerous experiments." The gentleman proceeded to show, says a published report, "that medicine was as much a science as any other known, although not based on fixed principles." How far he succeeded in establishing this amusingly contradictory proposition, we are not publicly informed, but it must evidently have been as difficult an operation as he ever attempted in the whole course of his practice. This done, however, he advanced to his second position, which, according to the same report, was to show that "those who were given to experiments never raised themselves in the profession and were injurious to their patients." And in these two points we have the whole scope, design and intellect of this famous Annual Address.

It becomes, therefore, an important question as to whether the sincerely zealous and talented young men who now throng our medical schools, from all parts of the Union, should be thus misled and retarded in their noble aspirations for true eminence and usefulness in the arduous profession which they have chosen, and in which so awful an amount of responsibility and so vast a field of human interest are necessarily involved. None but bigots will hesitate to admit, that the tendency of such instruction as we have above quoted, is to keep the next generation of medical men at least as ignorant, conceited and mischievous as the present and the past: mere petrifactions in the stream of time, while the students of almost every other department of knowledge display a living and athletic career of advancement and renown.

That medicine is not, as Dr. Stevens affirmed, "as much a science as any other known," has been frankly admitted by many men, as distinguished, to say the least, in that profession as himself. Let the ingenious student listen to the opinion of another instructor, the truly eminent Dr. Evans of Edinburgh:—

"How much have we yet to learn, how little do we really know, of the nature and rational treatment, not only of the diseases of the cerebro-spinal system, but of diseases in general! Assuredly, the uncertain and most unsatisfactory art that we call medical science, is no science at all, but a jumble of inconsistent opinions; of conclusions hastily drawn; of facts badly arranged; of observations made with carelessness; of comparisons instituted which are not analogical; of hypotheses which are foolish: and of theories which, if not useless, are dangerous.—This is the reason why we have our homœopathists, and our hydropathists; our mesmerists and our celestialists!"

And as a timely counterpoise to Dr. Stevens' nervous horror of "experiments," injurious at once to practitioner and patient, we would submit the following remarks of the able and honest Dr. G. B. Childs of London,

"The whole science of healing is built upon fortuitous and chance discoveries. Like the alchemists of old, we have discovered a thousand valuable things, where we never thought of looking for them; and while uselessly seeking for talismanic gold, we have lighted on a pearl of great price. Every thing in fact, is presented to us as the result of *experiment*; and, in the treatment of disease, the most valuable remedy can boast of no higher origin than its more humble neighbor.

Dr. Knighton who was at the head of his profession, and physician to George IV—said

"It is somewhat strange that, though in many arts and sciences improvement has advanced in a step of regular progression from the first, in others it has kept no pace with time; and we look back to ancient excellence with wonder not unmixed with awe. Medicine seems to be one of those ill-fated *arts* whose improvement bears no proportion to its antiquity. This is lamentably true, although Anatomy has been better illustrated, the Materia Medica enlarged, and Chemistry better understood."

It would be easy to add the testimony of a great number of distinguished men to the same effect, but it would be useless to do so as the truth of the statements of those we have quoted, is known to every well informed physician. Dr. Stevens, however, steps forth and breasts the whole tide of testimony, and while he admits that medicine is not founded, like all other sciences, upon fixed principles, still obstinately insists that it is "as much a science as any other." Fixed principles being thus unnecessary to medical science, it seems perfectly consonant that he should denounce those "experiments" by which alone fixed principles ever can be, or ever have been established.—We strongly suspect, however, that the Doctor may have other motives of hostility to "experiments" than those which he assigns, for we could, ourselves, refer to some "experiments," of a very singular character which have proved as beneficial to his patients as they may possibly have been injurious to his practice. And there is much less of paradox in this, than in the notion of a science without principles. We have, indeed, no doubt that the "experiments" of

which the following are a few of the results, are among the most objectionable which the Doctor could adduce :—

Many cases of confirmed tubercular consumption, long under the best treatment, known to the anti-experiment, (or anti-injurious-to-patients !) school, and then avowedly abandoned as utterly hopeless, *cured*, within a few months after the "experiments" were tried, directly under anti-experimental observation !

2. Many cases of white-swelling, tubercular disease of the joints—treated and abandoned by science without principles, and rapidly cured by experiments injurious to patients, as above.

3. Violent inflammations of the organs, uniformly reduced in from three to fifteen minutes.

4. The most severe paroxysms of Bilious Fever, with violent pain in the head, back, stomach and intestines, &c., uniformly reduced in from five to ten minutes.

5. Sick head-ache uniformly reduced in from one to ten seconds ; and Nervous head-ache in from one to five minutes.

6. Tooth-ache in from one to fifteen seconds.

7. Tic-Douloureux, of the most intolerable severity, in from one to five seconds.

8. Luxation of the hip joint, of four years standing, reduced by three applications of the Rotary Magnetic Machine.

9. *Cum multis aliis.* And we mean by this Latin that Dr. Stevens can have as many more, in plain English, as he could lecture against from this time to the next Annual Session.

MARY DENT AND JOHN GARLAND.

SIR JAMES GRAHAM'S "SURGERY."

In a recent number of The Lancet, (July 27, p. 562,) we published a short account, extracted from the Times, of a most extraordinary trial which had taken place on the Norfolk Circuit, that of John Garland, surgeon, accused of feloniously killing Mary Dent. The appeal which we then made to our friends residing in that part of the country, for further particulars, has been responded to, and we are now able to lay a full and authentic account of this strange affair before our readers. In addition to a medical narrative of the case by Mr. Henry Mitchell, of Addenbrook's Hospital, Cambridge, one of the surgeons who performed the post mortem examination, we also publish a letter, which has since appeared in the "Provincial Medical and Surgical Journal," from Mr. Jones, the surgeon who was first called in by Mr. Garland.

Mr. Henry Mitchell's History of the Case.

The name of the unfortunate patient was Mary Dent, wife of John Dent, of Littleport, in the Isle of Ely, labourer; she was twenty-three years of age, of good health, and robust appearance ; she had borne five children and had miscarried once ; she was married at a very early age, and became a mother when between sixteen and seventeen years old.

On the 22d day of May last, Mary Dent complained of feeling very unwell ; she felt great pain, and vomited occasionally, and being apprehensive of miscarriage, sent off, about eleven o'clock at night, for Mr. John Garland, a person of middle age, who has practised as a surgeon and accoucher, at Littleport, ever since 1816.

It appears that on the day in question, the patient had occasion to lift or drag a sack of flour, containing fourteen stone ; it also appears that according to her own account, she was at this time about three months advanced in pregnancy, having menstruated for the last time on the 14th of February.

Upon his arrival, Mr. Garland proceeded to examine the patient by passing his hand and arm into the vagina, intending as he himself expressed it, to "bring the child." He shortly afterwards made a second examination, whereupon the patient entreated of him to desist, "for he was pulling her entrails out ;" and presently Ann Banyan, the nurse, saw hanging out in the bed "a large quantity of entrails, as many as could lie on a large plate." (I quote her own words as taken down by the coroner.)

When matters had arrived at this crisis, Mr. Garland appeared most anxious for further advice and assistance, and, at his urgent request, a messenger was despatched to Ely, who returned, bringing with him Mr. Jones, of Ely, surgeon.

Upon turning down the bed-clothes, Mr. Jones discovered in the bed a something, which he at first mistook for the umbilical cord, but a more careful examination, convinced him that the protruding mass was small intestine, depending from the vagina.

Upon a minute inspection, he ascertained that the intestine was completely detached from the mesentery, throughout its whole length and that it was extensively lacerated; the *distal* portion being torn completely across, that is, its whole diameter being completely divided, whilst the *proximal* portion was lacerated, so as to be very nearly divided. Under these unfortunate and perplexing circumstances, Mr. Jones was of opinion that any attempt to save the intestine would prove useless; he therefore passed a ligature around the intestine, above the *proximal* laceration, and close to the vagina, and cut off all the intestine below the ligature; the intestine, so cut off, measured nineteen feet six inches. Mr Jones then took his departure stating his belief that the patient could not survive many hours.

All this occurred between four and seven o'clock on the morning of the 23d of May. Shortly after the departure of Messrs. Jones and Garland, the fœtus was found in the bed; it appeared a fœtus of about three months. About twelve hours after the application of the ligature, the bowel above the ligature became very distended, and ultimately burst. Subsequently, the nurse, Anne Banyard, removed about half-a-yard more of intestine, without any medical man being present; she cut it off, and she did so, "because it became very black and was very offensive."

The poor woman lingered seventeen days, and expired suddenly and at once, whilst attempting to raise herself up in bed, on the 8th day of June. During this period she did not suffer so acutely as might have been imagined; for three or four days the stomach rejected every thing, but latterly it became much less irritable; her skin was cool, her pulse rarely above eighty, her countenance natural, and she complained of no pain, neither was there any appearance of hæmorrhage. She took a little simple sesqui-carbonate of soda as medicine, and weak gruel or chicken-broth as diet.

I was instructed to make a post-mortem examination about forty-eight hours after death. The following is the result of the examination:—

A very marked flatness and depression was observable between the two ilia; over the whole abdomen the bodies of the vertebræ could be more distinctly felt than naturally they should be; the external parts of generation and the perinæum were very much excoriated. There was nothing else worthy of note about the trunk.

Upon opening the abdomen, the liver was ascertained to be healthy, as also the stomach. The omentum was offensive, black, gangrenous, and adherent to the arch of the colon, and to the small intestines generally; this adhesion was more marked from the symphysis-pubis to the right than to the left iliac region.

The colon appeared shrunken and contrated, and was so adherent to the omentum throughout the extent of the ascending and transverse portions, that the omentum and colon might be turned back together; the whole of the ascending portion of the colon was in a state of complete gangrene; over the region of the cæcum a small and circumscribed collection of matter was found, and it appeared as if, in this situation, the small intestines had been separated from the large; the descending portion of the colon and the rectum were not in so diseased a condition.

About *two yards* only of small intestines remained in the abdomen, these, towards the lower portion were very gangrenous, and upon tracing them downwards it was discovered that they were very adherent in the right iliac region, and that in this situation they dipped downwards and inwards to the right of the uterus, and became attached, by their lower margin, to the borders of an opening found in the right side of the vagina; the small intestines appeared to terminate *in* the vagina, for they could not be traced onwards to the large.

The mesentery was gangrenous, and had been torn in two or three places.

In the vagina was found in the upper part and on the right side, a laceration sufficiently large to admit two or three of my fingers; this laceration was found to communicate with, and to lead into, the above-mentioned depending portion of small intestine, so that the fingers could readily be passed from the vagina into the small intestine; the vagina on the *left* side was healthy and unruptured.

The uterus was normal in size and appearance, and what perhaps is rather singular, did not exhibit any traces of recent impregnation.

The bladder was healthy, so were the lungs, and so was the heart.

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Defence by Mr. Garland's Counsel.

Mr. O'Malley addressed the jury on behalf of the prisoner in a speech of geeat eloquence and power. He began by adverting to the spirit in which the prosecution had been got up, which he characterized as one of professional jealousy and revenge. An unfortunate interpolation in the evidence of Mr. Stevens, to the effect that he had generally found the prisoner an ignorant man, he denounced in terms of severest and most indignant reprehension. He analyzed with much acumen the evidence of Mr. Jones, and was not less severe upon him than he

had been upon Mr. Stevens. Talk of rashness, forsooth! Why, here was a man who, with three minutes consideration, performed an operation which he confessed destroyed every possible chance of life. Whatever might have been the result before the cutting off the protruding intestine, at any rate, according to the witness's own showing, there was no hope—no chance whatever after that operation. And who was to say what was the state of things when Mr. Jones first examined the woman? He confessed that he knew not what the extraneous substance was when first he saw it; he thought it was the umbilical cord; might not his handling of it have produced the holes and lacerations spoken of? The learned gentleman argued that most likely the rupture in the vagina had been occasioned by the lifting of the flour—that the prisoner, like Mr. Jones, had mistaken the intestine protruding from the aperture for the umbilical cord—and that at best he had been guilty of an error, and that medical men were liable to errors every day of their lives. Hundreds, nay thousands, were annually killed by the errors of medical men, it was impossible it could be otherwise; but they were not to be indicted for manslaughter for mere errors. Mr. O'Malley made a most forcible appeal to the feelings of the jury.

The jury found Mr. Garland GUILTY, and he was sentenced to one month's imprisonment.

Academie de Medecine, Paris.—*July.*

CASE OF SUB-PUBIC LITHOTOMY, (HIGH OPERATION.)

M. Segalas presented to the academy two vesical calculi which he had recently extracted from two old men, by the high operation. One of them was of the form of a kidney, of extreme hardness, and weighed 135 grammes (4 oz. 4 dr.;) its circumference was nineteen centimetres in one direction and fifteen in the other. The patient who bore it was a priest, residing in the department of the Loire. Its presence had been overlooked by an hospital surgeon who first examined him, but was subsequently discovered by another practitioner, when he was sent to Paris, to M. Segalas. On examining his patient, M. Segalas easily discovered a very hard and voluminous calculus. He has already several times found stones of this description in country priests on whom he has operated, a fact to which he attributes to their being far from surgical assistance, and allowing the stone to acquire a large size before they leave their homes for advice. At the urgent request of the patient, M. Segalas made three attempts at lithotrity, but not succeeding in breaking the stone, the pains becoming very violent, and fever setting in, he proposed an operation, which was accepted with resignation, supported with courage, and followed by complete success. The cure was obtained without the slightest accident. After the extraction of the stone, which was easily accomplished, although the patient was very corpulent, a siphon-sound was established, and under its influence the urine escaped nearly always by the ordinary channel.—The wound was completely cicatrised in a month.

The other calculus was not so large, and only weighed 68 grammes. (2 oz. 2 dr.) Its form was that of a full wheel. The patient was an old man, sixty-five years of age, a shoemaker. The sus-pubic operation was also performed, and the stone easily extracted. Lithotrity had previously been tried once. The siphon-sound was introduced, but occasioned so much irritation that it was withdrawn on the fifth day. Nevertheless, urine only issued from the wound on the twelfth day. The patient was then sounded every two hours; he subsequently sounded himself when he felt the desire, and the cure was completed on the 20th day.

EXCISION OF THE SPLEEN.

