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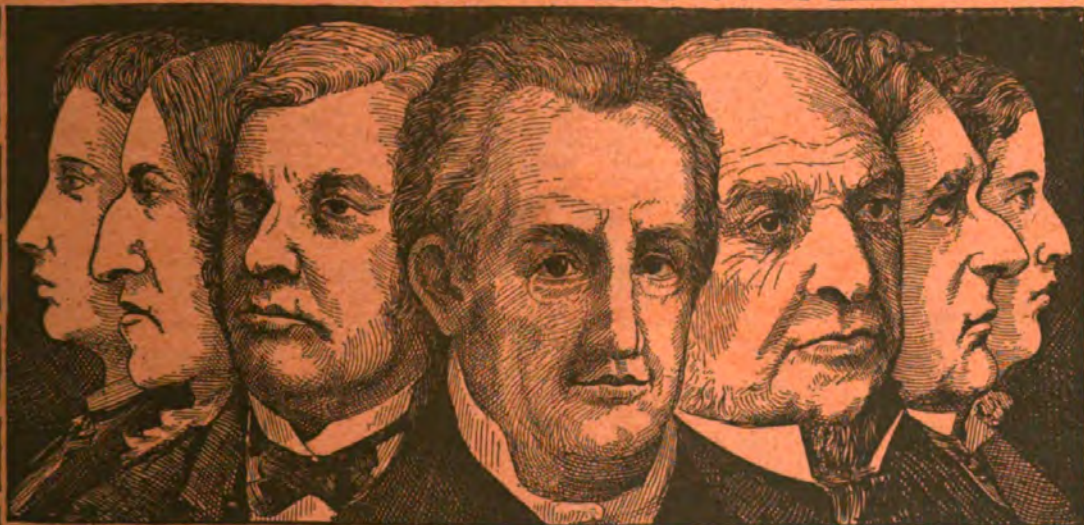
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NUMBER 1.]

JANUARY, 1890.

[WHOLE NO. 613



REV. W. G. PUDDFOOT,
The Western Home Missionary.

THE REV. W. G. PUDDEFOOT,
THE WESTERN HOME MISSIONARY.*

YOU have a good constitution for health and power. If you live rightly, you will be likely to hold on to life and duty and the power to perform it to a good old age. You inherit from your mother your type of thinking, while you inherit from your father your type of feeling and character. Sometimes this is reversed. A man will think as his father does, logically, coolly, and patiently. He may be emotional like his mother, and have tenderness, sympathy and affection. Another has a quick, keen, sharp, intuitive intellect, and a tendency like the mother that reaches conclusions without argument, and hits it right about as often as trap pigeon shooters bring down their birds without seeming to aim. They never bring the eye to the gun, but somehow the gun is aimed by instinct. You have that tendency to form judgments without going into a mathematical plan in respect to it. There are men in this city who will visit a cattle yard and buy a hundred oxen in a hundred minutes and get within five pounds of their weight, and the weight will be so much more than estimated.

You have good judgment. Your first impression of that which you ought to know something about is sound. A clear conclusion comes like a flash of lightning in the night, and is the line of action which you ought to adopt. Poring over and pondering the subject does not throw any additional light upon it. For instance, if you were in the granite business you could tell the amount of a given block of granite near enough for the purchase of material by the lump. If you were buying timber, you could tell the height and size of a tree sufficiently near to know how much to offer for it, or for a hundred trees. Let us

say that whenever you are impressed unfavorably in regard to any affair you should let it go and not allow yourself to be persuaded or argued into it by anybody. If you ever make mistakes in business, it will be when you fail to follow your first distinct impression. You are not very likely to follow other people's advice, because among men that we meet there is not one in five thousand that has as much individuality as you have. Sometimes we call it stability of purpose. Sometimes it is called independence.

Self-esteem, firmness, approbateness, and conscientiousness constitute the crown section of your head and the strong part of your mental makeup. Your head measures 21 3 4 inches where the hat fits. It ought to measure from one ear to the other over the top 13 3 4 inches. It measures 15 inches, so that the seat of government is in the crown of the head. You have as much of what people sometimes call push, obstinacy, and independence as we generally expect in a man whose head measures 23 inches in circumference. You are organized admirably for a superintendent, to overlook men, and decide and direct matters. You see at once what ought to be done and how to do it. You have the will, power, and positiveness to direct and control, and procure to be done that which is at hand. You could take fifty men and so employ them as to accomplish as much in a week as the average superintendents of men, who are so engaged, would accomplish with fifty-five men. So you would save the time of five men out of the fifty by that readiness of thinking and planning, and by the positive firmness of your decisions and the ability to urge them to acceptance and fulfillment. If you have the charge of men they do not expect to discuss matters; they simply want to know what you say and what you wish. If

*(The sketch of character here given was dedicated to a reporter by Prof. Nelson Sizer without any knowledge of the name or work of the subject.)

it were absurd they would do it, because "the boss said so;" consequently, you do not have divided counsels where you have the right to be master. People suppose you know, and generally you do. Your directions are so definite that there is not much doubt about what your purposes are. They generally come out right.

You have mechanical judgment, and you are generally able to adapt yourself to a business and to plan the details of that which is required. Your desire for gain is more a spirit of judicious economy than it is of a grasping, speculative spirit, and it is best for a man like you to be an executive factor in the carrying out of a business which has general rules. For instance, railroading, telegraphing, and manufacturing have general rules. Then in such a business as quarrying, or lumbering, or house-building, or the building of a railroad, or a steamship, general rules can be established by experience. When that shall be done you are the man to take these rules and put them into practice. You would plan and direct with such definiteness that the men would lose no time in studying to know whether the plan were a good one. If you were on a jury, you would be likely to be made foreman. As a boy among boys, you were one of the captains to play a game of ball. You are generally on the executive committee wherever you are, in church, or business, or pleasure.

You are ambitious to rank well. You think a good deal of the good opinion of the people, and no matter if you were rich or influential, you would like to have every man think that you were about right. If you are doing or saying something which looks strange and doubtful to others, you will sometimes say, "It is all right; I am posted." Then you go on about your business.

Your hope leads you to expect favorable results. Your energy, self-reliance, and practical skill will enable you to make a success from ordinary circum-

stances, and even to wrench success out of doubtful and difficult conditions. You can get out of a thing as much as can be laudably obtained from it, and do it about as quick as anybody. If you were appointed Receiver of some business that needed one, you would manage to close it up quicker than most men who are so engaged. If you were in a business in which there were collections to be made, you would keep them up snugly.

Your idea would be to get that which was past due as soon as decency, and propriety, and good fellowship would warrant, and if somebody thought you were in a hurry, you would say, "Short settlements make long friends." You would show that you wanted the business done up promptly, but you would not want a man to think that you felt the necessity of collecting at once, for fear you never would get it. You would get your customers in the habit of knowing that the bill would come in pretty early, and if the remittance did not follow it somebody would be there to save them the trouble of sending it. If people whom you owe let their bills lie over, you would see them and say, "Why don't you send in that bill? I am keeping the money in the drawer to pay it, or watching the cash account, so that it can be paid instantly." You would make a capital buyer if you were backed by plenty of capital. If you were a buyer for a wealthy firm or house, you would get the bottom figures in a few minutes. If you did not get the bottom figures, you would say to the salesman that you had better say good-morning, and that when he wanted to take your figures, he might let you know. You would keep him good-natured. Then he would call you back and say, "We will divide it." You would say, "No, my figures are a fixture; if you want them, all right." So you would waste but little time. You would have good judgment in regard to merchandise, as to whether it came up to the requisite standard for the price.

Your power among men consists in your quick decisions, and in your ability to be your own master and make people feel that you are your own master, and in that way you master other people. A man without any spirit of independence or effort is always made the butt of people's caprice, just as a cow without horns is always knocked about by youngsters who have horns.

Your social nature makes you loving and affectionate. People believe in you, but you do not have a great many intimate confidants. You try to treat people in such a way that if they were to become enemies they could not hurt you. You will treat people who are not your friends in such a way that they may become your friends. The consequence is that you have more off-hand speaking acquaintances in the community than almost anybody else. If a man sees you walking on the other side of the street, he will throw you a good morning. Men are not likely to whisper some conspiracy into your ear and ask you to join it. Somehow you carry yourself in such a way that people do not feel that you are one of the kind to conspire. You want to have what you do as square as mathematics, and about as clear. When you finish a thing, it is done. When you propose some line of business, people know very quickly what you are at.

You could do well in real estate. If you were in that line of business people would come to think that if you had an interest in a certain enterprise it would do to think about it. A man will sometimes ask you, "Is it all right; do you know about it?" You will say, "I believe it is all right." If you were in it yourself, you would say it was all right, and most men who knew you would think it was as you stated. There are some men who are constitutionally indirect. They must bring about results by a circuitous, covert method. You can not manage matters in that way, or if you should try to do it, it would be a long process. You could make three off-

hand bargains where you could consummate one by this indirect method. A man that makes off-hand transactions, as you do, does not awaken in the public mind the feeling that there is some concealed trap. You will carry yourself in such a way that men will have the feeling that it is open and above board, and square and true; therefore, they need not put themselves on their guard.

You talk well on subjects which you understand, and you talk frankly and directly to your friends. They know just about where you stand in everything that they have the right to know. That which they do not have the right to know, you say nothing about. You are a good judge of strangers. You generally hit it right. When you think of men with whom you are well acquainted, you consider every time what kind of men you are dealing with and adapt yourself to them. If you are dealing with a man that is tricky and indirect, you surprise him with your frankness. You take him unawares. You do not give him time to fix up statements, so you get along with him by your frankness. You will succeed with him better than most men, because you disarm him of any idea that you have some secret plot to consummate. You do not sugar-coat the pill; therefore, if it looks like aloes, it is accepted as that. If it is made to look like sugar when it contains aloes or something else, people will learn to be suspicious of you.

If you were a public speaker, you would be masterful in controlling the thought and action of the hearers. In the pulpit, on the lecture platform, in politics, or temperance, you would take an influential place. There is nothing dull in your methods, nothing slow or weak in your thoughts or words.

In speaking of his career in a series of papers entitled "How I became a Home Missionary," Mr. Puddefoot says:

I was born in the little town of West-erham, Kent, England, May 31, 1842,

so that I am a "man of Kent," though not a "Kentish man." Before becoming a Home Missionary I was a confirmed skeptic of nearly twenty-five years standing. My mother was a superior Christian woman spiritually, but my father was an agnostic, and much stronger mentally than my mother, and of course influenced a boy more; howbeit that which is lowest in the spiritual is higher than the highest in the mental. I was often kept in to mind the store, and as we sold periodicals, such as "Chambers's Journal," and their other works, "Dickens's Household Words," "Eliza Cook's Journal," "The Illustrated London News," "Punch," "The Family Herald," "The London Journal," I became a very miscellaneous reader. Nothing came amiss. I stumbled over the big words in Milton's "Paradise Lost" before I was ten. In the same lumber-room I found "Dr. Ure on the Cotton Manufactures of Great Britain," and Capt. Marryat's "Pirate," and the "Three Cutters."

Those were the days of Chartism, and soon after came the "Tractarian Movement," which seemed to make papists of some, and rationalists of others. Darwin lived a few miles north, Rev. F. W. Robertson was preaching in the next county, and, although I knew nothing of these things at the time, nor indeed until I had become a Home Missionary, I can see plainly that through my father, who was an intense Radical, I was much influenced by them. I remember putting such awkward questions to the Sunday-school teacher in regard to the six days' geological story that I was promoted by being discharged; but not until my ears had been pulled sundry times; all of which helped me into unbelief. Of course such questions are more skillfully dealt with now.

I was taken from school at thirteen years of age, just when I was beginning to study, and sent to learn the carpenter's trade. Being too young the indentures were cancelled, and I clerked

at Pickford & Co., the great carriers. Then I worked on the first Atlantic Cable; after which for a few months I served as errand boy, and knew Old London from Westown Schools, where I used to get my hands spanked while a boarding-school boy there, to Old London Bridge.

My father came over the Atlantic to Canada. I was getting to be a burden at home, and although I was fool enough to despise a trade and wanted to be a lawyer, I felt I must not longer be a burden on my father, for his means had been sadly crippled. I therefore began to learn shoe-making, and after eighteen months' experience, having been three times apprenticed to that trade, I started off with my broken indentures as a full-fledged journeyman, and at that trade I worked nearly twenty years.

Mr. Puddefoot seems to have passed through a long series of experiences in connection with church work before he finally decided to avow himself a Christian. A good singer, and much interested in music, he took part in church choirs, but like very many people found to-day in the organ gallery, he sang merely from love of music itself, not for the sake of its spiritual association. He was past thirty-five before he yielded to the impressions of his surroundings and concluded to join the Methodist church. Going to Michigan he acted as superintendent of a Sunday-school, class-leader, lecturer, and chorister, discovering qualities as a speaker that were as much a surprise to himself as to others.

At that time the Reynolds Temperance crusade was in activity in Michigan, and there was much demand for speakers. Mr. Puddefoot responded to the call, and addressed audiences with such success that people thought that he should leave his bench and shoe-making and devote himself to reformatory work, but before he had arranged to do so an experience at a camp meeting, where he spoke with much effect, determined his entrance upon the work

of the ministry. Objection was made to his assuming the part of a pastor in the Methodist church, because of his lack of training. However, a temperance address in a little room up in a newly settled corner of Michigan brought him into correspondence with a leading minister of the Congregational church, and the result was he left the Methodist church to take service with the former, his first pastorate being at White Chapel, Nebraska. He was ordained in 1880. After about seven years of settled church connections he was transferred to the missionary field, and has been most actively engaged in it since.

His early life has proved a training for this most useful sphere of Christian endeavor that exceeds much in practical efficacy the didactic teachings of institutes or seminaries. Knowing the needs of the people from much personal contact, especially people in the newly settled districts of the Northwest, he can, with his natural ease of adaptation and his benevolent spirit, minister to them as few men from the schools of the East could, whatever their privileges of mental culture and development.

Mr. Puddefoot is a man of fine physical development, dark hair and eyes, and an exuberant flow of good nature. His manner is sympathetic and winning, his address off-hand, frank, and thoroughly unconventional. On the platform he is apparently dominated by one impulse, to tell the story of his work among the poor, neglected, vicious, and desperate classes of the far West. He speaks with great earnestness and rapidity, mingling humor and pathos in a continuous stream, often speaking for an hour, and apparently taking a breath only now and then. By some his speaking is compared with a cyclone, so fast and strong do the sentences or phrases follow each other. He has something to interest every one who has a vein of sympathy, of true human nature, in his constitution.

Generally Mr. Puddefoot finds a large audience wherever he is announced to speak, and his fervor, his earnestness, his naturally dramatic spirit, born of years of experience among the very scenes he so impressively pictures, awaken a profound sympathy in the hearers.

PHYSIOGNOMY.

STUDIES IN LAVATER.—THE TRUTH OF PHYSIOGNOMY.

MORE than a hundred years ago the illustrious Lavater wrote his wonderful work on Physiognomy. He had already gained great reputation as poet, preacher, and writer. He was the eloquent pastor of St. Peter's church at Zurich, admired for his genius, and universally beloved for his noble, benevolent, and blameless life. Wherever he preached enthusiastic crowds gathered to hear him, and his published sermons and correspondence were read all over Europe. But this new work which he named "Physiognomical Fragments for the Promotion of the Knowledge and Love of Mankind," greatly extended his celebrity in foreign countries. Long before him Aristotle, Plato,

and Galen had written and taught physiognomy. Hippocrates had a system of his own, based upon the colors of the complexion, and other men had added their contribution to the literature of the subject.

Lavater made the first elaborate attempt to reduce physiognomy to a science. He had long believed that character could be discerned by the cast of the features, and in his work he gathered the fruit of many years of study. Its publication at once made the new science everywhere studied and discussed, assailed, ridiculed, admired, and praised. Great men visited and corresponded with the author. He received the highest honors from kings, and princes, and

the royal families of Europe. He was invited to visit the Emperor Joseph II., who said to him, after a long conversation with him, "Should you be able to assign precise principles, and your observation become a certain and attainable science, what a revolution you must produce in the world. All men would view each other with very different eyes." Said the poet Goethe, "Lavater is the best, greatest, wisest, sincerest of all mortal and immortal men I know." Zimmerman, the illustrious physician of Hanover, said, "Your penetration appears to me more than human, many of your



JOHANN GASPAR LAVATER.

judgments are divinely true. No book ever made on me a more profound impression, and I certainly consider it one of the greatest works of genius and morality that ever appeared. You may rely on my encouragement and support in every possible manner. How happy am I in the friendship of Lavater!"

Lavater says of his work: "I must repeat the full conviction I feel, that my whole life would be insufficient to form any approach toward a perfect and consistent whole. It is a field too vast for me simply to tell." But Lavater has enriched and cultivated for us one of the

choicest fields of human observation. Before Lavater nothing had been precise or defined in facial interpretation. There had been a constant collision of opinions, always "crushing the youngest and the weakest." Most had copied Aristotle, or collected together a great many contradictory assertions. Lavater asserted nothing but what accorded with his own observations. When a boy, nothing gave him greater pleasure, he says, than to see objects of any kind unusually large. "Every building appeared to me too small. Every tower too low, and animal too diminutive. When I saw or heard of a high tower my heart palpitated with a kind of rapture, and my greatest delight, notwithstanding my natural timidity, was to ascend such lofty edifices, and, looking down from them, to see everything below me little, while what was near me alone was great. This love of seeing high towers has almost become a passion in me. In my journeys, even in the latter years of my life, I have found myself, as it were, impelled by a kind of irresistible necessity to ascend the towers of Strasburg, Augsburg, St. Ulric, and that which is still higher than these at Landshut;" and so through life Lavater's mind was occupied with great themes and lofty views, his soul always climbing to something higher, beyond where he could look down on the small things below, and at the great truths around him. He wrote and talked as if from some serene spiritual height, where truth glows richer than imagination, he overleaps it on all sides.

He began each day with this noble resolution, which he kept throughout life, "Every day shall be distinguished by at least one particular work of love."

His first public act, when only twenty-one, was a fearless protest against an influential public oppressor.

Defender of truth from the first, while encouraging and relieving the wounded soldiers in the streets of his native city,

at the taking of Zurich by Massena, he received himself a fatal wound, and lingered many weary months refusing ever to reveal his assailant's name. He died breathing words of forgiveness.

Lavater's simple faith, like light within a vase, glows through many a page of his book, and we love the man who puts so much of his own soul in his words,



GRACE AND SYMMETRY OF FORM.

and without prejudice we read what he says. His firm belief in the "irresistibility of prayer," the correspondence between humanity and divinity, like "the celestial chair of Homer," traverses through all the interval that separates the power which creates from the soul which contemplates." His esteem for great capacities, and his joy at discovering them,

were so unbounded he was always willing to overlook the defects, and very seldom heard to speak of them. Always forgiving, he delighted to find good in his enemies, praising their virtues with marvelous magnanimity, and so, of all men, was most able to judge impartially and candidly of the character from the face. He studied the form of the body, the signs of the countenance, in the composition of the features. As an artist, observing a landscape, he observed each particular configuration or cast of face.

After ten years of daily study he says, "I am not any more convinced of the certainty of my own existence than of the truth of the science of physiognomy, or that this truth may be demonstrated, and that I hold him to be a weak and simple person who shall affirm that the effects of the impression made upon him by all possible human countenances are equal." He also adds, "I have heard, from the weakest of men, remarks on the human countenance more acute than those I had made; remarks which made mine appear trivial." Lavater had very early a great taste and talent for drawing portraits, and comparing proportions, features, similitudes, and varieties of the human countenance. Once it happened that he had drawn two faces whose features remarkably resembled each other. This awakened his attention, and his astonishment increased when he found these persons as similar in character as in feature. He found that every man had some peculiar train of thought into which he falls when alone; this, to a degree, molds the man. He may try to seem better or lovelier than he is in the presence of others, assuming an expression foreign to his nature, but this dissimulation affects only the movable features;

the face at rest, the real countenance or the basis of those features is beyond dissimulation.

The scientific claim of physiognomy rests upon the assumption that the habitual exercise of any feeling will leave upon the face a certain impression by enlarging, strengthening, and rendering permanent in position the muscles associated with such emotions.

Says Lavater: "There can be no doubt of the truth of physiognomy. All countenances, all forms, all created beings are not only different from each other in their classes, races, and kinds, but are also individually distinct. Each being differs from every other being of its species. No rose is perfectly similar to any other rose, no egg to an egg, no eel to an eel, no lion to a lion, no eagle to an eagle, no man to a man. Confining this proposition to man only, it is the first, most profound, most secure, and unshaken foundation stone of physiognomy that however intimate the analogy and similarity of the innumerable forms of men, no two men can be found who, brought together, will not appear to be very remarkably different. Nor is it less incontrovertible, that it is equally impossible to find two minds as two countenances which perfectly resemble each other." I myself have seen two brothers who very strikingly resemble each other. I was well acquainted with one, Mr. Edward, and had never been introduced to the other, Mr. James. I met Mr. James one day on the street, and, thinking it was Mr. Edward, bowed to him. Not stopping to speak, as Mr. Edward always did, he gave me a rather surprised bow and passed on. I learned afterward that Mr. Edward was out of town and I had bowed to the wrong man. Meeting both brothers in a carriage the week after, I found, though very much alike when apart, when together there were striking differences. I have often tried to please two children by giving them two roses just alike, but in a large garden I could

never find two exactly similar. I have only partially succeeded in baking two similar little cakes, or cutting and chiseling two pieces of maple sugar so much alike that two little people would not prefer one to the other. From this we infer that there must be a certain native analogy between the external varieties of the countenance and form and the internal varieties of the mind. Is not the internal variety the cause of the external? Does not the mind influence the body, and the body the mind? The Universal Mind stamps upon every living thing the signet of its heritage, and those who open the book of Nature's truth may read and find the true history written on the face of everything. Every



SIMILARITY IN BLOOD.

stone, every grass blade, and sand grain "is impressed with the thought of God, and relates His wonders." In the simplest things close to us we read the mystery of the most distant, most marvelous phenomena. In the silent amber the secret of the thunder, in the smallest drop of water the explanation of the rainbow; the darkest coal interprets the diamond's glow. "Is the soul alone dumb and blind to the divine harmonies of creation?" Through her curtained windows she reveals the lights and shadows of the world within, and reflects the glories of the world without. All truths of form and color come to meet her love of beauty. Light brings truth to her thirty three millions of leagues away, and farther still may come

through telescope-glass starry streams quintillions of miles away. Through the ears, her sounding boards, come truths of tone, and the voice of all Nature is raised to charm her. Through sensation, smell, and taste, come balmy, delicious, delightful truths.

Nowhere are these varying emotions seen more clearly than in the face of a little child who has never tried to hide the true, or assume any false expression. Just as my little friend May was having her picture taken with the sedatest of faces, she was shown a stuffed cat, with the head off, which she thought so very



PORTRAIT. HARMONY AND SYMPATHY.

funny, that her face immediately changed from its very sober look to the hilarious expression of the picture. I never saw a child look happier.

"A sympathetic, kindly soul has a sympathetic, kindly face. Sunshine within will beam without. Fire within will burn without. The laws in the spiritual and intellectual forces are as absolute as those which work in the physiological and ordinary natural conditions. We are quite safe in judging of the unknown by the known, the unseen by the visible, the whole by a part." Unity of principle rules in every department of the universe, and binds the whole in

one. An active and vivid eye and an active and acute wit are frequently found in the same person. Is there no relation between the active eye and the acute mind? Is this the effect of accident only when we perceive the eye gleam and the face glow the very moment when the understanding is most acute and the wit the most lively? The motion and the fire of the eye undergo at that moment the most visible change. As lightning reveals the stormy sky, and the sunshine the smile of Heaven, so clearly does a smile, genuine and joyful, reveal the sunshine of the soul.

The face is the mirror of Divinity. Shall not its harmonies and revelations be more clearly expressed and defined than all lesser things? Howsoever denied, we all intuitively acknowledge this in our language. We speak of "the heat of passion," "the light of knowledge," "the harmony of feeling." One person, we say, has "a cool, reasonable style of mind;" another, "a warm and loving heart." We talk of eyes "flashing fire." A New York paper speaks of Verdi, composer of *Trovatore*, as having "flashing eyes;" words are said to "burn," the heart to "boil with indignation." When we say the heart boils with indignation we are literally correct, as the heat of the spiritual forces causes a hot condition of the heart which sends the blood into a boiling motion.

Writers on "Chromo Mentalism" say that the eye can flash real fire; only of a higher grade than ordinary fire; that mind and body work after the same laws. There is a fine spiritual something emanating from a noble, animated face that we call sparkling and radiant. There are some countenances that seem to us always noble and wonderful, but a careful observer of faces will see in each countenance, at times, something remarkable. No change can take place in the soul without some corresponding act of the body. No "mental action takes place till the convolutions

of the brain have been awakened into life by the sweep of fine ethers as well as blood through them, just as in a landscape a tempest brings all surrounding objects into action. Volition and mental action make the maiden's cheek blush, send life currents to the heart, cause the paleness of fear, send electric currents to contract muscles, and ther-



ECCENTRICITY.

mal currents to expand them, and bring about a hundred other kinds of effects." The powers of this busy brain are miraculous and illimitable. Imperfect as the science of physiognomy is, folded in it are rules and formulas by which the whole empire of matter is worked. There is no prosperity, trade, art, city, or great material wealth of any kind but if you will trace it home you will find it rooted in a thought of some individual man, and that individual man will have eyes, brow, lips, lines of face peculiarly his own, and he who earnestly and often studies that face will have found something grand in the man before the world knows it.

Let any person for two days note all he hears or reads among men, even from the adversaries of physiognomy, and he will continually hear expressions like these: "You might have read it in his eyes." "The look of the man is enough." "He has an honest countenance." "His manner sets every person at his ease." "He has evil eyes." "You read honesty in his looks." "Should he deceive me I will never trust

man more." "He can not look any person in the face." "His appearance is against him." Hear servants talking of their mistresses, or noblemen talking of their peers—all are judging alike by physiognomy.

"Each insect is acquainted with its friend and foe, each child loves and fears, although it knows not why." Physiognomy is the cause; nor is there to be found a man upon earth who is not daily influenced by physiognomy, not a man who can not figure to himself a countenance which shall appear to him exceedingly lovely or exceedingly hateful; nor a man who does not more or less, the first time he is in company with a stranger, observe, estimate, compare, and judge him according to appearances, although he might never have heard of the word or thing called physiognomy.

There is a bond of unity between mind and matter, or the mind could never act upon matter or matter upon spirit. In some faces there is a harmoni-



ARTLESS, HAPPY CHILD.

ous gradation in forehead, eyebrows, cheek, chin, and mouth, as in the picture of the beautiful Queen of Delhi, drawn by a native artist on ivory, her hair progresses from lines of beauty above to lines of grace below. To look at this face we think there must be some harmony of character.

"All men," says Lavater, "absolutely all men estimate all things whatever by their physiognomy, their exterior, temporary superfluities." By viewing these on every occasion they draw their conclusions concerning their internal properties. What merchant, if he be unacquainted with the person of whom he purchases, does not estimate his wares by the physiognomy or appearance of those wares? If he purchase of a distant correspondent, what other means does he use in judging whether

from his countenance? Will he not, almost before he is out of hearing, pronounce some opinion upon him and say, This man has an honest look? What is it to the purpose whether his judgment be right or wrong? He judges, though not wholly; he depends in part upon the exterior form, and thence draws inferences concerning the mind. Does not the physician pay more attention to the physiognomy of the sick than to all the accounts that are brought him concerning his patient?



QUEEN OF DELHI.

they are or are not equal to his expectation? Is not his judgment determined by the color, the fineness, the superfluities, the exterior, the physiognomy? Why does he take one guinea and reject another? Why weigh a third in his hand? Does he not determine according to its color or impression, its outside, its physiognomy? If a stranger enters his shop as buyer or seller, will he not observe him? Will he not draw conclusions

The father's fault and the mother's weakness may also come with the father's mouth or the mother's nose. Knowing this, and owning up to it, the fault may be early checked, the weakness helped. To recognize this physiognomical fact might be a world of comfort to the earnest father or mother who would have their children wiser, happier than they have been, as the florist, by cultivating, gets a larger, sweeter

rose ; so where we have failed, our children may be taught and trained to win. From the rock of our manifold mistakes they may sail forth on the sea of life far better voyagers than we ; their future glowing with our own unattained ideals. Had Cæsar's mother tried to develop in him the moral sentiment which animated Cato, Rome would have been free, and Cæsar greater. Had Alexan-

der been early taught the sentiment of the beautiful that animated Socrates, instead of conquering the world, Alexander's ambition would have been to render it happy. "A generous thought in the soul of a mother was the only thing required to save the human race." "My child looks like me, she shall not make my mistakes ;" here the science of physiognomy is a help. L. A. MILLARD.

NOTABLE PEOPLE OF THE DAY.—No. 27.

DOM PEDRO II.,

Late Emperor of Brazil.

THE retirement of Dom Pedro II. from the throne of Brazil, announced a few weeks ago, must have startled many a crowned head. For eighteen years peace has hovered over the broad expanse of that country, and its prosperity and advancement have made it a theme of admiring interest to many political economists. Why, then, should this necessity have arisen for so radical a change in the form and policy of the Brazilian government ? Observers find reason for this change in the growth of ideas among the people from their contiguity and relations to the South American republics, and from the powerful influence exerted in South American affairs by the United States ; and further, the liberal spirit of Dom Pedro himself has helped greatly to nourish the development of a desire for more liberty and a representative system.

The manner of the emperor's withdrawal from the place he had occupied so long and usefully, appears in itself to have been a foregone conclusion, and a conclusion not unwelcome. He may not have realized to the extent that some of his contemporary rulers have realized that "uneasy lies the head that wears the crown," but in his advancing years he probably expects, as a private man, to enjoy more what of peace and happiness life can afford than he would be likely to find by remaining at the head

of a nation that combines so many diverse interests and types of population.

Thirteen years or so ago we met Dom Pedro, and were impressed by his kindly manner, and earnest attention to methods and institutions that had for their object the instruction and improvement of the masses. He was then of an observing, inquiring turn, and avoided as much as possible everything that savored of parade and display. He preferred a visit at a great manufactory, or well-equipped school, in company with two or three, to a brilliant reception, where time and patience were expended in a round of superficial courtesies. He was then studying what other and older countries had in common use, and which might be applied to the good of his people.

The portrait, if taken from a recent photograph, represents him very nearly as he appeared then. He was a tall man, of large frame, with a voluminous head, a bright eye, and abundant hair and beard, then gray. The face and head struck us as those belonging to a thoughtful, sympathetic, benevolent character. His strength of will lay more on the side of kindness, self-helpfulness and tact than on the side of force and compulsion. He evidently read men well, and possessed more than average power, as a ruler, to win their interest and co-operation. At times, in

his career, he has shown the spirit and energy of the aroused lion, but, as a rule, his policy in governing has been the policy of kindness.

Dom Pedro II., or as his name is when written out, Pedro John Charles Leopold Salvador Vivien Francis Xavier Francis de Paul Leocardio Michael

brought about a crisis which compelled his abdication, and after establishing his son on the throne under a regency, he retired to Europe to spend the remainder of his days in quiet. That was a peaceable revolution, and until 1841 the boy head of the ancient house of Braganza was the subject of his tutor and the Re-



DOM PEDRO.

Gabriel Raphael Gonzague d'Alcantara, was born December 2, 1825, and was crowned "Emperor and Perpetual Defender of Brazil," when a mere child, April 7, 1831. His father, the head of the royal house of Braganza, had achieved the independence of Brazil, but his leaning toward absolutism

gent Minister. On July 18, 1841, Dom Pedro II. was solemnly invested with all the authority and dignity of his position as Emperor, but his coronation was made the instance of an uprising on the part of the Republican faction of the people, which, however, was put down after eighteen months of turbu-

lance. From the beginning of his reign Dom Pedro has been the friend of liberty, and through his efforts a Brazilian contingent fought with the Argentines for the independence of that country from Spain in 1851 and 1852.