M. Berthet, of Gray, related a case of excision of the spleen. An individual received, in a quarrel, a cut with a knife in the left side. Eight days after the accident, M. Berthet, on being called in, found a considerable tumour formed by the spleen, which exhaled a strong smell of putrefaction. He excised the tumour, the surface was methodically dressed for some time and healed. The patient lived more than thirteen years afterwards, and his digestions were always accomplished with ease, which seems to prove that the spleen is not more necessary to life in man than in the animals from which it has been excised of late by vivesectors. This individual died of pneumonia. Only a very small portion of the spleen, as large as a nut, was found; it was applied on the external parietes of the stomach.

Academy of Sciences, Paris.—*July.*

PSEUDO-MEMBRANOUS INFLAMMATION OF THE BLADDER PRODUCED BY BLISTERS.

M. Morel-Lavallee stated that although, generally speaking, cantharides applied to the skin exercise no influence over the bladder, they sometimes develop in that organ, owing to individual peculiarity, an inflammation similar to that produced on the skin, and accompanied by the formation of false membranes. The size of the blister appears to

have a considerable influence over the occurrence of these accidents. In the three cases which M. Morel Lavallee gave, the blisters were very large. One had been applied near the bladder on the hypogastric region; the others had been applied at a considerable distance on the head and the chest. The false membranes are sometimes small, thin, with an irregular festooned margin, whilst sometimes they are as large as half a playing card. In the first instance they are of a greyish-red colour, striated with streaks of blood; in the other they are of a dull-white colour on the non-adherent side, rosy on the adherent one. In one case in which M. Fidal de Cassis was able to examine the bladder after death, its internal surface was red and swollen, like the conjunctive in blennorrhagic ophthalmia. The symptoms are those of ordinary crystitis. It is worthy of remark that in the cases obversed by M. Morel-Lavallee, the blister had been powdered with camphor. In the treatment of these cases M. Morel advises vesical injections of emollient fluids, along with poultices refreshing drinks, &c., at the same time be takes ofl the blister.

PATHOLOGY.

A CASE OF ACUTE TUBERCULOSIS OF THE MEMBRANES OF THE BRAIN, THE LUNGS, AND LYMPHATIC GLANDS.

Observed by Dr. Brazic, Assistant Physician to Dr. Skoda, of Vienna.

From the British Journal of Homœopathy.

[We give the full details of this cure, of a pure and very interesting disease, and would wish to direct the attention of practitioners to it; for, from the difficulty of the diagnosis, it is not improbable that it is often confounded with other diseases, which it not unfrequently simulates. At the Homœopathic Hospital of Vienna, we had an opportunity of observing a case of acute tuberculosis, which so closely resembled the typhus fever of the Continent, that it was impossible to distinguish the difference. Even the most celebrated diagnosticians admit their incompetency to the task. A notice of the disease will be found in a paper on "The Pathology of Typhus," at p. 342 of the Edinburgh Monthly Journal of Medical Science for 1842.]

B. A., aged 28 years, by trade a gunsmith, a native of Hungary, of a muscular and robust frame, a pale complexion, and described to have been previously healthy. For six weeks, the patient complained of severe and constant headache, particularly over the region of the eyebrow, and the forehead, which deprived him altogether of rest, and rendered him quite unfit for any hard work. Until now he had not sought any medical aid, and on his entering the "General Hospital" here, upon the 2d of October of this year, the symptoms he presented were as follows: The only morbid symptom whiah the patient complains of, is severe pressive pain in the forehead and in both eyebrows, which is not increased by any amount of pressure on the part, and never varies in degree. There is nothing else of a morbid character discernible; the forehead does not feel unnaturally hot, and nothing abnormal can be detected in the eyes, ears, or face. From the mouth there comes a most offensive smell, the origin of which cannot be discovered; the tongue is covered with a very thick; white, adherent coat; there is loss of appetite and thirst; the chest is normal; the abdomen, in its whole extent, sensitive on strong pressure. The stools present nothing unnatural; the temperature of the skin is not raised; the pulse is slow and regular. The patient feels not so much exhausted as giddy, especially on rising. An acidulated drink was ordered, and no diagnosis was pronounced.

The 4th.—the pain remains the same in every respect; the countenance is somewhat flushed; there have been two stools; the patient feels weak.

The 5th.—No change. A blister was applied behind the ear.

The 9th.—The pain is still terrible; the smell from the mouth continues; there is no appetite. Neither the mental powers, nor the power of voluntary motion are at all affected. Cold embrocations were applied to the brows.

The 11th.—Tne weakness has increased; the patient cannot sit up in bed. The headache is still most severe, especially in the supraorbital region; there is a slight cough, with a little mucous expectoration.

The 12th.—Still dreadful headache, constipation, dysuria: the pulse more rapid than natural. The patient has several times vomited small quantities of thin greenish-yellow fluid. There is unnatural sensibility of the abdomen; no alvine evacuation, nor any passage of urine.

The 13th.—No more vomiting; the patient lies with his eyes constantly closed; no consciousness of any thing; pressure on the eyebrows and forehead excites no pain. He cannot swallow; and there have been no evacuations.

The 14th.—Hydrocephalic symptoms have developed themselves; the right eyelid perfectly paralyzed, its pupil manifestly dilated; consciousness, sensibility and power of voluntary motion entirely suspended; the mouth is open at its right side; the breathing is

molliusculam, tenuem vidi et modice quasi slow, stentorious, and difficult; no cough. The temperature of the skin fallen; the pulse very rapid; no stool, nor any urine passed. Death ensued on the night of the 14th of October.

Dissection.—The body was of strong osseous build, and very muscular; the pupil of the right eye dilated; the neck and the limbs rigid; the thorax arched; the skull compact; some coagulated fibride in the sinuses. The arachnoid vascular; the *pia mater* on the left side, especially along the sinus, and to a much larger extent on the right side, in the temporal region, was permeated (durchwept) by an exudation, partly hæmorrhagic, but more yellow, granulated, tuberculous, around which it was soaked by a greenish yellow serum. The substance of the brain was soft; in the ventricles there was half an ounce of grey turbid serum; the choroid plexus was pale; the *dura mater*, at the base of the skull, was irregularly infiltrated with serum, especially around the decussation and infundibulum.

The neurilema of the optic nerve and of the *motor oculi* was vascular, that of the *motor oculi was injected, of a dark red colour, at the part between where it leaves the brain, and where it penetrates the skull.* The left lung was free, the right one was firmly united at the top to the parietes of the chest; the substance of both did not collapse. Pale, with little blood; at the top of the right upper lobe, there were calcareous tubercles, surrounded by condensed tissue of the lung; at the lower part, as well as at the top of the left upper lobe, groups of grey fresh tubercles, the size of a millet or a hemp seed. The liver was pale, with little blood; at its inferior margin an old acephalocyst, the size of an egg. The mesenteric glands around the pancreas were converted into a cheesy mass, the size of an egg. The spleen and kidneys firm; the bladder distended, and containing more than two pounds of urine.

Oster. Med. Wochenschrift, No 46.

The tuberculous character of this case, could have been determined in a moment by the magnetic symptoms, like every other case of typhus fever.—*Editor.*

The Researches of M. Jobert (De Delamballe) on the Structure of the Uterus.

Mr. Jobert, surgeon to the Hospital St. Louis, is an enlightened and conscientious observer, whose labors seldom fail to throw light on the subject which he studies. We extract the subjoined account (condensed) of his researches of the anatomy of the uterus from M. Malgaigne's "Journal de Chirugie," one of the best conducted French periodicals of the day,

The uterus is generally considered to be formed of proper tissue, of two membranes, of numerous vessels, and of cellular tissue uniting these elements.

The existence of subperitoneal cellular tissue uniting the abdominal serous membrane to the uterine tissue, is generally admitted. This cellular tissue which is said to entirely surround the uterus, is considered by some authors to present the physical characters of yellow fibrous tissue, and by others to be susceptible of muscular transformation during pregnancy. My researches, says M. Jobert, have shown me that there is no cellular tissue or yellow fibrous tissue underneath the peritoneal covering of the uterus. Cellular tissue, on the contrary, is evident, at all periods of life, round the Fallopian tubes, the round ligaments, the ovaries, and a part of the uterine neck. The peritoneal serous surface is elsewhere joined to the entire extent of the uterine substance by muscular fibres, so adherent that it is difficult, except near the neck, to separate it from them without bringing some of them away. When this separation is affected on the posterior surface of the uterus, the torn fibres present a longitudinal disposition. On the anterior surface, on the contrary, the fibres appear transversal and oblique. At the fundus of the organ their direction varies, and cannot be always ascertained. This union of the peritoneum and of the body of the uterus is also evident in the female of the monkey, in the sow, the ewe, and the mare; in these animals the cellular tissue is abundant round the vagina, and in the large ligaments. The adhesion between the peritoneum and the cornea of the uterus is also effected by muscular fibres.

I think, therefore, that we may establish as a law that the peritoneum is connected with the proper tissue of the uterus, in woman and in animals, by muscular fibres, never by cellular tissue or by yellow fibrous tissue, and that cellular tissue, in the entire animal series, is the means of union between the peritoneum and the neck of the uterus, the vagina, and the large ligaments. I have never found any trace of cellular tissue in the proper substance of the uterus.

Is there a mucous membrane on the internal surface of the uterine cavity? Most of those who have submitted its existence have done so more on the strength of analogy than from anatomical evidence. Rœderer is the only author who really appears to have anatomically seen it. He says "I have seen an internal membrane, rather soft, thin and apparently villous (membranam internam,

villosam.") But the most celebrated modern anatomists have sought in vain for it, and if they admit its existence at the end of pregnancy, it is as a newly formed membrane. The numerous experiments which I have performed appear to me to demonstrate its existence. The principal obstacle to its anatomical demonstration is the absence of cellular tissue between the mucous membrane and the proper tissue of the uterus, whence results, as it were, the fusion of the two parts. Nevertheless, a longitudinal or transversal section of the uterus shows a very thin layer, distinct from the proper tissue, the surface of which is remarkable from its polish and its coating of mucous. Maceration renders the presence of this layer still more evident. If the opened uterus is placed in very pure water the villosities of its surface become evident, but disappear after a lengthened maceration. At this period flakes may be raised belonging to the mucous membranes underneath which there appears a rugous uneven surface. In the female of the monkey I have found the uterine mucous membrane still more evident, and by boiling I have been enabled to raise a thin pellicle which appeared to me a delicate epidermis. This membrane contained follicles both in the neck and in the body.

The lacunæ, which are few in number on the internal surface of the body of the uterus, and which are rendered visible by maceration become more numerous on the internal surface of the neck, and there form a series of cavities, the extent, direction, number, and diameter of which vary at different periods of life, according to whether the woman has had children, or has suffered from uterine disease. These cavities are, as it were, the rudiments of follicles, and constitute another proof of the existence of the mucous membrane. The younger the subject is, the more numerous are the lacunæ. There are scarcely any to be found in women who have had children; these women present uneven prominences which appear to be constituted by the reunion of several of these lacunæ, or by the cicatrices which follow their rupture. The lacunæ situated near the external orifice of the uterine neck approximate more to the character of sebaceous follicles. They form a small sac, provided with a neck and an orifice which pours out the secreted mucous. When these follicles become obliterated the mucous collecting forms real cysts.

The structure of the substance of the uterus is still a debated point. Some look upon the uterine tissue as a special tissue, without analogy in the economy, others as a tissue of muscular nature, others maintain that it contains fibrine, and can be transformed into a muscle, but that it belongs to the yellow tissue. The possibility of the transformation of fibrous yellow tissue into muscular tissue is denied by M. Blainville and many others; moreover chemistry shows us that fibrous yellow tissue never contains fibrin, whereas fibrin is always found in the uterus at all periods of life. This fact alone proves the muscular nature of the uterus. M. Caventon, at my request, analyzed the uterus of a young girl of seven or eight years of age, and found it completely fibrinous, and absolutely free from gelatin. I, therefore, think I am warranted in stating that the uterus is formed by muscular tissue at every epoch of life, and that the uterine muscular fibres merely become more evident during pregnancy. The diversity of opinion which has hitherto existed is to be attributed to the arrangement of the fibres, to their extreme tenuity, and principally to their intimate connection with each other owing to the complete absence of cellular tissue. As regards the arrangement of the fibres, the greatest anatomists have failed to determine it with precision. Vesalius and Malpighi gave up the attempt. Ruysch describes an orbicular muscle, Hunter, layers crossing each other. Madm. Boivin recognized an anterior and posterior longitudinal layer, passing from the fundus to the neck; anteriorly and posteriorly three layers of transversal fibres, which lose themselves in the Fallopian tubes, the ligaments of the ovaries, and the round ligaments; two circular layers deeply situated, the centre of which correspond with the orifice of the Fallopian tubes; lastly, a thin laryer near the internal surface.

I have examined the uterus in the entire animal series with the greatest possible care, and think I am able to assert that it is formed of *one muscle*, the fibres of which, arranged in layers, present the following direction:—

The longitudinal superficial fibres, which may be called median from their position, are seldom seen on the anterior surface, but are constantly met with on the posterior, where they constitute two thin superincumbent layers.

1. Posteriorly, they begin at the fundus of the uterus, and end at the uterine extremity of the vagina, to which they become attached, with the exception of some few that terminate on the neck, above the opening of the vulvo-uterine canal. They adhere by one surface to the peritoneum, by the other to the oblique fibres.

2. The anterior superficial fibres do not pass along the entire extent of the uterine parietes, but cross each other before they arrive at the round ligament of the opposite

side. Some contribute to form it, whereas others pass behind and terminate on the lateral regions, where they cross also those of the posterior region.

3. There are other superficial fibres, only evident during pregnancy, which are destined to the Fallopian tubes and to the ovarian ligaments. Some originate at the fundus of the uterus, unite to those which contribute to form the Fallopian tubes, and pass on to the anterior part of the ovarian ligament. Others, more numerous, originate from the posterior surface of the fundus of the uterus, and pass on to the same ligament. Lastly, a few transversal fibres from the posterior surface form its inferior part. The numerous fibres which pass on to the Fallopian tubes originate at the fundus of the uterus and form a thick fasciculus, which divides into two secondary fasciculi destined one to the ovarian ligament, the other, more voluminous, to the Fallopian tube. Some fibres separate from the common fasciculus, and lose themselves, in the cellular tissue which separates the Fallopian tubes from the round ligament.