In 1843 Dom Pedro married Theresa, daughter of Francis I., titular King of Naples and the two Sicilies. By her he had two daughters, Leopoldina and Isabella, the latter still living. The principal events of his reign have been the troubles with England in 1862, which were arbitrated by the King of the Belgians; the war with Paraguay, beginning in 1866, and ending in 1870; and the decree, promulgated in 1871, providing for the gradual emancipation of the slaves in Brazil.

The war with Paraguay was a long and bloody one, and it was in this war that the imperial navy, under the great Admiral Barroso, won its first laurels. Since that time the emperor has, until the outbreak of the "revolution," reigned in peace, disturbed only by the intrigues of politicians and the natural cares that encompass a throne. Never did a monarch see such changes in the country and the people he governed. When the boy of sixteen first assumed the crown, his vast empire was practically an unexplored wilderness, with a few miserable cities scattered along its coast.

The capital itself was a tangle of narrow, ill paved, undrained streets. Now there are long avenues, bordered with warehouses and costly residences, the smoke of sugar refineries hangs over the Bay of Rio, and the boom of the cotton-mill is heard by the walls of Maranhão. Throughout the entire length of the Amazon busy steamboats ply, and every harbor is crowded with commerce. A navy has been created which commands the respect of even the great European powers. Every art and science has a home in Brazil.

The late emperor may look back from his new European home and say with

pride, "Brazil owes what she is to me, and is my monument."

PRINCESS ISABELLA OF BRAZIL.

VERY like her father, it must be said, this portrait of the Princess Isabella shows her to be. There is similarity of forehead, eyes, ears, and side head, a somewhat stronger cut of nose, and a more lively temperament, and a more elastic disposition. The character of this lady has many masculine elements; probably she has derived much from her maternal grandfather. The princess' disposition is marked by spirit, courage, and independence; possibly, if she had had much to do with affairs in Brazil lately, and her vote had been necessary to its consummation, the change from an empire to a republic would not have been so easy. She is ambitious, and likes power, while she may not be severe or harsh in its exercise. The princess was born in 1846. At eighteen she was married to the Count d'Eu, son of Louis Philippe, who, it is said, has shown in his life no disposition to act more than the part of an amiable and rather inert husband. In 1877 Dom Pedro visited the United States, and later traveled considerably in Europe, and during his absence from Brazil the Princess Isabella acted as Regent. Some discontented men, taking advantage of the emperor's absence, began to foment discord. But they soon found in the Princess Regent a ready and powerful opponent, who nipped that rebellion in the bud in a manner which will long be remembered by Brazilians.

The princess combines the religious fervor of her great namesake of Castile, with the strength and energy of her ancestress, Maria Theresa. In her the Bourbon and Hapsburg blood is more strongly marked than that of the house of Braganza. A devout and rigid Roman Catholic, she has oscillated between the state and festivities of court and the ascetic life of a penitent. One night a stranger in Brazil, having the entry of

the court circle, might have seen the heir-ess of an empire surrounded by the music, lights, state, and splendor of the Botofogo palace. The next day, visiting some dim lit church, he might have seen a plain-faced woman in a coarse gown sweeping the flags of the paved floor, and people would whisper to each other and say, "There is the Princess "

aged wife to Europe—this time also leaving the reins of government in his daughter's hands. While he was absent a great popular measure was accomplished, and largely through the insistence of the princess. She had always been an ardent advocate of the abolition of slavery, and not content with the slow process of emancipation which her



PRINCESS ISABELLA OF BRAZIL.

She has three sons—Pedro d'Alcantara Louis Philippi, Louis Maria Philippi, and Antonio. Her only sister, the Princess Leopldina, wife of the Duke of Saxe-Coburg Gotha, died in 1871.

Again, in the year 1887, the emperor being in feeble health, went with his

father had inaugurated, in April, 1888, she dismissed the ministry which her father had left her, and appointed one pledged to immediate action. The Brazilian cabinet is modeled after that of England, and like that holds office until a vote of censure is passed by the legis-

lative body. The bold action of the Princess Regent in dismissing her ministers occasioned considerable excitement in political circles in Brazil, but the sentiment of the people generally was with the princess. The politicians

saw in it another evidence that Isabella was determined to both reign and rule. The result was what she desired, the hastening of the day when property in human lives no longer existed in Brazil.
EDITOR.

HOUSEKEEPING IN THE FUTURE.

A WRITER in the *Forum* holds out a cheerful prospect for the modern housekeeper, in the following. We can easily imagine our lady readers who are daily fretted and worried by the annoyances that have crept into modern household management, saying heartily "Speed the day."

In cities and villages the kitchen and cooking stove and hired girl are all to be banished from the home. Clothes making, soap making, starch making, laundry work, coffee browning, yeast making, butter making—all are gone. Send after them—or rather say that organized industry is already taking along with these—the remaining work of cooking and cleaning. This state of things is coming as sure as fate; and when it comes the deliverance will be so great that generations yet unborn shall rise up to bless the workings of this beneficent law.

The city of the future will not build houses in squares, giving every house an individual kitchen and prison-like back-yard. It will rather build them all around an open square, and the part now disfigured with the kitchen will be given over for a household sitting-room or nursery, opening into a great green space, where children shall play in safety, and through which the free air of heaven shall blow into the houses surrounding it. In every square will be found a scientifically constructed building containing a laundry and a great kitchen, supplied with every modern appliance for skilled and scientific cookery, and also for sending into ever dining-room any desired quantity or variety of food.

The individual of the home and home table will be preserved, and the kitchen smells and waste and "hired" girl will all be banished.

THE INNER LIFE.

WE know there is a life within the life

Of each who, toiling, treads the conquered way;

Ever a fiercer strife behind the strife

That each is seen to wage from day to day.

We find ourselves contending with a world

In which ambition rules and pride holds sway;

We drink and scoff, like others, are possessed

With zeal to grasp the baubles as we may.

So we are judged to be alike as base

As he who sells for pottage all he hath—

Who yields not only love and joy and truth,

But yields for this his soul's immortal worth.

Be thou serene before this heartless judge,

Brave heart that hath with unseen valor fought;

Strive not to hold against the world a grudge,

And sell the sunshine of thy life for naught.

The world can never know thee as thou art,

Much less with truth can judge thee as it ought;

But if thou hast with courage done thy part.

For thee there's nothing further to be sought.

'Tis well for us to toil and strive to win

All that our health and our comfort require;

But let the angel still within us reign,

That we may aid the world to something higher.

Then let the inner life be full and free—

Let mind rule with the scepter of its might;

Let heart and soul with aspiration turn

Toward all that's great in nature, grand in thought.

Then be the world in judgment true or false,

The heart secure in consciousness of worth

Can find within its battlements of truth

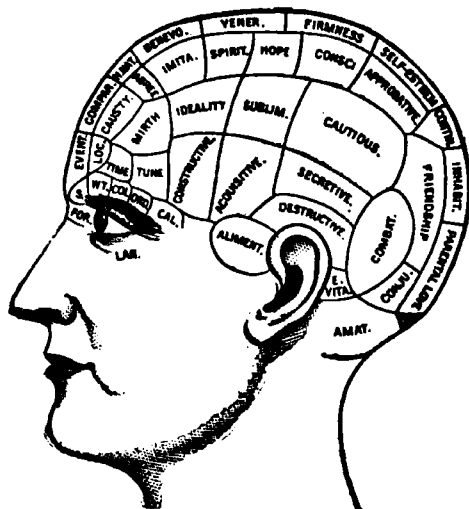
The greatest pleasure possible to earth.

ROBERT LIVINGSTONE.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



MENTAL MECHANISM No. 5.

HOW FACULTIES WORK TOGETHER.

THERE are certain mental states in which single faculties seem to act. Other mental states reveal the activity of two or three of the faculties, and others again seem to involve three-fourths of the man's entire mentality. Cautiousness, for instance, gives naturally fear. It gives a sense of anxiety in respect to danger, but the objects which we fear are sometimes not dangerous at all. Every driver of a horse will remember instances in which pieces of wrapping paper, or part of an old newspaper has been rolled along the street by the wind, and the horse has reared and shyed and manifested timidity, or the tendency to run away; whereas, if he had been driven along and the article had lain still on the ground, he would look suspiciously at it, or make a graceful curve, and pass on, but when the thing rolls over in the wind, it looks to the

horse very alarming. We are astonished that he has not sense enough to know that it is not dangerous. But it is an unusual and uncommon exhibition, which looks to him as though it might be dangerous, and he gives himself the benefit of the doubt and perhaps runs away.

Cautiousness, let it be remembered, has no knowledge. It does not think or reason. It is simply afraid of that which may seem alarming. The hoisting of an umbrella will frighten a horse. The slapping of a window-blind will make many persons jump and shriek. People are trained to be afraid of the dark, and many persons in sitting in a room with a light burning, even though the doors were locked, as the outside doors of houses generally are, if the light goes out, children and women and sometimes men manifest a sense of fear till the light is restored. The sense of danger often unnerves effort and prevents persons from doing what they are quite able to do. Any person of ordinary muscular balance could walk the length of a room on a common board of the floor which is six inches wide, and would walk over it backward and forward a hundred times and not step off, but, if we take away every other board of the floor, leaving the space open to the next story below, most persons would feel unsteady about walking on the same width. The builder, the seaman, and men accustomed to walking on high and narrow places would walk on the edge of a beam six inches wide, if it were ten or twenty-five feet high, and not feel giddy or afraid. The steadiness of his head and his habit of walking in that way would disarm his fear.

We have seen a toy made of short pieces of paste-board, and hinged by twine joints representing a spotted snake two feet long, painted in such a way as to look quite natural. A boy had worked a day making it and was enjoying the sport of holding it by the tail and letting it weave snake fashion from side to side to scare his brothers and sisters, although they had seen him working at it and knew what it was. When the maker of it had his back turned, an older brother picked it up and put it forward of him, and the boy shrieked and almost tumbled over backward. His cautiousness was taken by surprise. His intellect knew that he had made the thing and knew that it was not a snake, and not dangerous, but the memory of the terribleness of snakes was flashed upon his consciousness on seeing the imitation, and he felt for the instant exactly as he would if an adder had been displayed in the same way.

This feeling of caution works with other faculties. Sometimes it promotes the exercise of courage, its very opposite. If a cat be cornered, it will fight dogs and men until it gets free, and then it will make haste to leave the scene of danger. The dog has more courage than fear. He will fight best in the open field, where he has every opportunity to run and escape the danger; he faces it; he secures safety by means of courage and executiveness, rather than by means of retreat.

Cautiousness and Approbativeness lying side by side, work together. People are afraid of public sentiment. Approbativeness gives the desire for approval and a dread of censure and disgrace. Cautiousness acting with Approbativeness impresses a person with a watchful regard to anything which may impair the reputation, or bring one into disrepute, and it most always happens that large Approbativeness and large Cautiousness go together and they work in pairs, or co-operate in

their influence. Each faculty seems to play into the hands of the other.

Self-esteem, located between the two organs of Approbativeness, helps to fill and elevate the center of the crown of the head. This faculty leads to dignity and pride, a spirit of domination, a sense of the fitness of power and the ability to supervise and control and regulate others and dominate their action, and also to give one independence of feeling and character. Yet, this faculty depends for its success largely upon its co-operation with other faculties. It seeks positions of authority, influence, and power, and Approbativeness gives a thrill of joy when the altitude of distinction is reached.

Firmness works with Self-esteem. In fact it is not common to find large Self-esteem without correspondingly large Firmness. Self-esteem leads a man to feel, "I will rise; I will control; I will hold my position." Firmness seems to be an assistant, like one of the legs of a tripod, or three-legged stool.

Firmness, Conscience, and Self-esteem, working as a triunity, make a pretty solid basis for the assumption of dignity, influence, and control. When Self-esteem wants power and authority, Conscience may or may not approve. If it be strong and can approve the purposes of Self-esteem, it gives it aid, and Firmness is ready to make stable whatever the other faculties, acting in harmony with it, indorse.

Hope, located in the vicinity of Firmness, Cautiousness, Approbativeness and Self-esteem, acts as one of the advisory committee. Hope rejoices in the prospects of success. It looks for the bright side of affairs, while Cautiousness takes charge of the dark side. Hope expects that every egg will hatch, and every chick will live to full growth, in time for the Christmas market. Cautiousness fears whatever might damage the prospects—the unhatchable eggs, the sneaking weasel, or the predaceous hawk, whose inroads may reduce by

one-third the chickens that are hatched, to say nothing of the unpremeditated accidents and emergencies. So, between the counsels of the different faculties, a medium or average of expectation is reached.

It is interesting to study the interaction of Secretiveness, Cautiousness, and Combaticiveness. Secretiveness gives policy, the tendency to be covert and sly, reticent, and guarded in operations. Secretiveness sets the trap and snare. It takes or aids in making the conspiracy, and hides the purposes, and conceals the design. It sugar coats the pill. It also teaches people to conceal their own purposes, to be judicious in the statement of facts and experience. Individuals and families have facts in their history which relate to themselves and not to the public, facts with which the public have no concern or business. If men advertised by words or otherwise their plans and all their private purposes, it would be simply ridiculous and absurd, but when weakness is not able to cope with strength, it employs concealment and strategy. When a dog has killed game, or is satisfied for the time being with gnawing his bone, he carefully digs a hole and buries it, as if to conceal it from other dogs, and perhaps, also, to keep it moist and make it mellow for future use.

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ANOTHER READING OF THE BONES.

WHILE recently in Audubon, Iowa, and just before I had begun my course of lectures there, I was invited by Dr. R. L. Osborn to examine a skull he had in his possession, the individual whom he had known in life. He said: "I have some faith in Phrenology, and if you can give me the characteristics of this person you will only serve to strengthen my belief."

At my request he produced the skull, a small, rather round and heavy one, and remarkably developed in the basilar and occipital regions. The parietal

bones were somewhat depressed, also. I examined it carefully, and in substance told him that it was a female skull, and that the person had the bilious temperament predominating; that her tastes were low, her passions enormous, and her general character very reckless. I told him she was *governed* by her feelings and passions, was rather masculine, of a critical, sarcastic nature, and a person likely to be contentious, and that no doubt she was a murderess!

As I closed my brief delineation, Dr. Osborn's physiognomy was a study itself, and as I laid the skull upon the table, he quickly remarked: "Doctor, you have told the characteristics of that woman very accurately. She was a prostitute, and at one time tried to shoot a negro. She at last hung herself in jail at Greenfield, Iowa. Her home was at Creston, Iowa. I was one who helped make the autopsy. It was the notorious Ida H—. Yes, I am a firm supporter of Phrenology now." Let us hear from others.

DR. F. W. OLIVER.

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PLEASANT CHAT OF PATRONS.

L—, N. C., Aug. 2, 1889.

PROF. NELSON SIZER—Dear Sir:

AFTER studying the phrenological chart which I received at your hands on the seventeenth ult., I am most thoroughly convinced that you were correct in each and every detail relative to my character. You stated positive facts to me, in your examination, and I remarked to an elderly lady in your establishment, before leaving, whom I supposed to be the widow of Prof. Wells, that I was pleased to observe the perfect precision and correctness you displayed in my examination, in its entire detail, and facts stated about which I was decidedly positive you knew nothing, personally. You made "hits" every time you touched me, and I must say it is truly astonishing how you could have done so, when you had never been

in my presence one moment before I entered the examination room. You named for me a profession, medicine, law, and engineering, the first of which suits my taste and fancy, and which I have for a long time desired to qualify myself for.

The money paid for my examination was the most beneficial investment that I ever made, or ever expect to make again, except a similar one for my "other half," if I ever find her.

My intention is to start to college immediately, to prepare myself for the practice of medicine, and with this view I request you to advise me as to the best institution to which I can go for that purpose.

Very truly yours,

F. A. H.

—:O:—

Mr. J. B. Harris, of the class of 1888, has been an earnest worker during the last year, in extending the circulation of the *JOURNAL* and the sale of books. His orders are frequent, and his words of courageous cheer evince that his heart is in the work.

In his address to the class he said :

"Dear Teachers and Class-mates:-With this occasion, I set a new resolution to live more nearly up to the grand teachings of the science of Phrenology. Let each one of us, my brothers and sisters, follow closely the guiding star of this man-unfolding and woman-redeeming science."

Coming in contact with our teachers, whom I had often read of and corresponded with, only proves to me that they, in teaching others, seem to be fulfilling their phrenological principles, which a past correspondence has taught me to believe.

I, for one, will attempt, in my humble way, to direct those who seem to need a truer light, to the great science of Phrenology, that they too may become faithful workers in the field of usefulness."

From Rev. A. M. Growden, a graduate of the American Institute of Phrenology in 1888, now settled in Sacramento, Cal.

"DEAR MR. SIZER :

I wish I could spend another vacation as I did the last one, commencing the first Tuesday in September, at the Institute.

The course has been of great value to me ; I think every minister could be improved by a course ; we would have men then who would know the great book of Human Nature as well as the 'Book of Life.' If one is needful, so is the other. Time flies, it seems hardly a year since I saw you ; wish I could 'sit at the feet' of the faculty that I have learned to love in an especial manner. Success, prosperity, happiness, and joy to all concerned.

With best wishes,

Yours sincerely,

A. M. GROWDEN."

Aug. 21, 1889.

—:O:—

NEWARK, N. J., Oct. 13, 1889.

Having for some time past noticed that my memory and power of continuity have seemed to be failing, will you kindly inform me of some method to develop these faculties ? F. W. G.

Answer.—Memory, like every other faculty, is strengthened by legitimate use. But we have many types of memory, one of objects—Individuality ; one of form ; one of magnitude ; one of colors ; one of places ; one of historic incidents.

When you read a sentence, or important statement, read it a second time ; close the book and try to talk it, and put it into your own words. When you have lived it in your brain in that way, form it into phrases of your own, and it will be more readily recollected.

For the cultivation of continuity, divide your time between whatever duties you have to perform, and stick to each one until you get it finished.

CHILD CULTURE.

BEING AND DOING.

BY THE AUTHOR OF "AN AUNTIE'S NOTIONS ABOUT CHILDREN," ETC., ETC.

IT is uttering a truism to say that this is the age of *sham*. Few things are really and truly what they represent. Gold that has not the smallest particle of gold in it; leather that shows but the surface grain of leather; silk that is some clever preparation of cotton, and stone that is only stucco, come the most readily of a score of illustrations that one might meet with in a single half-hour's walk. We have become resigned to it; the universal make-believe has, to a certain extent, defeated itself, and we are not for a moment taken in by the outside appearance of half the things we see.

But I wonder how many of us ever seriously consider, for our own benefit and that of those whose education may lie in our hands, how common, how wide-spread is the *character-shamming* of daily social life? Any who have done so can not but be appalled by the ease with which the most honest-meaning of us slide into small hypocrisies, and how heedlessly we teach the same to children.

That "sending of love," what nonsense it often is! a mere form of words, an empty compliment. Mrs. Brown has seen Mrs. Jones twice, and meeting a relative of the latter when walking in the [street one day, must, of course, say sweetly, "Be sure and give my love to Mrs. Jones!" Lily, by her mother's side, recollects that, not two hours before, mamma remarked to papa, that she couldn't "see much in that Mrs. Jones, that the Smiths should seem so fond of her!" It is "love" here, "kind love" there, "much love" everywhere. And perhaps it would not trouble us greatly

to know that we should never meet the recipients of it again. In nine cases out of ten the old-fashioned "kind regards" would serve all purposes of politeness and express the utmost of the cordial feeling we entertain.

Then again, how do we praise and affect to admire the work, or singing, or housekeeping of some one upon whom we call, and, arrived at home, proceed to find more or less fault with nearly everything over which we were "gushing" not half an hour before. The excuse that we do it to give pleasure, by no means exonerates us. Truth must come before all; and although it is right to cherish a spirit of love (evidenced by actions rather than a glib and frequent utterance of the word), and to avoid wounding by crude criticisms the feelings of those about us, sincerity surely demands that our actual sentiments shall at all times measure the warmth of our speech.

Besides such hypocrisies as these taught to the young by example, another is sedulously promulgated among them by the encouragement of "company manners." "How wrong of you, Tommy, to come bouncing into the room like that, *when Mr. So-and-So was here!*" Well, either the bouncing referred to was really wrong, or it was not. If it was an act of rudeness or carelessness, then it would have been equally deserving of reproof, had mother or father been quite alone. "I am surprised at you, Julia, showing off your temper *before Mrs. Blank!*" As though the presence or absence of anybody could make such an exhibition either better or worse. But that such teaching as the

above widely prevails, and produces the desired impression upon children's minds, is proved by the fact that so many of them behave quite differently in the presence of strangers from what they do when with those they know well. I am not going to say that the unnatural primness, frequently exhibited in the former case, should be the constant rule of behavior, for it is usually overdone ; but it is the hypocrisy of it that I most condemn. But a child who is taught always to be good is not likely to do anything disgraceful either in company or out of it.

Again, in the matter of naughtiness which demands apology to some one, what a grave mistake it surely is to either bribe or threaten a child into expressing contrition which he does not feel ! I confess I can not but admire the boy who will say bluntly, knowing that his punishment will be prolonged thereby, "I'm not sorry, and I'm not going to say I am !" If you can get him, by putting the case in its proper light, to see for himself how wrong his conduct has been, and be genuinely repentant, the expression of it, with judicious management, will naturally follow ; otherwise better let him remain a rebel than become a hypocrite. It is an error of the same nature to compel children who have quarreled to "kiss and be friends," while their cheeks are still hot with anger, and resentment is burning within. Wait until the passion has cooled and gentler feelings supervene ; then, if tenderness and magnanimity toward the offender can be awakened, a genuine desire for reconciliation will inspire the pardoning kiss ; but don't, *don't* make little Judases of them, even if the feud should last for days. Incalculable harm is done to children's sincerity of character for life, I feel sure, by the early forcing of expression of one sort and another that has no spring within.

Allied to the above is the habit, far too popular, of extracting from the

young premature declarations of religious sentiment. "Do you love Jesus ?" is the favorite formula to start with, and what can the little creature thus button-holed do but answer "Yes !" though it may so far have no conscious feeling whatever on the subject. Other queries of a like nature follow, and they must all be replied to with the proper affirmative or negative, as the case may be, or the grave surprise and uplifted eyebrows of sad concern will be brought into play to make the small victim feel like a reprobate, and evidence, as it is regarded, of full-blooming piety is thus squeezed out, while possibly the actual sprout is not yet showing above ground.

The flower does not produce the root, but the root the flower ; and compelling from young people the words and works of religion—the religious phrases, the missionary contributions, and the Dorcas sewing—will not make youthful Christians of them, any more than assiduous attention to their outward behavior will ensure their being good girls and boys. But hypocrisy, which is simply *doing* without *being*, will be greatly fostered thereby.

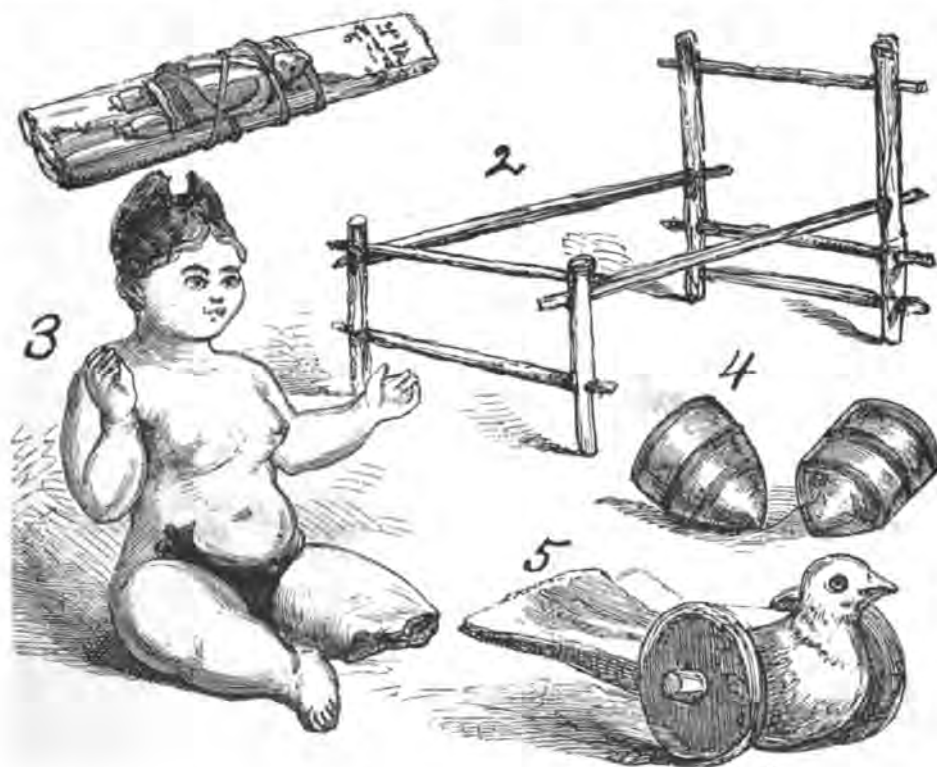
Nothing short of going back to the source of action and dealing with motives will, either in ourselves or others, be of any real use in the formation of character. Let nothing superficial satisfy us, no amount of external gloss and finish be thought worthy of a moment's care, save as the faithful indication of what is within. Let us be loving before we "send love ;" let our courtesy be the natural expression of a kindly desire for others' comfort and welfare ; let our outward religious life follow and not precede, still less be a substitute for, the Life within ; and let us train the young folks under our care, even in this, the only honest fashion—truly praying, each and all, "Create in me a *clean heart*, oh God, and renew a *right spirit* within me."

JENNIE CHAPPELL.

ANCIENT TOYS.

GO as far back as we may in the study of man, we find that he has always possessed many, if not all, the qualities that he claims to-day. In the remains of those ancient nations, Chaldea, Babylon, Arabia, Greece, Egypt, that flourished with a high degree of civilization thousands of years ago, the modern explorer now and then brings to light objects that have an interest to all—the young as well as

brought to light a collection of buried articles that are appropriately noted in this part of the JOURNAL. Mr. Petrie discovered, in the early part of last year, the famous labyrinth described by Herodotus, and also the tomb of its builder, and a little later, near the remains of the labyrinth, he unearthed a cemetery of extensive size, belonging to the Græco-Roman period. Here a great variety of funeral objects were found,



ANCIENT GREEK TOYS.

the old—because of the similarity of habit and taste that they reveal between ancient life and modern. The old Egyptian or Greek mind is shown to have been ruled by humors, caprices, motives, and ambitions quite identical with those that rule the European and the American mind in the circles of what is called the better society of to-day.

A recent find in Lower Egypt by that industrious observer, Mr. Petrie, has

and among them many things dear to children that had been entombed with their bodies. Just as we may see to-day in some cemeteries the favorite plaything of a child placed upon his grave, in a glass case, perhaps, or in the vault with the little casket, so in that ancient Egyptian cemetery are found many toys that were dear to the child-heart in life.

The illustrations of some of these toys

show that the little Egyptian enjoyed the same things that the American boy or girl is accustomed to play with. The first illustration represents a papyrus charm with a small image bound to it; the second, the framework of a toy bedstead. Three is a terra cotta doll, part of one leg being broken off. Our doll-makers to day do not make better. At 4 we have two tops, that look as if they had come from a modern shop, the pattern being identical with those our boys are often seen whipping on the pavement. No. 5 is a pigeon or dove on wheels, which the little one, we can imagine, was accustomed to draw about with a string. Six shows a boy crocodile, 7 a rag baby, 8 a miniature sedan chair with movable figures; 9 is a

toy mirror of metal, in its wooden case.

Thus we see that the child mind of the past differed little, if any at all, from the child mind to-day. The question may arise why should it have differed? These were similar necessities as now—which stimulated the action of the brain for its growth and a corresponding mental development. In the primary exercise of mind that belongs to childhood there was but little difference between the mode of action of the faculties. And the ancient parents, their susceptibility to the same emotions as to-day, led to a similar expression of concern and interest as shown by modern parents, in providing the little ones with the means of diversion.



ANCIENT GREEK TOYS.

THE HEROIC LITTLE MAID OF JOHNSTOWN.

IT will be many years before the terrible disaster of Johnstown, Pennsylvania, will be forgotten. One or two similar calamities have occurred, but none in this country like this total engulfing of a city in the Conemaugh Valley. Furnaces and mills in active operations, banking houses, churches, shops, and many hundreds of private houses were swept suddenly from their foundations, and became piles of ruins hard to distinguish. The loss of life was never ascertained. A card from Dr. B. L. Yeagley, June 3, four days later, estimated it at five thousand; the newspapers made it much higher. Some of the dead bodies floated away; more remain yet buried beneath the mud and rubbish.

It has been usual for the Conemaugh to rise above its banks in heavy rains. The normal breadth of the stream has been reduced by the encroachment of buildings upon the shores, and the occurrence seldom gave rise to alarm. Such was the case this time, till it was observed that the rise of water was unusually high, and threatened damage to property. Dr. W. C. Beam, who perished that day, remarked to Dr. Yeagley that he expected trouble, and had taken the precaution to secure his valuables about his person. When his body was recovered, however, and that of his brother, Dr. L. T. Beam, they had been rifled of everything. But great as was the peril from the swollen river, it proved, as we know, the merest trifle compared with the actual danger from the Great Pond.

Mr. Duncan was an officer of the street railway. That fatal morning he had been called out before daybreak. There had been heavy rains all night, and the water from the river was flooding the tracks, so that cars could not be taken through. He remained away from home until the occurring of the great disaster. His family, consisting of wife, three daughters, a babe of five months old,

and a maid, were in the house. They arose as usual, breakfasted, and then repaired to the front room to watch the swelling of the water. It was more threatening than usual, and they soon perceived that it was necessary to take precautions to save their furniture. Carpets, chairs, and other movable articles were conveyed to the upper floor of the house. The lower rooms were now flooded, and the mother, fearing for the health of her infant child, went out with it to the house of the nearest neighbor, a Mr. Bolsinger, which stood on higher ground. She attempted later to return, but could not.

The water in the Duncan House was now three feet deep. The younger of the girls, Elvie, about twelve or thirteen, was terrified, and begged help to go to her mother. A young man, Arthur Fill, who lived near, came to her assistance. Making his way in, he lifted her and carried her to a rear window. Then getting out, he took her upon his shoulders and waded to the other house. The water was then as high as his waist. Young Fill was one of those who perished that day.

There were now eleven persons at the Bolsinger house—women and children, and a Mr. Cook. By this time the water was going down. Every one was watching it. Suddenly there was a change. Miss Elvie herself thus relates the story:

"All at once the water came gushing through the house like a river. The South Dam had burst! But we did not know it then. Mr. Cook screamed at the top of his voice: 'To the attic! to the attic as hard as you can go!' We all ran. The water was then only going over the first floor; but before the last one got to the attic it was flowing over her feet.

"Then the houses were falling to pieces, and going off their foundations; roofs and people came sailing around us on the water. We saw our own house

come over to the one we were in. The attic where we were was cracking and caving in all around us. The house itself had upset a little. The water was up to our knees and we thought we were all gone, when all at once we saw a tin roof floating right near us. Mamma said: 'Come, quick; let us try to make this roof.' We all got on but Mr. Cook and the colored help; but they were very good swimmers and were saved somewhere else.

"When we got on this roof we sailed away down the street, passing the Campbells' house, which is forty feet high. The back-water here caught us and turned us around, and sent us up the stream to Kernville, a mile and a quarter from where we started. The *debris* here was so heavy that it stopped us.