The deep fibres are very visible when the uterus has undergone rather lengthened boiling. They all evidently present a semi-circular direction, are rather oblique, and only differ from those above described by their smallness, and by their belonging exclusively to the body and to the neck of the uterus. They cross each other on the median line anteriorly and posteriorly, as also on the sides, so as to produce a kind of net-work. Their thickness varies as they approximate the internal surface of the uterus, where they appear to describe circles exterior to the internal membrane. There are annular fibres along the Fallopian tubes, which do not entirely encircle it, and are deep seated. Lastly, the blood-vessels are encircled by fibres, similar to the deep muscular layer which surrounds the intestinal canal.

The uterine neck is formed by fibres which constitute semicircles, and decussate without mingling. This semi-circular arrangement is more evident in women who have had children than in others. Do the fibres of the neck mingle with those of the superior portion of the vagina? It has appeared to me that the vagina attaches itself to the proper substance where the mucous membrane passes from the neck itself to the os tincæ. This insertion terminates abruptly anteriorly; posteriorly, on the contrary, it is continuous in every case with the longitudinal fasciculus. From the above data we may draw the following inferences:—

1. The proper tissue of the uterus is not fibrous yellow tissue, but muscular tissue, and that at all periods of life, and in all animals.

2. In pregnancy the uterus is merely in a state of muscular hypertrophy.

The uterus is formed by one muscle and not by several.

4. There exists an uterine mucous membrane, but without epithelium.

5. The direction of the uterine fibres shows how they act in freeing the uterus from its contents. The longitudinal layer of fibres, which originates at the fundus, and is inserted into the neck and vagina, tends to diminish the length of the uterus; while the semi-circular fibres by their action diminish its cavity in every sense. The longitudinal and annular fibres of the Fallopian tube explain the mode of progression of the product of conception, and those which surround the uterine vessels appear to diminish, by their contraction, the rapidity of the circulation, and to prevent hæmorrhage during parturition.

Camphor a Preservative of Ergot of Rye.

To the Editor of THE LANCET.

Sir,—I was not a little surprised to read some remarks by Mr. Rawle, stating that he had discovered camphor to be a preservative of ergot of rye. I can only say that I have been in the habit of using it for the last nine or ten years, but not exactly in the manner described by him. I order the camphor to be *mixed* with the powdered ergot in the proportion of a grain in every scruple. By this means I think the camphor is more intimately diffused throughout the whole than can possibly take place by the plan proposed by Mr. Rawle. I do not give this either as a new, or, indeed, my own discovery; for I adopted the method by having seen it in the practice of Mr. Spurgin, an old practitioner, also at Saffron Walden, and from whom I have every reason to believe that your correspondent also obtained the same information, he having been engaged in the same gentleman's practice.

If you think the above worthy of notice you will oblige, Sir, yours respectfully,

JOHN M. SIMPSON, M.R.C.S. &c

Staines, August 28, 1844.

The Effects of Tartar Emetic on Young Subjects

Mr. Wilton, of Gloucester, records in the *Provincial Journal*, four cases in which extreme prostration and collapse followed the administration of the ordinary doses of tartar emetic to young persons. Two of them were fatal. We alluded, on a former occasion, to several similar instances of the pernicious effects of this remedy, recorded by Mr. Noble, of Manchester. The recollection of those facts is sufficient to place practitioners on their guard when the use of this remedy is required in the cases of infants or young children.

PRACTICAL OBSERVATIONS:

*Affections of the Spinal Marrow: employment of Ranunculus Bulbosus.**

By Francis Black, M. D.

A. R., aged 20, of a bilious temperament, enjoyed good health until he was 16, when he first complained of weakness in the back. About this time, after bathing, he suffered from pain in his back which set in with a slow fever; but he was unable to go about his occupations until the end of 1840. In January 1841, he observed, while bathing his feet in hot water, that he had no sensation in them; at this time the pain in the back had disappeared, and the only thing complained of was loss of sensation; this gradually extended, the weakness increased, and, at last, he was scarcely able to walk.

March 16, the actual cautery was applied for about 9 inches along the spinal column, and after this time he was affected with complete paralysis of the lower extremities. From this period, bleeding, dry cupping, sinapisms, &c. were used, but without benefit.

I saw him first on the 15th February, 1842; he had then been confined to bed for six months. The following was his state:—Paralysis of the lower extremities, hardly any emaciation of the limbs; the flesh seems tolerably firm, the skin is slightly sensible. He is able to flex the left leg a very little, but with great difficulty, and attended with quivering of the muscles. He can scarcely move the right lower extremity.

There is no tender spot along the course of the spine, but there is slight lateral curvature, with acute projection of one of the spines of the dorsal vertebræ; here there is no pain, even upon pressure, but the skin over this place is slightly red.

Bowels costive, requiring constantly aperients. Urine passed freely and easily, although occasionally there is little pain.

Sleeps sound, but dreams a great deal; disposition cheerful.

Cocc. 18-4. ii., [4] m. et. n. $\bar{3}^{a}$. Up to February 28th, two such doses were administered; the bowels acted four times; no change, except that he feels as if the limbs were beaten, as if after a long walk; sulph. 30-4. ii., [] m. et n. 3. In this way cocculus 18., sil., 18., nux v., 15., and rhus., 6., were given until May, and on the 9th of May there was no change, when he got sil., 18-4. pulv. ii., [6] m. et n. 3.

May 17.—A day after the first powder, suffered from pain in the back, in the part where there is projection of the vertebral spine; it lasted for twenty-four hours, and was not increased by pressure upon the part.

From this time there was a gradual increase of motion and sensation, Rept. June 1st.—Considerable improvement; he is able now to put one leg over the other, and with his feet to push off the bed clothes; sil., 6-4 [4] m. et n. . From June 8th to 20th he received, for other symptoms which had shewn themselves, calc., 18·, bell., 6., and sulph., 6. June 25th.—Continued improvement; sulph. On July 3d, the silex was again resumed, and continued until Septem. 23d, with, however, frequent intervals, during which no medicine was given.

September 23d.—Has now for a month been able to move about; walks pretty well. From this time he continued steadily to improve, but, as a precaution, moved about the room in a machine such as children are sometimes put into on first learning to walk. This he soon laid aside, and completely recovered under the daily use of occasional doses of sulph., calc., nux v., sil., and the administration of cold sponging, and latterly the shower bath. Some six months after this, he was again troubled with pain along the spine, and weakness of the limbs, but this soon yielded to the administration of silex. There now remains an acute projection of one of the dorsal spines.

The above case we believe to have been an affection of one or more of the bodies of the dorsal vertebræ of a scrofulous character, and that the paralysis arose either from inflammation or irritation, extending to the spinal column. We believe that the use of the actual cautery added to the already existing evils, by increasing the irritation, and thus rendering the paralysis of the limbs more complete.

The case is interesting, as shewing the beneficial influence of silex in a disease which, according to one of our best surgical authorities, "proves extremely obstinate or rather always incurable, at least with such few exceptions as hardly deserve to be mentioned." We cannot suppose that the successful termination was attributable to rest, and the horizontal position. *First*, Because these means had been previously tried for a considerable time without any benefit. *Second*, Because the improvement became apparent only after the aggravation caused by the silex; and during the treatment we observed much more evident effects from the silex than from any of the other remedies.—*Third*, Because we have, in several instances, seen similar good effects follow the administration of silex in affections of the spinal cord. We recollect, at present, two cases of children, where the benefit was very marked. The one, a child aged 2 years, of a strumous diathesis, was unable to stand

* Bulbous Crowfoot.

or walk, the lower extremities were thin and flabby, hanging down as if powerless; no loss of sensation; appetite pretty good, and the evacuations natural and regular.

Silex 18, was administered in solution, at various intervals, for a month; towards the end of the month, the muscles of the lower extremities became firmer, and the child could stand a little; the sil. was continued. In six weeks the child could stand well, and walk a little; and before three months had elapsed, the child could walk perfectly. In the other case, the inability to stand or walk was not so great; this child also perfectly recovered under the use of silex.*

Paralysis, principally of the lower extremities.

M., a middle-aged healthy person, of temperate habits, has suffered for twelve years, from palsy. He attributes it to a fall when hunting, but at no time suffered from pain in the region of the spine; the disease came on gradually, and notwithstanding that every possible measure has been tried, the palsy has not diminished. The following was his state when seen by me in December 10th, 1842.—The patient is well made, and of a healthy appearance; he complains of weakness, especially of the lower extremities, from the hips downwards. Stands with the greatest difficulty, and only by leaning the weight of the body upon the arms. Is able, when setting, to move the legs about but cannot place them firmly upon any thing; for example, if placed upou the fender, he cannot retain them there, they immediately drop down. The lower extremities are colder than other parts of the body, and deficient in sensation. Has complete control over the upper extremities, but deficient sensation in the fingers; feels, on grasping any thing smooth, as if its surface were rough. Bowels kept regular by a lavement of simple water. Urine passed easily.

Very liable to spasms in various parts, especially in the lower extremities.

Has amaurosis of the right eye.

Cocc. 6-4. pul. ii., [4] m. et n, 3.

December 22d.—The sensation is more perfect; feels more power in the lower extremities; suffered a good deal from shooting pains in parts where he had not previously felt them. Cont.

January 7th.—Continued improvement; is able to place his feet upon the fender, and retain them there. Until the 30th, he received two more doses of cocc.; but on the 31st, he retrograded considerably; rhus. [ ] was then administered, but with little good. On the 6th February he got silex [ ], this was continued until the end of the month, and under its use he was in the same state as on January 30th. During the month of March he received alternate doses of sil. [ ] and cocc, [ ]: by the end of this month he had considerably improved; the gritty feeling had left his fingers, the sensation had returned to his legs; going between two rows of chairs, he could walk backwards and forwards for a distance of 18 yards. *He could see well* with the right eye; the cramps had almost ceased. During April he received sil., and cocc., but principally the latter, and continued daily to gain ground. May the 2d, has been out, and with assistance, and sitting down, has been able to walk a quarter of a mile; and by the end of the month he could walk half a mile, though with difficulty, and always supported, and mount to the top of a flight of long stairs. To the end of June he received nux v., sil., and cocc. [ ] alternately, and continued steadily to improve. In July, however, he lost ground, and though the same remedies were used, as also rhus, oleander, agaricus, and sulphur, he from day to day became worse, without any assignable cause, and by the month of September was nearly in the same state as when I first saw him. The patient then became dispirited, and gave up the treatment.

This liability to relapse we recollect to have observed in two cases, both of them in elderly men, who suffered from palsy, not depending however upon spinal disease, as in the case above detailed, but following an apoplectic attack. Under the use of cocculus, which at first produced sharp shooting pains in various parts of the body where palsied, and where the patient had not suffered previously, they improved considerably in two months, and gave great promise of being cured: but before four months had elapsed, they gradually got worse; the one we lost sight of, the other resisted all the other means employed.*

Diseases of the spine, when affecting a great portion of the spinal marrow, are extremely unmanageable. We have not, and we have treated several, seen a single case, where the disease had so far advanced as to cause *great general disorder* and *partial palsy*, yield to treatment.

Nor does the first case we have given form an exception; for, in it, the palsy evidently depended upon the irritation of a diseased vertebra, but the cases, the prognosis of which we state to be unfavorable, are those in which there has been at first acute or chronic inflammation, which has probably

* These were all cases of tubercular disease of the spine.—Editor.

* This was a case of tubercular disease of the brain and not of the spine as the Dr. *guessed*.—Editor.

led either to rammollisement or some other structural change.

This obstinacy is what we might almost have been led to expect, when we consider that Homœopathic practitioners are rarely at present consulted until the poor patient has been bed-ridden for years, and undergone the most violent treatment. The prognosis is also more confirmed when we know, that, though the affection may not have commenced in some organic change, the long-continued disease and *treatment* will produce it. But, though hitherto unsuccessful, we do not despair of succeeding in recent cases of this disease: and our hopes are principally founded upon the great benefit which follows the administration of our remedies in similar cases, but confined to a smaller portion of the spinal marrow or its coverings. For example, we have seen great good follow the administration of ars., nux v., and lach., in cases of dyspnœa, cough, pain in the chest and palpitation, which were distinctly referable to irritation in the upper dorsal portion of the spine; spasms, pain in the bowels, and gastrodynia depending upon the same cause, relieved by nux., v., cocc., and veratr.

The alternate use of the above medicines, together with sil., sulph., calc., and bell., are frequently attended with great relief to the patient. Even in advanced cases, the pains in various parts of the body, the disorder of the stomach, and costiveness, which is a frequent symptom, are frequently relieved by these remedies. The subject of costiveness reminds us of a case of a yonng lady who had been unable to walk for a long time, owing to a spinal affection; when we saw her she had recovered so as to be able to walk across the room; but it was especially for the excessive costiveness that the aid of Homœopathy was asked. She was in the habit of taking every 4th day, two or three [illegible]yath pills; nothing weaker would act; [illegible] an hour after taking these, she became always sick; this increased; and before long she was seized with cramp in the abdomen, and vomiting; towards the morning this lessened, and she had an evacuation; all aperient medicine produced the same symptom; and even strong enemata had no effect. Under the use of nux. v. i. the costiveness was much improved, so that the bowels, with the aid of an enema of simple tepid water, were moved every 4th day. We at first tried the higher dilutions of nux, and then various other medicines, sulph., lach., sil., puls., bry.; but without any effect; but, after nux v. 1. g^{tt} [1], there was almost regularly an evacuation. She improved in strength: but of late has discharged from the bowels a peculiar white tape-like substance, which we at first supposed to be tape-worm. A more minute examination shewed it to be an exudation from the intestines. This exudation has continued for nearly eight months; but Homœopathic treatment was only steadily pursued for about six weeks; the medicines given were sulph., nit., ac., nux v. and merc., but with the exception of the nux, which relieved the costiveness, their administration was attended by no improvement. The patient is again under treatment.*

Diseases of the Spine producing various Neuralgic Affections.

C., aged sixty.—Has since the age of twenty-one suffered from affection of the head and spine—for many years she complained of fatigue and weakness, with tendency to syncope. In an acute affection of the head she lost her sight and smell. After this the eyes inflamed very much, and since then she has been constantly liable to attacks of shooting pain in them. She has great lateral and also antero-posterior curvature. There is a very tender spot over the lower cervical vertebræ, which, upon being pressed, causes violent shooting pains down the scapulæ, chest, and arms. Complains of spasmodic sharp pains round the waist and in the abdomen, and also similar pains in the lower extremities, especially at the ankles. The least motion increases the pain—pain worst at night; is unable to walk, and raised with difficulty from her invalid's chair; sleeps very little. Bowels costive; frequent acidity and great flatulence. She had undergone every variety of treatment without benefit. Such was her state in August; cocc. 6-4 ii. [4] m. et n. $\overline{3}$. Cocc. was thus administered alternately with nux v. 18., until Sept. 3d; by this time the bowels had become regular, the flatulence less; she was able to move the body with greater ease. Sept. 7th, continued improvement; sulph. 6-3 ii. [4] m. et n. $\overline{3}$. Sept. 18th, sil. 18., was administered as above, and under the use of this remedy she improved very rapidly; the pain became less frequent; she was able to walk a little; slept better; appetite improved.

From this time until the end of October, she received sil. 18., [ ] calc. 18., [ ] and continued to improve. She was able to walk about with much less pain; and even went out to drive. Up to the present time this patient has continued comparatively very

*This is a case of tuburculu disease of the liver, stomach, intestines, and uterus.—Ed. tor.

free of pain; and when it comes on, cocc., or sil., succeed in relieving it. Occasionally carbo. v. was given to relieve the flatulence, which at night was sometimes excessive.

Miss W., aged 26, has suffered for fifteen years from her present affection, for which numerous remedies have been tried, but without any relief. She was seen by us on January 17th, 1844. She states that the pain commenced gradually, and without any assignable cause. The pain commences in autumn, gets worse during winter and spring, and diminishes during the heat of summer. She complains of frequent attacks of pain between the shoulders, in a space not larger than half-a-crown, over the 8th dorsal vertebra, where there is no tenderness upon pressure. The pain is dull, coming on frequently eight or nine times a-day, but never at night. The pain frequently extends round the waist, when she suffers from cutting pains, as if knives were run into the stomach; these shoot round to the back, and suddenly disappear, when they settle into the dull pain above described. When the pain goes off, she is troubled with yawning. Catamenia regular, and in all other respects quite well. Cocc. 6-4, iii. [6] 8ta q. q. h,

Jan. 26.—Pain between shoulders much better. Ars. 15-4. Cocc, 6-4. Ars, 6-4. Cocc. 6-4. [4] m. et n. 1.

Feb. 9,—Has been greatly better; for the last ten days has had no pain between the shoulders, and the cutting pains in the abdomen have almost ceased.

Rept. Med. ut Jan, 26th.

Feb. 24,—Is now, and has been for some time, entirely free of pain. The patient, up to the time we write, nas continued free of pain.

Ranunculus bulboses we have found useful in three instauces of pain depending upon spinal irritation. In one case, the patient, who was under treatment for chronic headaches and abdominal affections. complained of sharp shooting pains round the chest;—in the other, the pain was acute, and felt principally in the shoulder, axilla, and mamma; so acute was it in the breast, that the patient dreaded cancer, for which fear there were no grounds. These two cases we believed to be neuralgia of the intercostals. The third, which was the case of a lady who had suffered from long-existing spinal disease, and complained of sharp gnawing pain over the left side of the chest, as if the skin were torn, with occasionally shooting pain from the spine. In the two first cases, two doses of ran. 6, [ ], removed the pain, and in the third it was also very useful, but the pain returned in a fortnight. She is still under treatment; but, under the use of sil. and cocc. has improved considerably.

As the ranunculus is not as yet much used, it may not be uninteresting to give the following case of rheumatism, where it proved useful.

J. S,, aged 50, has been several voyages to warm climates; during his last voyage he caught cold, and has for some months suffered from rheumatism. The pains are confined almost entirely to the trunk. He feels as if the abdomen and chest had been bruised; on the least motion the pains become cutting and sharp. Bowels costive; tongue foul.

June 23.—Ran 6-4 ii, [4] m. et n. 3.

July 4.—Pains a good deal better. Rept. med.

July 13.—Pains in abdomen and chest are now gone; complains of pain in the neck and shoulder, Bry.

July 17.—He was better, and again received bry; and on the 20th, from a slight return of the pain round the chest, ran. 6. was again administered. After this he underwent treatment for disorder of the stomach.

From the pathogenetic action of the ranunculi, we believe that they would frequently be useful in various rheumatic and neuralgic affections, especially of the chest.

The last cases the Doctor calles "Neuralgic Affections," are plain cases of tubercular disease of the organs and muscles, or chronic disease of the organs and rheumatism; and they are now in much the same state they were before the Doctor saw them.

Calculus of the Bladder treated by Electricity.

To the Editor of The Lancet.

Sir;—A "SUFFERER" imploringly asks in your last number whether you know any thing of a method for the cure of stone by electricity, and seems justly to estimate its importance. For his comfort I beg to inform him that there is such a method, and, I believe, a successful one. The author of it, whom at present I have no authority to name publicly, was so good as to call on me, about a fortnight ago, with a patient, on whom he had successfully operated, in order to show me what had been done. The man was perfectly well after, I think, about two months' treatment. I questioned him as to his previous suffering, and there can be no doubt that he had labored under very aggravated symptoms of stone in the bladder. He had, moreover, been sounded, I was told, at one of the Borough hospitals, by an eminent surgeon, whose opinion was that there was a large calculus. The physician who

brought him to me informed me that it was a very large lithic acid calculus that had been decomposed. I presume that very soon the subject wtll be brought before the profession and the public.

I am, sir, your obedient servant,

WM. MACLURE.

Harley-street, Aug. 5, 1844.

Therapeutical Application of Cold.

To insure good effects from the application of cold, the temperament of the patient should always be considered. In nervous persons, and upon irritable organs, the use of cold should never be carried to the same extent as in opposite states of the system, or in other parts of the body. Two young females, sisters, one of whom was of extreme susceptibility, the other more calm, were attacked at the same time with fever. Ice was applied to the head of both of them. The latter was relieved by the application; the symptoms of the former were, on the contrary, aggravated by it, and the attack soon proved fatal.—*Idem.*

On the Causes, Symptoms, and Treatment of Acute Founder in the Horse.

A clever communication on this subject, from the pen of Mr. Gabriel, appears in a late number of the *Veterinarian*. He points out, in an historical sketch how successfully the disease was treated some two hundred years ago, and how, on the other hand, by modern veterinarians it has been deemed incurable. He attributes its occurrence, in a large majority of cases, to over-exertion of the animal, either by long standing, rapidity of travelling, or long journeys. The symptoms are characteristic: in addition to fever there is an extreme reluctance of the animal to rest its weight on the affected fore-feet. In getting up from the ground, or in attempting to move, the hind-feet are made the instrument of progression. The treatment hitherto pursued has been exceedingly varied. We do not profess to be very profound hippopathologists, we must rely to a certain extent, therefore on the statements of the author. He says that modern pathologists pronounce the disease incurable; in his hands that the treatment rarely fails. This consists of a dose of Barbadoes aloes [eight or nine drachms] and then *a seton through each frog*; on the latter he places his chief reliance. Venesection must follow till the pulse is affected, and large tepid bran-poultices are to be applied to the feet. The shoes should not be removed, but the venesection and physic must be repeated if necessary.—These hints may prove useful to some of our professional readers, whose horses are too liable to a disease amongst the exciting causes of which are to be found rapid travelling and long journeys.

One of the most remarkable substances yet met with in organic chemistry has been obtained by Dr. Blyth, in an investigation, carried on in the Giessen laboratory, upon the styrax liquidus;—before the publication of Dr. Blyth's paper we cannot say whether as a product or educt, nor can we give the composition of the body; but it is in the form of a colorless, transparent and very limpid fluid, with very high refracting powers.—Upon heating this fluid, in a closed vessel, beyond its boiling point, it becomes converted into a solid hard body, retaining its transparency and its refracting power unimpaired, looking like a piece of pure glass. To this substance the term styrol has been applied.

DIABETES TREATED BY ALKALIES.

MM. Miale and Contour narrated a case of diabetes millitus cured by the use of alkalies. and sudorifics. The patient, a man aged forty-three, had been labouring under diabetes for eighteen months, and was in the following state:—Extreme prostration and emaciation, great weakness, appetite good, digestion easy, thirst intense, dryness of the mouth although the patient drank five or six quarts a day. His urine was abundant, and the quantity was always in relation to the fluid he introduced into the economy. It was acid and nearly colourless; density, 1035.; it contained a little more than nine drachms of sugar for each quart. After giving, without any result, the chloride of sodium during fifteen days, the internal administration of alkalies was commenced, as also the use of flannel, of vapour-baths, and of a highly-animalized diet One drachm of bicarbonate of soda and eighteen grains of calcined magnesia were given daily during eight days. The dose of bicarbonate was then progressively raised to one drachm and a half, to two and a half, and, lastly, to three. The doses of the magnesia remained the same. This treatment lasted a month, and was followed by complete success. The quantity of sugar contained in the urine gradually decreased, and when the fluids of the economy had recovered their alkaline properties, it entirely disappeared. At that time the patient was cured, and eating every day a pound of bread along with a pint of milk. He still, however, continued the use of the alkalies, and it was impossible to say whether the symptoms might not return, were their administration suspended.

DUODYNAMICS.

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Medicines that act upon the different surfaces of the body are either positive like the alkalies, or negative like the acids; that is, they are of opposite dynamic characters. Their combinations also are varied with the predominance of one force or the other; for each and every one of the articles are imbued with two forces; one of which prevails over the other, and determines its character as negative or positive. In some articles the prevalence of one over the other is very great, while in others it is very little, no matter whether they belong to the vegetable, mineral or animal kingdom, or are combinations of the different kingdoms; and we distinguish these different medicines by their effects upon the serous and mucous, or negative and positive surfaces in acute and chronic diseases of these surfaces.

Physicians have been constantly in the habit of prescribing negative and positive medicines indiscriminately in these diseases, without a knowledge of these distinctive dynamic properties, and the result of such practice has been any thing but satisfactory. We have, however, pursued a different course for many years, and the extraordinary confirmation of its correctness in the results obtained from the action of the forces from the Rotary Magnetic Machines has suggested the great importance of a new classification of medicines, and we have consequently commenced the work, as will be seen in the following tabular view in which medicines are classed according to their negative or positive properties.

It contains it will be seen the principal articles used by both the alopathic and homœopathic physicians, and present in one view a list of negative medicines, which are used mostly in diseases of the serous surfaces, and a list of positive medicines, which are prescribed mostly in diseases of the mucous surfaces, or one of which acts at least more directly on the serous, and the other on the mucous surfaces.

Negative.	Positive.
Acid, Acetic,	Amonia. Carbonate,
Benzoic,	Acetate,
Muriatic,	Muriate,
Nitric,	Antimony, Crude,
Phosphoric,	" Sulphuret,
Prussic,	Assafœtida,
Sulphuric,	Balsam Copavia,
Aconite, Monks-hood,	" Canada,
Antimony, Tartarized,	Bryonia,
Antimonialis Pulvis,	Calcaria Carbonica,
Arnica,	Carbon Vegetable,
Arsenic,	" Animal.
Aurum, Gold,	Castor Oil,
Belladonna, Night-shade,	Cina Wormseed,
Baryta Iodide,	Camphor
Calomel,	Catechu,
Cannabis Ind. Hemp,	Cinnamon,
Cantharides,	Cochineal,
Chamomilla,	Cocculus Indicus,
China, Cinchonia	Colocynth, Bit. Cucumber
Colchicum Mead. Saff.	Cream of Tartar,
Conium. m. Hemlock	Creosote,
Crocus Sativus Saffron,	Croton Oil,
Cuprum Copper,	Cubebs,
Acetate,	Elaterium, Wild Cucumb'r
Sulphate,	Gamboge,
Digitalis,	Graphites. Carburet of Iron
Dulcamaria. Bitter-sweet,	Galls, Nut,
Emetic Tartar,	Gum Amoniac,
Gold, Chloride,	Kino,
Hyosiamus, Henbane,	Scammony,
Iodine,	Hellebore, White,
Iodine Chloride,	Black,
Iodide Potash,	Hepar Sulphur,
Mercury Mu- Corrosive or	Ignatia, St. Igna. Bean,
Mercurius Solubilis,	Ipecacuanha,
Magnetism,	Iron Carbonate,
Magnetized rings,	" Subcarbonate,
Mesmerism,	" Iodide,
Morphine,	" Muriate,
Nux Vomica,	" Sulphate,
Opium,	Jalap,
Pulsatilla,	Kino, Gum
Pulvis Antimonialis,	Lead Acetate,
" Doveri,	Lime, Muriate,
Quinine,	" Sulphate or
Ranunculus. B. Crowfoot,	Hepar Sulpher,
Rhus Tox. Sumach,	Lycopodium, Club Moss
Secale Cornutum Ergot,	Lobelia Inflata,
Silicia Silex,	Mercurius. or
Silver Nitrate,	Mercury Crude,
Sang. Cana. Bloodroot,	Magnesia Carbonate,
Sepia Inka juice, C. Fish,	" Sulphate,
Spongia Tosta,	" Calcined,
Stramonium, Thorn Apple	Petroleum, Tar Barbadoes
Tin, Muriate.	Potash Carb. Salts Tartar,
	Potash Caustic,
	Petrosilineum, Parsley,
	Phosphorus,
	Rheum, Rhubarb,
	Scillae. Squills,
	Soda, Carbonate,
	" Muriate,
	" Sulphate,
	Sulphur,
	Tartarum, Cream of Tartar
	Zinc, Sulphate.

CAMPHOR A PRESERVATIVE OF ERGOT OF RYE.

To the Editor of THE LANCET.

Sir,—In the Lancet of to-day, is a notice of Mr. Rawle, surgeon, of Saffron Walden, concerning the preservative power which camphor exerts upon ergot of rye. I have been in the habit, sir, of using this preservative for the last six years, and have done so in consequence of having read the following passage in a paper of Dr. Bright's, published in No. 141 of the "Edinburgh Medical and Surgical Journal:" "Camphor if intermixed with even-powdered ergot, completely prevents the formation of animalculæ," &c.