"We saw a brick house still standing. Mamma thought we could make it. She made a jump with the baby in her arms; and what should I see but them both go down! I could not stand it any longer. I took a minute to think, and then plunged into the water after them. I caught her by a heavy cord which was on the bottom of her wrapper, and got her up as far as the elbows. I then thought of the baby, and looked and saw him lying on a little board in the water, his little arm swaying backward and forward. The water was just about running over his face when I grabbed him. All this time he was laughing at the top of his voice.

"I was now losing my foothold so fast that I did not know what to do. I made a spring out of the water and alighted upon the brick house. Holding the baby in my one arm I looked back to see whether mamma had got to the other roof. I saw her crawling back on her hands and knees to the roof I had come off from. She looked around and I held up the baby as high as my arms could reach. She waved her hand to us in answer.

"The baby was wringing wet; the

water dropping off his clothes like a shower of rain. It had been raining all the time. The water was not in the second story of this house where I was now; so I crawled down off the roof and went in at the bay window. I did not know what to do with the baby; so I took him in the back part of the room and took off his clothes. Then I took my skirt and wrapped it around him till I found a piece of a blanket and wrapped him in that.

"All this time mamma was sailing down the stream, and finally the back-water brought them back to a school-house, right across from the street from where I was. Some men then climbed up the lightning rods and pulled the women in with ropes.

"I had nothing for the baby to eat. So Mr. Miller, a man who had got to the same place, said that his house had just upset, and there was a baking of five loaves of bread in his attic which he would get if he could. He did so, and got the bread and brought it to us. Over at the school-house they caught a barrel of whiskey, and sent some to us, for which we gave them some of the bread. I got some, crumbled it up, put cold water over it—for that was all we had—and then put some whiskey with it and fed it to the baby.

"By this time it was getting very dark. Then big fires set out and lasted all night. It made it nice and light for us; for we could not strike a match for fear the gas would explode. The baby took little sleeps in my arms, but would not lie down. So I held him all night.

"When it was getting daybreak we could see that the water had fallen three or four feet. The men then made a path with the *debris* over the water to the school-house, and then over slippery roofs and boards, so that we reached Sherman street. Then we were on dry land! We went to Horace Rose's and got some dry clothes and something to eat.

"Here we found papa. He had at-

tempted to reach us in a skiff, but when the dam bursted could get no further, and had to flee to the hill to save his own life.

"All this time my two sisters and our girl had been in our own house. They saw this terrible thing coming, and went and lay down on our middle room bed. The front of the house caved in, and one of the sides; and the brick house that stood next door caved in on top of them. They sailed on the water for a quarter of a mile, and then the back-water caught them and carried them to Cambodia City, to Haines's mills. Next day my uncle found them there, and took them home with him to Morrellville. He then went in search of the rest of us, and found us on Saturday afternoon.

"We went over the hills on Sunday and found my sisters; Katie, our dear girl, being drowned. We were not all together, however, till Thursday, at dinner. We are therefore all saved and well, but have no home."

This narrative of the adventures of one family may doubtless be repeated many times. Its artlessness, simplicity, and almost total unconsciousness of having done any remarkable act, commend it to admiration beyond any description which an accomplished editor could give. Other witnesses affirm its literal accuracy.

ALEXANDER WILDER.

THERE'S A BOY IN THE HOUSE.

A GUN in the parlor, a kite in the hall,
In the kitchen a book, and a hat, and a ball,
On the sideboard a ship, on the bookcase a
flute,
And a hat for whose ownership none would
dispute,
And out on the porch gallantly prancing no-
where
A spirited hobby-horse paws in the air;
And a well-polished pie plate out there on
the shelf,
Near the tall jelly-jar which a mischievous
elf

Emptied as slyly and as slick as a mouse,
Make it easy to see There's a Boy in the
House.

A racket, a rattle, a rollicking shout,
Above and below and around and about;
A whistling, a pounding, a hammering of
nails,
The building of houses, the shaping of sails;
Entreaties for paper, for scissors, for string,
For every unfindable, bothersome thing;
A bang of the door, and a dash up the stairs
In the interest of burdensome business affairs,
And an elephant hunt for a bit of a mouse,
Make it easy to hear There's a Boy in the
House.

But, oh, if the toys were not scattered about,
And the house never echoed to racket and
rout;
If forever the rooms were all tidy and neat,
And one need not wipe after wee muddy feet;
If no one laughed out when the morning was
red,
And with kisses went tumbling all tired to
bed;
What a wearisome work-a day world, don't
you see.
For all who love wild little laddies 'twould be;
And I'm happy to think, though I shrink like
a mouse
From disorder and din, There's a Boy in the
House!

"WE."—A well-known merchant said:
"I would not give much for a boy who
does not say 'we' before he has been
with us a fortnight." The boy who says
'we' identifies himself with the con-
cern. Its interests are his. He takes
pleasure in his work, and hopes some
day to say "we" in earnest. The boy
will reap of what he sows if he keeps up
his grit and sticks to his job. You may
take off your hat to him as one of the
solid men of the town. Let his employer
do the fair thing by him; check him
kindly if he shows signs of being too
big for his place; counsel him as to his
habits and associates, and occasionally
show him a pleasant prospect of ad-
vancement. A little praise does an
honest boy a heap of good. Good luck
to the boy who says "we."



HEALTH NATURAL.

AS we were created, health is natural, the unavoidable result of the harmonious action of the various organs of the body.

It is as natural for the unvitiated appetite to prefer and select nutritious, wholesome, easily-digested food—if such can be found among fallen creatures—as it is for the ox to select the green grass and the vegetables of the field; these constituting a very simple diet, capable of affording strength, while it is as natural for a healthy stomach to digest such food, changing it to blood, by which the vitality of the system is sustained. It is as natural for the heart to contract and propel the blood into every part of the body as it is for the rain to fall and sink into the soil, vivifying the vegetable world, and as natural for this blood-current to deposit the elements of nourishment just where they are needed, and so to promote growth and repair waste. It is as natural for the lungs to breathe, thus aerating the body and purifying the blood—a very important means of promoting the health, as only a reasonably pure body can be healthy—as it is for the winds to blow, sending the foul gases where there is sufficient vegetation to appropriate them. These lungs labor day and night, from the dawn of life till its close, fulfilling conditions of health of absolute necessity. It is as natural

for the secreting vessels to gather up the waste and poisonous matters and expel them from the body, that it may be pure and uncontaminated by dead particles of the ever-decaying body, as it is for the streams of earth to flow, and the vapors to rise, that the earth may be refreshed by the rains and snows. I repeat, health is perfectly natural, as natural as for vegetation to thrive under the genial influences of the light of the sun and the showers of heaven.

If we have disease, pain, and suffering, it is because we violate the laws governing vital conditions, and sin against the Creator; since He established the laws of the body, mind, and soul, any violations of these laws being alike sins against Him, differing only in degree, of course. There is no effect without a cause; while it is as easy to understand the laws of the body as it is those of the eternal world, the laws of gravitation, and reproduction; as easy to understand the relations of cause and effect, those relating to the health of the body as those of the development of the mind and soul. Obedience to God's laws, the physical, will insure health as certainly as warmth will heat the body, or water satisfy the thirst, or fertilizers nourish the crops.

It is absurd, therefore, to talk of the "mysterious dispensations of Providence," since it is as easy to trace the

relationship of cause and effect in the matter of health as in intemperance, debauchery, the pollution of the body by a licentious career, or the squandering of an estate by a life of indolence and prodigality. There is no more mystery connected with a headache, indigestion, an affection of the liver, a fever, and the like, than in the production of drunkenness, venereal disease, or wounds resulting from drunken fights. They all occur in accordance with fixed principles, laws which no more change than those of the "Medes and Persians." I would as soon contract to produce dyspepsia, if right, as

to build a house, feeling as certain of the result in both cases, for both are secured in obedience to fixed and definite laws. Therefore, if intelligent and self-denying, we may as certainly secure health, in a certain sense buying it, as we may buy a barrel of flour. And here I may say that it is fortunate that the most wholesome food is the cheapest within the reach of the poor, the most nourishing (a pound of wheat containing about the nourishment of three of beef), the easiest of digestion and the most palatable, at least to those who have unvitiated tastes.

DR. J. H. HANAFORD.

A BURIED TALENT.

IN TWO CHAPTERS.

Chapter I.

"VINNIE SHELBURNE, how can you reconcile it to your conscience to pretend that you really like dish-washing, scrubbing, and all such disagreeable tasks?" vehemently inquired pretty Miss Germaine, as she poured hot water with mock emphasis over the unoffending breakfast dishes which her married sister was deftly depositing in the scining rinse-pan.

The elder only smiled, as she continued her work, for similar speeches were of frequent occurrence and argument availed little.

"I don't believe you, either," resumed Miss Germaine, her nimble fingers proceeding with the drying process. "Why, even *wiping* dishes makes my hands rough. Just look at yours! They are like nutmeg-graters. They look like those of a scrub-woman. I do like to see a lady's hands look as though they belonged to a lady!" emphatically, her blue eyes sparkling.

"Hands that have not been in the kitchen for 500 years," laughingly quoted Mrs. Germaine, who was an amused listener.

"Dish-washing is not distasteful to me," quietly replied Mrs. Shelburne.

"Plenty of hot water and pure soap rob it of more than half its terrors."

"Not for me," protested her sister.

"Nor for me," asserted the mother, looking up from her knitting with a smile.

"I am out of all patience with you, Vinnie, for working daily beyond your strength," continued Miss Germaine, who, once launched on her favorite topic, was as difficult to stop as a small tornado. "Why *will* you persist in doing your housework against the advice of your friends?"

"For a number of reasons," answered Mrs. Shelburne. "I serve myself far better than I could expect any hired help to do. Brains tell in housework as well as elsewhere, and the domestic machinery always moves more smoothly when I am at the helm. Moreover, I am nervous, and do not always find it easy or pleasant to be obliged to plan and direct a girl's work, to humor her whims, and to avoid friction. I never grudged a servant her wages, for I know from experience that she well earns the money, generally. But I do feel badly to see supplies thrown away, as it were. Probably with a larger income, this would not fret me so much. Under my

own management, I know that there is no unnecessary waste of fuel or food."

"Most ladies would think their hands full, with the care of several young children, their clothes, the superintendence of the home, not to mention the reading, etc., obligatory to enable one to keep up to the times," wildly remonstrated Miss Germaine.

"I feel tempted to add, that Vinnie would rather sweep than read," dryly observed Miss Germaine, as her sister took up the woman's weapon.

A flush of mingled shame and pain colored Mrs. Shelburne's thin cheek. It was with an evident effort that she checked the hasty reply that sprang to her lips. Did Minna Germaine realize how her taunt wounded the proud spirit? She would not heed, for she had resolved upon a course of heroic treatment, to win this idolized sister to higher things.

To both Minna and her mother it was a continual source of deep regret that Vinnie should (as it seemed to them) throw away the best years of her life, persisting in doing that for which she was physically unfit, and mentally unsuited, having received early advantages of a high order. From their standpoint she was foolishly usurping a position better suited to one of stronger frame, but less keen intellect, instead of filling her own proper sphere. They thought it a sad mistake for one capable of brain work to sacrifice the mind, to so overtask the body, that the spirit, naturally partaking of the weary condition resultant, must also thereby be rendered unfit for its own highest exercise. Not that either lady considered housework degrading. They fully realized the importance of a practical understanding of the subject, and, did occasion demand, could properly perform all necessary branches. Their creed, however, was intelligent supervision rather than actual labor.

With sorrowful impatience they watched Vinnie turning off more work

in a day than they would have felt strength to accomplish in twice the time. They were blind to the fact that this showed plainly how the burden galled. "Work out rather than rust out," thought Vinnie, somewhat bitterly, spurring the weary body by force of will, when tired nerves protested in vain. "A woman of stronger physique could do far more and not feel so worn out," she often murmured to herself, in vexed discouragement, forgetting that Providence has wisely placed a limit upon all our powers, which those who overstep must pay the penalty.

"Why need you sweep so often?" now expostulated Mrs. Germaine. "You look all tired out, this morning. Do let me have the broom," coaxingly, "while you rest a little."

Mrs. Shelburne yielded with a weary sigh. She disliked to have her mother feel that she must do so much to help her, while making this visit, but it was true, assistance was most acceptable. The realization was at length coming home, that to go beyond one's strength day after day is the height of folly. It is making direct inroads upon the capital intended to last a lifetime.

After a brief interval Vinnie brought forth a basket of neatly rolled pieces, which must be ironed before night, in addition to the regular routine. The simply-made yet numerous white dresses in which the baby was always so fresh and sweet, took a good while to iron, and Miss Germaine finally exclaimed, as she watched her patient sister, "I'd hire this done if it took my last cent! Ironing is such tedious work. Makes my hand feel six times its natural size."

Her air of assumed disgust was so comical that Mrs. Shelburne could not help smiling.

"Your opinion, sis, has a positive value, being acquired through the occasional smoothing of a few handkerchiefs or towels."

The young lady laughed merrily, as she replied: "Fact is, work and I never

did agree. I am thankful that I do not belong to the laboring class."

To look at her, even an uninterested observer could readily have told that she was one with whom mentally, at least, work never did nor would agree. Handsome, intelligent, accomplished, Minna Germaine only lacked the spur of necessity to become an exceptionally capable woman. She was now well on toward thirty, and since her graduation had led a life of no practical value, either to herself or the world in general, with the inevitable result of oft recurring periods of discontent and vain disquietude. She was apt to speak of herself depreciatingly, as one who had no talent for anything. Rather, so versatile was her talent that she might have done well in almost any line, given the conditions of ardor, perseverance, and unflagging energy.

Vinnie had married young, had led a more or less struggling existence with a man whose profession was such as to afford only comparative comfort at best. Repeated sicknesses, the care of children, and of a household which must be ordered as economically as possible, had been a severe discipline for a girl brought up in comfort. Its fruit had not been a contented spirit. Inwardly, Mrs. Shelburne had often repined. Occasional, hasty outbursts had disclosed to her patient husband the true state of her feelings, but his forgiving nature made quick excuses for these ebullitions. As for her mother and sister, Vinnie was far too proud to allow either to see her dissatisfaction. Indeed, it was her apparent contentment which aroused their opposition most fully.

That evening as they assembled in the parlor, Mrs. Germaine said, "Come, Vinnie, lay aside that work, and play something. You have scarcely touched the piano for a week."

"In a few minutes, Mother, dear; I ought to finish this mending first."

"What's the use of your having such a nice piano!" exclaimed Miss Minna,

looking up from her embroidery. "If I could play as well as you do, I should be earning money by giving lessons, instead of trying to work myself to death, doing housework to save a few dollars."

"How easy it is to decide for others!" thought Vinnie, coloring, quick tears springing to her eyes. But she controlled herself sufficiently to reply, gently, "I should hardly feel like setting up for a teacher without taking lessons first, for it is certainly twelve or more years since I studied any."

"You play better than many who do teach," asseverated Minna. "However, since you are so conscientious, why don't you take lessons?"

"If turnips were watches I'd wear one by my side."

"Use some of the money that poor dear Pa left you, instead of saving it to educate your children. It will do you more good than it would them."

"It would be of no advantage for me to take lessons of any but a first class master, and it seems like a large outlay for a doubtful result. Besides, my fingers are stiff, and my hands have grown, for I require a larger glove. I fear I could never regain the delicate touch which once was my delight. Music is an exacting schoolmistress, demanding constant, unswerving allegiance."

"Everything worth having, costs," sententiously remarked Minna, while the mother added, "You would soon find your fingers limber, only keep them out of dish-water, and away from all menial employments."

"I fear you are partial judges," replied Vinnie, as she folded the little garment so neatly repaired, and laid aside the basket. It was never empty. But it did not occur to Minna that her slim, dainty hand could do such plain work as well as embroidery. She detested sewing, especially the prosaic kind which falls to the lot of the house-mother. Miss Germaine usually disliked anything of a purely practical nature.

Willing to help when requested, she simply forgot to put herself out for other people, unsolicited. She often assisted Vinnie, under protest, as it were, feeling that she was conniving at the sacrifice by so doing. Better far to expostulate, if Vinnie would be so silly as to work every minute; which (to do Minna justice) she did upon the slightest occasion with all the vehemence she could command.

"You play too well to drop your music so entirely," said Mrs. Germaine, as Mrs. Shelburne arose after an excellent rendering of a Beethoven sonata.

Vinnie Shelburne did play well, she knew it. Music had been a passion with her. But little by little its place had been usurped, and she had mourned in secret. In the privacy of their chamber she said to her husband, "I do wish that Mother and Minna would not say so much to me about practicing. If I had all my time to myself as Minna has, I might try to amount to something, but at my age—"

"Hush," interrupted Mr. Shelburne, kissing her, "you are certainly spending your life more nobly, and to more purpose than Minna. For years you have exercised continual self-denial, because my income has been so small that there has been imperative demand for closest economy. I, at least, have appreciated the loving spirit which has caused you, not considering yourself, to do the work nearest at hand; to be servant as well as home-keeper, wife, and mother. Your motive has been a commendable one. Only you have tried to accomplish more than your strength would permit. That has been the grave mistake. I blame myself deeply for not having recognized this, for, had I done so, I should have over-ruled the apparent necessity, and guided your choice toward mental rather than physical labor. Besides, dear," with a smile, "you are *not* old, and you shall not call yourself so."

"I shall certainly never be younger," answered his wife, attempting to laugh away her emotion.

Sweet though her husband's approbation was, it could not quell the tumult which had been aroused in her soul. In the still hours of the night, while others slept quietly, she lay wide awake, mournfully reviewing the slow procession of events passing before her mental vision; events which had shaped her life into its present form. Circumstances, which at the time had seemed insurmountable, dwindled into insignificance in the clearer light of her sharpened vision. A newly awakened sense of justice to her own nobler self forced her to acknowledge that she had decided foolishly. Her music, which would have been an elevating influence, a never-ceasing inspiration and comfort, had been laid aside. Her delicately-reared frame, wholly unsuited to hardships, had been over-burdened, while the naturally bright mind, helpless partaker of the tired body's fatigue, had unavoidably grown rusty.

"I thought I was doing right," she mused, sadly, "but now every thing is blurred and I can no longer distinguish my duty. I believed it wrong to be ashamed of the performance of common tasks, however humble. Were they disagreeable, so much the more reason for me to overcome my natural dislike. House work plainly appeared to be my life work. It seemed only right that I should take up the burden as cheerfully as possible. What if I have been mistaken all this while? Was there another path open to me which would have been as truly a fulfillment of duty? I know I have injured my health, perhaps permanently. I see now that I might have *earned* far more than I have saved."

The baby in the crib beside her nestled uneasily. Carefully re-covering the little one, she tenderly kissed the precious finger-tips, murmuring, "At least I have tried to be a good mother."

This crumb of comfort gleaned from the consciousness of the unswerving devotion she had laid on the altar of

motherhood, soothed her inexpressibly. The aching eyes grew tear wet, the vexing problem slipped from her troubled

thought, and blessed oblivion overcame the tired sense.

ADA E. H.

AN IMPERIAL CURE FOR HOARSENESS.

THERE is a curious story told of the manner in which Frederick the Great dealt with a *prima donna* of the period who was inclined to disappoint the public with little reason. The great artist seemed to catch a cold, which had the effect of rendering her hoarse, and consequently unable to sing, when anybody or anything displeased her. One day a certain opera was to be performed at Berlin before the king himself. At the appointed hour the manager came forward and said, "Ladies and gentlemen, we grieve to inform you that our *prima donna* has a sore throat, and that the representation announced can not, therefore, take place." The stolid Teutonic audience seemed no whit surprised, and was moving out tranquilly, when the king rose and commanded the musicians to keep their places. The audience sat down again, and waited patiently on events.

In less than a quarter of an hour the manager re-appeared and spoke as follows: "Ladies and gentlemen, I have the most unfeigned pleasure in informing you that our *prima donna* is completely cured of her sore throat, and will have the honor to sing before you to-night." Surely enough, the famous singer soon appeared, and never had she sung better. Her triumph was complete. The king's prescription had been a very simple one. The *prima donna*, having dismissed the unhappy manager, was sitting comfortably before the fire in her own room, actually pleased with having spoiled the pleasure of several hundreds of persons, when the door was violently thrown open, and there entered an officer, followed by four dragoons. "Mademoiselle," quoth the officer, "the king, my master, has sent me to ask after your health." "The

king is very good. I have a bad sore throat." "His Majesty knows it, and has charged me to take you at once to the military hospital, where you will be cured in a few days." Mademoiselle turned pale. "You are jesting," she simpered; but Prussian officers, she was informed, never jested. The lieutenant gave the orders to his men, who seized mademoiselle and carried her out.

A coach was in attendance, the lady was deposited therein, the officer took his place beside her, and off they went, the dragoons riding alongside. In a few seconds, "Stay," said the lady, "I think I feel better." "The king is anxious, mademoiselle, that you should feel quite restored, and even that you should sing to-night." "I will try," murmured the prisoner. "Back to the theater!" cried the officer to the coachman. Arrived there, mademoiselle began to think she had yielded too easily. "I will sing, since his Majesty commands me," she said, "but Heaven knows how." "You will sing," returned the officer, "like the great artist you are." "I shall sing like an artist with a bad cold." "I think not." "And why?" "Because a couple of dragoons will be in attendance, and at the least *couac* they have orders to carry you off again to the military hospital." The hoarseness was now completely gone.

THE COOKING SCHOOL.

I.

"WHERE are you going to, my pretty maid?"
"I'm going to cooking-school, sir," she said.

II.

"And what do you do there, my pretty maid?"
"Make waffles and biscuits, kind sir," she said.

III.

"And then do you eat them, my pretty maid?"
"I do not care to die yet, sir," she said.

INVALIDISM OFTEN DUE TO MORBID CAUTIOUSNESS.

IT is my belief that every disease, no matter of what nature, may be found to have its origin partly in the deranged or perverted action of some mental function, and that much suffering might be avoided by seeking a mental cause rather than a physical. There is a certain bodily condition to which women especially are liable, though men are not by any means exempt, which can not be designated as any particular disease, but usually goes under the name of "nervous trouble." The control of the nervous system is partially lost, the stomach is disordered, the liver deranged—in short, not an organ of the body performs its work properly. The physicians are at a loss to locate the cause, every disorder seeming to be consequent on some other disorder, but the cause itself is obscure; in other words, can not be found in the body.

But what of the mind? It is as much disordered as the body, and the mental suffering is much more excruciating than the physical. When we come to sum it all up it is found that this feeling of intense mental pain may be expressed in the one word fear, than which, what can be more wearing to mind and body?

I know a case, which is only the representative of thousands of others, of a lady who went into a decline presumably from loss of children, developing heart trouble, stomachic disorder, serious types of female complaints, and in time a general giving way of the whole system. Her nerves were a complete wreck, she was constantly in fear that something would befall her one remaining child. Were her husband half an hour later than usual she was sure an accident had occurred. The slightest sound startled her, and she would sometimes lie awake the greater part of the night, after waking from a frightful dream, in the fear that the family would all be murdered in their beds, unless some one kept watch.

She could not be left alone in the house even for a short time, and grew to be in a constantly terrorized condition; or, as I have before said, the slave of fear, induced by the death of her children. Medical treatment of various kinds, springs, traveling, were tried, but without avail. Finally, by the "mind-cure," or hypnotic treatment, the excessive and perverted action of cautiousness was allayed and a sense of security and safety recovered.

With the mental calm, and state of restfulness which followed, the physical ills vanished without a drop of medicine. Her strength returned, so that from being unable to be on her feet, she could take plenty of out door exercise. While recovery was slow, from the natural tendency to relapse into the fearful state, by perseverance and the exercise of will she maintained a fair degree of health, which increased as the months went by until all tendencies to illness were overcome.

The case is not at all hard to explain. Fear disturbs the action of the heart to such an extent that if long enough continued disease results. Fear arrests digestion and deranges the stomach. The food not being properly digested produces that condition of the blood called anæmia, the tissues do not receive their proper nourishment, and all the organs of the body become weak and inert. The muscle are relaxed, and those of the abdomen giving way, cause prolapsus and kindred ills. Constipation helps to swell the train of evils, and medicine proving useless, long years of invalidism result. Not only is the patient extremely unhappy and robbed of all joy and comfort, but the influence extends to family and friends. We read in stories of helpless invalids who are supremely happy, and shed only joy and sunshine around them, but such cases are deplorably rare in real life. Who does not pity the child who must grow up under the shadow which always

surrounds a sick parent. As well expect a flower that is constantly in the rain to develop into perfect symmetry and beauty.

Henry Ward Beecher, in describing the fruits of the spirit, said that "peace" (he might have said health) "is that condition of the mind in which all legitimate faculties are harmonious with each other and are implected and receiving their appropriate food and nourishment."

When the soul is hungering and thirsting, the body will likewise be ill-nourished; for the latter is but the reflection of the former, and when the needs of the soul are satisfied the body may well be left to care for itself.

M. C. F.

FRIENDLY PERSECUTION IN SICKNESS.—How many invalids would protest, if they dared, against the persecution they are compelled to endure from friends who feel it their *duty* to call and console with the sick. One sufferer breaks out in this manner:

"I feel as if I had just been to my own funeral, and it was a very sad affair."

"How so?"

"I was killed by a friendly call. My neighbor over the way, with a face as solemn as an owl, has just been in to see me, and he kindly remarked that I was so changed he shouldn't have known me, and he *hoped* I'd pull through, which meant I'm sure you can't last long, poor fellow; and had I heard that J—, who was taken sick at the same time I was, had been given up by the doctors? He mentioned several other equally cheerful items, which made me feel as if I should fly into a thousand pieces!

A call like that is enough to kill anybody who doesn't know how to resist the influence of such sympathy. Heaven save the mark if that is sympathy! I call it torture. I do wish my friend

would talk to me of something besides myself, and how I look, and how I feel, for I am reminded of all that far too often. If they want to show their friendship and help me get well, they will help me to forget myself and all my difficulties. Pray throw open the windows and let in the sunshine to dry off the dampness and gloom of that neighborly call."

BRAVE MEN.—The coolest courage in time of war is not always shown by the officer or soldier. The surgeon and ambulance nurse carry on their work of saving life as undismayed in the midst of shot and shell as the men whose unhappy work it is to take it.

An anecdote is often told by the seafaring folk who live on the shores of Buzzard's Bay of a certain Dr. Ebenezer Swift, who went from among them to serve in the Mexican war. He was surgeon in General Kearney's division under General Scott through all the battles of the campaign.

During the battle of Molino del Rey he was so busily occupied with the wounded that he did not perceive that the American lines had fallen back, and that he was left exposed to a raking fire from the enemy.

General Worth, passing, ordered him sharply to fall back, adding:

"You are drawing the fire from Chapultepec!"

The busy doctor glanced up at the clouds of smoke and dust, and answered, absently:

"In a moment, sir."

A similar story is told of three American surgeons who volunteered their services to the Russian army during the War of the Crimea. They soon were disgusted with the poverty of surgical aids and the butcheries on both sides; but in every battle they were in the thickest of the fight, dragging out the wounded and aiding them, although repeatedly warned to fall back to the surgeons' tents in the rear.

NOTES IN SCIENCE AND INDUSTRY.

The Forest Area of the United States.—By separating the States into groups, the six New England States are credited with a forest area of 19,198,028 acres; the four Middle States, with 17,630,000; the fourteen Southern States, including Maryland and leaving out Missouri, with 232,800,000; the nine Western States, with 80,358,768; four Pacific States, 52,630,000, and the seven Territories, with 63,034,000. It will thus be seen that of the entire 465,645,895 acres of forest included in this estimate, the fourteen Southern States possess fully one-half. These statistics show that, while the process of denudation has been carried to an unwise and injurious extreme in the Eastern, Middle, and a few of the Western States, the forest area still remaining in this country is very great. If the estimates of the department are approximately correct, the timber lands of the country, exclusive of Alaska, cover an area equal to fifteen States the size of Pennsylvania. If proper measures are taken to prevent the rapid and unnecessary destruction of what is left of our forest domain, it should be equal to all reasonable requirements for an indefinite period. With the adoption of a policy of judicious tree-planting in the prairie States, and a system of State or government reservations in the mountain districts, which are the sources of the chief rivers of the country, the evil effects which have followed denudation in Europe and some portions of Asia would never exist here. The States and the National government should be moving in this matter in good earnest.

Sun Dials.—Charles Lamb was possibly not far wrong, says *The Horological Journal*, when he conjectured that Adam had a sun dial in Paradise. Dials are probably older even than alchemy. The Babylonians had them; though the Egyptians, that wondrous people who knew most of the things the moderns have rediscovered, seem not to have used them. The Babylonians gave them to the Greeks; the Greeks, to the Romans; and the Emperor Trajan is credited with an epigram upon the art of dialing. Naturally dials are most frequent

in lands where the sun shines, as a matter of course, and not as a rare complacence. French and Italian gardens are full of them. To the walls of sunny *chateaux* they are fixed in hundreds. In the old days, when there was time for sentiment, and room for it, sun dials were favorite gifts from great personages to one another—from people to princes, and from princes to people. Cosmo d' Medici, whose fitful humors so angered Benvenuto Cellini, gave one to the Florentine students of astronomy; and on the wall of Santa Maria Novella it still marks the time of day.

Vacant Farms in Vermont.—Mr. Valentine, a Vermont official, says that, while standing with other officials on a hill in Bennington County, and looking over the valley of the West River, a tributary of the Connecticut, they counted fifteen farms, of perhaps a hundred acres each, all fenced, and with dwelling houses and barns in at least tolerable condition, without a single inhabitant. Beyond, toward the Connecticut, but hidden by the maple groves in the valley, were, as they knew, fifteen more, also deserted, yet all well situated, and still showing signs of their former fertility. Statistics show that a similar condition prevails all over the State. In Windham County alone are more than forty thousand acres of land, once cultivated, but now deserted, and in the whole State the number of abandoned farms, complete with houses, fences, barns, and outbuildings, must be several thousand. Yet Vermont is one of the pleasantest, healthiest, most fertile States in the Union. The reckless agriculture which has made portions of the South nearly barren, has never been favored in Vermont, where a century or more of stock farming has rather enriched than exhausted the soil, yet the people who once found happy homes there have crowded into the towns, or have left the State altogether. In thirty years, from 1850 to 1880, the increase of population in Vermont was five per cent., while the population of the whole country more than doubled, and that of the adjoining State of Massachusetts increased by nearly eighty per cent.

Chemical Transformation.—Alcohol, one of the best-known products of chemical industry, may serve as evidence to what degree of perfection the composition and decomposition of chemical compounds has been brought. As the chief constituent of intoxicating beverages, alcohol, together with carbonic acid, originates by fermentation from sugar; but this is not the only possible way to produce it. The brightness of electric lights, by which public places, roads, stores, etc., of our cities now are illuminated at night, is emitted by an electric current passing between two carbon points. When such a passage of electricity takes place in a glass balloon filled with hydrogen, the electric current causes this gas to unite with carbon, forming acetylene, a gaseous compound, which in contact with more hydrogen readily takes it up, forming a second gaseous compound—ethylene—which is the chief light-giving constituent of illuminating gas. Ethylene, when brought into contact with sulphuric acid, forms a liquid combination, and this, when treated with potassium hydrate, is converted into alcohol. Having thus built up from its elements a substance formerly known only as a product of fermentation, we may proceed at once to decompose it again into its elements. We can easily regain the carbon which it contains, by heating alcohol with sulphuric acid, which again converts it into ethylene; and this gas, when mixed with chlorine gas and lighted, burns away, leaving carbon, which, as a dense black smoke, fills the vessel.—*Popular Science Monthly*.