AUGUST 17, 1844. AN OLD OBSTETRICIAN.

Effects of Magnetising upon the Magnetiser.

Rheumatism—Dizziness—Cold feet and hands—Neuralgia—Tic Douloureux—Hahnemann and Homœopathic remedies.

We probably receive, on an average, fifty shocks a day in magnetising our patients, either from accidentallv touching the unprotected parts of both buttons, or from touching the patient with one finger and a button with the other, and were at first much alarmed at the consequences that might result from it. We have been, however, not only happily disappointed in our expectations of injury, but have found it a great benefit to us. It has removed every vestige of chronic rheumatism with which we have been much affected during the last fourteen years.

We never had so much elasticity in our body and limbs, and never had so much strength; we never walked with so much ease as we now do; and besides, we frequently, even after having gone through great labor during the day, feel so much elasticity and buoyancy that it is rather difficult to sit or stand still, from a strong inclination to be moving, jumping, or dancing; these sensations are in fact sometimes so strong as to require great efforts to repress them.

Persons affected with rheumatism, and especially those in the decline of life, are more or less subject to turns of dizziness,, which sometimes compel them to sit or lie down suddenly, to prevent them from falling, and we had been much affected in this way. But these premonitory symptoms of palsy have entirely disappeared with those of rheumatism; and we have removed these symptoms in many other cases, by magnetising the brain—a practice much more simple and effectual than the old routine practice of the schools.

Those who are affected with rheumatism are very subject to colds, and to cold feet and hands. A great number of the cases of headache, are those of rheumatism affecting the muscles of the head, and the membranes of the brain; and the muscles of the face are affected with rheumatism under the names of Neuralgia and Tic-Douloureux; and those of the heart under the name of hypertrophy of the heart.* Many of the cases of vacillating pains about the chest—of the front, right, and left side, along the pectoral and intercostal muscles, are cases of rheumatism, often mistaken for disease of the lungs. These cases are all distinguished in an instant by the *pain* produced by pressing with the thumb and finger on the intervertebral spaces of the middle and back part of the neck, the intensity of which increases with the intensity of the disease; and physicians, on commencing the practice of the magnetic symptoms, are often surprised to find the great number of cases of rheumatism—of tubercular disease of the muscles, as well as of the organs.

Hahnemann committed a great error in mistaking tubercula of the organs and muscles for Psora or Itch, as every physician knows who practices these symptoms; and in searching for remedies for this imaginary affection, or "*anti-psorics*," justly subjected himself and his followers, or homœopathists, to the imputation of chasing a phantom.

These remedies, like those of the Allopathists, have no effect in chronic diseases of the organs and limbs, but that of palliating urgent symptoms in the periods of excitement, which uniformly follow those of repose. They NEVER cure the disease, and have little or no effect upon those who are not very susceptible to mesmeric or magnetic influence.† Homœopathic remedies are, however, generally very efficient in acute diseases, and are useful as palliatives in those that are chronic.

The negative and positive surfaces of the facia of the muscles are both equally affected in acute rheumatism, and the affected limb or limbs are consequently paralyzed; and in chronic rheumatism the positive surface of the facia in which the motor nerves terminate, is more or less affected, and the motion

* In magnetising for headache, the negative button should be placed over the point where the pain is most intense, as in other cases.

† The great number of cases we have examined with the magnetic symptoms during the last seven years, after they had been a long time under the treatment of the homœopathists of this city, has left no doubt upon this subject.

of the limb or limbs more or less impeded, and hence the necessity of using positive as well as negative medicines, or combinations of positive and negative medicines, in many cases of this disease. The uncertainty in regard to the extension of the disease in the different surfaces, relatively to each other, necessarily makes the true remedy for any given case uncertain, so that it may be necessary, in some cases, to try one, two, three or more, before we find the right one. Medicines of any kind in this disease, are, however, only palliative; they rarely cure it permanently.

MESMERISM.

Rome, N. Y. Dec. 3, 1844.

DR. SHERWOOD,

Dear Sir:—As you are the publisher of an independent medical journal, permit me briefly to relate a case or two, of the cure of disease by mesmerism.

Not long since I was called to see Mrs. M——, who was laboring under a severe attack of Inflammatory Rheumatism. She had called her physician the day before, who had bled her largely, blistered the shoulder (this and the elbow being the parts affected) and given a cathartic. Her suffering was intolerable. Every thing that had been done only increased her difficulty. I at first refused to prescribe for her in the absence of her physician. Of this she would hear nothing, but in her acute sufferings implored that I would try magnetism. At that time I did not believe it to be of any avail, but to gratify her I made the effort, and to my utter astonishment found that her sufferings began to abate, and in less than forty minutes she was perfectly easy, the arm, that was before immoveable and suspended on pillows, became flexible and the shoulder could be rotated, and moved in any and every direction.

At the time I entered the room her sufferings more resembled those of a woman in the last stage of labor than any thing to which I can compare them. Now behold the change! In less than one hour she may be said to have been cured; for her pain never returned, and as soon as her blister healed she was attending to her domestic duties!

Another case has since occurred under my observation, even more unaccountable than the one above related. A young man was suffering under partial paralysis of the right side, so much so that he could not close the eye of that side, nor thrust out his tongue, which, was turned sideways: there was moreover, great loss of sensation and motion of the whole of that side. At the suggestion of Professor Grimes, the young man being easily magnetised, I put him into the mesmeric sleep; and then, in that situation, told him that my object in mesmerising him at that time was to *entirely remove all his paralysis.* I assured him that a pass from my hand over the affected part would restore lost motion; and that as soon as this was done he would perfectly close his eye, thrust out his tongue straight, and have all his natural motions perfectly restored. In short, that he would, by this, be entirely cured.—After repeating these assurances and making a few passes over the side affected, I awoke him.

I then told him in a grave and confident manner that my object in putting him to sleep was to cure his palsy, and *that I had done it.* "Now," said I "you can thurst out your tongue straight; you can close your eye, and do all other acts with that side that you ever did." He then made the effort to close the eye, and thrust out the tongue, and to my utter astonishment every effort was successful. In short he was well; and from that day to this, nothing of his former difficulty has returned.

I know that for a man to relate circumstances like the above, is as much as his reputation for truth is worth; but I only state what I do know, and testify what I have seen. Below I give you the names of both of the above persons; one of whom is now a resident of your city.

Yours Respectfully,

J. V, COBB. M. D.

Effects of the Rotary Magnetic Machine.

St. Andrews, 18th Nov., 1844.

DEAR SIR:

In fulfilment of my promise to report to you the case of Comp. *Bronchitis*, I alluded to when I saw you last, I must apologise for its not being as free and concise as could be wished; as in the pressure of professional business, it only received a notice among a variety of other cases.

Mrs. H——, of Orange Co. N. Y., of middle age, bilious temperament and leucophlegmatic habits, last winter, suffered from

a severe and protracted attack of inflammation of the bronchial avenues, ending in effusion of the chest, (the sequel of a tedious labor, with profuse uterine hemorrhage,) from which, however, she recovered tolerable well, and so continued until August past; at which time pains of an erratic character appeared about the shoulders and right side; soon followed by tenderness in the left pectoral region, and some quickness of breathing, loss of strength, appetite, and a dry hacking cough, which annoyed her constantly—the dyspnoea now so great, that it was impossible to take the least exercise; and at one time absolutely threatened suffocation.—*Blisters, expectorants, alteratives,* &c., &c., I used for some time with little or no benefit; at length, I caused the use of the R. M. Machine, and in exploring the chest found *Tubercula of the lower* and middle *lobes* of the *left lung*, with chronic inflammation of the *Bronchia*; (pulse at this time very quick and full.)

The instrument was now used daily for three weeks, with the use of Naptha as an expectorant; and a comp. C. gold pill night and morning as a deobstruent, (if you like the term.) In conjunction and for some time subsequent to the discontinuance of the use of the Machine, rapid improvement followed from the first week—cough lessened—appetite returned, &c., &c., and at present is in the enjoyment of very good health, attending to her domestic duties, (the widowed mother of six interesting children.) It may not be improper for me to state that in March last she lost her husband with tubercular consumption, and she had come to the deliberate conclusion that no better fate awaited her; considering the disease as contracted from care and attention given to her husband, and by strong entreaties and to gratify friends, was she alone prevailed on to accept of relief.

A Physician of Orange Co.

MAGNETIC SLEEP.

A much greater number of persons can be put into the magnetic or mesmeric sleep under the combined influence of the rotary magnetic machine and the magnetiser, than by the common method, or that of the magnetiser alone. We have put persons into that state by the influence of the machine alone.

In the combined operation we place the positive button in the left hand of the person to be magnetised, and take the negative button in our left hand, and then take with the other hand the right hand of the same person, under the most moderate power of the instrument.

The patient is then requested to look steadily at some small object, as the armature of the instrument, as long as the eyes can be kept open, and then to close them and go to sleep, or into the mesmeric state.

This manner of magnetising, like every other, should be practised, under the most favorable circumstances, as regards time, place and seclusion, and should be repeated every day at the same hour, until the object is effected.

When persons or patients have passed into the mesmeric state, they should be treated in the most mild and respectful manner, and if they show symptoms of restlessness, a few passes should be made from the head, along the arms to the feet, which will quiet them, and they may then be allowed to remain in that state a few minutes or one or more hours, according to the judgment of the magnetiser, when they may be aroused in a moment, by reversing the action of the machine, or by the reversed passes, or passes with the back of the hands over the face at right angles with the median line.

Patients are sometimes clairvoyant the first time they are mesmerised, but not generally so; they will, however, tell the number of times it will be necessary to mesmerise them before they will become clairvoyant. They advance in *light* and knowledge by *degrees* in the mesmeric or somnicient state. There are six of these degrees, and six sub-degrees or steps in each degree, thus making thirty-six; and the clearness and extent of their vision, as well as of their intuitive knowledge, increases as they advance in the different degrees. There are, it appears, very few who advance higher than the third degree, or eighteen steps. A few are raised as high as the fifth degree, but these are the bounds it seems they cannot or do not pass with impunity.

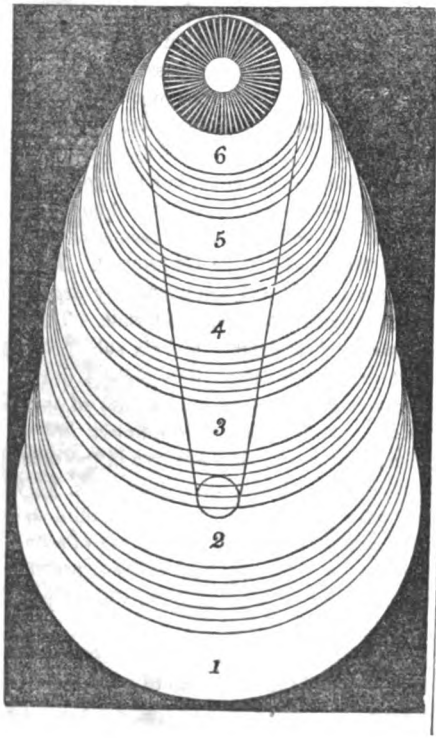
These recognized degrees are described as circles of light in the form of a cone, with steps or degrees of less light in spiral circles

between the greater degrees of light in perfect circles—the spiral being continuous, and terminating in a disc of the most intense light in the top of the cone, as represented in the engraving below.

The light is represented as radiating from the disc at the top, to the bottom of the cone, and the intensity of the light is minimum in the first degree at the base, and increasing in each degree as they rise to the sixth, where it is at its maximum.

A reversed interior arrangement or inverted cone, is also described by clairvoyants, corresponding with that in the circumference, as seen by its outlines in the engraving—the great degrees of both being interspersed with rooms or apartments of light, which are probably reflections connected with the phrenological organs.

The first great degree of light forming the base of the cone first described, surrounds the base of the brain, while the sixth degree is mounted on its summit.



Clairvoyants have the power or faculty of increasing the diameter of the great degrees or circles of light, to an unlimited extent, for the purpose of encompassing objects situated at great distances, and enabling them to see and describe with great accuracy through the surrounding Magnetic medium, especially in the intense light of the higher degrees.

The light is very dim in the first degreee, less so in the second, and at a medium in the third; in which degree clairvoyants see and describe very well under favourable circumstances, but are otherwise subject to great errors in their descriptions, as well as in the first and second degrees.

In raising clairvoyants to the higher degrees, magnetisers should proceed with great caution. They should first inquire about their knowledge of the degrees in the somnicient state, and then of the degree they are in. If they are in one of the lower degrees, the magnetiser may then inquire whether he can raise them to the next degree. If the answer is in the affirmative, he may proceed to raise them by the exercise of his will; but if it is in the negative, the clairvoyants will, on inquiry, tell him how many times it will be necessary to magnetise them, before he can raise them to the next degree. We have great doubts of the propriety of any attempt to raise them higher than the fifth degree, even with the most perfect preparations for it; because in the present state of our knowledge they cannot be raised to the sixth degree without great danger, indeed, without the peril of their lives; and there is no real necessity for it, as the light is intense enough in the fifth degree, and there are also sights enough that may be seen in that degree to satisfy the cravings of the most marvellous.

The phenomena of the degrees in the labyrinth we have described, as seen in the somnicient state, and about which there appears to be no reasonable doubt, are one of the most extraordinary that was ever presented to the human mind; yet it is a perfectly simple, and beautiful magnetic arrangement, resulting from the operation of magnetising, or of giving a new and systematic magnetic

form to the brain—of adding an artificial to natural organization, in which the organization of the great pole in the centre of the brain (2) is reflected upon its surface, and from thence into infinite space.

The poles of all the other organs are organized in a similar manner as seen in the somnicient state; that is, they are organized with circles at right angles with their radiations, like those seen on the summit of the labyrinth, and some clairvoyants see through those of the stomach. Besides the concurrent testimony of clairvoyants on the organization of magnetic poles, it is found on a comparison of our previous knowledge on this subject, that their descriptions agree exactly, as far as our knowledge extends. We were well acquainted with the radiations, with the circles at right angles with them—with their light, and with their spiral circles and inverted cones; and could not, therefore, fail to recognize in these descriptions, a magnetic organization.

Those who are unaccustomed to magnetic phenomena, however, find great difficulty in reconciling with their preconceived notions, the possibility of persons being able to see, and thereby distinguish, objects through any other medium than that of external light, and by means of the ordinary functions of vision.

The idea of *any* light, except that which comes from external objects seems to be regarded as unphilosophical, if not assumptive of the supernatural, although an easy and palpable demonstration of the fact is, at all times, within the reach of the most sceptical and supercilious. Let the doubter and sneerer simply close his eyes, so as to exclude all external light, retiring, if he please, into a perfectly dark room where not a ray exists, and on pressing his fingers on his eye-balls, he will *see*, without that mechanism of the eye which is essential to external vision, several distinct and concentric rings of light, around a central point of still greater brilliancy. And though he be afflicted with blindness towards external things, this power of internal vision will be in nowise impaired. The light thus seen is magnetic, being elicited from the two poles of opposite denominations, which belong to the crystalline lens, and is doubtless of the same character as that which is affirmed by clairvoyants to exist in the brain, the heart, the cervical glands, the kidneys and other organs, and by which, in fact, they are enabled to trace the whole magnetic organization of the human system. With the intense luminosity of the magnetic forces when in atmospheric combustion, every one is familiar; and we have now furnished an example, at least equally familiar, in which this luminosity is independent of atmosphere as it is distinct from every other kind of light. In short, every one can see for himself precisely the same kind of light that is beheld by clairvoyants in the mesmeric state.

ANIMAL MAGNETISM.

SURGICAL OPERATION UNDER THE INFLUENCE OF MAGNETISM.—The editor of the Cleveland Plain Dealer, states that he witnessed on the 25th inst. a most difficult surgical operation, performed by Professor Ackley, assisted by Professors Delamater, Kirtland, and others before a class of students at the Cleveland Medical College. The patient was a Dr. Shriever, from Columbiana county, Ohio, quite an elderly man. It was an operation for tumor, situated under the lower jaw and partly in the neck, near the right ear. In reference to the proceedings of the operator, the Plain Dealer has the following statement:

"We happened in just as the Professor was putting knife to the skin. He made two or three frightful gashes, seemingly cutting the throat, and not a muscle of the old man was observed to move. We were astonished, and we think the whole medical class, and even the faculty were not less so than ourself. The secret was, the patient was in a magnetic sleep. This fact of course was known by the professors, but not by the spectators generally. There stood, by the bleeding patient (not sufferer) the magnetiser, who, with the magic of Mesmer, had thrown his subject into pleasant dreams; and now while the knife of the bold surgeon was dashing away at his vitals, and dripping with gore at his throat, he could say to the trembling nerves, "be still," and all was quiet! What a triumph of mind over matter was there! The will of the magnetiser striking dumb even the living being and making even his body the insensible subject of dissection! No agonizing groans were

heard, as is usual from the conscious patient to alarm and terrify the operator; but he went quietly on, without haste, and consequently with better effect. It lasted some fifteen minutes, during which time there were frequent consultations among the professors, as it proved to be a malignant case. It caused a frightful wound and a profusion of blood. The patient was removed to another room, still unconscious of pain and the operation; and when we left he was assuring the magnetiser that he felt quite happy.

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The following article, from the Newburgh Gazette may be given in proof of the practical application of Animal Magnetism in many important and painful operations.

MR. ADAMS.

Beneficial effects of Animal Magnetism.

A correspondent has furnished us with the following interesting statement touching the beneficial effects of Animal Magnetism. The operation alluded to was performed on Wednesday last, by Dr. Grant, at the house of David Cromwell, near Canterbury, in the presence of several persons, among whom were Drs. Blackman and Phinney, of Newburgh, who are ready to vouch for the truth of the facts as stated by our correspondent. The following is his statement.

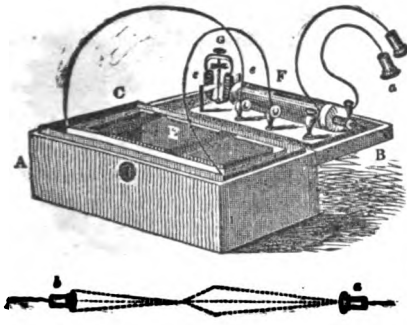
"The patient, a female 18 years of age, was subjected to the usual mesmeric "passes" by Mr. Adams for about ten minutes, when she appeared to be in a deep sleep. Dr. Grant then proceeded to cut around the gums of two of the molar teeth on the lower jaw, and to extract them with the forceps. During the whole of this proceeding, the patient manifested not the slightest evidence of pain. She was allowed to remain undisturbed for several minutes, when Dr. G. incised the gums around two of the molar teeth of the upper jaw. During the extraction of the third tooth, which from several causes, was attended with considerable difficulty, there was a slight contraction of the limbs, but not the least disturbance of the muscles of the face. The expression of the countenance remained unaltered. Dr. Grant then extracted the fourth and last tooth, which had large fangs, whilst the patient remained as before, to all appearance, insensible. In a few minutes Mr. Adams restored her to her natural condition, and she appeared to be totally unaware of the whole transaction"

We may add, the patient has suffered not the slightest pain or inconvenience from he operation since it was performed.—

Mesmerism in London.

The London papers by the Britannia state that Miss Martineau, the well-known authoress has been highly benefitted of late by mesmerism. I have been told of a letter from her to a friend in this country, in which she abundantly con firms the report. She had been given over by her physicians, who had told her that medicine could afford her no relief. She had been confined for many months to her chamber, which as she says, she never expected to quit, "unless in her coffin." She had been unable during that time to procure even an hours sleep, except through the aid of laudanum. The consequence was, that both her mental and physical powers were fast yielding to a painful, and, as it was believed, utterly incurable disease. At length it occurred to her to try mesmerism. The experiment was made and it was successful. Although not thrown by it into the state of trance of which we hear such wonders, a gentle and refreshing sleep was induced, which lasted twelve hours. On its termination her physicians declared that such had been the change in her whole nervous system, that they ventured to entertain hopes of a cure. The mesmeric process was continued at various intervals; and now the distinguished patient has so far recovered that, from not being able to walk across her room, she can, in her own language, "walk three miles at a time with a relish." "I cannot be thankful enough," she says, "*for such a resurrection.*" Miss Martineau, as all who know her will admit, is not a person of a fanciful or imaginative temperament. Her case will probably induce many to regard with more respect and attention a science, the believers in which, although Cuvier and La Place may be found among the number, are often classed with Mormons, Millerites, and other fanatics. The following intimation, from the London Literary Gazette, of the present condition of this science in London, is perfectly applicable at this moment to New-York: "Mesmerism, which has rapidly assumed a vigorous vitality, and the reality and utility of which have, despite the shallow wit of unphilosophical critics, been maintained by a number of cautious and practical men, is for the moment retarded in its progress *by public exhibitors of its often painful phenomena;* and hurried, on the other hand, to a maturity that has no real foundation by enthusiastic followers, whose intellects have apparently never been trained to the severity of scientific investigation." This is a brief but sensible view of the whole matter.—*N. Y. Corres. of the Nat. Intelligencer. Dec. 17th, 1844.*

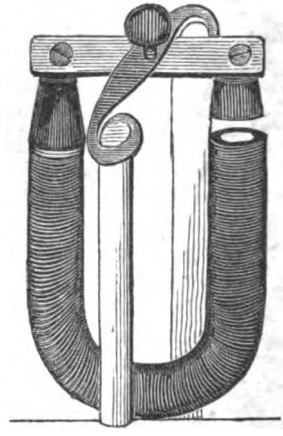
The Rotary Magnetic Machine, and the Duodynamic Treatment of Diseases.



We gave a full description of the Savage Rotary Magnetic Machine, represented in the above engraving, in the last, or October, number of this Journal, with its great superiority over the old shocking-machines, or those that were made for giving shocks instead of a continuous motion. Many physicians, who were using the old machines, have become so well satisfied of the great advantages of the Savage instrument as to lay aside the former and purchase the latter.

It was the great importance of having an instrument as perfect as possible for magnetizing, that induced us to direct the manufacture of the Savage Rotary Magnetic Machines, in which no expense has been spared to make them superior to all others; and the sale of more than 200 of them to physicians during the last six months, shows how much they are appreciated by those of the profession who have obtained a knowledge of them in so short a period.

Notwithstanding, however, the great superiority of these instruments, practice has shown that the silver conductor to the shaft of the armature, in consequence of the great velocity of the latter, will wear off in five or six months, if the machine be kept in constant motion every day, when it becomes necessary to replace them; and as a goldsmith or other mechanic may not always be at hand to replace them, or the armature, if it should require repair, we have directed our attention to a substitute for both, and have at last, succeeded in our object. We have substituted a spring as seen in the following figure, which vibrates so fast as to make the motions of the forces continuous.



A piece of brass is turned in a conical form, and a round hole turned out of the bottom for the top of the magnet to enter the eighth of an inch where it is soldered. A screw hole is then made on the top of the cone, and a piece of watch spring fastened on to it with a screw as seen in the figure. A piece of iron is turned in a conical form, and a hole drilled into the top of it, and fastened with a screw to the opposite end of the spring as seen in the figure. A hole is first drilled through the middle of the spring and a silver plate of a fourth of an inch square, placed on the top of the spring, and riveted to it, for the brass screw, in the cap of brass that crosses the spring, to rest upon The brass cap is soldered on to, and supported by, two strong brass pillars, which are secured in a steady position by brass nuts screwed on to the bottom of the pillars under the foundation board. The end of the copper wire that has been first wound around the U magnet, is then soldered to the brass nut that holds the magnet in its place—the other arrangements of the copper wires being the same as in the Savage instruments—connecting the wire which conducts the force from the zinc with the brass pillar on the

same side. The brass screw which rests on the spring, should have a rounded point, and on setting the machine in motion should be screwed down to a point where the spring vibrates in the most steady manner. It makes a steady and not unpleasant humming sound, with variations more or less regular.

The only difference in the motions of the forces from these machines is the variations in the intensity of the vibrating instruments from the variations in the motions of the forces from the battery, which is not observed in the rotary, in consepuence of the great momentum acquired by the velocity of its armature. These variations are very frequent and often very great; requiring great caution in the use of it, especially in magnetising the brain, heart, or stomach.

We have been thus particular in our description of the vibrating machine, for the purpose of enabling those who have the Savage Rotary Machines to change them into this form if they should choose to do so, when it should become necessaryto make the repairs we have mentioned, as the change can be easily made by any goldsmith, and with a trifling expense, as they have the magnet and brass cap, &c., for the purpose.

The power of these instruments is fully equal to that of the Rotary instruments, and they are made of the same sizes. They have both more power, and are *much* more portable than any others made in this country.

We shall continue to forward these machines to any part of the Union, the Canadas or the West Indies, according to order, at the low prices of 15, 18 and 20 dollars, according to the size and style in which they are finished; the vibrating being from 15 to 18, and the rotary from 15 to 20 dollars, including the buttons and manual for magnetising. Besides the improvement in the instruments, we have directed our attention to improvements in the batteries connected with them, but they have not resulted in any practical importance. The size of the batteries can be much reduced, but it involves the necessity of the use of strong acids, as the sulphuric and nitric, the fumes of which are always annoying, and even dangerous. There are besides other obvious objections to their general use,such as the danger in carrying these acids every day from place to place, which is entirely obviated by the use of the sulphate of copper in the common batteries.

Effects of the Rotary Magnetic Machine.

In our notice of the effects of the rotary magnetic machine in the last number of this Journal, we mentioned a severe case of bilious fever, in which we reduced the pain in the head, back, stomach, intestines, and the paroxysms of fever, with the machine, in the most prompt manner, and we have been much pleased to learn from physicians of this city, and from the country that they have uniformly obtained the same and very similar results from the action of the machine in the same disease.

There is now, as we have before suggested very little doubt that the machine will reduce yellow fever in the same prompt manner, for although the globules of the blood are found to be more or less broken down in this disease, or *demagnetised*, there is now no doubt that the machine, besides restoring lost motion in the membranes, magnetises the blood in the strongest manner, as well as every other part of the system. We besides suggested in the second, third, and fourth numbers of this Journal, the probability of the great importance of these machines in the treatment of tubercular consumption, and the results of a year's trial, of the instruments, in a great number of cases, has shown that we were not mistaken in the signs upon which these suggestions were founded; for more than *one hundred and fifty cases* of both sexes, and in every stage of the disease, have been magnetised in our rooms during this period, and of this number nine only have died, and of the few of the above number we are now magnetising not more than two will be lost. These results are so extraordinary as hardly to admit of belief among those who know little or nothing of the effects of these machines. They will very naturally suspect that there must be some mistake in regard to the diagnosis or genuineness of the cases; yet there is no-

thing more certain, than that they were all true cases of tubercular consumption; for the manner of our diagnosis does not admit of a mistake in any case. There was not among these a solitary case of chronic bronchitis; for we distinguish these cases with the same certainty we do the above cases, and reduce them with the aid of the machines in about the same proportion to the number of cases. Other physicians of this city have obtained with the instruments similar results in such cases.

The reader, we hope, is now prepared for what has appeared to us more extraordinary results from the action of these machines, one of which at least we are sure we could not have believed without ocular demonstration, and that is a case of luxation inwards of the right hip joint, set on the third trial by the action of the machine *alone*. The hip had been out of joint three or four years, and the leg fully an inch and a half shorter than that on the opposite side.

In this case the positive button of one of our largest machines was placed in the groin while the negative one was moved over and around the hip or gluteal muscles, when the head of the femor went into its place with a loud snapping sound. Such is the power and such are the astonishing effects of the machine.

Among other interesting effects of the machines not before noticed in this work, is the case of two large carbuncles over the right side of the lumber vertebræ of a gentleman aged 70 years, which were reduced by the usual means with the aid of the action of the machine. The age and feeble state of the patient's health, with the large and extensive swelling around the carbuncles indicated a fatal case. The swelling, with the livid and scarlet color of the skin was, however, reduced in the most marked manner by every application of the instrument, and the disease subdued in a few days.

Bed-sores, gleets, gonorrhœas, and chancres are now also subdued with great facility by physicians of this city with the action of the machine.