How to Climb Stairs.—A professional athlete has said truly that there is a knack in climbing stairs easily that but few learn. "To throw the body forward, bending at the hips, more than doubles the work. The weight of the body is a load that the muscles of the legs and loins must carry, and they carry it easily if the center of gravity is kept directly above them. Bending forward imposes on the muscles of the trunk the unnecessary task of holding the load from pitching forward. This is like carrying a load at arm's length instead of on the shoulder or on the head, as many Europeans carry burdens. Athletes lift enormous weights by bringing the strain on the

pelvic arch and legs, keeping their backs straight."

We think stair climbing is not the only climbing where this advice may be used to advantage. A boy beginning to mount the stairs of manhood will find, if he looks at the matter closely, that there is a "knack," indeed, in climbing. To lean forward toward the groveling things of earth more than doubles the load. Instead, do as above advised:—"Keep the center of gravity directly above you, do not hurry, step firmly and leisurely, and keep erect."

A Hudson River Mountain Railway.—A company has been formed for the purpose of building a spiral railroad to the summit of Dunderberg Mountain in the Highlands of the Hudson. The peculiarity of this road is that the route up the mountain will not be the same as the route down, the latter being far more direct than the former, which is described as "circuitous." It is not a great undertaking to construct a railroad to the top of this mountain, which is hardly more than a "sizable" hill. The pioneer railroad was that which scales the steep sides of Mount Washington. This has been in operation nearly twenty years, and there has never been an accident on it, but when the plan was first broached in the New Hampshire Legislature it was met with derisive laughter from the Solons at Concord. Humanly speaking absolute safety is secured by the various devices employed to prevent accidents, and the trains, both ascending and descending, run so slowly that if a fairly good walk were placed alongside the track a man with good legs could outwalk a train. A train on the Mount Washington Railway, by-the-way, means a single car, for more than one car is never attached to an engine when the big climb is to be made. This road, however, will fall into comparative insignificance if the scheme of building a tubular road up Pike's Peak is ever consummated.

A Woman's Invention.—We are told that Mrs. W. A. Cockran, of Shelbyville, Ind., has placed her name on the roll with the great inventors of the world, the result of her genius being a practical dish-washing machine. She began experimenting ten years ago. Her husband, the late W. A. Cockran, was then Circuit Clerk of

Shelby County, leaving her financially unable to complete her undertaking. By the aid of friends, however, she finally succeeded, and has a machine designed to do the work now done by the thousands of girls and women the land over. The machine is made for both hand and steam power, and is capable of washing, scalding, rinsing, and drying from five to twenty dozen dishes of all shapes and sizes in two minutes, the number, of course, depending on the size of the machine. Mrs. Cockran has disposed of her machine to an Illinois manufacturing firm for a large sum of money, and will receive a good royalty besides.

Imitating Ground Glass.—The effect of ground glass can be secured permanently by roughening one side of the glass by rubbing hard with a leather pad with fine emery. Fine emery-cloth, used by machinists, will answer. If too coarse, the emery will scratch the glass too conspicuously. Fine scratches, to remove the polish and diffuse the light by refraction and reflection in all directions, serve to soften the light without diminishing it. This is really ground glass, when thoroughly done. A similar effect may be produced by tying a piece of soft white putty in a bit of muslin, and "dabbing" uniformly over the clean glass surface, and afterward varnishing with clear Dammar varnish to protect it. A crystalline appearance may be secured by washing the clean transparent glass, inside, with a saturated hot solution of epsom salts (sulphate of magnesia), containing sufficient gum arabic to insure adhesion, and carefully varnishing when dry.

Albinos.—The word Albino is from the Latin *albus*, white, and was first used by the Portuguese, who applied it to designate the white negroes who were occasionally seen in Africa. It has since come into general use to designate certain freaks in both the animal and vegetable kingdom. In the latter, however, they are more generally called sports. In negro Albinos the skin assumes a peculiar whiteness, the eyes are of a pinkish hue, the woolly hair is white, sometimes tinged with yellow.

But Albinos are not confined to the negro

racés, as they appear in various countries, and among white as well as black or dark people. Sometimes only one child in a family will be Albino, and at others all or every alternate one. As a rule, Albinos are not so healthy and strong mentally or physically as persons of the normal color; but some have been known to have lived to a good old age, exhibiting moderately well developed mentality.

Albinos appear most frequently in hot climates, and among the darker skinned people, which fact has led scientists to attribute the cause to some skin disease perhaps akin to leprosy. Instances are on record of Albinos bearing children of the normal color of the race, and of others with an apparent mixture of their parents and grand parents.

Among animals Albinos are more or less common in all countries. The white elephants of India are well-known examples of Albinism. These animals are venerated by the natives, who believe they are inhabited by the souls of men. If the fact that white horses, cattle, and other domestic animals are descendants of Albinos is not proved, it is not at all improbable that the original white blood came in through the appearance of some Albino in the early history of the different species.

In this country Albinos have been found among our wild deer. A friend assures me that he had personal knowledge of one having been killed in Missouri some years ago. White raccoons have been frequently found, and in one instance of a litter of five, two were albinos. Among black squirrels albinos are occasionally found, and less frequently among gray and red ones, while white mice are quite common.

One might suppose the ground mole (*scalops aquaticus*) that lives entirely underground, and, consequently, in darkness, would be unlikely to produce albinos, but such is not the fact. Mr. A. S. Fuller has in his cabinet a specimen taken in Bergen County, New Jersey, in 1875.

Among birds albinos are often seen. White crows and white blackbirds are not unfrequently met with, while robins, orioles, swallows, and others are occasionally seen, although they are far from being common.

L. A. R.



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THE MORAL LIFE AS A GROWTH.

MORALISTS generally tell us that life is a constant struggle between the good and evil principles within us, and we are good or bad according to the triumph of one or the other in our conduct. This seems to be a hard, grim view of human nature, and it is. To contemplate it seriously would drive most of us to extremes of thinking, and to convictions of fatalism. Can one not conceive a relation in which the influences are conducive to thought and actions of a pure and noble type, and where evil suggestions have no place? Imagine a child surrounded from infancy by people who were kind, sincere, just, and courteous; whose language was always clean, courteous, and refined, and who indulged in no intimations of vulgarity, and avoided any discussion of the vice and crime of the world—would it be likely that such a child would contract habits of an immoral nature? Would he not, on the contrary, grow up with certain principles of thinking and acting dominant in his mental nature? And when at maturity he stepped into the world, would not the teaching and example of childhood and youth give him power of control over

the influences of evil that might assail him? There are men and women who have been favored by surroundings much of the kind described, and who appear to live in the midst of society calm and serene. Their habits are unaffected by the disorder and impurity of the world. They are "a law unto themselves," so to speak, and it is easy for them to do the right and speak the true. Their manner, their expression, their language show nothing of contest within their souls, and so far as choice of the right as against the wrong is concerned they know nothing of hesitancy in the matter, for decision comes with the suggestion of action. To them there seems to be but one side, and that the side of duty and right.

The fact of the educability of faculty, and of organism that lies behind faculty, resolves this matter. Out of the education and association—which is but another term for education—come the manners and habits of life, the expression of faculty. "But there is the inherited bias of disposition," one will say, "that is to be considered." Yes, that must be taken into account, and it will, to a greater or less extent, color the product of teaching and association. Yet this color is not necessarily an evil or vicious impression; the very characteristic that in one case by unwise management will tend to make one willful, passionate, malicious, dishonest, in another case, where the management is intelligent and wise, will make him strong, energetic, ambitious, dignified, upright, noble. It is the use of faculties that makes the man or woman.

Oh, the splendid men and grand women who have been wrecked on the

shoals of false education ! Struggle ! Yes, how such have struggled against the bias of habit and tendency woven into the very texture of their intellectual and moral being by habits that were formed and fostered in youth ! It is our duty as parents, teachers, guardians, to make life less a field of contest to the young minds given to our care, than a field for the free exercise of the powers God has given. The inculcation of good motives, of proper ambitions, of a love of truth, of temperance, sympathy, and courtesy will effect this, in that it will inspire self-respect, and distrust of everything that would lower one's consciousness of integrity.

AN argument is found in Evolution that has a most pertinent application in the philosophy of practical mental science. According to the environment so is the organic development, we are told by the Darwinist. The eye was made for seeing, but not until there was light to render things visible was the eye created by the process of evolution. The necessity for seeing did not exist. The fish in the waters of the Mammoth Cave are sightless ; they have no occasion for eyes in those dark springs. But transfer those fish to outer waters where the sunshine lightens up the liquid depths, and the progeny of those sightless fishes will in time show an eye growth, and the adaptation that is normal to their new habitat. This principle is active in the economy of mind, and most happy are its results. Heredity may impose obstacles, and difficulties, and deficiencies upon organization, yet training, effort, exercise, will in time greatly modify the original stamp of nature.

In the training of children he is the best teacher who bravely insists upon the effects of training—and encourages every one with inferior capacities to exercise, as far as possible, what he has. The kindergarten teachers know that much can be done with little children, whatever may be their derivation. It matters not if gathered from homes of squalor, ignorance, and vice, how soon they show improvement in conduct and language ! Their reasoning and æsthetic faculties, kept dormant and depressed by the disuse and oppression of their home environment, awake to the call of the kind and earnest teacher, and a new and promising life opens to them. They need but the light of intelligent culture to open their eyes to possibilities of growth that may be as fruitful in benefit to the community as to themselves.

It is the want of exercise, training, culture, use of faculty, that results in failure, waste, incapacity, unhappiness, degradation, vice, and crime. The penal record in every State shows that seventy-five per cent. or more of the offenders against law have no trade or any business training ; the practical and therefore the useful elements in their natures have not been brought out by exercise. Being then without the most important means of self-control they have yielded to corrupting influences and drifted into the channel of crime. But even at this time there is a probability of reform under judicious management. So long as the mind perceives the difference between order and disorder, honesty and dishonesty, kindness and cruelty, so long will it be susceptible of changes through education and example.

OUR FUTURE.

A NEW YORKER has written a poem in heroic measure, which discourses of man in that state of much advanced development which is symbolized by the term "millennium." So far as we can see, this writer speculates with regard to probabilities of human conduct at that indefinite era when selfishness and sensual indulgence will no longer dominate the mental and physical life of men, but sympathy, kindness, friendship, and affection will be the cardinal principles, and every one will aim to help others to know and to enjoy all that is beautiful and desirable.

This projection of thought forward may appear unnecessary and irrational to some logicians, but it is nevertheless a legitimate out-reach of a philanthropic spirit that recognizes the unequal distribution of nature's gifts, and would hasten the time when the cravings of the higher faculties will be met. We believe that there are moments in every man's life when he raises his eyes from the ground and ceases to think and plan for personal gain or advantage; when he feels that life has higher interests than those that center in his shop or office, and his soul warms with a thrill of true hope that ere long society will be emancipated from the bondage of self-seeking, and a sincere fraternal relation be established.

Such moments should come to all of us oftener than they do, for it is when we *stop to think* that the best influences are exercised, and the best opportunities for real and lasting growth occur.

"He most lives
Who thinks most, feels the noblest,
Acts the best."

At this New Year tide is it not well for us to review the past; not to grieve or despond over the errors and misfortunes that mark its current, but rather to rejoice in the successes and blessings that here and there have brightened the way, and from them to draw much of hope and courage for the future.

"The glories of the Possible are ours."

To believe this is the first step toward the attainment of things essential to human happiness.

A PUZZLER IN SOCIAL EVOLUTION.

Now that woman is showing her dexterity in many employments not long ago considered the special domain of man, it is but fair that man should be permitted to try his hand in the arts and practices that have been her exclusive territory. To be sure the bevel-eyed celestial has for centuries shown a peculiar skill in washing soiled linen, and the emotional sons of France have won enduring fame for their management of the pots and kettles of the kitchen, but as a rule there has not been shown by the civilized wearer of exterior bifurcated garments that facility of adaptation to woman's work in the household that the heroine of the petticoat has shown in many lines of outside work-a-day life. How rare is it that in an emergency a husband and father distinguishes himself at the stove except by getting his fingers burned or well covered with black! And if he essays the wash-tub many minutes do not pass before he is found in a bad humor because of the disagreeable effect of the soap-suds upon his respiration, and the constant slopping over that results from his awkwardness and excited manipulation of

the linen and muslin. As for the attempt of the masculine element in an American household to run the ironing department we will not describe it, for disaster dire to hands, the wash, and the temper is a sure accompaniment.

Not long ago, according to the newspapers, a man in Baltimore offered his services to help in the family washing, and was blown out of the kitchen or somewhere by an explosion of the stove or one of the tubs. Another sad case of indiscretion or awkwardness, or of something that does not appear in the account, is that of the man who, at Dayton, was struck by lightning while taking down the wash from the line. It would seem as if nature, the elements, and other forces that rule in affairs human were against the encroachments of man in the domain of woman, while the favor of the powers mundane seems to be with woman when she invades the territory of her big brother. Well, what is to be done about it? Some one may suggest that it would be the part of wisdom for man to retire from the field of universal activity and let the women have their sweet way. Doubtless the idea would be pleasing to that large proportion of trousered folk, who are already disposed to sit in the shade or on the fence when any work is to be done. Another large proportion that admire the manners that are becoming in aboriginal life would welcome a proposition of the kind because they would like to stand by with hands in pockets and boss the different jobs. But another large proportion that like to work, for various reasons, would enter a strong protest against such a plan. The puzzling question is, what to do with that class of male society?

JEFFERSON DAVIS.

THE death of Jefferson Davis has removed the chief figure on the Southern side in the late war. He was eighty-one years of age, a Kentuckian by birth, a Mississippian by residence. At the age of twenty he was graduated at West Point, and from that time on showed a preference for military relations. In the Mexican war he showed great bravery, and was promoted to a Brigadier-Generalship, although he declined the commission. In 1852 he was Secretary of War in President Polk's cabinet. He also served in Congress with distinction. His career as President of the Confederacy is well known to the world. Very few, if any, other men could have sustained a contest so long where the disadvantages of his side were so great. Yet opinions, South as well as North, differ as to the wisdom of measures that were put into execution by his command at times of serious emergency. This, however, would be the case at any time of crisis in any country, and regarding any leader. The last years of his life were spent quietly on an estate in Mississippi that had been given him by a wealthy lady friend, and to the last day of his life almost his mental vigor was retained to a remarkable degree, while his physical state appeared unusually strong.

THE ROUND OF LIFE.

OVER and over again,

No matter which way we turn,
We always find in the Book of Life

Some lesson we have to learn.

We must take our turn at the mill,

We must grind out the golden grain,

We must work at our task with a resolute will,

Over and over again.

Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

THE EARS.—S.E.—In the books devoted to physiognomy, some attention is given to the signs in the shape and quality of ears. Perhaps there is not as much said about the external organ of hearing as about the eyes, nose, mouth, etc., because people are not as much interested in it as they are in those features which are directly associated with the face. To one who makes a careful study of ears, their variety in shape, quality, condition, position relative to the head, face, etc., is more and more surprising, and the significance of this variety becomes naturally a matter of consideration. In back numbers of this magazine articles have been published on the ear. In the book entitled, "New Physiognomy," a resume of the features is given.

LANGUAGES OF THE WORLD.—E. J.—The latest researches in philology divide the languages of the world into twelve classes, viz.: 1. Papuan; 2. Hottentot; 3. Caffre or Bantu; 4. Negro; 5. Australian; 6. Malayo-Polynesian; 7. Turanian or Mongolian; 8. Arctic; 9. American; 10. Dravidian; 11. Nubian; 12. Mediterranean. While the original or primitive types of language may be said to be comparatively few, the total of

languages and dialects spoken extends into the thousands. It was computed by Adelung over forty years ago that there were upward of 3,000 languages and dialects, distributed as follows: In Asia, 987; Europe, 587; Africa, 276; America, 1,214. Authorities to-day add 2,500 or more to the number of Adelung, so that 6,000 may be said to be about the total. This, of course, takes into account differences of speech among peoples who occupy different provinces of the same country and are closely akin. The number of languages quite distinct in their natures does not exceed 850.

BRAIN WEIGHT IN MAN AND WOMAN.—

Question.—Does sex have any influence upon the weight of the brain or its quality?

DOUBTFUL.

Answer.—We are not aware that sex in itself has any influence upon the weight of the brain. Man, as compared with woman, is larger and heavier, and the proportion of size and weight is naturally exhibited in his brain. To be sure M. C. Bon has found several cases in which males and females of the same weight showed a difference of brain weight that was in favor of the former, but the data are not full enough for a fair analysis, we think. Men of short stature, below the normal, often have heads that properly belong to tall, heavy men. So we meet with women below the average size who carry large heads. Often nature appears to put growth or development into the head that should have been distributed elsewhere. As regards quality of substance, we are inclined to think that the brain of woman fully equals that of man if it does not exceed it. If we are warranted in judging from the quality of her general organization, we should be led to ascribe a higher degree of fineness to brain and nervous system of woman. Some investigators claim for her a larger proportion, in respect to size, of gray substance, the intimate physical basis of mental expression.

WHAT TRADE TO LEARN.—*Question.*—Throwing aside organization, what trade among many would you advise a young

man who is anxious to get on in the world to take up?

L. U.

Answer.—We could scarcely dispense with organization as a primary requisite. We do not know how a young man is to get on in the world, no matter what he takes up, unless he has some fitness for it by organization. We might say in general terms that a trade or business that is absolutely necessary to mankind, and therefore permanent, would be in the line of preference. Notwithstanding the advantage that such a trade possesses in itself, we could not assure success and fortune to him who should take it up unless he had capacity for understanding and prosecuting it. We have heard of "a business running itself," but must confess we never saw in all our experience with men and affairs any such business. Some one must be at the helm to manage and control. When a business is left to run itself it soon goes into the ground. A young man who wants to get on in the world should take up something that will make him independent of others, something he can run on his own account, and not be subordinated and made a machine of.

FAITH IN THE REMEDY NECESSARY.—B. R.—Yes, we regard the element of faith as very essential in medical treatment. The patient who does not feel confidence in his medical adviser, and looks upon the prescriptions that are left on his table as so much trash, is not likely to improve. Doubt or uncertainty is an important obstacle to getting well, while faith, assurance, and hope are of incalculable help. If the medicine has a grain of application to the case, and the faith of the sick in the physician is unbounded, the prospect of recovery is, we might say, almost certain.

R&D NOSE.—J. R.—This rather unhappy feature is avoidable in a great majority of cases. If you will carefully examine your habits of eating, and dressing, and living generally, you will probably find several things that could be improved or dispensed with, and they will be likely to bear some relation to the color of your nose. Drinking strong liquors, eating spices and highly seasoned food are among the causes, and the more conspicuous causes. But there are many people who are troubled in this respect who are very careful in their diet

and never touched alcoholic mixtures; yet then, there may be some error in dress, the clothing may be too tight, the feet may not be warmly clad, the hands, if the case be that of a lady, may not be sufficiently protected in cold weather. Any cause or habit that prevents free circulation of the blood may have something to do with the trouble at the end of the nose.

PERSONAL.

DR. JAMES PRESBOOTT JOULE, F. R. S., the discoverer of the mechanical equivalent of heat, died at Sale, near Manchester, England, October 11th. He was the son of a brewer in Salford, and was born in 1818. His first contribution to scientific literature was made when he was about twenty years old, in a paper describing an electro-magnetic engine. His great discovery was made after patient, independent investigation and experiment, with extremely simple apparatus constructed by himself. He constructed electro-magnets of greater carrying power than any previously known, and made other valuable researches in electricity, physics, etc. He lived mostly in retirement, where he could pursue his investigations with comfort.

MR. AND MRS. EDMUND RUSSELL are lecturing on the principles of art criticism according to Delsarte, in New York city. As exponents of the great master of expression, they are worthy of the interest their very entertaining and suggestive addresses awaken wherever heard. Major Pond has engaged both Mr. and Mrs. Russell for a tour in America.

WISDOM.

"Thou must be true thyself.
If thou the truth would teach."

THE prodigal robs his heir, but the miser robs himself.

ONE man makes up his accounts from his wants. Another from his assets.

IT is good in fever and much better in anger to have the tongue kept clean and smooth.

DOCTRINES are of use only as they are

practiced. Men may go to perdition with their heads full of truth.

LEAVE the mere rude explicit details; 'tis but brother's speech we need. Speech where an accent's change gives each the other's soul.—*Browning.*

VIRTUE is no enemy to pleasure; her proper office is to regulate our desires, that we may enjoy every blessing with moderation, and lose them without discontent.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

If man is descended from the monkey, the descent must be, as the lawyers say, "In tale."

A MAINE man was out with a temperance lecture with the title: "How Goliath was Killed with a Sling."

Gus (pathetically)—How I do suffer with hay fever! I'm almost dead! Jack (heartlessly)—Never mind. 'Sneezy death.

A COUNTRY editor speaks of a contemporary as "so dirty that every time he goes upstairs there is a rise in real estate."

"So," said a lady recently to a merchant, "your pretty daughter has married a rich husband?" "Well," slowly replied the father, "I believe she has married a rich man, but I understand he is a very poor husband."



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

FROM OVER THE BORDER, or, Light on the Normal Life of Man. By Benjamin G.

Smith. 16mo, pp. 238. Chicago. Charles H. Kerr & Co.

This is an example of a class of books that is increasing to-day, and is the outcome of thought that is responsive to views frequently expressed by people who claim to be scientific or "agnostic," and who will not have, or pretend they will not have, aught to do with any considerations that concern a future condition of the human soul, because, forsooth, that is merely a sentimental idea. Of course, taking the Christian view, heaven or paradise awaits the believer's spirit. We can not say that such books as this are unnecessary, for their reasonings and suggestions bring comfort to many a heart that has somehow or other gathered doubt, and we are willing that they should be circulated.

The author is a very earnest thinker, and it is in the belief that what he has written will be of service that the book has been printed and offered to the public. His own convictions appear to be strong enough and he expresses them in this fashion: "Death is but the beginning of a higher life. * * * At the close of man's earthly career he enters upon another, which may be of a far superior order. * * * Immortality in ever widening vistas is an inevitable logical conclusion from a true idea of God." The plan of the book is much like that of "The Little Pilgrim:" the writer assumes that he has crossed the dark river, and finding himself in new scenes reports of their nature, the character and conduct of the people he meets with, etc. Considered as a story having a moral stamp, we think that its influence would be generally good.

ESSAY ON MEDICAL PNEUMATOLOGY; a Physiological, Clinical, and Therapeutic Investigation of the Gases. By John N. Demarquay, Surgeon to the Municipal Hospital, Paris, etc. Translated, with Notes, etc., by Samuel S. Wilian, A. M., M. D. Illustrated. 8vo, pp. 300. F. A. Davis, Publisher, Philadelphia and London.

The idea of employing oxygen and other gases in the treatment of disease is by no means new, but the idea has been taken up

in late years and wrought into a systematic method. Several physicians of capability have studied methods and applications carefully and thoroughly with results that warrant us in ascribing, to oxygen at least, a place among the remedies of nature. In this work we have a compilation of experiments and studies, more especially relating to the effect of oxygen when introduced into the system by inhalation or injection.

The American translator is somewhat enthusiastic in his advocacy of the oxygen treatment, and deems it very valuable in surgery as well as in the ordinary treatment of the physician. It is the reviver *par excellence* according to both the French and the American writer. Cases are recited of shock from accident and surgical operations in which oxygen produced effects little short of marvelous, and restored patients to life when they were apparently on the verge of dissolution. Illustrations of the various apparatus employed in oxygen treatment are given with much detail. In wasting diseases, in nerve depression, in consumption, in skin troubles, rheumatism, and other inflammatory disorders, we are assured that oxygen gas will prove a valuable adjuvant toward recovery or relief.

LYRA ELEGANTiarum; A collection of some of the best specimens of Vers de Societe and Vers d'occasion in the English language, by Deceased Authors. Edited by Frederick Lockyer. 16mo, pp. 360. Paper, \$1.

LUCHIE. By Owen Meredith. Vignette edition, with one hundred new illustrations, by Frank M. Gregory. 12mo, pp. 420.

ONE, TWO, THREE, FOUR. New illustrations in colors and in monotint, by Maud Humphrey. New verses by Helen Gray Cone. Small quarto, thick paper. Price \$1.

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"AMERICA, MY COUNTRY, 'TIS OF THEE." By Samuel F. Smith. Illustrated. Small quarto, gilt. Price \$1.50.

GONDOLA AND PALACE. With colored prints, and selections from the text. By Charles P. Yriarbe. Quarto. Illuminated cover.

THE CALENDAR OF THE SEASONS. With facsimiles of water-color designs. By Maud Humphrey. Price 50 cents.

The above noted publications are fresh from the press of Messrs. Frederick A. Stokes & Brother, 182 Fifth Avenue, New York. Each is a beautiful specimen of the book-maker's art, and suitable for holiday uses.

Lyra Elegantiarum is an elaborate compilation of pieces in rhyme and meter from known and unknown authors of the past four hundred years. Very pleasant reading are these pieces, and at the same time the book is a welcome addition to the library, because it contains many specimens of old English writers that are inaccessible to most of us.

Of *Lucile* this new edition is one of elegant character; the illustrations are dainty, and the text clear, on paper of fine texture. With an appropriate binding one would have a real *edition de luxe*.

"One, Two, Three, Four," and "Babes of the Nations," are charming picture books for children; that with the second title has a series of little ones in the costumes peculiar to different nationalities. The artist has endeavored to show the features and temperament in most cases, and quite successfully; for instance, the Dutch, French, Spanish, German, and Swedish faces are striking.

The fittings of "America" are admirable: it is a charming book. Scenes in color from all sections of the United States deck the pages, and render one proud of his country as he examines them. A fitting gift from any one to any body.

"Gondola and Palace" at once suggests the romantic island city of Venice. Facsimiles of well-made and finely-colored photographs of such famous structures as the Doge's Palace, the Bridge of Sighs, the Arsenal, and the Piazza San Marco, are given, each a picture worthy a frame and a place on the wall.

MOTHER'S PORTFOLIO. A Book for Every Mother, etc. Illustrated. Quarto. Published by Alice B. Stockham & Co., Chicago.

A handsome volume this of over 400 pages, and filled with material of service to mothers, and teachers of children. Its

sources are the methods and occupations of the kindergarten, and mingled with the very interesting sketches of kindergarten practice are stories that attract children, and at the same time instruct them in truths and principles of the most important nature. Not a little taste has been shown in the selection of the larger pictures that adorn the book, and are enticing to the eyes of older folk. There are also essays from educators of authority, and musical compositions appropriate to the subject of the volume.

RUTHERFORD BURCHARD HAYES, JAMES ABRAHAM GARFIELD, AND CHESTER ALAN ARTHUR. By William O. Stoddard. 12mo, pp. 105, 96, 72. Frederick A. Stokes & Brother, New York.

Another volume is added to the series of brief biographies of the Presidents, and this time we have three worthy men included in one cover. Of Mr. Hayes the writer of the sketches speaks well, and rightly so. We have been of opinion and still entertain the thought that Mr. Hayes's administration was a remarkably clean one. Not a brilliant man, not anxious to compel attention by some great stroke of policy, he nevertheless showed himself an industrious and faithful executive; with a good knowledge of human nature he selected associates whose records were clean and who surrendered their portfolios when the time came for such surrender without a blotch upon their cabinet record.

Of the unfortunate Garfield the presidential record is necessarily short, but we are given realizing glimpses of his early life and political career by Mr. Stoddard, and shown how industry and determination will promote advancement, avoid the difficulties and hardships that beset the man born with no prestige of family or fortune.

Mr. Arthur, coupled by the uncertain vicissitudes of politics with Gen. Garfield in the Republican victory of 1880, and so soon to be clothed with the chief authority after his associate's tragic death, receives scarcely that attention from the writer that seems to us befitting him, his career in office being rather briefly reviewed. He was the gentleman, *par excellence*, of the trio, and perhaps did more than any President had done for many years to exemplify American capacity for the most refined and elegant amenities

of official life. For young people, and all, indeed, who have not time to spend upon elaborate volumes, this series of the Presidents is well arranged and written.

MAGGIE BRADFORD'S CLUB. By Joanna H. Mathews, author of "Uncle Rutherford's Attic," etc. Illustrated. New York. Frederick A. Stokes & Brother.

A pretty story that will interest our girls. Designed as the first sequel to "The Bessie Books," it is written in the manner of those always nice books to the well-bred girls that are favored in the well-appointed private schools of our cities. The club Maggie formed was composed of kindred spirits who attended Miss Ashton's school, and its ambitious aim was to be literary. How they succeeded is well related and entertaining, and the pranks of the mischievous monkey, and the troubles and heart-burnings he caused, incidentally woven in, may interest even more than the "literary" efforts of the club. This is one of the very few good juvenile stories that we have seen for some years past.

PUBLICATIONS RECEIVED.

CHRISTMAS BOOK-SHELF.—Being the Christmas number of the *Publishers' Weekly*. Franklin Square, New York.

A handsomely illustrated pamphlet containing a very full and varied list of books suited to the season, and very helpful to the public.

INFLUENCE OF ALCOHOL ON THE HUMAN SYSTEM, especially as used in beer and wine.

Viewed from a scientific standpoint, by the eminent Dr. N. S. Davis, of Chicago, is a contribution of notable value to temperance literature. Published at 10 cents a copy, in paper, by the Nat. Temp. Society, New York.

INTERNATIONAL MEDICO-LEGAL CONGRESS, New York, June 4, 5, 6, and 7, 1889. Transactions and Banquet, with Officers, Committees, Members, and Delegates. 8vo, pp. 112. Published by the Medico-Legal Journal Association. New York.

THE NATIONAL TEMPERANCE ALMANAC AND TRETOTALER'S YEAR BOOK for 1890.

Contains official statistics bearing on the liquor traffic, lists of societies, sketches, illustrations, etc., etc. Price 10 cents. J. N. Stearns, Agt., New York.

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Christian Union says: "It is well known as a popular storehouse for useful thought. It teaches men to know themselves, and constantly presents matters of the highest interest to intelligent readers, and has the advantage of having always been not only 'up with the times,' but a little in advance. Its popularity shows the result of enterprise and brains."

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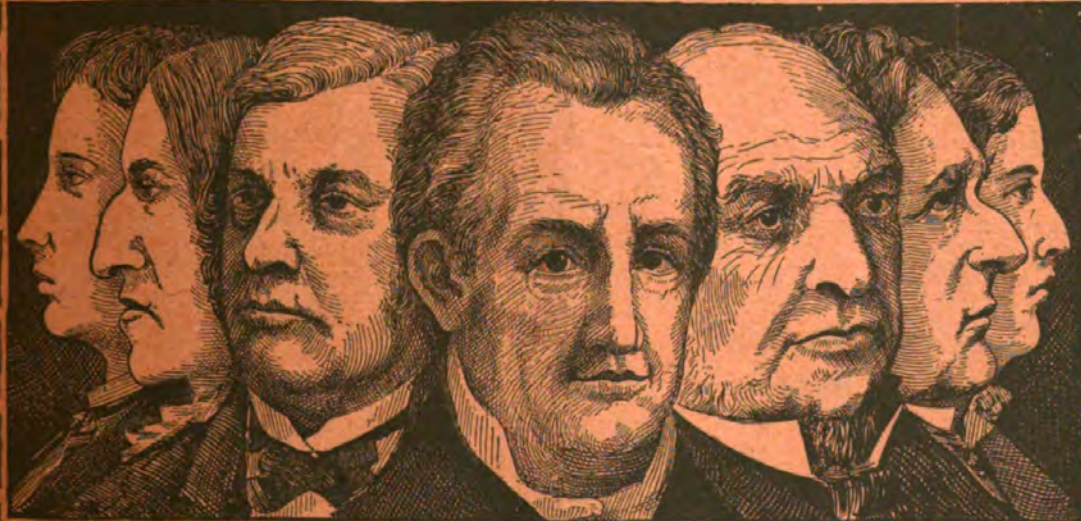
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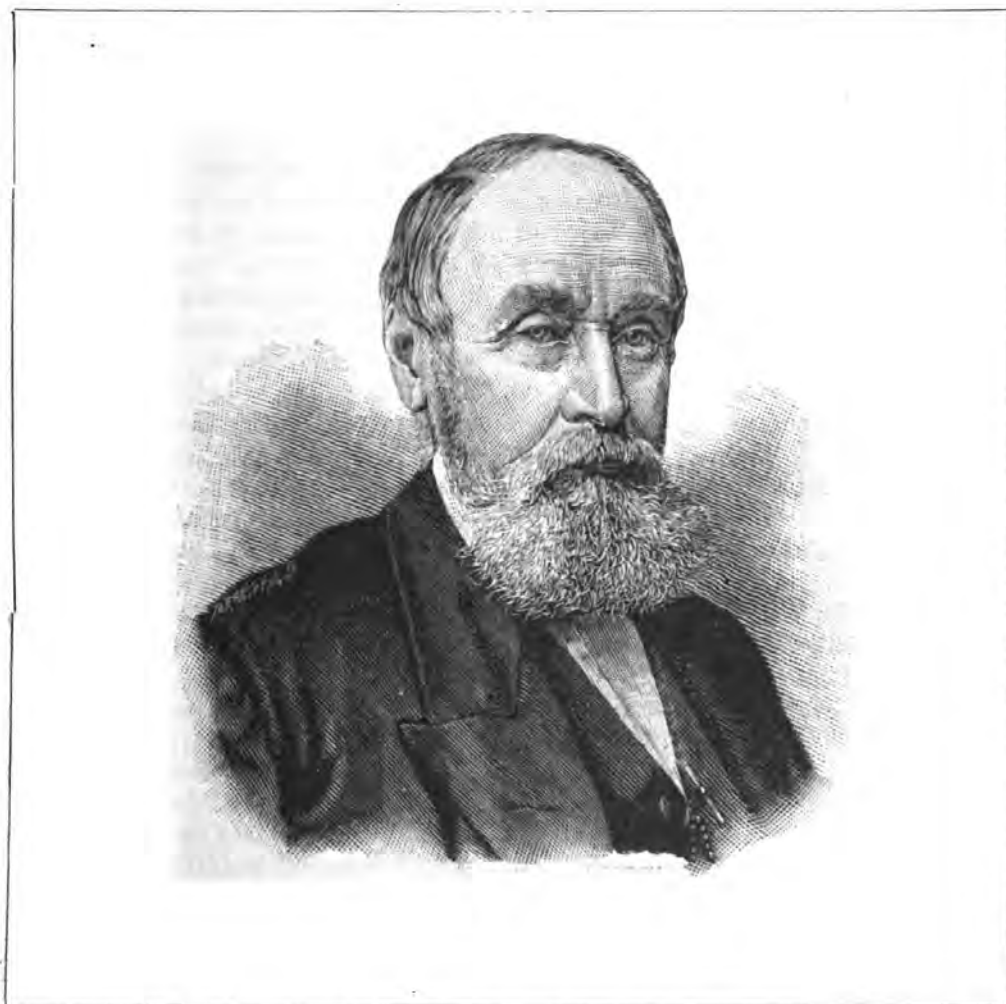
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PRINCIPAL DAWSON.

NOTABLE PEOPLE OF THE DAY.—No. 28.

SIR J. W. DAWSON.

THAT is a philosophical face, and a face that sends us back nearly a century from our best comparisons to find its like among the old thinkers of the Scotch school. The type is of that strong, veracious, dogmatic sort that stands so prominent in Scottish thinking in the days of Kames, Brown, Stewart, etc. The broad head intimates energy and action, ability to organize large enterprises, to enter into details also. We could easily conceive such a man laying out the plans of an important expedition, and while the object of the expedition ruled his thought and made him fully appreciative of its extent he would enter with earnestness into the consideration of the details of supply, and be more ready in suggesting the little essentials than most any of those interested with him in the matter. He recognizes the value of small things, and aims to be complete and thorough in what he undertakes. Hence he is what a woman would call "particular," when speaking of that spirit of order and neatness that is shown by a few housekeepers. His thinking is broad in its applications, and also of critical nicety. He likes close thinking and well marked discriminations. Talkers and writers who mix their points and illustrations, who run off on side issues apparently forgetting the leading topic of their discussion, fare badly at his hands. Trifling lapses and inconsistencies are detected promptly by his keen eye, and if worth while turned to advantage on his side. He has power of language that indicates itself, we think, more in the clearness and fullness of the writer than in the fluency of the speaker. He speaks and writes to be understood not merely to be heard, and so does not seek occasions for talking unless he has something to tell that has a useful bearing upon some question of interest. He is a man of econo-

mies and does not believe in wasting time or brain in trifling objects. At the same time he should be known for breadth of sympathy and sterling kindness—which are manifested in most cases without anybody's prompting, and in his own manner.

Principal Dawson, as he is called up in Canada, is a gentleman whose scholarship has given him fame in the world of science. He was born at Pictou, Nova Scotia, in October, 1820, probably, if his physiognomy does not lead us to mistake, of Scottish parentage. Having studied at the schools of Pictou, he was sent to Edinburgh where he took up a course of study in the old University. Returning home he applied himself with much zeal to the study of natural history and geology making Nova Scotia and New Brunswick his fields. In 1855, he published a work embracing the results of his study which is entitled "Acadian Geology"—and which at once took a leading rank among scientific books. Other works followed at intervals, interspersed with numerous contributions to scientific periodicals. At the meeting of the Geological Society of London, in 1881, Sir (then Mr.) W. W. Smyth remarked that when he referred to Sir J. W. Dawson's published papers he found that they numbered nearly 120, and they give the results of most extensive and valuable researches in various departments of geology, but more especially upon the Palaeontology of the Devonian and Carboniferous formations of Northern America. In 1850, Mr. Dawson was appointed Superintendent of Education for Nova Scotia, and in 1855 he became Principal of the great McGill University at Montreal, where he still remains, and of which seat of learning he is also Vice-Chancellor.

In 1854 he was elected a Fellow of the Geological Society of London, and of

the Royal Society in 1862. He is a Master of Arts of Edinburgh, and in 1884 he was granted the degree of LL.D. by McGill. In 1881 he was the honored recipient of the Lyell medal for his eminent work and discoveries in geology. In this year also he was created a Companion of the Order of St. Michael and St. George; was selected by the then Governor-General of the Dominion, the Marquis of Lorne, to be the first President of the newly organized Royal Society of Canada, and was also President of the American Association for the advancement of Science in 1881-2. In 1884 he was Knighted by her Majesty. In 1886 he presided at Birmingham over the meeting of the British Association, of which he is now one of the Vice-Presidents. He is also Fellow of the Royal and Geological Societies of London, honorary Fellow of the Geological Society of Edinburgh, and of the Liverpool Geological Association, and honorary member of the Philosophical Societies of Liverpool, Glasgow, Manchester and Leeds.

The following are among the principal published works of Sir J. W. Dawson: *Acadian Geology*, 1855; *Egypt and Syria*, 2nd ed., 1887; *Fossil men and their modern representatives*; 3rd ed., 1888; *Handbook of Zoology*, 1886, 2nd ed., 1888; *Modern science in Bible lands*, 1888; *Origin of the world*, 5th ed., 1888.

Principal Dawson is one of the stronger supporters of Christianity and his scientific inquiries and publications have made him a recognized champion as against the extreme evolutionists.

SARAH ORNE JEWETT.

IN this era of novel writing and novel reading—which is the bigger craze may need some thought to determine—it is pleasant to be able to indicate a living writer here and there whose stories have a healthful influence, and are not to be reckoned among the ruffraff of postposterous sensation that loads the

bookseller's counters. While it must be said that some of the most useless writers of fiction are women, it is due to the sex to say, that some of the most useful are women, and their work in great part seems to be an attempt to offset the moral damage done by their reckless sisters, to the reading sentiment of the public. Such a tone of face as that in the portrait of Miss Jewett could not be interpreted as belonging to that quality of mind that is ready to barter talent and aspiration for "so much a volume"—to write cheap, flashy, low underlined, machine tales that will sell—because the uneducated masses want them.

There is kindness and humor, spirit and pride in those features; there is evidence of the enjoyment of success, but we read her mistakenly if she would glory in the success of a book that did not contain the expressions of a true and earnest motive, that carried in its elaboration of incident and detail of character, lessons of value, and in its *denouement* a golden truth clearly cut and practically useful. There is much of the old New England character in that face, and it must needs come out in the manner and the doing of the lady. The earnest, sincere, conscientious habit of viewing affairs that belongs to that character rendered her early mature and gave her rank in the community. She could always enjoy with a hearty zest the merry and jolly sides where coarseness and impurity were not allowed place, for her mind loves the healthful reactions of pleasure, and would escape awhile from the restraints of that grave, prosaic routine that an earnest woman naturally enters. Into her books, Miss Jewett has written herself as very few writers of the day have written themselves, because so few deal with such true and personal histories as she does, and are so sincere in expression.

Miss Jewett was born in South Berwick, Maine, a manufacturing village

near the coast. Her father, Dr. Theodore H. Jewett, a physician of wide reputation and practice, died several years ago, leaving a widow and two daughters, who still reside in the pleasant family mansion. Aside from his professional acquirements, Dr. Jewett possessed historical and antiquarian

as they drove along the road herecounted to her fragments of family history, anecdotes and observations gathered during his long medical experience. Miss Jewett thus amassed a fund of information from which many of those inimitable character-sketches and those equally admirable reproductions of sea



SARAH ORNE JEWETT

tastes, the natural outgrowth, perhaps, of a residence in one of the most interesting neighborhoods in New England, where almost every foot of ground has its history or its tradition. His daughter, to some extent, no doubt, inherited these tastes. She often accompanied her father on his professional round, and

and shore in and about York, Kittery, and Berwick have been drawn. No one who reads Miss Jewett's stories can fail to perceive how strongly these surroundings impressed themselves upon her own character. To a spiritual and imaginative nature, the grandeur and mystery of the sea furnishes an inexhausti-

ble theme. The emotions it awakens are clear and unmistakable. Yet she is always simple, natural, and unaffected. The tens of thousands who go to the New England coast for a summer's vacation see it all again in her stories. Every well known head-land, clump of pines, or heap of rocks in the offing, is to her a personal friend.

Miss Jewett also finds much inspiration in the habitations of a former generation and the tales they have to tell. Sometimes it is a humble roof, but the story reveals that life is everywhere the same. The simple annals of the poor are touchingly narrated. Sometimes it is a decayed colonial mansion and a sad story. And what is so saddening as the ruin of a family that has seen better days? Sometimes it is a mere wreck with a poor half-crazed creature clinging to it.

Miss Jewett sees in old houses so many mysterious conductors into the past, so many monuments to the lives and fortunes of their occupants. A keen sense of humor is also characteristic of this author. Her humor has a healthy and contagious quality denoting appreciative discernment and feeling for all sides of character. Even while assisting at a country funeral we find the odd sayings and doings of the mourners sometimes too much for that decorous gravity suitable to the occasion. But this is in no irreverent spirit. It is simply a genuine touch of human nature. Her people are all very life-like. They

talk naturally and not a bit by the book. We at once recognize in them old acquaintances. Miss Jewett varies occasionally the writing of short stories, so evidently her true vein of literary success, with poetical composition. In this field she has already written and printed what would make a small volume if collected. Her poetry breathes a strong religious feeling, usually calm and contemplative, rather than brilliant or passionate.

Miss Jewett began writing for publication when nineteen. She is now about forty, with a future of undoubted promise before her. Besides the volumes of her collected stories she has been a frequent contributor to the leading periodicals. She enjoys an unquestioned popularity with a multitude of readers who have become acquainted with her chiefly through the pages of the *Atlantic Monthly*, in which most of her stories have appeared. We need hardly say that out-of-door life is with her a passion. Expert with the oar, an accomplished horsewoman, it is her delight to live in close companionship with nature.

Of her books the following have obtained a wide recognition among those who read thoughtfully and not merely to gratify in semi-drowse an idle hour: "Deephaven," "Country By-Ways," "A Country Doctor," "A Marsh-Island," "Old Friends and New."

EDITOR.

HAPPINESS.

MAN lives in the future and the past. Unconscious of the bright days he could enjoy in the Eden which is his, he forever yearns for a more convenient home, and a better age. Men have been led into error because they so often failed to apprehend the duty and meaning of life. Life has been likened to a multitude hurrying in one door to take a feast, and then rapidly disappearing at another; or to a jour-

ney which wise men make with great alacrity.

Happiness depends as much upon inner, as upon outer conditions. The dream of a happy future where we can eat and sleep all day long, where there are no clothes or dishes to wash, where babies do not cry, where Italian organ grinders will have a good time all to themselves, where newspaper men always tell the truth, and where milkmen

do not skim the milk on the top, and then turn it over and skim it on the bottom. We long to go to Europe to see the sights, to visit the art galleries stand upon the bridge of Sighs which Byron spoke of, or the leaning tower of Pisa which Mark Twain fancied he was going to upset, tread the streets of romantic Venice, wander along the banks of the river Tiber, yellow with the dust of other ages, or mingle with the ruins of the Forum and Coliseum. The circling steam sluggishly floating away on the air carries with it the dreams and reveries of a saddened world. Little Cinderella at the fire-side and poor Bessie listening to the song and romance of the tea-kettle, are the miniature portraits of the great world piling in the air unsubstantial dreams. Maude Muller and the Judge are real characters seen in the harvest fields of New England, and in the drawing rooms of Boston and New York. The one with no greater emotion or intensity of will longs for the wayside wells or closes his eyes on his garnished room, to dream of meadows and clover blooms, as the other, sitting in the kitchen sees in a reverie, the Judge "gazing at her with timid grace", the tallow candle transforming itself into an astral, and the narrow, damp walls stretching away into stately halls. These are some of the stern realities which oftentimes dim the brightness of the spirit, and cause men to drift out into the dangerous oceans of human activity. We muse upon the ghosts of past possibilities and hopes, undervalue present opportunities, and allow ourselves to trample underfoot the flowers which blossom by the wayside. To a great degree we look to the evanescent things of the universe for reliable happiness. Whenever I read the beautiful poem of "Mignon Regretting Her Native Land", by Goethe, I feel a sympathy for that sweet spirit who was so lonely, amid the population and palaces of great cities. How lonely is a lone-

some heart, in stately chambers, and sculptured halls! Nature has so organized man that he loses the pleasure of what might be called *his specific gravity with the universe*, the moment he places himself, amid what seem to be unfavorable conditions. Human life is a zoological plant, as Professor Fowler used to say, that needs the proper surroundings and conditions for growth and happiness. And hence our need of interest in whatever seeks to ameliorate human life, and tends to make mankind happy. Although I believe that a great many are "unfortunately organized" yet, have no hesitancy in accepting this fact, that happiness is the very end of life. Not only are all our organs and faculties made to afford us pleasure in use, but to lead us to the ultimate consideration that, God as love, wills that we shall be happy. Phrenology has this divine mission, in the earth, to so impress men with the significance of the philosophy of optimism, which Professor Fowler, and his able contingency have maintained, is the only reliable cultus in life, that they will look forth to the day, when truly God will dry all tears from human eyes, and when sorrows will be no more. It is without a question the sublimest argument of the school of transcendentalists, such as Emerson and Olcott represent, as well as the fundamental tenet of phrenologists, as I take it, that "there is nothing good or bad, but thinking makes it so"; that love is the means to pleasure, which is the end of life and that evil, (which as generally apprehended is not a misnomer), in reality is but the law of the universe, driving home that old saw of Pope, that "whatever is is right". If the object of our being is happiness, we shall miss nothing by a wise discrimination as to what actions or conduct, will afford us the maximum of pleasure, with the minimum of pain, and it will be our study so to shape our lives; that we may keep in the path of the least resistance,

forever gravitating toward the eternal love of God. We will accept virtue, honesty, truth, benevolence, charity, duty, not as ends good in themselves, but rather as means good in their ends.

And our joy will come and never depart as we become in love with the universe, losing ourselves in God to find ourselves in bliss.

J. C. F. GRUMBINE.

STUDIES FROM LAVATER.—2.

VARIETY IN EXPRESSION AND ITS TEACHING.

Two people, with similar faces and heads, will often have similar tastes, temperaments, talents, and with certain striking resemblances of head and face will surely have striking resemblances of gifts and character. We go from the probables to the sureties. Our steps are easier, gradations simpler and surer when we go in the line of families, where children, resembling either parent, particularly in some striking feature perhaps very peculiar or prominent, do resemble that parent; often in voice, movement, step, and manner there is always a similiarity of character modified or toned, aggravated or improved by a new training, surroundings or culture, but a chip of the old block still in the granite doggedness of some imperious father, or the gentle grace of some noble mother. Do we not see it here, there, everywhere? Does not everybody recognize it in Greenland or Jericho, in Paris or Africa, in Maine or Georgia? The boy has the father's aggressive nose, and the boy is aggressive as his father was. "Always kicking up some row, stirring up some rumpus, getting everybody at loggerheads, bringing out everybody's ill feeling." I once knew a principal of a boarding school with one of these noses. I never knew a woman better fitted to bring out the belligerent in others. She said, when a girl, it was her greatest delight to walk around her father's large garden with a long stick, "touching up those queer green bugs," and making them bring out their horns, and it seemed to us girls, as she told us of her enthusiasm in this pursuit, that she had been going around the world ever since touching up everybody's

horns; if there were the least vestige of a horn, she would try to touch it up. "There is something in noses, no mistake," said a bright, uneducated man to me once; "I allays keep clear of a man with that kind of poketty, peeketty follow-up-everybody-nose. I don't like to set alongside of it in meetin', or walk the street with a man that owns it; he'd make a saint swear in a week. I'm not sure about ears and mouth," he said, "but you can't fool me with that sort of a nose. I don't care if it belongs to a



AGGRESSIVE NOSE.

deacon or parson." So we go from possibilities to perhapses, from probabilities to certainties, and having always found that sort of man with that style of nose, we have one fact at least to start from.

The illustrious German thinker, Herder, was born the same year as Lavater, and died two years after him. His love for humanity was intense, pure, passionate. "No writer," says Lavater, "who has mentioned physiognomy seems to me so profound, so exact, so clear, so

great ; I had almost said so sacred, as Herder," and these passages from his "Plastick" nearly contain the system of physiognomy in a nutshell.

"Where is the hand that shall grasp that which resides beneath the skull of man ? Who shall approach the surface of that now tranquil, now tempestuous abyss ! Like as the Deity has ever been adored in sacred groves, so is the Lebanon the Olympus of man, that seat of the secret power of the Divinity, overshadowed ! We shudder at contemplating the powers contained in so small a circumference, by which a world may be enlightened, or a world destroyed. Through those two inlets of soul, the eye and the ear, how wonderful are the worlds of light and sound, the words and images that find entrance ! How significant are the descending locks that shade this mountain, the seat of the gods ! their luxuriance, their partition, their intermingling !"

"The head is elevated upon the neck, Olympus resting upon an eminence in which are united freedom and strength, compression and elasticity, description of the present and the future. The neck it is that expresses, not what man was originally, but what he is by habit or accident become ; whether erect in defence of freedom, stretched forth and curved in token of patient suffering, rising a Herculean pillar of fortitude, or sinking beneath the shoulders, the image of degradation ; still it is incontestably expressive of character, action, and truth. Let us proceed to the countenance, in which shine forth mind and divinity.

"On the front appear light and gloom, joy and anxiety, stupidity, ignorance, and vice. On this brazen table are deeply engraved every combination of sense and soul. I can conceive no spectator to whom the forehead can appear uninteresting. Here all the graces revel, or all the Cyclops thunder ! Nature has left it bare that, by it, the countenance may be enlightened or darkened. At its

lowest extremities thought appears to be changed into act. The mind here collects the powers of resistance. Here reside the *cornua addita pauperi*. Here headlong obstinacy and wise perseverance take up their fixed abode.

"Beneath the forehead are its beautiful confines, the eyebrows ; a rainbow of promise, when benignant ; and the bent bow of discord, when enraged ; alike descriptive in each case of interior feeling. I know not anything which can give more pleasure to an accurate observer than a distinct and perfectly arched eyebrow. The nose imparts solidity and unity to the whole countenance. It is the mountain that shelters the fair vales beneath. How descriptive of mind and character are its various parts ; the insertion, the ridge, the cartilage, the nostrils, through which life is inhaled.

"The eyes, considered only as a tangible object, are, by their form, the windows of the soul, the fountains of light and life. Mere feeling would discover that their size and globular shape are not unmeaning. The eye bone, whether gradually sunken, or boldly prominent, equally is worthy of attention, as likewise are the temples, whether hollow or smooth. That region of the face which includes the eyebrows, eye, and nose, also includes the chief signs of soul ; that is, if will or mind in action. The occult, the noble, the sublime sense of hearing nature has placed sideways, and half concealed. Man ought not to listen entirely from motives of complaisance to others, but of information to himself ; and, however perfect this organ of sensation may be, it is devoid of ornament, or delicacy ; depth and expansion, such are its ornaments.

"I now come to the inferior part of the face, on which nature bestowed a mask for the male ; and, in my opinion, not without reason. Here are displayed those marks of sensuality, which ought to be hidden. All know how much the upper lip betokens the sensations of taste ;

desire, appetite, and the enjoyments of love; how much it is curved by pride and anger, drawn thin by cunning, smoothed by benevolence, made flaccid by effeminacy; how love and desire, sighs and kisses, cling to it by indescribable traits. The under lip is little more than its supporter, the rosy cushion on which the crown of majesty reposes. If the parts of any two bodies can be pronounced to be exactly adapted to each other, such are the lips of man when the mouth is closed.

"It is exceedingly necessary to ob-

carbuncled; it discovers what its rank is among his fellows. The chin forms the oval of the countenance; and when, as in the antique statues of the Greeks, it is neither pointed nor indented, but smooth, and gradually diminishes, it is then the key-stone of the superstructure. A deformity in the chin is, indeed, much to be dreaded."

Lavater says: "How does the present though concealed Deity speak in the human countenance with a thousand tongues! How does He reveal himself by an eternal variety of impulse, emo-



AN ESTHETIC BROW.

serve the arrangement of the teeth, and the circular conformation of the cheeks. The chaste and delicate mouth is, perhaps, one of the first commendations to be met with in the common intercourse of life. Words are the pictures of the mind. We judge of the host by the portal. He holds the flagon of truth, of love, and endearing friendship.

"The chin is formed by the upper lip, and the termination of the jaw-bones. If I may speak figuratively, it is the picture of sensuality in man, according as it is more or less flexible, smooth, or

tion, and action, as in a magical mirror! Is there not something inconceivably celestial in the eye of man, the combination of his features, in his elevated mien? What elegance, propriety, and symmetry through all the forms of the human body—unity in variety, variety in unity! How imperceptible, how infinite the gradations that constitute this beauteous whole! In the image of God created He him. And there he stands in all his divinity, the likeness of God, the type of God and nature, the compendium of all action, of the power

and energy of the Creator! All your heroes and deities, whatever their origin, form, or symbolic qualities, the most perfect ideal angel that Plato or Winkelmann ever could imagine, or that the waving lines of Apelles or Raphael could portray, the Venus Anadyomene and Apollo, to man these are far unequal. These with him compared are disproportionate as shadows lengthened by the setting sun. In vain would art-

There is no window, door, gateway, to the mind but through the body. "We might as well try by sitting down beside an Alpine mountain, gazing at its rocks, avalanches, and ice-covered peaks, to gain a perfect knowledge of the God of nature, as expect to read human character from the head alone. Just as God lives in universal nature the mind is diffused through the whole body. We judge of the mind not by one particular



THORWALDSEN.

ists and poets collect visible riches and powers of luxuriant nature. Man, the image of God, the essence of creation, exuberant in the principles of motion and intelligence, formed according to the council of the Godhead, ever must remain the standard of ideal perfection."

All that art has ever done, that art can ever do, is to copy closest and best the more perfect forms of real men.

part of the body, but by all. As in nature so in man, the point of union between nature and its Creator, there is what is called the law of correspondences." "As the dial is to the clock so is the human face to man. On it are written not only his mental powers, his moral strength or weakness, but also his physical capacities, powers, weakness, and predisposition to health or disease."

Says Lavater: "Intellectual life or

the power of the understanding and the mind make themselves most apparent in the circumference and form of the solid parts of the head, especially the forehead, but intellectual life, or the powers of the understanding and mind, will discover themselves also to an attentive and accurate eye in every part and point of the human body by the congeniality and harmony of the different parts."



A MELODIOUS EAR.

"The same vital powers that make the heart beat give motion to the fingers. That which roofs the skull arches the finger nail. The finger of one body is not adapted to the hand of another; each part of an organized being is an image of the whole. The blood in the extremity of the finger has the character of the blood in the heart. The same congeniality is found in the nerves, in the bones. As from the length of the smallest joint of the finger the proportion of the whole, the length and breadth of the body may be found, so also the form of the whole from the form of each single part. When the head is long, all is long or round; when the head is round or square, then it is square. The human body is a plant, each part of which has the character of the stem. One and the same spirit is manifest in all—form, stature, complexion, hair, skin, veins, nerves, bones, voice, walk, manner, style, passion, love, hatred. A man of fashion has told me that at a masquerade, with only the aid of an artificial nose, he entirely

concealed himself from the knowledge of all his acquaintance. So much does Nature reject what does not appertain to herself." One of the greatest of modern physiognomists carries out the idea of Lavater in these words: "It is not within the power of any individual to do or perform anything which does not already exist and reside in his organization. A man need not attempt to become a good carpenter or architect if he is not himself constructed on the mechanical principle, with square form and provided with large bones; he will not deal well with square objects or things, with angles and straight lines. He would utterly fail in any attempt to expend his energies in an architectural or mechanical direction. If a man would do and judge well of round work, he must himself be built on the round plan of human architecture. If a man has little color in his organization, thousands of pounds may be vainly spent in trying to teach him to paint. Color is shown sometimes by a decided color of the eyes, skin, and hair. It is also shown in the arching of the center of the eyebrows, as seen in the face of



DULL EAR.

Guido Reni. Persons that are color-blind almost always have a depression of the eyebrows at the center. This central arching of the eyebrows is often an inherited feature, transmitted from ancestors who have cultivated their sense of color in different trades or professions. You see it in poets of vivid imagination, as in the pictures of Longfellow; his eyes were cerulean blue,

and his face had a flesh tint conspicuously bright and beautiful. You see this central arching of the eyebrows in the faces of artists whose paintings are rich in color. A Boston artist, famous for his glowing sunsets and striking marine views, has this contour; so has a Brooklyn artist I know, who has a life-coloring in her pictures; she likes a trace of color in everything dull and dark in life. You see in her face the roundness and size of the muscles of the eye and its orbit, and the arching of the eyebrow, increased, perhaps, by the raising of the lid and brow constantly,



SIR WALTER SCOTT.

as all artists do in their work. An eye comprehending a long range, and taking in everything beautiful at a glance, will be found invariably to stand out from its socket, thus turning conveniently within a great visual range. Many musicians have round ears, round noses, and round, muscular bodies. The round or rounding ear set out from the head asserts more of the passing musical waves, and conveys them with more force to the *tympanum* or drum of the ear, and it also conduces to musical judgment. Flat ears are unmusical and generally dull of hearing. A good

musician should have both ears alike, round, thin, and standing well out from the head. Musical ears are generally red, because the vibratory motion with which they so readily respond to the waves of sound draws the blood to the surface of the organ. All round-eared animals love music, while long eared animals are indifferent to or dislike it. The muscular system is mainly instrumental in producing sound, as the larynx, where sound is originated in the human voice, is composed of muscles and ligaments; the bones have no part in producing sound. One element of sound is its waved or curved motion, therefore muscle is best adapted to the giving forth and receiving of sound. Men built on the tall, slim plan are agile and sprightly. Lavater calls this strength of tall, slim persons elastic strength. General Washington was built on this plan. It is said that he was an excellent runner, and could jump twenty-two feet at a single bound. So there was no more industrious, quick-motioned man in the American army than General Sherman, tall and slim; and so is Weston constituted, well-known as America's rapid walker, walking 112 miles in less than 24 consecutive hours.

Animals and men with long, slim, pointed noses are formed on the active plan in every department of their nature and bodily build. Animals and men of similar conditions have similar qualities; those on the broad plan are strong, on the long and narrow build are agile. The best men often remind us of some noble animal. I can see in the face of Sir Walter Scott a striking resemblance to a noble Newfoundland dog. This noble man and the noble animal have alike a great memory, sagacity, patience, and forbearance, strong affection and great endurance; one so long stemming the tide of misfortune to save his name and home, and the other so often stemming the overwhelming waves to save some struggling child.

Each frequently repeated change of form and state of the countenance, says Lavater, impresses at length a durable trait on the soft and flexible parts of the face. The stronger the change and oftener repeated, the stronger, deeper, more indelible is the trait. The like impression is made in youth on the bony parts. An agreeable change by constant repetition makes an impression on and adds a feature of durable beauty to the countenance.

A disagreeable change by constant repetition makes an impression on and adds a feature of durable deformity to the countenance. A number of such beautiful changes, when combined, if not counteracted, impart beauty to the face, and many deformed changes impart deformity. Morally beautiful states of the mind impart beautiful impressions; these, if incessantly repeated, stamp durable expressions of beauty on the countenance. The whole countenance, when impassioned, is a harmonized combined expression of the present state of mind. Frequently repeated states of the mind give durable traits of deformity or beauty impressed upon every part of the countenance.

The true beauty and deformity of the countenance is in a just and determinate proportion to the moral beauty and deformity of the man.

The morally best the most beautiful.

The morally worst the most deformed.

There are lines of beauty of soul in the face that are more excellent, more expressive, more noble, than those which are more corporeal. How often we hear, "She is a handsome woman, but her face is very disagreeable to me." "People call him an ordinary man, but he grows handsomer to me every day."

On a dark brown background what beautiful flowers Nature paints. So on a plain face how the soul blossoms forth, sparkling with thought's dew-drops! There are pink and white faces with china doll blue eyes, but no soul illumining them, and we tire of them. They

are like a highly polished stove, with elaborate nickel ornamentations, but no fire in it on a cold December day. We all keep a directory of faces in our hearts, we know where to find our comforters, tormenters, or helpers. One may inherit regular features or fair complexion, but by bad associations or disagreeable habits of thought may grow to be hideous in our eyes. One with the plainest features may have so cherished and loved noble thoughts that the face to us may be lovely and attractive. How precious these handsome homely people are! They fascinate us like sunshine on a rugged mountain cliff. On one of these soul-illumined faces a child will look steadfastly and with pleasure, and



LONGFELLOW.

turn away and violently begin to cry, when one of these fair and more regular faces without the soul enkindling, tries with blandest smiles and softest tones to win its answering smiles.

A baby is often a good physiognomist. I have seen a baby of three months look with as much rapt enthusiasm at a bunch of pinks held before it as ever painter gazed at an Italian sunset, its whole little frame thrilled with enthusiasm, swaying backward and forth, and its eyes dilating with wonder and admiration. A gorgeous sunflower could not gain the child's heart and eye as these dainty, delicate, rose colored pinks. Faces with soul in them are like flowers with perfume. "How grand was Lincoln's plain face with

goodness, beautiful with tranquillity the countenance of Washington, majestic with Titanic strength the face of Webster." Who that ever saw Longfellow in his own home could help seeing in the sincerity and humility of his face the humility and nobility of his nature? His face was a positive index of his character, its rugged lines showing great

firmness and intelligence. His was a poet's soul shining through a face "glowing with a beautiful carnation more suggestive of youth than old age." How often have we seen the faces we love best at our own fireside, faces grow suddenly beautiful when glowing with some noble thought or tender emotion.

LYDIA M. MILLARD.

THE PSYCHIC SENSES.

"The outward doth from the inward roll,
And the inward dwells in the inmost soul."