MAGNETIC SURVEY.

In the *Montreal Herald* we find the following interesting letter on a recent magnetic survey:

"As a brief notice of the route pursued by Lieut. Lefroy, in his late scientific exhibition to the far North West, together with one or two novel facts, brought to light by him while engaged in that quarter, may not be uninteresting to some of your readers, I shall make no apology for requesting the favor of you to give the following outline of them a place in your valuable columns. But, before proceeding farther, it may not be unnecessary to premise, that the Royal Society having determined on making a number of magnetic observations, in various parts of the globe, selected Mr. Lefroy for that service, as he had already proved himself eminently qualified for it, by discharging so successfully the duties which devolved upon him on a similar mission to St. Helena, where an observatory, of which he was placed in charge, was established for the like scientific purpose. Lieut. Lefroy, with his assistant, left Montreal, on the 1st of May, 1843, and followed the usual canoe route to the interior, in the prosecution of the objects of his mission, he visited York Factory in Hudson's Bay, Norway House, Red River Settlement, Cumberland House, Isle a la Crosse, the great Methey Portage, so graphically described both by Sir John Franklin and Sir George Beck, and reached Lake Athabasca in the following September. Having remained at the latter station for the space of five months, he sat out on the ice for Mackenzie's River, on which he travelled to the verge of the Arctic Circle. Retracing his steps to Lake Athabasca, he descended the Peace River to Dunvegan, whence he crossed over land to Edmonton on the Saskatchewan, which river he descended, and traversed the north west end of Lake Winnepeg to Norway House, where he arrived in the early part of September last. The necessary arrangement for his journey to Canada being completed, he embarked at this place in a canoe manned by six men, and after a tedious and boisterous passage in his frail bark, reached Penetanguishene on the 14th of last month, having been absent about twenty months, and having thus completed a chain of magnetical observations, which includes many miles of country, and which will add materially to our knowledge of a very important and interesting branch of the *Physique du Globe*. Conformably to his instructions, Mr. Lefroy devoted a portion of every day to magnetical observations, having for their object to ascertain upon a great number of

determinate stations, the physical facts as to the present distribution of the earth's magnetism over this portion of the earth's surface, and more particularly, the region of the greatest magnetic energy or intensity; since it is a curious fact, that this region, the pole or focus of greatest attraction, is far from coinciding with the pole of vertical dip, discovered in 1831, by Commander (now Sir James) Ross; and appears, we understand, to exist somewhere in the neighborhood of the Lake of the Woods. The winter of 1843 and 1844 was comparatively mild, the severe cold weather lasting but a short period; its lowest degree at Lake Athabasca was 46 degrees below Zero, Fahrenheit. Here a small observatory was erected, and many curious and interesting facts, relative to the influence of the aurora upon magnetic needles were displayed, and these observations we are informed, throw light upon that beattiful and little understood phenomenon, and its close connection with the ageney which produces the effect of terrestial magnetism.—*N. Y. Herald, Dec.* 16.

Mr. Sunderland.

The experiments performed by this gentleman at his last two lectures in this city, were so very extraordinary, so every way unlike any thing we ever heard of before, and so very like the tales of the fairies, or the wonders of the Arabian Nights, that we frankly confess our inability to believe what we saw with our own eyes, but for our knowledge of the lecturer, and those of our citizens upon whom the experiments were performed.

Mr. Sunderland had, previously, informed his audience, that, on Friday evening he would give a novel exhibition of that power which he denominates Pathetism, by causing a number of the audience to fall into a state of somnambulism, before he, Mr. S. came into the Hall. Accordingly, the place was well filled with an anxious multitude, some time before half past six, waiting to witness results performed on the human mind so strange and unaccountable. And sure enough, some considerable time before Mr. S. came in, one after another was seen to arise, and slowly approach the platform, and two gentlemen and one lady were seated upon it, besides a number of other cases, of persons in whom the sleep was equally profound, but who did not leave their seats in the audience till some minutes after Mr. S. had arrived.

On Saturday evening, Mr. S. reversed somewhat the order of proceeding, by actually inducing some eight or ten cases of somnambulism even before the persons on whom the influence was exerted, had reached the Hall! The lecturer arrived a few miuutes after six, and took his seat on the platform as usual; and such was the great desire of the large audience who had assembled to witness the approach of the *sleep-walkers*, that considerable commotion ensued. At about half-past six, a young lady was seen entering the Hall with her eyes fast closed, the hands extended; and with a slow and somewhat unnatural step, she approached the place where Mr. S. was standing, and was seated upon the platform. Next came a gentleman, Mr. R., and then another, Mr. D., with the eyes closed, somewhat awkwardly making their way up the aisle to the lecturer, who seated them upon the platform. Soon after, there came two more ladies, until there were eight seated upon the rostrum, with as many more asleep, promiscuously seated in the audience.

After the statement of a few facts, showing the utter falsity of the old theories known under the terms of "Mesmerism," or "Neurology," and, proving that these results were not produced by any fluid magnetic or nervous, he proceeded to the developement of a series of most curious and extraordinary phenomena. The patients were first thrown into a state of ecstacy, and with their hands clasped and elevated as in a state of devotion, they manifested in their countenances and conversation, a state of mental tranquility almost superhuman. While in this state, Mr. Sunderland drew from them some pieces of music which were most beautifully performed. Next they were transferred into what they conceived to be enravishing fields of fruit and flowers, and now commenced a most diverting scene, for each patient made motions as if actually gathering flowers, grapes from vines, and peaches from the trees, which they seemed to taste and eat with the greatest imaginable delight.

"Come," said the lecturer, "go with me in another direction," when, in a few moments, they began to describe every variety of wild animals. Among them was discovered an elephant, and a ride on his back having been proposed, they went through with the motions of mounting for that purpose. The expressions of fear, the agitation and tossing about seemed reality to the life; till, in a few minutes, as if the huge animal had actually stumbled and fallen, and the patients were thrown upon the floor, with cries of fear, and complaints of broken bones which it took the operator sometime to restore.

Other interesting results followed, which were highly gratifying to the audience, espe-

cially in view of the facts referred to by Mr. S., that neither of these patients had ever been mannipulated in the usual way, the sleep having been induced for the first time by his new process of operating, and they had never been operated upon together, in that manner before. And what was still more interesting to the audience, and those who wished to understand the practical benefits of Pathetism, Mr. S. pointed out a number of them who had been most remarkably relieved or cured of some nervous or chronic disease. One, a Mr. A , had been cured of St. Vitus' dance. Mr H. had been cured of nervous sick-headache; and a third was a case of amaurasis. The lady had been almost blind, and utterly unable to see, or read without glasses; but since she first attended these lectures, she has thrown aside her specs, and has been able to see as well as ever before; and the lecturer pleasantly remarked, that, had he only been known, heretofore, as a good Catholic, or Mormon, cures like those he had performed in these and many other similar cases. might have passed for miracles, and entitled him to a place among the "Saints" of the Polish Calander, or made him the successful rival of the Mormon Prophet.

Providence Gazette.

—*Dec.* 17.

Pretended Discoveries in Animal Magnetism.

Duly impressed with the deep and extended interest which the subject of Animal Magnetism has created in the public mind, and the ardent curiosity and attention which every new fact connected with it is sure to command, several writers have flattered themselves that it is only necessary to advance a claim, however shallow and assumptive, to some peculiar originality in the science, in order to become distinguished as immense magnetical philosophers. Accordingly we have a Dr. James Braid of Manchester in England, discovering that Animal Magnetism ought no longer to be known under that name, but be called Hypnotism, or Hypo-tism; and he therefore introduces new terms for all the principles and processes involved. Thus a person can be no more magnetised, but must be hypnotised, &c., and he then favors us with the whole under the general denomination of *Neurypnology!* This philosopher's production appeared in London in 1843, in 12mo.

The Rev. La Roy Sunderland discovered, in this country, and nearly contemporaneously with Mr. Braid, that Animal Magnetism should be called *Pathetism*, because, as he supposes, it depends altogether upon sympathy. The word sympathy, however, not being fine enough for such a discovery, and as it might induce a number of common people to inquire into the causes and laws of sympathy, he discards it for the word Pathetism, which of course stops all further investigation, and leaves every body perfectly satisfied. He consequently uses the word Pathetising for Magnetising, &c., and his work was published in New York in 1843, in 12mo.

Next, and quite recently, we have Professor J. Stanley Grimes, coming out in a volume of 350 pages, to show that Animal Magnetism should be re-baptized, and ever known hereafter, under the name of *Etherology*, *Etherium*, or *Etheropathy*, but which of these three terms he decidedly prefers he leaves rather dubious, so much so indeed, that it would not surprise us to see some other new philosopher reject them altogether for one of his own invention or sponsorship. Prof. Grimes's Etherology has been published in this city within a few weeks, and bears the confidently anticipatory date of 1845.

Of the character and capacity of this work as a philosophical treatise, a pretty adequate idea may be formed from the following brief specimen which constitutes the author's first grand postulate, and to which he is so much attached that he copies it on his title-page:

"All the known phenomena of the Universe may be referred to three general principles, viz: *matter*, *motion*, and *consciousness*. Everything that we know is a modification of one or all of these three."

Previous philosophers had held the doctrine that *motion* (for instance) was an *effect* of forces, instead of being a primary principle, and that the forms and modifications of matter were results of the motion thus produced. But n'importe.

The only other highly original feature of this production that particularly strikes us

is to be found under the title of "Credensiveness" a new term, we presume, for the old phrenological organ of marvellousnes. In connection with this new piece of nomenclature, the author expatiates with no little complacency upon the extraordinary efficacy of ASSERTION, as a branch of Animal Magnetism---we beg his pardon—Etherology; and his whole work may be adopted as an evidence of his unbounded confidence in this potent agency. In fact, he wields it like the rod of Aaron through his whole controversy with other magicians, and causes it to swallow up the whole of theirs with the utmost facility. With this weapon only he defeats Buchanan, Caldwell, Braid, Sunderland, Fowler, Elliotson, and all others while he remains invincible.

We have no doubt that each and all of these writers upon Animal Magnetism whom we have here mentioned have many merits, both as writers and investigators, and are entitled to the regard of all lovers of science for the zeal and dilligence with which they have pursued their labors. We merely protest against their childish exploits in setting up ideal distinctions where there are no real differences, as if they felt that this was the only way of becoming distinguished above other men from whom they do not otherwise differ.

Colon Strangulated by the Meso-colon.

By Gilman Davis, M. D., Portland, Me.

Communicated for the Boston Medical and Surgical Journal.

On the 13th Oct. 1843, was called to Anson Robinson, Esq. æt. 26, merchant. I found him complaining of violent pain, not constant, but paroxysmal, and referred to the epigastrium. There was no tenderness on pressure over any portion of the abdominal surface, no thirst, and the pulse not accelerated; the bowels constipated, and had been so for some time. The most remarkable symptom was a tonic rigidity of the abdominal muscles. On applying the hand to the abdomen, the muscles were felt to be literally as firm as board, in a perfect tonic spasm, and yielding to no pressure. Colocynth, calomel hyoscyamus were given internally, conjoined with morphia and repeated injections. After three days the symptoms yielded, but there was pain, and rigidity of the recti and other muscles remaining for several days. The relief began as soon as an evacuation from the bowels was produced.

On the evening of the 5th of May, 1844, I was again called to see Mr. Robinson.—He had enjoyed moderate health in the interval since I had last attended him, but had been troubled by constipated bowels. During the latter part of the time, he was observed to place his hand frequently during the day, on the hypogastrium, as if in pain, and during the last week had repeatedly said to a member of the family, that he could obtain no evacuation from his bowels. There was a very small discharge, however, two days previous to my visit. I found him complaining of great pain, as in the previous attack, but with much less of the muscular rigidity; the pain, as before, coming on in paroxysms. There was now superadded to the previous symptoms, constant vomiting, the smallest quantity of food being instantly rejected, and the effort of vomiting increasing the pain. There was no thirst, no pain caused by the firmest pressure on the epigastrium or other parts of the abdomen, and the pulse not perceptibly accelerated. His pain he referred to the epigastrium, placing his hand directly below the sternum, and repeatedly said there "was a stoppage there," and that "he should feel better if he could only have an evacuation from his bowels." There was no appearance of hernia. There was a remarkable restlessness and nervous agitation, as much as I ever before saw.

The same medicines were given as before—calomel, colocynth, hyoscyamus, morphia, and injections. Between 11 and 12 o'clock that night, there was a slight alvine evacuation, but it afforded no relief. Hot fomentations with hops enclosed in flannel bags were kept constantly applied. The morphia afforded slight temporary relief. There was no vomiting of fæculent matter at any time.

He remained in this state Monday and Tuesday, during which I visited him four times a day. On Tuesday night, at 11 o'clock, I visited him, and the symptoms had not changed; still no tenderness and no apparent acceleration of the pulse, though I examined carefully and often, and with surprise. It was evident there was some internal strangulation, and that it must end fatally. On Wednesday, at my morning visit, I found a great change—a Hippocratic face, the pain much less, and the pulse betweeu 130 and 140, and so feeble as to yield to the slightest pressure. He was also

thirsty now, but the smallest quantity of fluid was rejected generally, though he had swallowed and retained a very little broth. There was extreme restlessness and jacitation, the patient going repeatedly from one room and one bed to another.

He remained in this state till evening: the extremities then became cold, but he lingered till the next day (Thursday) and died at 12 o'clock, noon. For hours before death the limbs were icy cold, and no pulse, and the most incessant restlessness, the poor sufferer rising up in bed with a look of indescribable anguish, and then falling back faint and apparently dying. I remained with him from Wednesday noon through the night, and until his death, with the exception of an hour and a half on Thursday, when I was obliged to leave him.

On the following morning I opened the body. The stomach was empty, with considerable ecchymosis; the gall-bladder fully distended with dark bile; the intestines filled with gas, and a little fluid fœcal matter. In the hypogastrium appeared a large knuckle of intestine, of a deep port-wine color. I removed the whole with great care, and found this knuckle to be composed of thirteen inches of the colon, strangulated in an aperture of the meso-colon, the aperture being about the size of an American quarter of a dollar. From the strangulated part of the colon to its termination in the anus, it measured four feet, I need not add that the portion included in the aperture was in a complete state of mortification. The aperture was round and with even edges, with no appearance that could lead to any reasonable conjecture as to its formation; nor could I learn that the patient had ever had any severe fall or blow upon the abdomen.

I know of no similar case. In the two cases recorded by Sir Astley Cooper of mesenteric and meso-colic hernia, in the last edition of his work on Hernia, the bowel was contained in a sac formed by the intestine protruding itself through one layer of the peritoneum forming the mesentery, separating the two layers, and remaining enclosed between them. In this case the aperture was through the entire thickness of the meso-colon, and through this thirteen inches of the colon had passed and become strangulated.

Organ of Calculation.

Vermont has furnished two or three boys, within the last twenty five years, whose sagacity for arithmetical pursuits was of an extraordinary character. The autobiography of the far-famed Zera Colburn is familiar to the public. After having positively astonished the mathematicians, both here and in Europe, with the rapidity, accuracy and mystery with which he conducted the most elaborate arithmeticial calculations, all at once, equally to the surprise of himself as well as every body else, he actually lost the faculty of doing wonders in figures. No effort on his part was successful in recovering a power that made his name ring over the world as an eighth wonder.

Another calculating boy, by the name of Safford, now only eight years of age, says the Vermont Journal, has been discovered in Vermont, who will give the product of four figures by four, performing the operation mentally nearly as quick as one can do it with pen and paper. He has also multiplied five places of figures by five, which was the extent of Zera Colburn's power in his best days. He will extract the square and cube roots of numbers extending to nine or ten places, performing the operation quite rapidly in his head. The division of numbers into their factors is a favorite amusement with him. Give him the age of a person, and he will give the number of seconds correctly.

How can the doctrines of the phrenologist be called in question, with such sustaining proofs of their truth, as are presented in this and many other analogous cases?—*Boston Medical and Surgical Journal.*

Value of Homœopathic Practice.

In the Circuit Court of this city Dr. F. Vanderberg brought an action against T. E. Beckman, to recover $427 for two professional visits from New-York to Hudson, and nine visits from Rhinebeck to Hudson, to attend Miss Elizabeth Beckman, ill with consumption, who died in Dec., 1842. "Dr. V.'s treatment was of the homœopathic description, and it is contended, in defence to the charge, that such is a species of quackery, and unskilful: also that the charge is too high. In relation to the homœopathic treatment, several eminent physicians, viz: Drs. Buel, Frasy, Manly, Stevens, Greenough, Cheesman and Beck, declared their belief that the system is a species of quackery. One of the gentlemen said it was an attempt to cure one disease by creating another of the same kind. Dr. Manly said his opinion of it could be stated in a few words. It is delusion on the part of the public and knavery on the part of the practitioner.—These gentlemen stated that they had not examined the theory, as they thought it too absurd to give it attention. On the other hand, Drs. Cooke, McVickar, Curtis and Peck, stated that they had fully examined the

theory, and were decidedly in its favor. Its principle is to treat 'like with like.' That is, to administer heat for a fever, &c. while the allopathic, or old system, was the reverse. It was shown that the young lady whom Dr. V. was called upon to attend was seized with a vomiting of blood. Dr. Cooke was her physician, and the services of Dr. V. were requested by her father, knowing that his mode of treatment was on the principle of homœopathy. She was taken afterwards with a second attack of vomiting blood, and Dr. V. again sent for, though he stated to her father from the first, it is said, that he could do her no good. It was remarked by the physician who gave testimony, that consumption, when once seated, can never be cured, although life may be prolonged by care and medicine. It was shown that Dr. V's practice, under the old system, was large."

The court charged that Dr. V. having shown himself a regularly licensed physician, he is entitled to pay for his services, unless it can be shown by defendant that he exhibited ignorance or want of skill. On that point, and also as to the compensation asked for, the Jury must decide from the evidence. Verdict for plaintiff, $325.

Decomposition of Tincture of Opium by Ammonia.

It is of great importance for prescribers to remember that the addition of ammonia either as carbonate or spiritus ammon. aromaticus, to mixtures containing tincture of opium or any salt of morphia, will after some time, say twenty-four hours, precipitate the morphia in a crystalline form; so that if a mixture is made a day or two before it is taken, the patient may get several doses of morphia concentrated in the last portion left in the bottle, and fatal consequences may be produced. The presence of alcohol will prevent the precipitation.—*Chemical Gazette.*

Medical Miscellany.

There was some alarm in regard to the appearance of small-pox, lately, both at Hanover N. H., and near New Preston, Conn.—The Visiting Physician of the Michigan Penitentiary, located at Jackson, receives of the State seventy-five cents for each visit, and one dollar when he prescribes for two patients. Yellow fever was raging fearfully, at the last accounts, at Metamoras, Texas.

The American Consul and many others had died with it. From fifteen to twenty cases of small-pox recently occurred among the paupers in the Almshouse in Saratoga Co. N. Y. Two of them only proved fatal.

J. J. Paulding, M. D. will sail from Boston soon, destined for the foreign missionary service in Asia. There are sixty students at the Botanico-medical Institution, at Cincinati. Dr. Hill, of the chair of Anatomy, is represented to be an admirable instructer. A pamphlet has appeared in that city, upon human magnetism, by Henry F. Smith.—There is a class of ninety students now attending lectures at Dartmouth College. The school is well sustained. At Willoughby University, there are now attending the medical lectures, 120 students. The institution is very prosperous, and the faculty, to a man, are exerting themselves to educate their classes in the best manner. There are nearly nine hundred students attending lectures at the two medical schools in Philadelphia.—*Boston Medical and Surgical Journal.*

There are about 500 students, attending the Medical Schools in New York.—*Ed.*

The Local Pathology of Neuralgia

Has been explained by Dr. Black upon anatomical principles. He very justly observes that the nerves, which are usually the seat of neuralgic pains, are those which take their exit from the interior of the body through canals in bone or unyielding tendinous structure. He adds to this, the anatomical fact, that each nervous twig is accompanied by a branch of an artery and a vein. It may easily, therefore, be conceived that those nerves, which are contained in rigid canals, must be subjected to injurious pressure whenever their accompanying vessels are unusually distended with blood. Upon this pressure, according to Dr. Wallis, depends the neuralgic paroxysm. The explanation is ingenious, and is, I think, borne out by the consideration both of the exciting causes and the effects of treatment.—*Dr. Kanking in Provencial Journal.*

Motion along the nerves ceases in such cases, and violent pain is the consequence, as in cases of pleurisy, and as the pain ceases instantaneously on the application of the forces from the Rotary Magnetic Machine, there can be no doubt but it is the consequence of restoring lost motion.—*Ed.*

The Symptoms of Abscess of the Prostate Gland. Diagnosis from Gonorrhœa.

The following remarks by Professor Colles, deserve to be remembered:

"Abscess of the prostate often begins with symptoms closely resembling gonorrhœa inflammatory fever, more or less well-marked usually precedes both, there is the same heat and pain in making water; and the pain in

micturition is often referred to the same spot in both; there is a discharge from the urethra scarcely purulent perhaps at first, but soon becoming so: but while, in clap, the discharge increases with an uniform progression, in the prostatic disease it will often be observed to be very trifling suppose today, profuse to-morrow, again diminished considerably on the next, and so on; even this, however, is not so constant as to be relied on for a distinguishing mark of the nature of the case. There will be often felt a pain or uneasiness in the region of the gland, increased during the passage of hardened stools, irritability of the bladder, or retention of urine."—*Medical Press.*

THE CURABILITY OF HYDROPHOBIA.

Mr. Hawkins makes the following remarks in a very interesting lecture on the subject of hydrophobia. We fear that those anticipations are very far from being realised.

"At the same time that a cure of hydrophobia is possible is rendered not unlikely by the fact that rabies is sometimes cured, or recovered from, in dogs, of which there seems no doubt, from the experience of Mr Youatt and others who have attended to the subject —so, also, it is, perhaps, sometimes in the human subject; at least more than one instance has been recorded in which several persons at once, in the same family or neighbourhood, have been bitten by the same animal, of whom one has died, and of the others some one or more have suffered from an indisposition. This indisposition may have been *essentially* hydrophobia, though without coming to its usual stage. At any rate, I am convinced that in such a line of investigation alone is any cure to be anticipated.—*Medical Gazette.*

On the Efficacy of Large Doses of Calomel in Typhus.

By J. BURGESS, Esq., M.R.C.S.

IF you think proper to insert the inclosed communication, which appeared in a provincial journal in 1842, it will show that the use of *calomel* in *typhus*, proclaimed as a new opinion in a contemporary periodical, which came accidentally under my notice, has been anticipated by me, as therein recorded, and practised in the manner described, with the most unfailing success more than twenty years since.

CALOMEL.

The popular character of calomel as a medicine may be some apology for trespassing upon your space with the following observations, since medicines of common and general use, like diet, clothing, nursing, and exercise, appeal to the welfare of all classes, and claim a popular discussion.

An interesting article in the Times, on "The Climate of the Western Coast of Africa," which appeared on the 12th ult., induced the following remarks:—

Calomel, although a specific remedy in many diseases, is capricious and uncertain in its action, which is frequently the result of an empiricism in its use, even by those of whom better things ought to be expected.

One of the most familiar circumstances attending its use, when continued in small doses, is salivation, and swelling of the soft parts of the palate, mouth, and gums, which occur more or less certainly and speedily in different constitutions.

This is so common a tendency that it is frequently considered by the practitioner inseparable from its remedial powers, a conclusion which leads to much error in the treatment of diseases.

In those cases in which this test of a curative mercurial influence is wanted to establish its permanency and safety, the object is to know how to arrive at it, in a degree sufficiently small and mild, and which is one of the desiderata of medical practice.

There is a wide range of diseases in the treatment of which its remedial powers depend in no degree whatever on these circumstances, but, on the contrary, are impeded and frustrated by them, and yet, in its use, the practitioner has difficulty to divest himself of the prejudice of a necessity for its affecting the mouth and gums.

It is necessary to continue its influence on the vascular and absorbent systems for a lengthened period to develop some of its powers; and it may be difficult under some circumstances and constitutions to avoid this dilemma; but if mercurial salivation was to be considered in the light of a false practice, and its avoidance a test of a successful one, supposing the cure to be obtained in the one instance without mischief or injury to the constitution, so likely to result from salivation, the triumph of calomel in the treatment of disease would become established, and this valuable remedy would be henceforth relieved from the ban under which it is placed.

In those cases in which small doses of calomel are required to be administered most often there exist counteracting circumstances to prevent or mitigate its irritating tendencies.

In children, in whom small doses of calomel are most often indicated, a condition of the intestinal canal presents, to remove which no other remedy than calomel will prevail,

it being loaded with a slimy and mucous secretion,(*excretion*) protecting its surfaces from the agency of remedies, which, in no other cases and without such protection, would be irritating and preternaturally active.

It is the peculiar remedy of infants and children; but the greatest triumph of calomel, even in the cure of infantile diseases, is in the administration of large doses, which act upon the overloaded absorbent system, invigorating it, and restoring the patient to health.

Its merit as a remedial agent does not consist in its irritant qualities, but in its sedative ones; and the first invariably developed by a timid and fearful exhibition of it in small doses, whilst its sedative and more valuable qualities result from large doses.

Thirty, or sixty grains of calomel, administered in typhus, act like a charm upon the unconscious and comatose patient, and produce what every other remedy fails to do, a profound and natural sleep, from which he awakens to consciousness and comparative comfort, with a soft and relaxed skin, a free and tranquil pulse, and a tendency to general perspiration; the bowels become washed with secretions, (*excretions,*) and saline purgatives being resorted to, after the benefit of sleep has been obtained, make them patent; and little more is left to remove the most formidable attacks of this epidemic, but to repeat the remedy and aid its influence by cold affusions over the surface of the body.

The agency of calomel in yellow fever, and the other formidable endemics of trophical climates, which cæteris paribus, are within the same denomination and class of morbid actions, only influenced by temperature, is of a similar character, and totally independent of its irritant agency, or of any effect it produces upon the mouth and gums, which is a regular and course test of its influence.

The most successful sedatives we possess, next to blood-letting to syncope, are calomel, in large doses; laudanum, in large doses (particularly when administered after depletion and blood-letting,) oxymuriate of mercury, combined with tincture of foxglove, in small doses; and these, next to the lancet, are the most successful means to combat acute diseases, and are divested of the objections to blood-letting, of leaving a permanent and organic debility, forbidding in many instances its use; or as an evil scarcely less than the disease, and which objection also exists against tartar emetic, which remotely debilitates the nervous and absorbent systems, and impairs the vital powers. I am, Sir, your most obedient servant,

JOSHUA BURGESS.

London Lancet.

We have pursued the course suggested in the above article in the use of calomel more than twenty years, and we have no doubt of its correctness. In epidemics we have been constantly in the habit of giving tea-spoonful doses of calomel to adults, and when attacked with the disease, we have taken table-spoonful doses, with the happiest effects—eschewing small doses in acute, and its use in chronic diseases.—ED.

Spontaneous Cure of Cataract.

A stone-breaker had suffered from cataract from his youth. Whilst pursuing his occupation, he was struck by a splinter in the affectedeye, and this gave rise to inflammation. He consulted a medical man, who with a view of examining the eye, dropped into it a solution of bell-adonna. The pupil became largely dilated, and at the same time the opake lens fell into the anterior chamber, vision being immediately restored.—*Edinburgh Monthly Journal.*

PLANE TRIGONOMETRY.

°	′	″	
23	27	33	Obliquity Ecliptic, Jan. 1, 1845.
101	17	46	West Longitude Magnetic pole in [arctic circle.
96	30	56	West do line no va. do do
83	29	04	East do do do do
158	38	32	East do Magnetic pole in [antarctic circle.
153	51	42	East do line no.va. do do
21	21	28	West do do do do
	32	26	An rate of motion of line no. va.
	4	18	Minimum daily va. of needle
6	27	33	Maximum do do do
	8	03	Mean annual rate of declination
6	41	04	West dec. City Hall, New-York.

Dec. increasing—mean heat is increasing.
Dec. decreasing—mean heat is decreasing.

Errata.—On page 45, in Column of Positive Forces, in 46th line from the top of page—for Sulphate read Sulphuret.