THE physical senses are not the limit of the universe around us, but they are the limit of our animal life.

We live strongly possessed by the illusion that our visible world and bodies are the great essentials; the most important matter in the universe and life. Through the grosser, visible elements of our organisms we are brought into conscious relation with the grosser elements and powers of the world about us. But what of the unseen elements and forces? Science already assures us that we even now possess an embodiment of ethereal, unseen matter; that by far the greater part of our bodily organism is constituted of this invisible matter. Thus we are growing and developing organs and senses within and around those grosser ones that we know and consciously use. This invisible part or body of our organism is related to our grosser seen body and life, much as the insect form within the chrysalis is related to the old, dying pupa case. Remember, then, that while we consciously live in and through the visible forms we wear, we are unconsciously growing and developing organs and senses in a more ethereal form, that rest upon and folds about our visible one, even here building up a more perfect organism for higher existence. Every human soul has possibilities within it for unfolding, and we are to measure every man and woman by what they are capable of doing. We are living in two spheres here and

now, in the midst of trial and discipline. There is a material, and there is a spiritual, magnetic, or nerve-projected body which occupies the material body during life, and gives it all the sensation and life which it has. The dissolution of these two bodies we call death.

The fundamental laws of the two worlds, spiritual and material, are united in man; and can only be studied in him and by him; since he alone possesses the properties of both. Recognizing the fact that we live now in the internal, and also in the external, as the starting point of physical and psychic philosophy, and you are in the focal point of light. A number of facts in the history of mankind demonstrate the existence of powers in the human mind, which transcend the ordinary processes of sensation, perception, and reasoning. There are psychic senses that are reached partially through the physical senses. These senses include intuition, clairvoyance, clairaudience, prevoyance, and the psychometric faculty, which are latent in every soul, and become manifest in proportion to the spiritual development. The existence of such powers has been demonstrated more clearly and made more familiar by the experiments of magnetizers, which have proved the existence of clairvoyance, clairaudience, prevoyance, and mental or magnetic sympathy, as powers common to the human race in the somnambulist state. All mental action comes through nervous action, and all mental operations are physically conditioned. Lucidity is

no gift, but a universal possibility of the race. It is latent, or still mind power. Clairvoyance is an art like any other, its elements exist, but to be useful must be systemized. Clairvoyance is a term employed to express various degrees and modes of perception by which we know facts, things, etc., without the use of the ordinary avenues of sense. Psychometry is a nervous sensitiveness, whereby the subject comes in magnetic contact with the peculiar material, emanations, or sphere, given off from every person or object in existence. Intuition is the effortless, instantaneous perception of facts and results; the difference between these faculties is that the first *sees*, the second *feels*, and the third *knows* instantly.

We have no consciousness of how we think in relation to the brain, or of the circulation of the blood, or of digestion, or any other mechanical action of any physical function. We are still in foetal life in regard to *how* we do these things; it is simply instinct. Life is the mechanical action of the soul on matter. The brain is the center of man, both psychical and physiological. The soul acts through the brain, giving mind or intellect, and through that on the body. The brain is the instrument of the mind, through which it acts on other minds, and reveals their presence to our senses and reason. The body is the soul's instrument of action on external nature.

The soul is an entity, which possesses an infinite capacity to receive. Its attributes are perception, sensation, and passion, and it exists *not* without them. The soul is a relativity of the attributes of consciousness. Magnetism is also one of the unseen forces of nature. All being is the basis of *phenomena*, and its qualities and attributes are infinite. Unfoldment is the power expressed by the action in differentiation of motion in the molecules of the brain, ever changing, ever progressing. The *mysterious*, which is continually taking place around

us, is but the exercise of those faculties which belong to the soul, and are not dependent on the body for their exercise. Development of the soul, or psychic senses, stimulates the mind to the largest investigation and freest thought on all subjects, and gives spiritual sight and knowledge, independently of the material avenues of sense. Great discoveries, in any branch of science, are the result of inspiration, an influx of ideas from the higher realm of life and intelligence, light from above.

Thought is an internal sight or vision. To know and to see spiritually are identical. The efficacy of thought-forces on the outward plane will be in proportion to the soul power of him who generates these elements. The invention must become a living image in the mind of the projector before it can be created in such form as to be visible to other minds.

These wonderful powers of humanity lie at the junction of the spiritual and material. There physiology blends with psychology, there man is connected with God, the limited and gross with the limitless and immaterial. Mind does not connect with the whole body in mass directly, but communicates with it through the brain. It connects not with the whole mass of brain directly, but with a particular central portion, from which it irradiates the whole; as the brain is to the body so is this region to the whole brain, the source of mental life; the sun which illuminates the whole. The center of intellectual consciousness is the interior center of memory. The region of intuition is located on the median line of the forehead, extending from the root of the nose to the lower edge of comparison, at the interior edges of the front lobes of the brain. The lowest portion is the region of physical clairvoyance, the middle of mental clairvoyance; the highest is the region of prevoyance or prescience. The central portion gives the power of recognizing mental conditions, or mental action,

the power of thought-reading. When these powers are exercised in the somnambulist condition the lower part capacities for the description of places or

persons, the middle for the perception of character, design, or emotion, the upper for prediction.

M. J. KELLER.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

FRANCIS JOSEPH GALL.

NEW YORK, Oct. 3rd, 1889.

BE it known that we, the assembled students of the American Institute of Phrenology, realize the need of a concise manual of biographical sketches of the leading phrenologists of the world, of all times, and that we believe Mrs. Charlotte Fowler Wells to be possessed of all essentials to the writing and compilation of such work, therefore

Resolved, That we hereby request and pray that Mrs. Charlotte Fowler Wells prepare, at her earliest convenience, the desired manual, and that the same shall contain her autobiography.

The above resolution was unanimously adopted.

Committee { R. O. DIEUIS,
D. H. CAMPBELL.

In response to the above request Mrs. Wells will prepare sketches, to be published in the PHRENOLOGICAL JOURNAL, commencing with Dr. Gall, who discovered the science, and who, although he did not claim to have perfected its arrangement, put it in such a form that others might take hold of it where he left off, and carry it on toward its best condition. Others had discovered that the brain was the organ of the mind, long before Dr. Gall's day, but it was original with him, and he reduced his discoveries to a useful and practical science.

C. F. W.

Francis Joseph Gall was born March 7th, 1758, in the village of Tiefenbrunn, in the Duchy of Baden in Germany. His father was a merchant, and mayor of the village. His parents being Roman Catholics had intended him for the church, but as his inclinations ran in quite a different direction he chose the

healing art as his profession. His literary education was acquired in his native village at first, and continued at Baden, at Brucksal, and at Strasburg. Vienna being more noted for its medical school than any other of the German speaking cities, he decided to pursue his medical studies there, and when in his 23rd year he went to that city in 1781, and after he had completed his studies settled there, and commenced practice as a physician, in which he gained an excellent reputation, had access to all its public institutions, and was thereby furnished the best opportunities for studying the characteristics of abnormal and peculiar persons. He appreciated and embraced the advantages thus afforded for accumulating facts in substantiation of the new study of mind and human nature that had begun to unfold to him. After an earnest investigation, covering a long series of years, he gave his first lecture in Vienna, in 1796. He gained many converts, and many came to controvert his philosophy, but could not gainsay the facts and illustrations, for, as great minds run in the same channels, so Bacon and Gall adopted the plan of *facts first*, then conclusions or deductions from the facts, and his opponents were theorists without his substantial foundation. The adoption of his new philosophy would necessarily require the abandonment of their own theories, which was very hard for them. Boardman says:

"The truths of Phrenology had always existed but had never been clearly recognized till the coming of Gall. He gave himself to their reception with singleness of heart, and to their transmission with unparalleled ardor. The father of Phrenology

threw down the accumulated superstructure of ages, cleared away the rubbish, laid the foundation of the new temple broad and deep, and reared by far the greater part of its massive walls and its everlasting towers. He demonstrated the unsatisfactory nature of all existing explanations of mental phenomena, and of the functions of the brain, and the true method of investigating such phenomena and such functions. He alone established all the great fundamental principles of Phrenology. He discovered three-fourths of all the organs yet known. He discovered and developed the natural language of the organs. He pointed out, in a general way, the applications of Phrenology to insanity, education, and jurisprudence. He indicated the mode in which men and the organs might be classified, and in which investigations should be continued. Finally, he discovered the great leading facts concerning cerebral structure; in developing which, those who followed him had merely to pursue the same course. Truly did he himself remark that 'The foundation of this useful doctrine is established, and it should be as firm as the facts, the materials of which it is constructed. But I am far from believing that the edifice is finished. Neither the life nor the fortune of one man can be sufficient for this vast project.' I think it can not be shown in the annals of the human race, that any man labored more assiduously, or more successfully, than did Dr. Gall, or that any man ever presented to his race so rich a boon."

Gall's lectures, the zeal manifested in the presentation of his new philosophy, his rapidly increasing popularity drew the attention of all classes toward him, until finally fear and envy marked him for their prey, and a man who was indebted to Gall for the high position which he occupied, returned that kindness by endeavors to injure the man to whom he was thus indebted, and being continually near the person of the emperor he represented that the doctrines taught by Gall were inimical to religion. The final result of these misrepresentations was, that after Gall had, for more than five years, been teaching and lecturing in Vienna, the Austrian govern-

ment, on the 9th of January, 1802, issued an edict, in the form of a general regulation, prohibiting all private lectures, unless a special permission was obtained from the Public Authorities. Gall knew that this edict was pointed at him, but he would not seek that permission from the Public Authorities; he refrained from lecturing. This edict served to draw still more attention to him and his science; he had more inquirers, and made more converts, acquired new facts, and made more rapid progress. Thus we see that opposition to *truth* is its greatest aid to advancement, and verifies the adage about "blessings in disguise." He continued his practice as a physician, but sent a Petition and Remonstrance to the Emperor of Austria, in which occurs the following:

"3. To this perilous injury to my reputation, involving the loss of all the advantages arising from the hard earned confidence of the public, must be added a consequence deeply affecting my interest. My collection of plaster casts—of the skulls of men and animals, and of the brains of men and animals, in wax—have cost me about *seven thousand gulden*, ; and I have already made very expensive preparations, exceeding the amount of *fifteen thousand gulden*.* for a splendid work on the functions of the brain, which has been universally demanded of me; this property will be rendered useless by destroying my reputation."

Elliotson says of him:

"Till Gall established himself in Paris, and rose to a very fine practice (he was physician to many ambassadors), he kept himself poor by spending, upon his phrenological pursuits, all he gained, after absolutely necessary expenses. And although he lived then in the most private manner, with the comforts, indeed, of a handsome lodging, a carriage, and a garden with a small house in the suburbs, he had saved so little, that had his illness been protracted, his friends, in a few months, must have supported him."

After the Austrian edict against Gall's

* A gulden is something less than fifty cents in American money.

lectures, his petition, with its remonstrance to the Emperor being not granted, he was forced either to cease his labors, or tear himself from friends, home, and a rich and extensive practice. He, however, pursued his usual course in Vienna for three years under these depressing circumstances, sometimes struggling with them, and at other times rejoicing at unexpected successes.

John Gaspar Spurzheim became an interested inquirer and student. He was also a medical student in Vienna, and became an excellent anatomical surgeon, and in course of time became Gall's assistant giving demonstrations in the dissection of brains, while Gall gave a description of the same. Thus they worked together. Dr. Gall had a hospital patient in whose case he was much interested—a hydrocephalic case—and “which led to the discovery of the unfolding of the brain.” She was a small woman, and “in spite of her hydrocephalus, appeared to have intellectual faculties in no respect inferior to those generally possessed by women in her station.” Her head was so large that Dr. Gall thought it must contain at least four pounds of water. Her death occurred in her fifty-fifth year, and he found, in fact, more than four pounds of water in the cerebral cavities, which had distended the superior portion of the brain to a smooth and thin surface, instead of a mass of corrugated convolutions. Taking it to his home, he and Spurzheim spent the evening in its study, and to the inspiration then obtained we are indebted for this important anatomical lesson. Previous to this discovery it was supposed by anatomists that the acidity of the water liquified the brain.

In the struggles with opponents to his views Dr. Gall met with the same inability to understand the plain truth that still exists. They quoted, as from him, opinions which he did not convey, and then demolished those opinions. That same class of minds still exists, and

about once a year we read from some (so-called) “science” magazine, a long disquisition on Phrenology, and using these same misquotations, imputing them to Phrenology or phrenologists, if not directly to Dr. Gall, but they *always* fail to give the chapter and verse, or the volume and page of the quotation. I once heard a lecture of this kind before the American Association for the Advancement of Science. The lecturer told us about the “Old Phrenology,” which he demolished, and then gave an account of recent discoveries by savants by means of vivisections which made a very different science of what he called the New Phrenology. Later, an opportunity was improved to say to him that no phrenological advocate had ever given voice to the views he had credited to the Old Phrenology which were only “a man of straw,” built from the unbelief of opponents.

Dr. Gall, by both pen and voice, corrected these errors, but the opponents never quote his replies. Why? Is it because it is so hard for one to acknowledge one's self in an error, or is it because *another* has advanced the new truth?

Dr. Gall said :

“Everywhere, those, whose judgment the confiding public awaits, not only attribute to the author of a discovery the absurdities of their own prejudice, but even renounce truths already established, as soon as they are opposed to their ends, and resuscitate exploded errors, provided they will serve to ruin the man who allows them their due weight.

Such is a faithful picture of what has happened to me. I have, therefore, some reason to be proud of having experienced the same fate as the men to whom the world is indebted for so great a mass of knowledge. It would seem that nature had subjected all truths to persecution, in order to establish them in a more solid manner. History shows us that all the efforts and all the sophism, directed against a truth once drawn from the abyss, fall like dust, raised by the wind against a rock.”

In his works, Gall gives the history of the discovery of every organ he named, as follows: 1 Amativeness, 2 Love of Young, 3 Attachment, 4 Propensity to oppose, or Combativeness, 5 Propensity to injure, or Destructiveness, 6 Secretiveness, 7 Acquisitiveness, 8 Self-esteem, 9 Love of Approbation, 10 Cautiousness, 11 Educability (afterward

Wonder. He also considered it probable that there were organs for love of food and for senses of Order, and Time, and love of Home,

"He has been censured for not arranging and systematizing his views and discoveries, but with the foundation, which he laid and the facts he collected, it was easy to erect the edifice. It was believed by the



FRANCIS JOSEPH GALL.

discovered by Spurzheim and the Edinburgh phrenologists to be compound, and to include the organ of Individuality and of Eventuality), 12 Locality, 13 Form, 14 Language, 15 Color, 16 Tune, 17 Number, 18 Constructiveness, 19 Comparison, 20 Causality, 21 Wit, 22 Ideality, 23 Benevolence, 24 Imitation, 25 Veneration, 26 Firmness, 27

faithful followers of Mohammed that, a stone already hewed and fitted for its place in the temple of Mecca, came from every mountain in the world. So with the phrenological organs. All at first seemed confused and unrelated, but gradually they grouped themselves together each in its proper place and formed before the admiring eyes of the great investigator a system of wond-

rous harmony and of matchless symmetry and beauty."

After Dr. Gall's lectures were closed in Vienna by the Edict, he continued his medical practice, and added to his storehouse of facts connected with the study of the brain. As a physician to the public institutions, asylums for the insane, prisons, hospitals, and schools he saw many phases of character represented both normal and abnormal. At length a letter from his father, on the first of January, 1805, induced him to travel and lecture, and he thus expresses himself, upon the results of these travels.

"Moreover it is impossible that these men should not understand what immense advantages we must have derived from our travels, without which, my doctrine would never have been thoroughly known out of Vienna." "My travels have in fact, advanced this science in a few years, more than the best written books would have done in as many centuries."

Can we ever fully appreciate that boon for which we are indebted to the inquiring mind of Dr. Gall? In an account of the manner in which he was led to the study of the talents and dispositions of men, and which resulted in the formation of the phrenological system Dr. Gall gives us an insight to the many struggles through which he had to pass.

Scientific men and associations were curious to learn his new theory, and finding that if they admitted what he claimed they would have to acknowledge an error in their own, endeavored to silence him by one means and another. Some published books and others lectured with a view to counteract his teachings, but in so doing they usually failed to quote him correctly and thus laid themselves liable to a gentle scathing from his trenchant pen. He felt called upon to fight for the *truth* of his declarations.

As previously intimated, Dr. Gall experienced the force of the adage about blessings being sometimes disguised, for, after his lectures in Austria were inter-

dicted by the government, he found more listeners in private, more inquiries, and more progress than before. We know that opposition often draws attention, and hence, in a good cause, gains adherents. Look at his likeness and judge whether such a head and body would be likely to accept or adopt a theory without investigation; and the more he studied the more thoroughly he understood his subject and became better prepared to meet and dethrone opposition.

The following is the description of him given by his biographer :

"The person of Dr. Gall was well developed; he was five feet three inches and two lines in height, with a large chest, and strong muscles; his step was firm, and his look vivid and penetrating. His features, though not handsome, possessed a mild and pleasing expression. Every part of his head was strikingly developed, measuring, above the eyebrows and at the top of the ears, twenty-two inches and two lines (or twelfths) in circumference, and fourteen inches and nine lines from the root of the nose to the occiput.

"Many people in Paris called him selfish. He was not generous in the common understanding of the term; but it must be considered that in his domestic economy he failed in method, and consequently was always pressed by unforeseen and urgent wants. If he were selfish, let me ask what kind of selfishness it was? He educated and supported his nephews, and other young people of talents, and his table was free to everybody. We may say he had a love of property, but that his intellectual powers placed him above its control.

"Another faculty which he possessed in a remarkable degree, was that of elevation, pride, or high opinion of one's self. * *

* In describing the organ of self-esteem he has delineated himself. 'There are certain men,' says he, 'with minds sufficiently strong, who are so deeply impressed with a sense of their own value, and so independent withal, that they know how to repel every external influence which tends to subject them. As far as practicable, they choose the freest countries to live in, and

devote themselves to an employment, that renders them independent and exempts them from the caprices and favors of the great. That domination over their inferiors which becomes slavery under an absolute master would be insupportable to them. The honors and distinctions that are withheld from merit while they are lavished on insignificant men are but humiliations in their eyes. If they prosper it is only by their own efforts; like the oak, they are sustained by their own strength, and it is to their own resources that they would be indebted for all they possess.' He was, in fact, proud and independent. He never was anxious for titles. As a political man he loved liberty and good laws.

"There is another sentiment, vanity, ambition, love of glory, approaching the preceding in its nature, but still quite distinct from it, which was feeble in Dr. Gall. We always observed him to be indifferent to the praise and approbation of the multitude, as he was also to their blame and ridicule. He labored for the love of science, and under the impression that his ideas would triumph in the end."

In speaking of the application of general principles, Gall says:

"We shall find many difficulties with regard to human skulls; you know how every one fears for his own head; how many stories were told about me, when I undertook such researches. Men, unhappily, have such an opinion of themselves, that each one believes that I am watching for his head, as one of the most important objects of my collection."

That was the result of his efforts to obtain the privilege of examining the heads of those who died, if, while they were alive, he had observed a peculiarity in the form of their heads or in their character.

"When any discovery or new doctrine is announced, the question is usually asked, how the author conceived the first idea. Although the same experiments may not lead different individuals to the same meditations, yet when these same experiments are collected and presented in order, they give rise to ideas in the mind of the reader so analogous to those of the author, and the

discovery often appears to him so natural an event, that he is ready to exclaim, 'Why had I not made it long since?'

"This is precisely what has happened with respect to my doctrine, the origin of which rests on very ordinary facts. Most of those who have heard my lectures have said to themselves, and I doubt not but most of my readers will say likewise, 'How is it possible that these truths have been so long overlooked?'

"From my earliest youth I have lived in the bosom of my family, composed of several brothers and sisters, and in the midst of companions and schoolmates. Each of these individuals had some peculiarity, talent, propensity, or faculty, which distinguished him from the others. This diversity determined our indifference, or, our mutual attraction and aversion, as well as our contempt, our emulation, and our attachments.

In childhood we are rarely liable to be led astray by prejudice; we take things as they are. Among our number we soon formed a judgment who was virtuous or inclined to vice; modest or arrogant; frank or deceitful; a truth teller or a liar; peaceful or quarrelsome; benevolent, good, or bad, etc. Some were distinguished by the beauty of their writing, some for their facility in calculation, others by their aptitude to acquire history, philosophy, or languages. One shone in composition by the elegance of his periods; another had always a dry, harsh style; another reasoned closely and expressed himself with force. A large number manifested a talent or a taste for subjects not within our assigned course. Some carved and drew well; some devoted their leisure to painting, or to the cultivation of a small garden, while their comrades were engaged in noisy sports; others enjoyed roaming the woods, hunting, seeking birds' nests, collecting flowers, insects, or shells. Thus, each of us distinguished himself by his proper characteristic; and I never knew an instance, where one, who had been a cheating and faithless companion one year, became a true and faithful friend the next. The schoolmates most formidable to me, were those who learned by heart with such facility, that, when our recitations came, they took from

me the honors, which I had gained by my compositions.

"Some years afterward I changed my abode, and I had the misfortune still to meet individuals endowed with a surprising facility for learning by heart. It was then that I remarked, that all these resembled my former rivals in their large, prominent eyes. Two years afterward I went to a university; my attention first fixed itself on those of my new fellow students, who had large, prominent eyes projecting from the head. Such generally boasted of their excellent verbal memories, and though in many respects by no means the first, all of them had the advantage of me, when the object was to learn promptly by heart, and to recite long passages with correctness. This same observation having been confirmed to me by the students of other classes, I naturally expected to find a great facility of learning by heart, in all those in whom I should remark the prominence of the eyes. I could not believe that the union of the two circumstances which had struck me on these different occasions, was solely the result of accident. Having still more assured myself of this, I began to suspect that there must exist a connection between this conformation of the eyes and the facility of learning by heart.

"Proceeding from reflection to reflection, and from observation to observation, it occurred to me that, if this kind of memory were made evident by external signs, it might be so likewise with other talents or intellectual faculties. * * * By degrees I thought I could flatter myself with having found other external characteristics which were constantly met with in great painters, musicians, mechanics, and which consequently denoted a decided propensity to painting, music, the mechanical arts, etc.

"I had, in the interval, commenced the study of medicine. We had much said to us about the functions of the muscles, the viscera, etc., but nothing respecting the functions of the brain and its various parts. I recalled my early observations, and immediately suspected, what I was not long in reducing to certainty, that the difference in the form of heads is occasioned by the difference in the form of the brains. But I never went so far, as to imagine that the

cause of the moral qualities or the intellectual faculties resided in such or such a place in the *bones of the cranium*.

"Was it not, then, very natural to expect, that in discovering and demonstrating, in men, endowed with remarkable propensities or talents, the existence of some external signs of their qualities, this discovery would lead me to a knowledge of the functions of the brain, and of its parts? The hope of having it in my power to determine, some day, the relation of the moral and intellectual forces with the organization, the hope of founding a physiology of the brain, was so powerful an encouragement, that I could not but form the resolution to continue my researches, until I had attained my end, or was convinced of the impossibility of reaching it.

IN SEASON.

WHY doth the sweet rose pale and die
And the rare red leaves drop away from the stem?

You do not answer, then must I,
I have found the reason—and this is why
The June days fade and the rose with them.
We tire of seeing the self-same flower,

And noting its bloom;
'Twere better to die, and fall in its tomb,
Than to live one hour

After its beauty and rich perfume
Have ceased to awaken our finest sense.
The warm red leaves and heart intense
Have burned out the length of their beautiful days;

There are thousands of roses more to come,
And in various ways
Elicit praise,

When this one goes to her natal home.
This is our life;

And we need not mind if we pass so soon—
'Tis better to die in the flush of noon,
In the heat and strife,

And to fall like the rose in a timely tomb,
And give our place to a warm new bloom,
Than to faint and lag
And hang like a drag
On the wheels of the world.

For the world must move. She can not wait,

With her great sails furled,
While you and I,
Deigning to try,

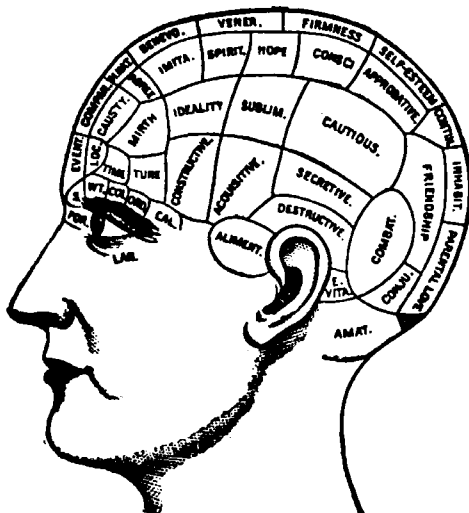
Finish the work we began too late.

ALMEDA COSTELLO.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



MENTAL MECHANISM.—No 6.

HOW FACULTIES WORK TOGETHER.

THE squirrel employs Secretiveness to hide away his stores, and this is a blind instinct which impels him to do that naturally, without experience and without logic. I had a tame gray squirrel in the house which was taken from the nest before his eyes were opened, and was raised by hand. It amused us, when a dish filled with walnuts was set on the floor, to see him look them over and determine which were good, and if there was a poor one in the lot, he would throw it out. He would take a good one in his mouth and gallop around the room till he found a place where he could hide it, or bury it. It would be perhaps, under the foot mat, or the edge of the carpet, between the nails. He would show wonderful skill in pulling up the carpet with one paw and putting the nut in with the other. Then, he would pretend to dig earth over it, as if he were in the open fields,

which he had never seen. He would hide a nut under my coat collar, down the back of the neck, and when he had disposed of a pint of walnuts in that way, in many different places, he would take the last one and run up on some elevated place and deliberately eat it. If he wanted another, he would go around the room until he had found one he had buried and pick it out and repeat the process of eating it. He had seen no squirrel steal another's food. The nuts had never been hidden away from him. He always had plenty, yet, he would hide them as if he were in the forest. Caution makes one afraid. Secretiveness suggests stratagem to get out of or avoid danger. The opossum if suddenly surprised will pretend to be dead, or if beaten, it will act as if it were dead, and if carried home by the hunter, he may be thrown down in the yard, his nose turned up to the sun, and he will lie there half an hour, or until he sees a chance to escape, and then "make his disappearance."

"If a big dog is met by a little one, and the latter cannot make his escape, he will lie down in a helpless way on his back and by his very weakness disarm the possible inclination of the big dog to molest him; and, if unmolested, he takes the earliest opportunity to depart. If the small dog were then to meet his equal, his Approbativeness, which joins secretiveness, and cautiousness, would combine with Combativeness and lead him to strut and threaten and growl and raise the tuft of fur on his neck, as much as to say, "I am able to meet you. It would be better for you to avoid a conflict," and so these dogs will walk around each other and strut

and growl, and try to show off their greatness. If a dog as large as two of them should come on the scene, they would instantly crouch and be humble in his presence, and thus disarm his fierceness. Thus, faculties work with each other and one excites another to activity. One seems to enforce and encourage the action of another, and they supplement one another, as notes in music, or as the parts of a structure co-operate and make the complete whole. Every faculty seems capable of assisting the other faculties, sustaining them in their efforts and making up the characteristics of joy and pleasure. In the "Human Nature Library," the number XI, is devoted to Approbativeness, it is shown how a man's happiness is enhanced by the co-ordinate action of each faculty with Approbativeness. Those who are studying phrenology, or who would learn how the faculties can combine and assist and sustain each other would find in that exposition a very full and interesting elucidation of the subject.

Approbativeness is proud of the conquests of love. It is happy when children are developed into playfulness and wit. Approbativeness rejoices in the home and conveniences and comforts. Courage gives it security, and men are ambitious to serve others with strength, skill and power as they are to win any other achievement. When two chickens have a fierce conflict for the mastery and one has come off the victor, it does not take him long to flap his wings and crow, and then they go at it again, and sometimes, the one that was at first apparently defeated becomes the master, and he crows and rejoices in the success of his combat.

Men through the activity of Approbativeness boast of their acquisitions of money and success in business matters. Acquisitiveness furnishes the occasion for ambitious pleasure. Alimentiveness leads some to boast of how well they live at the table, or how much they can

eat, or drink. And so, every faculty can foster the pleasure which Approbativeness gives to the other faculties, and can work with Cautiousness, with Acquisitiveness, with intellect and with Benevolence.

Some think it strange that the faculty of cruelty, or Destructiveness can manifest itself with Benevolence, which is the sympathetical and kindly element of human nature. Destructiveness is not always exercised in extermination. It aids very much to give a man strength and force to overcome the impediments which lie between himself and the object of charity. More than fifty years ago, I saw two men, in a blizzard, travel a mile in the height of the storm, when the snow was waist deep and the temperature dangerously cold, each with a bag of provisions for a poor old man and his wife, who lived at a distance from neighbors, and were supposed to be out of provisions. Occasionally they would stop and look back and measure the distance they were from home, and think of the distance they had yet to go and the weary labor they had undertaken, and then Destructiveness, or executive force would rise and help them move onward until they reached their destination, and found as they had expected that the aged people had eaten that morning the last of their provisions, and were wondering if the end were to come. Other men had pity for the poor old couple, and doubted if they had food or fuel, but they lacked the Executive energy to conquer the difficulties and go to their rescue.

In fact, most of the faculties are set over against each other, not exactly as antagonists, but as co-operative energies, as there are two opposing sets of muscles, one of which flexes the arm and brings it up to hit, and another set of muscles being on the other side to extend the arm, as in giving the blow. There are some horses that in traveling lift one hind foot very high. The nerves which operate the muscles that

lift the leg are strong and vigorous, but the nerves that operate the muscles which are on the other side of the leg and that hold in restraint and steady its lifting, and naturally hold it to harmonious action, are weak, and the singular action and mode of action is called spring-halt, or string-halt. Some mental organizations in like manner, have force that makes a rush, but, they lack the prudence to regulate, and without that prudence they are reckless and rash in their action. Some men have too much Caution without force, and they stand in their tracks and let danger run them down. Some animals become so thoroughly paralyzed by fear that they fall, and it takes them some time to muster courage and move. I have come upon rabbits in the field, or forest, so suddenly, that they would jump right up and down without making any progress. After awhile they would come to themselves and make tracks in a straight direction towards safety.

Character in its best condition, requires the harmonious action of all the faculties. When one has great Combativeness with little intelligence and less prudence, he is always in hot water. Others are so prudent and so lacking in courage that they are always hesitating, pondering and thinking, and are comparatively worthless. So, character means the combination and harmony of diverse forces.

"These mixed with art, and to due bounds confined,

Make and maintain the balance of the mind;
The lights and shades, whose well accorded strife

Gives all the strength and color of our life."

—:O:—

If we would know the truth of ourselves, we must interrogate Phrenology, and follow out her teachings, as we would a course of religious training, after we had once become satisfied of its truth. . . . The result of my experience for something over two-score years is this: that Phrenology is a revelation put by God himself within the reach of all His intelligent creation, to be studied and applied in all the relations and in all the business of life.—Hon. JOHN NEAL.

ECHOES FROM EXAMINATIONS.

W— C—, Minn., July 15, '89.

To MR. NELSON SIZER :—Dear Sir :

SOME sixteen years since, I received from you a description of my organization, physically, mentally, and morally, coupled with advice in regard to the proper mode of living, occupation, and so on. Among other things, you advised me to work at the carpenter's trade, and also, that I would make a good phrenological examiner. Well, I have acted on that advice, have followed the carpenter and building business since, and in the mean time have studied and practiced Phrenology among my associates and acquaintances, but not for pay, but for practice and study, and have often been told that my descriptions of character, as developed by Phrenology, agreed with that of many of the traveling professors of the science.

This is to show you what you have done for me, and also to express my deep gratitude and sincere thanks for timely and needed advice, at a time I did not *know* what to go at.

Having got hurt last winter—two ribs and an arm broken—and not being able to continue working at my trade, I have concluded to adopt Phrenology as my sole business hereafter. I did intend to come to the Institute this fall, but shall not be able to close up my business before October. If the Lord permits, I shall come at the next session.

There is this that you can depend upon, that I shall strive to use every influence in my power to make mankind purer and happier, by teaching them temperance, moderation, and purity in morals and conduct, and uprightness before God and man ; and to the young, to wholly abstain from tobacco, and everything that can intoxicate, as well as the many questionable habits that ruin both body and soul.

Besides using my eyes and ears on the living subjects, I shall endeavor to employ my leisure moments in studying

the works of those who are authority in these matters. Hoping I may see the time that I can receive from your lips, and those of your associates, the words of wisdom, truth, and experience, I close, praying that the blessing of the living God may rest upon you and those with you, now and forever.

D— G—.

—:o:—

MUSKEGON, Mich., July 5, 1889.

NELSON SIZER— Dear Sir :

I HAVE received the description of character with great pleasure which you wrote for me from photographs. All you said of me is true. You could not have made it more accurate if you had been personally acquainted with me, and I believe phrenology is a true science.

Yours truly,

—J.

—:o:—

A REMINISCENCE.

— CANADA, Nov. 14, 1889.

MESSRS. FOWLER & WELLS Co.:

A FEW days ago I was looking over some old papers and I found my "character," told by a gentleman named Nelson Sizer, at your establishment in New York, just twenty-five years ago. I was then editor and proprietor of a daily paper in Br. Maratime Provinces. After the stenographer had finished his work on my "character," I read it through. Many of the traits mentioned I was not aware then that I possessed. I have not read it since, until the other day, and my character having been fully developed and tried in the crucible of time and experience, I am now bound to say that Mr. Sizer was a remarkably clever delineator of character. Indeed, he was prophetic. Everything in the document to the minutest detail has turned out true. One of his statements, somehow, I have fought against always, but the

"gravitation was too strong." He said I would make a good teacher; well, here I am, after a chequered life, engaged in what I find a very congenial occupation, that of teaching stenography. I hope Mr. Sizer is still in the land of the living and with you. If so, will you kindly mention to him the incident and the result.

Yours respectfully,

—:o:—

A MOTHER'S LETTER.

MESSRS. FOWLER & WELLS Co.:

I HAVE a boy whom I wish to bring to your office for examination. Will you please inform by note what are your office hours and price for making examinations of children?

One of my neighbors has a boy that was exceedingly difficult to manage, indeed *she* could do nothing with him; she punished him severely and tried every device she could think of to impress him, and he grew no better, but rather worse, and was a terror of the neighborhood. Some one advised her to consult Prof. Sizer, the examiner in your office, and that he would tell what to do with the boy. She accordingly visited your office, and the Professor told her that whipping would make him worse, that he had good moral and intellectual powers, and she could appeal to his reason, tell him the causes and consequences; though it might take a little time, it would in the end be effectual. If I did not know the parties, and had not seen for myself, I could hardly believe it possible that the little gentleman of to-day is the same person as the naughty boy of a year ago. He seems to be entirely changed, and to act from different motives.

I wish to know what my boy's natural traits are, so that I can train him rightly before he gets off the track, and beyond my control.

Yours respectfully,

Mrs. B—.

CHILD CULTURE.

A SUGGESTION TO PARENTS.

THE old year with its mistakes and its failures is gone forever. Regret will not return lost opportunities, or remorse undo the wrong of the past. Retrospection avails nothing unless by its aid we learn from experience to avoid future mistakes. Perhaps in contemplation we still err, by attributing our failures to a wrong cause. As we reckon up our moral account at the close of the year, let us not fail to take into consideration the unfortunate condition of food, air, and clothing, which without doubt have had more to do with our moral failures than natural depravity has.

No person, old or young, can be thoroughly good while living in a vitiated atmosphere, eating unhealthful food, and wearing improper clothing. It was never intended that we should do so, and therefore there was no law made to cover such conditions. Some people actually force their children into evil ways through just such means, and then wonder at their perversity. What right have we to condemn our little ones for getting up cross, if we have compelled them to spend the night in an unventilated apartment? Neither is there justice in our blame if they show unmistakable signs of discontent and general ugliness after a breakfast of fried meats and strong coffee or tea. If we allow them to wear uncomfortable, ill-fitting garments, how can we expect them to be cheerful and happy?

Sometimes, for the sake of economy, a mother permits her little daughter to wear a dress which has become too tight across the shoulders or around the waist. I have in mind at this moment a middle-aged lady who has suffered her life long from a trouble in the side occa-

sioned by this very thing. Is this economy? The growing organs not having room to expand, are crowded upon each other and thereby prevented from performing their functions properly; disease and all the after consequences of doctors' bills and general uselessness is the inevitable result of such folly.

It is an undeniable fact that our children are in a great degree what we make them. How often we hear people wonder that the son or daughter of such and such parents should turn out badly. Although they have, to all appearances, been brought up in a conscientious manner, there *must* have been something in their surroundings which was not conducive to good morals. It was not a lack of prayer or precept, probably, but a want of hygienic conditions and ignorance of physiological laws.

All our habits, tastes, and inclinations should be in accordance with the laws of health, says a wise writer, and so they would be were our surroundings in childhood such as were conducive to health. Oh, how much of our misery through life is directly traceable to the ignorance or carelessness of our parents! If we may not overcome the evil in our own bodies, resulting from this; if we were not taught the laws of health in our youth; if we have never taken the matter into serious consideration in our later days, let us now, for the sake of our children, resolve to make every reparation possible, by acquainting ourselves with the laws which God has made to govern our being. In this way alone shall we be enabled to perform the duties incumbent upon us as parents, and to teach our children to live wisely and healthily.

Sterne, the brilliant essayist, says:

"O, thou blessed health, thou art above all gold and treasure; 'tis thou who enlargest the soul, and openest all its powers to receive instruction and relish

virtue. He that hath thee hath little more to wish for, and he that is so wretched as to want thee, wants every thing with thee." MRS. S. E. KENNEDY.

PRACTICAL EDUCATION.

THERE is much talking and writing about practical education, yet the same old routine of imperfect culture continues in practice. A mere smattering of the common branches is gained at the public schools, for the higher departments are so occupied in teaching languages and higher mathematics, that there is not opportunity to give lessons in Higher English.

I know students graduated from college who can not spell correctly, or read decently, or compose a tolerable essay, or write a decent hand. They have slipped through because they could learn mathematics, or some specialty. Students of that sort are not scarce in any college in the land.

The primary departments of the public schools, are mainly taught by young girls who have no conception of the value of correctness in every word, and tone, and who have no knowledge of mental methods. They often dull and blight the budding intellect instead of aiding it to expand and grow naturally.

Personal or family friendship controls half the teacher's situations and scarcely half the remainder are chosen for their ability to educate. How few teachers think of trying to educate the most important of the faculties, the percepts! A person who has been taught to observe carefully and correctly, will be half educated. Then give him thorough training of the hand in some simple, mechanical trade like basket-making, scroll-saw work or type-writing, that will require care, exactness and order, the training thus acquired in connection with exact, plain, simple, graded lessons, in reading, spelling, writing and lessons in the five

simple rules of arithmetic, will develop the mental powers regularly, systematically and without strain. It is a great mistake to insist upon a child's learning what it does not understand, or what it hates. Such training injures the mental powers. No mental forcing should be allowed with any but strong, lazy pupils.

The methods of Froebel's Kindergarten, are the true methods for developing young minds. The child must first become acquainted with objects around it, in its daily life. It must handle, smell, taste and pound substances to learn their qualities. This is nature's way to unfold their faculties. There is no other. And breaking playthings, striking and being struck, falling, hitting head and hands, all these are lessons in knowledge. The Kindergarten takes up the child's education at this point and by simple songs, plays, bead-stringing, playing with colored balls, weaving knots of colored paper and similar devices, teaches to the child, color, form, length, strength of materials, and a vast deal of facts concerning leaves, plants, woods, stones, animals, fabrics and numbers and thus prepares the young mind to pursue the simple studies of primary schools.

What our primary schools most need is not simply thorough training in books but continued exercises upon objects that will keep their minds open to observe, and their memories to retain.

Probably not half the teachers in our schools pay any attention to systematic training of the memory; they do not even so much as trouble themselves to read the many excellent works upon the subject. Probably not half the teachers in New York City care or try to

gain any true knowledge of mental science, and how the faculties may combine to advance learners and how the cultivation of certain organs may aid in the development of others less prominent.

We hope the day is drawing near

when education will be the opening of the pupil's mind, giving ability to write books himself, that is, to be able to compose treatises upon the subjects, instead of crowding his memory with the dead works of some other mind.

VERONIQUE PETIT.

TRAINING IN USEFULNESS.

HOW quickly children learn who is just, and firm, and exact with them! and how they pour out their love more upon those who act thus than upon the over-indulgent and weak ones who pet and caress, and then feel compelled to punish! From two to five the temper and affections develop quicker than the reasoning powers; but constant firmness will subdue and regulate the most passionate of children, without resort to corporal punishment, if it be but exercised steadily. It is at this age that a child's training for after-life more seriously begins; not in book learning, but in little actions of utility; of little household matters, and little offices that teach a child that it can be of use in the world. Proudly a little one of four or five will talk of "my work," if it be given some little task that its tender years can manage—some help to mother, or nurse, or servants, done well and carefully; and such small tasks lay the foundation for a son or daughter that shall be useful to the world they live in. The day is almost past when handiwork is considered derogatory to anyone. Is a man less a man if he can clean his boots better than his servant? Even at the tender age of four or five, a little task of usefulness within its power will make a prattling little one proud and happy, and more satisfied than the tearing to pieces of twenty toys.

It is from the age of five that the seriousness of life begins with a child. Lessons (call them not tasks) have to be learned, and work, "Heaven's noblest gift," performed. But here this very seriousness should be made the joyous-

ness of an occupied life; each characteristic of the child developed and not crushed. Well has Goethe put it when he sees in "self-will" future firmness and resolution; and yet, how many parents and teachers try to crush out self-will as an evil thing, instead of directing it into self-reliance and firmness, and resolution! Temper, too, is crushed; whereas, if guided, it may mean immense power of purpose; unguided, it does mean awful misery and untold grief.

Lessons to most children are a pleasure; it is the teaching and the school that are irksome, and sometimes hateful. All children are proud of knowledge, and will not mind the trouble if they but see the end and aim of their trouble.

How early a little child's thinking and reasoning powers are made use of by itself was aptly illustrated the other day by a mite of four, on hearing of the German Emperor's death, asking, "And now he's gone to heaven, isn't he, mamma? And will he see little baby up there? And what will he talk, German or English? And will he know little baby?" and then suddenly, after some words of explanation, "And will little baby understand him?" Such thinking and reasoning powers can be developed delicately and gently, even in children thus young; but in most of our schools they are crushed out by a child's being set to learn *tasks* of inexplicable grammar from not-to-be-understood primers.

Because an exceptional child shows power to understand grammar and mathematics we must have a system for all children on his mental plane.

THE HOME FUN OF GREAT MEN.

"**B**OYS, be wise, here comes a fool!" exclaimed a great theologian, ceasing to amuse himself by jumping over chairs and tables, as he saw a solemn, pedantic friend approaching. "You don't know the luxury of playing the fool," said Lord Chancellor Eldon, as he danced in his own drawing-room to a tune of his own singing. "You are a father, Signor Ambassador, and so we will finish our ride," said Henry IV. of France, when the Spanish minister discovered him riding round the room on a stick with his son.

Dugald Stewart, the philosopher, was once found by a friedd, trying to balance a peacock's feather on his nose. His competitor in this contest of skill was Patrick Fraser Tytler, the historian.

Dean Swift used to amuse himself by harnessing his servants with cords, and driving them up and down stairs, and through the rooms of the deanery.

Faraday played marbles and ball with little boys, and took part in charades, playing once the "learned pig."

William Pitt delighted to romp with children. He was once playing with his niece and nephews, who were trying to blacken his face with a burnt cork. A servant announced that two members of the cabinet desired to see him on business. "Let them wait in the other room," said Pitt, catching up a cushion and belaboring the girl and boys. They got him down, and were actually daubing his face, when he said, "Stop; this will do. I could beat you all, but we must not keep these grandees waiting longer."

A basin of water and a towel were brought in, and the great prime minister washed his face, hid the basin, and then received the two lords.

Doctor Battie, an eminent London physician, used to amuse himself by gazing at the Punch and Judy show. He was such a successful mimic of "Punch" that he once saved a patient's life by imitating that character.

The patient was suffering from a swelling in the throat, and the doctor, turning his wig, appeared at the bedside with the face and voice of "Punch." The sick man laughed so heartily that the swelling broke, and a complete cure followed.

Man is the only animal who can laugh; he, therefore, relishes a little nonsense.

MOTHER AND HOME.

A little child in the busy street—
A child with a shy face, flower sweet,
And brown eyes, troubled and half afraid,
By the noise and hurry quite dismayed.
I lifted the baby hand and said—
Smoothing the curls on the golden head—
"Where is your home, my little one?"
For the summer's day was nearly done.
And the swift tears came to her reply,
As she trusting answered, sweetly shy—
"Home is where mamma is, you know,
Won't you take me there? I want to go."
Where mother is! Oh, the world of love!
No matter how far our feet may rove;
When weary and worn in constant strife,
Mother and home are the best of life.
Blessed is he who may smiling say,
"I'm going home to mother to-day."
God's mercy hallows that home so dear,
Where mother our footsteps waits to hear.
Bless the busy hands and cheery smile
That brighten and comfort all the while;
Nothing on earth can with home compare
When a loving mother waits us there.

TRUTH, HOW WON.

GREAT truths are dearly bought. The common truth,
Such as men give and take from day to day,
Comes in the common walk of easy life,
Blown by the careless wind across our way.
Great truths are greatly won, not found by chance,
Nor wafted on the breath of summer dream,
But grasped in the great struggle of the soul,
Hard buffeted with adverse wind and stream.
Wrung from the spirit in hard hours
Of weakness, solitude, perchance of pain.
Truth springs like harvest from the well-plowed field,
And the soul feels it has not wept in vain.



A SLAVONIC SUN CURE.

THE hydropathic institution is common in Europe and doing good work for thousands of patrons yearly, but there are many other establishments with various names, but mostly of a hygienic nature that have their zealous advocates. One of these; isolated among the Carinthian mountains of Eastern Europe, is certainly but little known about on this side the Atlantic, and its peculiarities are such that Mrs. Mona Caird's description, given awhile ago to an English newspaper, will probably interest the JOURNAL readers.

Hidden among the mountains of Carinthia lies the little wooden-roofed village of Veldes, or Bledu, in the irresponsible language of its Slavonic inhabitants. It stands on the shores of a small lake of deep blue water, so blue that one begins to patch up one's shattered faith in the veracity of landscape painters of a certain school, and to feel that after all nothing is impossible.

The village creeps up by the inland escarpment of the castle cliff; a little nest of broad, gray, wooden tiled roofs, half drowned among foliage. It has rough little streets like river beds, where the rain pours down in torrents, for it can rain in Veldes, this village of the Sun! By the lake, hotels and villas congregate. These are 'one and all brilliant and festive dwellings; the hotels have gardens which are always more

successful as indications of holiday sentiment than as havens of rest.

To this romantic little shrine sun-worshippers come during the summer to offer sacrifices, while a larger number of pleasure seekers flock in from Trieste, from all parts of Germany, Poland and the north of Italy. What I lost in the society of the amiable and the wealthy I never knew, for they lived down on the lakeside in the "air-hut colony," while I remained in the village at some height above the lake. The "air-huts" are little wooden dwellings for sun-cure patients, consisting of one large room which has three walls instead of four, the fourth side being open to the air, and protected only by curtains. These curtains may be drawn on very rare occasions of almost unheard-of disturbance among the elements. From what I could gather, it seemed that the doctor would hear of no excuse for drawing them short of a tempest combining wind, thunder, rain and hail, and the hailstones ought to be not less than a certain very imposing size.

To the average German, who lives in an hermetically-sealed dwelling, and thinks that bathing is trying to the constitution, the regime of air and water which he undergoes at Veldes is probably exceedingly invigorating, and he is thus enabled to resist the effect of the

damp without difficulty. There seems to be no other way of accounting for the fact. For their meals, the air-hut dwellers, come daily to the "anstalt," a large peasant's house in the straggling village street. The diet is strictly vegetarian, and the meals are taken in a long wooden room, with one side open to the air. Some of the rebellious patients live at the hotels or in furnished rooms.

The life of the health-seekers presents a startling contrast to that of the ordinary civilized European. Were it not for its monotony it would be very fresh, and free, suggesting the spirit of the old Greek life, but alas! without the intellectual brilliancy or the all-pervading beauty which gave the charm to that existence. The first duty of the day is to take the "light air-bath." The doctor believes that the light has a peculiar and most beneficial action on the skin, and he therefore sends his patients to walk in the early morning hours in airy, flowing garments, with bare feet, providing for them an enclosure set apart for this salubrious promenade. It is thought that the blood is brought to the feet through walking without shoes, and that a particular electric action takes place at the soles. The same kind of action is produced at the upper part of the arm when exposed, and this is very desirable for the health, according to the oracle of Veldes.

The scene at the air-bath ought to have been beautiful, for the background of wood and hill forms an effective contrast to the figures, but unfortunately the doctor had decreed a surprisingly ugly garment for his patients, consisting of purple linen and blue tarlatan. The presence of five or six of these awe-inspiring "toilettes" mars the charm of the whole. Among the rebels who chose their own costumes were two Englishwomen who had aberrated so far as to provide themselves with white garments of Greek design, and these created great excitement among their

fellows, especially the German contingent.

Three hours are supposed to be spent in the air-bath, but few have the heroic courage to stay to the bitter end. There is absolutely nothing to do, except fight with the wasps, which come in swarms to feed upon the honey which the patients take with them to eat with their bread and milk. The wasps aside, monotony is the curse of the air-bath. The place is too small, and nothing has been done to provide occupation for the women patients. The men's air-bath, on the other hand, is a small principality, comprising mountains, valleys, fishing streams and grouse-shooting—so, at least, complain the many rebellious Englishwomen. Everything that human ingenuity can devise has been done to appease the savage bosom of man, while for the woman——!

Having left an interval of about two hours, the patients trudge down to the bath house on the lake, for their sun-bath. The flat roof of the bath-house has been inclosed by a tall fence so that only the sky is visible from the enclosure. Here with heads carefully shaded from the hot rays, each in a wooden compartment, the patients frizzle for about an hour, or an hour and a half. This process is both pleasant and soothing, strange as it may appear. The sun-god rewards his devotees.

Now and then a voice calls above the divisions for a glass of water, now and then a sigh over the heat escapes a worshiper; otherwise the place is quiet and reposeful. Reading or mental exertion, of any kind, is forbidden, and indeed severely punished by headache or exhaustion. Uninspired must be the drowsy observations that mingle now and then with the humming of the flies, and no one attempts to break this rigid law. Even the execrations wrung from the sufferers by the persistent attacks of these insects ought to be of the mildest character possible, considering the provocation.

During the last ten or twenty minutes the faithful are wrapped up in blankets like mummies; a tepid bath and a rubbing follows, and then the long suffering one is released, but only to repeat the process in the afternoon. Through the opposite actions of the cool air in the morning and of the sun at mid-day, very great things to the advantage of the patient are said to occur. Dr. Rikli traces a large number of illnesses, nervous and other, to the want of vigorous skin-action and the consequent strain on the other parts of the body to do the work which the lazy skin is neglecting to do. Thence breakdown, after a certain time, of whatever part of the system may be weakest. Whatever the theory may be, there is no doubt that the regular outdoor life, the extreme change from the accustomed routine, the large amount of exercise which must be taken, generally sends the patient home considerably better than he came, and one hears also of startling cases of dying men brought back from the brink of the grave after their friends had despaired of their recovery.

Dr. Rikli's system is an adaptation of the "water-cure" with the addition of the light-air-bath and the sun-bath. He uses packs and bandages and steam-baths, and he states that he was moved to establish the system through having his life saved by these means after being given up by all doctors. He now enjoys the most astonishing good health and seems to be able to do more than most young men, though he talks about retiring in his "old age" and handing the work on to some one else. He utterly scorns and condemns the use of medicine of any sort or kind. The "wet pack" is his most frequent remedy in serious illness.

For good walkers the place offers endless attractions, no scenery could be more beautiful or more suited for excursions, either driving or on foot. The climate can not be praised so heartily, for the place is subject to spells of most disturbing rain, which is generally very obstinate until snow appears on Mount Triglav, the highest peak of the Julian Alps, and then the sun breaks out again.

THE INFLUENZA EPIDEMIC.

NOTING the remark in a prominent New York daily that physicians are treating their cases for the most part by guess, and also noting the announcement of the Board of Health of this city, that it is at a loss to advise any special measure for the suppression of the epidemic, it seems in place to consider the subject from the side of hygiene.

A survey of the field of attack shows that large variety of symptoms that is met with in acute colds or catarrh, but the victims of the Russian influenza show a general similarity with regard to headache, nervous depression and a peculiar collapse of appetite and of stomach power. A man in good physical condition as regards digestion, and the functions of excretion, if affected by the malady is likely to have but a tem-

porary experience of its unpleasantness. "Just a cold that I've somehow taken," might be his opinion. An additional handkerchief to meet the need of over-charged nostrils, and in a few days he is quite recovered. But the man with a susceptible mucus membrane, or a little out of tone as regards stomach and liver, if attacked by the insidious malady, is likely to find himself decidedly ill in a few hours after the sneezing prodroma that announces the advent of the foreign invader. Some have called the malady "aristocratic," because of the large proportion of well-to-do people who are taken with it, the reason being easily referred to the sluggish overlaid state of the excreting organs of so many of this class. Good feeders who take insufficient exercise out-of-doors for

normal freedom of the animal functions, their liver, kidneys, lymphatics, blood, skin being unable to throw off the waste and excess, are the easy prey of a disease that finds its *nidus* in a disordered mucus tissue, just as they are an easy prey to ordinary acute affections.

But what to do in such cases? Obviously the first cure should be to relieve the clogged, congested organs, to promote freedom of the excretory and secretory functions, and that by means as hygienic and physiological as possible. Many of our "scientific" contemporaries resort to quinine and other "antipyretic" drugs, especially one notable and costly nostrum derived from coal tar, "antipyrine," exhibiting these things in large doses, and that with a knowledge that certain results may follow them that may be as disastrous to the patient as the influenza itself. A very intelligent physician of more than forty years experience, remarked to me in the course of a discussion of *la grippe*, that it was a matter of surprise to him that men calling themselves "scientific" should resort to a nostrum or even to quinine to treat what in its general symptoms was little else than a cold, when there were old and well understood remedies that could be depended upon for effect, and which did not induce a condition in the patient that might be grave enough itself.

The old school treatment would have been of this nature. Calomel to induce intestinal movement, Dover's powder to produce freedom of the secretions, perspiration, nervous calm, and sleep. A restricted diet, and refrigerant drinks would be ordered in this system. Considered all around as a drug method, is the modern antipyretic treatment with its decided margin, any advance of conjecture on the old? We think not. But there are the resources of hygiene, what of them? Speaking from personal observations, we know of nothing more immediate and benign in effect than hygienic applications early in the

course of acute catarrh, or influenza. First thorough cleansing of the intestinal canal by tepid water enemas, a good fountain syringe being used, so that nerve irritability and poisonous effects occasioned by old foecal accumulations shall be avoided. In the majority of cases the headache, or other cerebral distress is greatly relieved by this simple procedure.

Next a hot foot bath, or a sitz bath, the patient being well covered meanwhile, from the neck downward with blankets, so that free perspiration shall be induced, cool wet cloths to the head to subdue congestion and excitement there. Some simple, cooling drink like lemonade, or raspberry vinegar, may be given the patient while in the bath, and if there be a tendency to heat and dryness of the mouth and throat this drink should be at hand for continual use. We have found in many cases an alkaline spring water of mild quality and pleasantly cold, to be very refreshing.

Reaction being obtained by the bath, the skin acting well and the patient feeling comfortable, he should be quickly rubbed dry and put to bed, blankets and all, and allowed to sleep, if so inclined. In a house that is provided with all the apparatus of bathing more thorough treatment than this may be given, if the symptoms require it, but then the attendance of some one who understands hygienic procedures should be at hand, as much injury can result from the bungling management of a tyro. The blanket bath should be administered in a warm room, so that in drying and rubbing the patient, no exposure to cold shall occur. When put to bed however, the room should be well ventilated and of normal temperature. One of the features of *la grippe*, is failure of appetite and a vague, unpleasant ache in the stomach region. Hence it is best not to force solid food upon the unwilling digestive organs, but merely to take such liquid nourishment, as can be assimilated without discomfort. [Nature

should be given time to relieve and readjust herself, and if but little besides cooling drink be taken for 48 hours, the patient will be likely to recover appetite and functional tone the more quickly afterward. One patient under my observation, in whom the tendency toward pneumonia was marked, was not allowed to take anything solid for a week, a little milk soup, or a soup flavored with oysters was the only thing that could be swallowed with acceptance, and this tided him over a serious crisis. In this case there was very severe headache, from which great relief was obtained by the wet compress. In some cases a hot water compress is more effective than the cold. If there be much nasal irri-

tation, inhalation of steam relieves. To the water may be added a few drops of the extract of pine needles, or of any good germicide like listerine. With swelling and soreness of the throat, a simple antiseptic gargle is of course indicated. Free expectoration and free breathing should be promoted, as much as possible, for with the maintenance of the respiratory function, the disease is not likely to make any headway, or to affect the lower bronchial passages. In emergencies like this practitioners are apt to forget the efficacy of simple measures and resort somewhat blindly to what is experimental, with results that are disappointing.

H. S. D.

MODERN OVER STRAIN.

IN the days of our ancestors, when our grandfathers, and perhaps even the fathers of some of us, obtained their education mainly during the invigorating days of winter, when the season was unpropitious for the plow, and their school-houses were built of materials which their own hard hands had hewn from the forest, over mental strain from too much study was but a mythical possibility, and underpower was one of those fabulous gods of the imagination for which their incredulous heads and hands provided no Pantheon. Their organisms were hardened and strengthened to their surroundings by ample sunlight and fresh air, pure, plain food (well relished), timely and undepressing recreation and ample rest after each day's work for mind and body.

Our fathers lacked, and they did not require the wisdom of self-care that we must have in order to survive, if duty's demands in our time are answered. With all the added stimulants to overmental activity about us, which did not press upon our fathers, it is a possibility and a certainty (unless we are wiser than they were) for us to run our race much more swiftly and perish sooner than

they could have done under the mental pressure of their time. Their environments conserved their powers, ours tend to destroy. The necessities of existence imposed upon them more personal physical effort. They did largely a divided mental and physical work, and they could not if they would so readily run all night and scarcely note the fleeting hours as we can. We have reached a time when, in view of the many influences about us tending to accelerate our mental movements, it seems far less figuratively than heretofore to be but a step from the cradle to the grave. Most of us are willing and are probably anxious to go to heaven when we die, but most of us, I think, want to keep out of the grave as long as we can.

Over-pressure is the power which bears us there. How may we have the power to resist this pressure to the farthest natural extent? The problem of life is in this question, and the problem of health upon which depends the power of body and mind is involved in it likewise.

We make provision for action, always action, in our social, political, and educational organizations, and reform and

progress and *never rest* are our watch-words; and yet our frame is so constituted that adequate rest is one of its chief organic needs and essential preliminaries to progress. "Tired nature's sweet restorer, balmy sleep," is not courted as she ought to be. "Sleep! balm of hurt minds! nature's second course! sore labor's bath! Sleep, that knits up the raveled sleeve of care" and compensates the waste and wear and worry of our mental life, is too much ignored in all of our arrangements for work of mind. Our amusements and recreations, too, are mainly provided for during hours which were best devoted to rest and sleep.

To us the night cometh not now, as in the ancient days, when no man can work; night with us when the brain ought to be at rest, has become the chief time of action. At that part of the day when the heart-throbs should be lessened and the overtaxed organ allowed a little repose between its beats, its pulsations are accelerated to meet the imperative calls for blood, of an unresting and unrestful brain whose ideational cells and percipient centers are kept in ceaseless activity by the demands of late school work, midnight committee meetings of merchants, manufacturers,

manipulators of markets and managers of "the machine" of party politics. To these we add the neural prod and whip and spur of artificial, alcoholic (and even tea and coffee) stimulation at the wrong time of day, when an inclination to repose and not over action of the nervous system and mind should be encouraged.

DR. C. H. HUGHES.

A PHOTOGRAPH SAVES LIFE.—In *Le Messenger*, of Liege, Belgium, the following incident is related:

"A wealthy young girl of London had died, and the parents, desiring to preserve the image of their beloved child, summoned a photographer to have a likeness taken. The remains were placed upon a sofa and a negative was made, which, not appearing sufficiently distinct to suit the photographer he took a second one. To his great surprise he found a marked difference between the proofs of the two negatives and particularly about the eyes, as if they had moved. He gave notice of this to the watcher who in turn called a physician, and the latter appearing upon the scene called back to life she whom they thought to be dead."

DISINFECTING BY SULPHUR.

THE practice, often prevalent, of burning sulphur in the sickroom, or in the habitable rooms of the house, during the continuance of a case of diphtheria or other contagious disease, is productive of evil, and should not be allowed.

The theory that the continual burning of a little sulphur would destroy the germs or poison of the disease, and thereby protect these of the household not already infected, is wholly an erroneous one. Many experiments have been made, which show that the density of sulphur fumes (sulphurous acid) must be much greater than can be tolerated

by a human being in order to destroy the germs of disease.

The air of the sick-room, should be kept as pure as possible and not be vitiated by the fumes of any irritant, or choking substance. The latter acts as an irritant to the air passages, against which the lungs protest, besides consuming some of the oxygen of the air which is so necessary to the support of life, thus doing a positive harm to the patient. Still more, it impairs the natural powers of resistance to disease, and thereby indirectly becomes an agent to bring about a condition its use is popularly supposed to retard.

Sulphur fumigation will not destroy the germs of disease unless a large quantity is burned in closed rooms, and the process continued several hours. Agreeable deodorants may be used in the sick-room, and antiseptic solutions should always be employed; but by no means resort to the practice of burning sulphur.

The following is a good method for fumigating with sulphur. The house must be vacated. Heavy clothing, blankets, bedding, and other articles which can not be treated with disinfecting solutions, should be opened and exposed during fumigation, as directed below. Close the room as tightly as possible, place the sulphur in iron pans supported by bricks placed in wash tubs containing a little water; set the sulphur on fire by hot coals, or with the aid of a

spoonful of alcohol, and allow the room to remain closed for 24 hours. For a room about 10 feet square, at least three pounds of sulphur should be used; for larger rooms, proportionally larger quantities. Heavy woolen clothing, silks, furs, stuffed bed covers, beds, and other articles, which can not be treated with fluid disinfectants, should be hung in the room during fumigation, their surfaces thoroughly exposed, and pockets turned inside out. Afterward they should be hung in the open air, beaten and shaken. Pillows, beds, stuffed mattresses, upholstered furniture, etc., should be cut open and their contents spread out and thoroughly fumigated. Carpets are best fumigated on the floor, but they should afterward be removed to the open air and thoroughly beaten.

NOTES IN SCIENCE AND INDUSTRY.

American Prehistoric Remains.—At the December meeting of the Academy of Anthropology, Gen. C. W. Darling, Cor. Sec. of the Oneida Historical Society, read part of a very comprehensive paper on "The Prehistoric Archaeology of America." Starting with California, he gave an account of the discoveries in that State, in Mexico, in some of the States in the Mississippi Valley, and in Central America. Though it is not usual to go further back than to the glacial epoch to determine the age of man, man appeared to be present in California during a part of this period. Remains had been found beneath tablets of lava erupted in the Pliocene epoch. Man lived then, built mounds, wrought implements, and left behind records that can not be deciphered. The opinion is held by Dr. Thomson and others that the time will come when, perhaps by the aid of the ancient learning of the East, the records can be read. As yet, however, the riddle of the prehistoric race in America is unsolved.

One of the most remarkable monuments found is in San Luis Obispo County, Southern California. A great rock rises 150 feet

above the plain of Carissa, and, in the distance, looks rugged and forbidding. On near approach it is seen to have on its eastern side an opening 25 feet broad, which leads into an inner temple or court, with level floor 225 feet long and 125 feet broad at its widest part. The ceiling is 60 to 100 feet high. This great natural cathedral is a wonder to geologists, but is more wonderful to archaeologists. It was evidently used by prehistoric men as a temple of worship or a capitol of government. On the walls are paintings in red, white, and black, doubtless having a meaning. There are figures representing fields, suns, forts, spears, men, and animals. The colors are apparently as bright as when first laid on. The wonder was discovered by Franciscan missionaries a hundred years ago, and there has been no change in its appearance since. When or by whom the walls were decorated no one knows. The Indian tribes had no tradition concerning the work, and regarded it with superstitious reverence. Until recently the plain was frequented by wild horses, but now the temple affords shelter for the flocks of the shepherds.

Gen. Darling discussed the buried cities of New Mexico, of which there are many, and the prehistoric remains in Central America. In Yucatan alone 67 prehistoric cities have been found, though the obstacle presented by climate and savage people make travel in that country nearly impossible. The conclusion was, that the remains in all the Southwest were older than the Aztecs. The older civilization was in many ways remarkable. Ruined cities were found in Mexico, including great palaces of hewn stone 300 to 400 feet in dimensions. They contained sculptured ornaments in bas-relief. Skulls were found that, in their cranial character, were equal or superior to the average modern race. Many wonderful things have been discovered in Nicaragua, Brazil, and Peru. One monument indicated that a ship was wrecked on the South American coast, with subjects of Alexander the Great. Skulls are found that showed that the art of trephining was known and practiced in a rude way.

The Educational Conventions.

—The National Educational Association and Council of Education have decided to hold their next Annual Conventions at St. Paul, Minnesota, July 14 to 21, 1890. Twenty thousand teachers are expected to be present from all points of the Union. The Western railroads have agreed to give half rates, plus \$2. membership fee, to all persons who attend, and Eastern and Southern roads will make low rates which will be announced early. St. Paul has organized a local Executive Committee, and arrangements are being made to make the meeting a great success. There will be ample hotel accommodation at reasonable rates. Local excursions are being planned to all important points of interest in the Northwest and on the Pacific Coast. The official "Bulletin," containing programs, rates, and full particulars, to be issued in March, will be sent free. Mr. S. Sherin is secretary, local executive committee, St. Paul, Minnesota.

A Floating Island.—One of the most picturesque and remarkable bodies of water in the world is Henry's lake in Idaho. It is situated on the dome of the continent in a depression in the Rocky Mountains

called Targee's Pass. It has an area of forty square miles, and all around it rise snow-capped peaks, some of them being the highest of the continent's backbone. In the lake is a floating island about three hundred feet in diameter. It has for its basis a mat of roots so dense that it supports large trees and a heavy growth of underbush. These roots are covered with several feet of rich soil. The surface is solid enough to support the weight of a horse anywhere, and there are places where a house could be built. The wind blows the island about the lake, and it seldom remains twenty-four hours in the same place.

An Old Norseman City.—Great interest was excited last November among archæologists, by the announcement of Prof. Horsford, of a discovery of the site of the ancient and traditional city of Norumbega, which he claims was founded by the Northmen, about 1,000 A. D., or nearly five hundred years before the voyage of Columbus. The site claimed is near Watertown, Mass., a few miles west of Boston, in the valley of the Charles River. Prof. Horsford says that there are relics of the Northmen on every square mile of the basin of the Charles. As evidence of this, he points to a canal, walled on one side for a thousand feet along the west side of Stony Brook, and to the dry canal near Newtonville. He has found remains of canals, ditches, deltas, boom dams, ponds, fish-trap, dwellings, walls, and amphitheatres. The evidence tending to prove the discovery and occupation of the region around Massachusetts Bay long before the date usually assigned to the discovery of this continent, is constantly growing stronger, and there seems to be little reason to doubt that the "Vinland" so well known to the Norse adventurers was a part of the country rediscovered in later centuries.

A Canvas-Back Duck flies at an habitual rate of 80 miles per hour, which is increased in emergency to 120. The mallard has a flight of 48 miles an hour; the black duck, pin-tail, widgeon, and wood-duck can not do much better. The blue-wing and green-wing teals can do 100 miles an hour, and take it easy. The red-head can fly all day at 90 miles per hour. The

gadwall can do 90 miles. The flight of the wild goose is 100 miles per hour.

Smokeless Powder.—The *N. Y. Tribune* says: The Chief of Ordnance in his annual report to the Secretary of War discusses the subject of smokeless powder for military uses, and records the failure of chemists and experimenters to produce a serviceable compressed cartridge of that nature. In view of the unsatisfactory results of trials with smokeless powder, he does not deem it expedient to introduce in the army a small calibre rifle adapted for its use. It is certainly prudent to defer measures for the improvement of the small arms now employed, since some satisfactory kind of smokeless powder will inevitably be invented in the course of a few years. It is also probable that a radical change in the method of firing cartridges will be made. An English syndicate has recently been formed to develop American patents for supplying electric fire from a battery placed in the stock of the gun. It is not improbable that the armies of the near future in Europe will be armed with electric guns. The mechanism of the modern magazine rifle, and the use of high-power compressed powders seem to require at the firing-point an agency as precise, trustworthy, and efficient as electricity invari-

ably is when applied to the arts. Improvement in military rifles and small arms seems to lie in the direction of smokeless powder and electric fire.

The Little Men of Africa.—The Akkas are described by Dr. Junker as the only voluntary nomads of the Central African regions. They construct their little cone-shaped grass huts in the shelter of the trees of the woods, and live in a district as long as the chase lasts. They prefer to abide among some tribes and avoid others. The rulers welcome them, and they, being practiced archers and cunning warriors, are employed in the invasions of the territories of neighboring tribes. They possess no industry, and buy even their arrow-heads in exchange for meat, the produce of the chase. They are timid and suspicious, and Dr. Junker only once saw about one hundred and fifty of them together. They cannot properly be described as dwarfs, but only as relatively very small men.

It has been discovered that a large portion of Utah is underlaid with a body of water which may be reached by boring wells from one hundred to two hundred feet. The wells flow so liberally that one of them will water five or six acres thoroughly. The desert is literally "made to blossom as the rose."



NEW YORK,
February, 1890.

THE STUDY OF BRAIN PATHOLOGY.

IN every well ordered asylum for the insane some attention is given to the examination of the brains of patients who die in the institution. If marks of

tissue degeneration or changes from the normal in form and relation of parts, or waste of convolution or membrane, or unusual multiplication of fissures, decided want of correspondence of similar areas in the hemispheres, or the effects of long continued congestion or of anemia are noticeable, they are taken account of, and a record made with more or less particularity. As a result of this practice there is a large and growing accumulation of pathological minutiae, which should possess high value in the determination of forms of insanity, but which in fact does not appear to contribute much as yet in that direction. Some observers, for instance Luys, Gre-

ding, Meschide, make some general inferences as to the relation of certain distinct and usually extensive brain alterations to *melancholia*, or *general paresis*, or *acute mania*, but little attempt is made to define how a special kind of cortical breakdown will affect the mental economy.

In forms of chronic mania where there have been excited mental states it is usually found that the membranes are thickened, or there may be distributed through the layers the remains of capillary dilatations or hematoma. The *dura mater* may be adherent to the skull, and the softer membranes to the brain substance, a condition showing the existence of grades of inflammation. In cases of *dementia*, that form of insanity attended with a gradual loss of mental power both intellectual and moral, there is a noticeable loss of size and weight, the brain undergoing a process of shrinkage, the frontal convolutions, especially the second, becoming atrophied. We are shown, also, how blood clots, a hyperæmic condition of the brain vessels, pressure of bone through accident or adventitious growth, specific disease, fever, may produce mental disturbance and insanity.

With all this array of causes, or states of brain coincident with irritability or want of integrity of mind, we have yet to ask for their analysis on such a definite and logical foundation that we shall be able to trace the relation between a given type of mental disturbance and a certain pathological condition. Until the principles for such analysis are formulated all the histological examinations of brains that asylum and hospital attendants so zealously prosecute are of

little service to the world, because no definite and useful results can be drawn from them.

What the world wants is information with regard to the management of the insane, so that the present small proportion of recoveries shall be greatly increased. The same information will have its application in the *extra*—asylum world as a means of preventing insanity—the really grand thing to be sought.

What seems strange to some observers is that there is so much indifference in the rank and file of the medical fraternity to follow up a clue. If there be acute mania, for instance, why is not the history of this acute mania, antecedent and present, recorded, and its peculiarities noted?—what feelings or faculties, for example, are specially active? Why is not the head carefully inspected and measured, say after the method of Dr. Clapham? If at the autopsy the pathologist find evidences of congestion in certain parts; local tracts with extravasation, or certain areas of softened, broken down tissue, or thickened and hardened membranes or alien growths, or atrophy and loss of substance; then noting the character of the lesion and making comparison with the record of mental disturbance would be likely to lead to some conclusive result.

We wish that a fraction of the interest shown in motor function were appropriated to the impartial study of mental function, even that the bearing of the motor lesions were taken into account, and as careful an examination of the mind history of patients affected or supposed to be affected by motor lesion were made as of the muscle history. We are sure that in many of these cases

results that have a meaning and use would be obtained, and the study of insanity, as well as the study of normal mind action, be materially promoted.

A WATCH ANALOGUE.

THE man who has a good watch is disposed to take good care of it. He winds it up at a certain hour ; he keeps it in a certain pocket of his vest, perhaps in a close fitting leather case, that it may be kept as free from dust as possible. He does not carry hard, rough articles in the same pocket, and at night on retiring does not lay the watch down on the bureau or mantel-piece, but bestows it in a secure and handy place, where its position is much the same as while he carries it during the day.

Suppose a man should treat himself as he treats his watch, feeling that the pulsating organ in his left side needs as much care for its regular, effective action as the little machine that marks time for him. Suppose that he should be as regardful of his personal needs, regularly and carefully winding himself up by taking proper food, out-of-door exercise, and sufficient sleep. Suppose that he should avoid unnecessary exposures to severe weather, sharp winds, dust storms, and, just as he would not intentionally overwind the watch lest he should break the main-spring, so he would not attempt to do things physical or mental that were likely to overstrain and weaken his powers. Suppose that he avoided the rough and coarse sides of life, and so incurred little risk of forming habits that were wearing upon the physical machinery and pernicious to the mental economy. What would

be the result? In all probability, like the well kept watch, he would "run" evenly, harmoniously, and for a long time. The watch that is kept clean, free from dust, will vary little in its readings from day to day. So the man who keeps himself free of dirt will "go" rightly. When the little grit of unwholesome habits, that are often formed unconsciously through association, gets into a man it disturbs his machinery, producing friction and irregularity, which, if not corrected by the removal of the intruding stuff, will develop into absolute disease and final breakdown.

Now, keeping a watch in good order demands the formation of a habit of daily attention to its needs, so the human machine with its double acting organism of body and mind can only be kept in good order by habits of precision. But many—too many—don't take as much care of themselves, especially the mental part, as they do of their watches. What a mistake!

THE BETTER SIDE. The more we reflect upon the results obtained by careful, intelligent training in every department of human life, the less we are inclined to deplore the influence of heredity atavism, parental impression, etc. In the schools for the idiotic and feeble-minded, in the reformatories for men and women, in the asylums for the blind and for the deaf and dumb, at the schools for Indians, and in those noble missions set among the slums, where friendless and neglected boys and girls are rescued from the streets and futures of vice and crime, we have a demonstration of the susceptibility of human

nature to improvement. However low the organization, however dull and brutal the mental state, well adapted instruction produces marked effects in raising, brightening, purifying and refining the expression of the faculties. As modern surgery comes to the aid of the child born with distorted limbs, or imperfect features, so modern education enlightened by a true psychology comes

to the help of the mentally disturbed and imperfect. One who realizes the work that is being done to ameliorate the condition of the unfortunately born, and is thus enabled to grasp in some degree the possibilities of human development, were the common malign influences permitted now by society swept away, can not help declaring himself an optimist.

Our Mentor Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

TO CURE THE INTEMPERATE HABIT.—S. B.—We see in the papers a good deal of advice on this subject, and many advertisements of mixtures "to destroy the taste" for liquor. This is from an item that has been going the rounds of the press:

"Let the person have within his reach a small vial of tincture Peruvian bark, and when the craving for liquor comes on him let him take a teaspoonful of the tincture every two hours. In a few days taste for liquor is destroyed, and destroyed while indulging in it, for tincture of Peruvian bark is spirits into which has been drawn

all the substance of Peruvian bark. It is to be found in every drug store, but it must be of the very best."

Advice is given by some advertisers to use a preparation of strychnine, or a tincture of capsicum, or ginger. All such resorts are deceptive in the main. They contain alcohol as a rule, and so but supply, in a modified form, the very thing that we would have the intemperate avoid. If one would be cured of his unfortunate habit, it were better to get into such relations that offer little or no temptation to drink, and to use a diet that in itself is non-exciting or heating. Adopting vegetarian food has been found very helpful in the cure of inebriety.

THE HEADS ON THE COVER.—S. M.—The heads that appear in the semi-circle on the JOURNAL cover are intended to represent real types of form and expression rather than portraits. They are like certain eminent persons, it must be admitted, and if you would know the names, we have no objection to imparting them. The central face is like that of Goethe, that on the left resembles Charles Sumner, that on the right Mr. Gladstone, to the left of Sumner, "George Eliot," to the right of Gladstone, Mr. Seward; the other profiles are mainly fanciful.

CLOTHING COLOR.—Question: Which is better, dark or light colors for clothing worn at any season?

Answer.—We think that shades of gray or light drab, or mixtures that give a light tone to the material are better than dark or black tones for steady wear. As regards the warmth of a fabric much depends upon its thickness and quality, but weight for weight dark clothing is warmer than light colored, because of the fact that dark shades absorb heat more. You may remember the old experiment of placing pieces of white cloth and black cloth on snow, and observing that under the black the snow melted more rapidly than under the white. White cloth, while it repels heat, also retains it. Hence it is that animals in the Arctic regions have white or light gray, or light brown fur.

THE MOTOR AND IDEATIONAL FUNCTIONS.

—*Question:* According to the results of modern experiment the motor functions have "centers" in the convolutions—in regions where the "ideational" centers are located according to Phrenology—how do you explain this, can these two orders of functions be related?

Answer.—If we are to accept the motor center doctrine as established—and there are prominent authorities who are not ready to give it their acceptance—we do not see how it conflicts with the "ideational" centers or organs. On the contrary, if movements, as far as the hands and muscles of the face, are to be interpreted as indicative of feeling they, in most cases, are confirmatory of an associated relation with the "ideational" or psychic organs. If you have read the JOURNAL of the past year you must have seen one or two articles in which this point was discussed. The motor centers are given a great deal of room, because their exact margins have not been determined. And as nerve function is constituted there is abundant room for the psychic or phrenological centers.

BREADTH OF THE FACE.—Miss A. S.—We must beg leave to remind this and other correspondents that we can not reply to more than one question at a time. So that if half a dozen questions are inclosed in one letter, it must be expected that many months will pass before those more important and of "general interest" can be considered. We do our best to meet the wants of our friends in this respect, and are only limited by space and time.

The breadth of the face depends first upon the size and expansion of the cranium with its zygomatic attachments to the lower face. Second, upon the thickness and fullness of

the tissues. A strong face is strong by virtue of the impression of the bonv framework that gives prominence and emphasis to the lines and angles. A plump, fat face rarely impresses one as possessing the quality of strength, but a massive square jaw, prominent, wide-apart zygomas, a broad forehead with emphatic ridges and orbital angles, although well covered with flesh, will distinctly mark the man. The motive or osseo-muscular temperament imparts these characteristics, and you probably know that such a temperament imparts force and power to the mental expression.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

Plutocracy in America.—Plutocracy, so-called, in a republic, may be regarded as an excrescence on the body politic. It is nourished by the vitality of the organism, yet is not in keeping with its design, or the normal workings of it. At another view, it may be regarded, perhaps more appropriately, as a kind of unhealthy overgrowth, like the rickets in children, deranging the functions, and, at last, producing fatal results. In this view, also, the basis of it is found in the natural order; but it is wholly divergent from the natural order.

The fundamental principle of a republic is, equality of natural rights and correspondent equality before the laws enacted or administered. But the essence of plutocracy is, a system of caste and privileged legislation upon class distinctions; not avowed, indeed, but none the less certain. This growth has a foundation in a constituent element of human nature itself; which, unless suppressed, exerts, and was intended to exert, a controlling influence in all public and private affairs. I say, unless suppressed. There has been only one complete suppression in the history of the world; viz., in Sparta, where iron money was decreed, and commerce was thereby destroyed; and when the laws of Draco were "written in blood," Then, a rigid system of artificial self-abnegation comprised all

that was left of either private or public virtue. It developed national strength, indeed, in the way of military power; but lost the essential properties of national virility. How it continued so long will always remain a mystery.

With this solitary exception, an inherent desire for possession has dominated in every age the enterprises of the world, and that, too, whether of a private or public nature.

Agassiz, indeed, declared he had no time to make money. He meant only that he would not abandon his distinguished career of investigation and discovery for the mere purpose of accumulating money; even he was no exception to the rule that a desire for possessing, and a desire for money as the symbol of possessions already attained, are the legitimate motive power of business progress in all directions of development or improvement. Success always wins applause. This, also, is due to a primary element in human nature, alluring on to achievement, just as appetite incites the seeking of food. And one who honestly succeeds in earning money deserves credit for it. Here, then, is a definite sphere provided for the legitimate operations of the desire for money; which, confined within its due limits, is not merely proper, but necessary.

But when it becomes excessive or abnormal, the consequences are proportionately ruinous. No one can respect a miser; because his innate desire of possession has been indulged until it has bereft him of manhood; having overridden every other faculty, and tending to no purpose. Precisely on the same principle it is that a glutton is despised; because he makes that an end which was only intended to be a means to an end.

The Scriptures denounce an inordinate love of money, declaring it to be a "root of all evil." They proclaim covetousness as "idolatry"—false worship supplanting the true; and thereby subverting the foundation of true morals. Thus, they have given a perpetual warning against the central principle of corruption.

Now, where there is a rage for money-making, by whatever means that may be available, there is a miserly restriction which bodes no good. Where there is a

supplanting admiration of moneyed men, as such, without regard to the methods whereby their wealth has accrued, or the purposes for which it is used, the laws inevitably become distorted; a disposition prevails among those in authority to pamper wealthy men; caste is created as absolute as that of India; and the spirit and intent of the republic are thenceforth in deadly peril.

There is but one remedy for the evil, whether individual, or public; and this lies in the realm of morals; and it is nothing more or less than a constant outgoing in behalf of mankind. Sometimes, we term it charity; sometimes philanthropy.

If the rudder of equality be broken or displaced we can not guide the ship of state. The currents will inevitably carry it into the tumultuous seas of passion. Or, leaving this figure, what the politicians call "boodle" will be the prevailing power in everything; universal corruption must sooner or later ensue, and there be an end; for, in such case, the republic is already a shattered wreck wholly incapable of effecting the design of its institution. Are we not now rapidly drifting in that direction? Does not the wide-spread mania for speculation reveal it; and venial elections? Does not the universal clamor for subsidies indicate the course of the rushing current bearing us on? Bearing us on; whither? There can be but one destiny to a "boodle" career.

It is certainly disheartening to find that while some State legislatures are protesting Congress is silent; that eminent men are apologizing for, and even encouraging every effort for hasty gains; that class distinctions are prevailing, more and more, in the enactment of laws; and that the cry is "Onward!" in the race for pelf. Surely it is a time for earnest thought by true men and patriots. Can we avoid the maelstrom whose dismal roaring is even now borne in to the attentive ear? Or will we proceed with our dance of death and neglect all precautions until, within its vortex, we find it too late to save the ship of State from remediless destruction in the whirling waters?

My views may seem founded on presumptions that are extreme, yet will the reflecting observer deny that the situation is not menacing?

J. C. WELLS.

A BIT OF HISTORY.

IN April of 1889, while lecturing in the city of Little Rock, Ark., the writer became involved in litigation, in which some interesting legal questions, bearing upon the status of Phrenology and the rights of phrenologists were decided. Believing that the precedent so established should be known to our brethren in the field, I relate the facts herein exactly as they occurred.

On the second day after our consultation rooms were opened we were confronted by a policeman, and a demand for a license of ten dollars per week, which the city council had authorized the city collector to levy upon each and every phrenologist prosecuting his vocation within the city limits. Having served the goddess of Justice, in the capacity of an attorney for some years before entering upon our career of public lecturer and examiner, we felt constrained to investigate the grounds of the demand before paying the license.

The rule of law in such cases is that a municipal corporation, can not impose a tax upon any vocation, except where authority to do so has been expressly confirmed by act of the Legislature. A careful examination of the Statutes in such cases made and provided, disclosed the fact that the Legislature had authorized the city to tax fortune tellers, gaming establishments, pedlars, and a number of other vocations, but with an evident appreciation of the benefit which the citizens of Arkansas might be able to derive from the proper promulgation of Phrenology, the Legislature had omitted to classify us as an object of suspicion and subject to police regulation. Taking this view of the case we notified the city authorities of our determination not to pay the license.

An arrest followed as a matter of course. We appeared in the police court, made our argument, were promptly convicted, and sentenced to pay the fine of ten dollars. A bond was immediately filed, an appeal taken to the

Circuit Court of Pulaski County, left the case, being placed in charge of Hon. W. S. McCain, one of the ablest lawyers in the Southwest, while we continued our tour. On the 2d day of December the case came to a hearing in the Circuit Court when the real battle was fought.

We had just closed a successful course of lectures in Memphis, Tenn., when a message from Judge McCain, caused us to hurry to the seat of war. In the Circuit Court the interests of the City were represented by Hon. W. L. Terry, a gentleman of great legal ability, but who in private conversation, as well as in the conduct of the case, evinced as great a hostility to the science of Phrenology as Sir. Wm. Hamilton himself could have done. When the case was called the City Attorney, realizing that our position on the law was impregnable, changed his tactics, and substituted the charge of "Fortune Telling by means of Phrenology", in order to bring the case within the legislative enactment. Realizing that we were about to be tried for "Fortune Telling", and understanding that issue would be simply whether Phrenology is a phase of fortune telling; we accepted that issue, donned our war paint, and entered the courtroom fortified with skulls, callipers, the Institute diploma, copies of various forms of charts, and other phrenological literature including a copy of the JOURNAL, and threw down the gauntlet.

The case was hotly contested. The city attorney proved our location in the city, our refusal to pay license, our methods of business, and introduced our advertisements in the daily papers in which we had had the temerity to declare that we would point out the talents of those who consulted us, advise them in regard to matrimony, the choice of professions and "*how to accumulate a fortune, and prolong life.*"

We opened our batteries, and assured the court that a science which could

name among its followers such men as Henry Ward Beecher, Horace Greely, Horace Mann, and Charles Dickens, was entitled to respectful consideration. We cited the definition of Webster for fortune tellers "one who predicts future events," and assured both judge and jury that we were guiltless of any such attempt. Witnesses were introduced who testified to the nature and correctness of the examinations, and benefits derived from them.

The City Attorney subjected us to a rigid cross examination in which he tried to entangle us in the question of "bumps." We unloaded our skulls upon him, and demonstrated the theory of Phrenology, by which the amount of sense a man possesses is measured not by "bumps," but by estimate of temperament, quality, health and size of brain.

"Where do you locate the *emotive* faculties," was one of the questions fired at us by the City attorney.

"There are no such faculties known to the phrenological classification, we replied.

"Yes there is, Webster gives them in his Phrenological Chart."

We assured the distinguished legal luminary that Webster's definitions probably contained an allusion to the *emotional* nature of man, but that even with this correction, the treatment of the subject in Webster's Dictionary was nearly as contracted as the city attorney's own views, and that he should seek elsewhere for an accurate knowledge of the subject. In our argument to the jury we assured them that we were fighting simply for the jewels of professional pride and reputation. We could have escaped tedious and expensive litigation by the payment of ten dollars, if we had felt so disposed to rest under the stigma of being classed with disreputable occupations. We were not fighting for our rights and privileges alone, but in behalf of the noble army of men and women, who were

laboring for the advancement of science, and the welfare of the race in a better understanding of the mental, moral, and physical relations of man. We explained our methods fully, reviewed the evidence and the law of the case, and submitted the issue to what we believed was an intelligent and impartial jury of our fellow countrymen.

The city attorney followed with a vindictive onslaught, in which he charged that we were simply humbugging the people, telling fortunes, and "reaping a harvest of golden shekels." That we were now trying to get an endorsement from the court, which would enable us to advertise our business as legitimate. He urged the jury to protect the people of Little Rock from the grasp of a charlatan. After the heat and acrimony of this discussion it was refreshing to hear the presiding judge, Hon. Joseph W. Martin, dignified, calm conscientious and impartial, instruct the jury that Phrenology was a legitimate science, and business and its practice not subject to license.

That a fortune teller was one who attempted to predict future events. That if they were satisfied from the evidence beyond a reasonable doubt, that the defendant attempted to predict future events in his practice, they would convict, but that an estimate of capacity for business or professions, or directions for conduct, or matrimonial selection based upon the science of Phrenology and Physiology was legitimate, and not included in the term "fortune telling." After a brief deliberation, the jury returned with a verdict of "Not Guilty" and we were at once surrounded by an enthusiastic crowd of attorneys, court officials and spectators, and made the recipient of hearty congratulations.

In this connection it is only just to say that throughout this litigation we had the united support of the press and people of Little Rock, as against their own city officials.

WILLIAM WINDSOR, LL. B.

PERSONAL.

SIR HENRY AARON ISAACS, the new Lord Mayor of London, has two daughters who are deaf and dumb, but they have been so well educated on the oral system in Holland, that they can, by lip-reading, understand readily what is said by others. They have such bright, intellectual faces that few imagine them to be deprived of two senses.

REV. HENRY W. LYLE, M. A., a deaf mute, has just died in Philadelphia, where he was rector of All Souls' Church. He was born in China, his father being a missionary, and completed his education at Yale, after studying for a while at Cambridge, England, and two other European colleges.

HORATIO ALLEN, of Montrose, New Jersey, ran the first locomotive that was ever used in this country. He was sent to England in 1826, by the Delaware and Hudson Canal Company, to buy the rails and three locomotives for a railroad of sixteen miles, which they wished to build in connection with their mines in the Lackawanna Valley. Having built the road, Mr. Allen could find no one to act as engineer on the locomotive he had imported, the task being considered too dangerous, so he took hold of the lever, and ran the engine several miles down the track and back, to prove that it was safe. Mr. Allen studied law when young, but left that profession for the more congenial pursuit of civil engineering.

WISDOM.

"Thou must be true thyself,
If thou the truth would teach."

GIVE fools their gold, and knaves their power;
Let fortune's bubbles rise and fall;
Who sows a field, or trains a flower,
Or plants a tree, is more than all.—*Whittier.*

THE love of glory can only create a hero;
the contempt of it creates a wise man.—*Talleyrand.*

I LIKE the laughter which opens the lips and the heart,—that shows at the same time pearls and the soul.

It is a terrible moment in young lives when the closeness of love's bond has turned to the power of galling.

THE flowers which scatter their odors from time to time, in the paths of life, grow up without culture from seeds scattered by chance."—*Sam'l Johnson.*

If a man would but truly and impartially

examine himself, he would find but little cause to judge severely of his neighbor.—*A. Kempis.*

MIRTH.

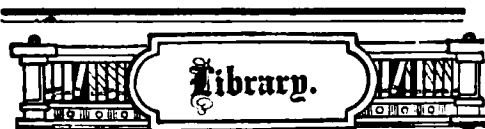
"A little nonsense now and then
Is relished by the wisest men."

WHEN a young farmer's wife made her first boy's pants precisely the same before as behind, the father exclaimed: "Goodness! he won't know whether he's going to school or coming home."

THE Duluth woman who put the kerosene can on the stove-hearth while she went out to trade with a peddler, is now keeping house in a barn, kindly loaned for the occasion.

ON their wedding journey.—She: "This is Minerva." He: "Was she married?" She: "No, she was the goddess of wisdom."

DOCTOR: "Take these powders as directed and your cold will be gone in two or three days." Patient: "You seem quite hoarse, doctor." Doctor: "Yes, I've had a bad cold for four weeks."



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

A SHORT HISTORY OF THE WAR OF SECESSION, 1861, 1865. By Rossiter Johnson. Author of "A Short History of the French War, ending in the Conquest of Canada," and a "History of the War in 1812-'15."

At the distance of nearly a quarter of a century from the strife that wrought so much sorrow and loss to our common country, the trained observer can hope to review the facts of its origin with impartiality, and follow its course from the siege of Sumter to Appomattox with a considerate regard for the bravery and devotion of the Confederate soldier fighting for his home, and a respect for the Northern soldier as bravely resolute in his determination to maintain the unity of this

country. There have been many volumes written on this great drama in our nation's life. Soldiers who have participated in it have written out their observations. Statesmen have reviewed it, giving the color of their personal opinions, and here and there a literary man has tried his facile pen at describing the scenes of battle. But few, with that needed experience that is to be obtained only by special studies in history, have taken up the theme. Mr. Johnson approached it with something more than the "prentice hand." He had already done good service for American readers in making two excellent volumes of condensed history, his account of the war of 1812-'15 especially showing an adaptation, the power of scientific analysis, required by him who would write acceptable history. In other respects a disciplined writer, with an easy, simple style that few litterateurs acquire, Mr. Johnson took up his pen for this short history of the civil war with good prospect of accomplishing successfully a difficult task. In this book of 550 pages he aims, first, to answer the question "How did it happen that the war took place at all" by a careful examination of the state of affairs social and political, South and North, for many years. Then he proceeds to marshal the occurrences in its course, and to interpret their significance in the brief terms required by the limitation of space. He writes in this volume as ever, carefully, thoughtfully, conscientiously, and with a regard to the effect of his opinion upon the reader. In a small compass he has packed a great amount of detail. As a book for popular reading it is certainly a success.

A MANUAL OF MEDICAL JURISPRUDENCE, with special reference to Diseases and Injuries of the Nervous System. By Allan McLane Hamilton, one of the consulting physicians to the Insane Asylums of New York City. 12mo, Cloth, Price \$2.75. E. B. Treat, publisher, New York.

A condensed treatise relating to one of the most important topics of modern science. The author, with but a short introduction explanatory of the typical conditions of mental disease, enters into the consideration of the subject, illustrating phases of unsoundness, be they related to illusion, hallucination, delusion, acute or chronic mania, inebriety, epilepsy, etc., by cases drawn from actual observation, and the records of court. Many *causes celebres* relating to wills are detailed, and the peculiar neurosis that this or that decedent suffered from is analyzed carefully. So far as medico-legal inquiries are concerned the book is well furnished, and the adjudica-

tions of court in their correspondence with medical opinion are passed in review.

There is no pretence of fine writing or of the higher scholarship in the making of the book, but there is more—viz., an evident purpose on the part of Dr. Hamilton to supply a book that shall be of essential use, in giving the lawyer and physician information covering a wide field of inquiry and that in a definite brief style.

PUBLICATIONS RECEIVED.

THE JONAS FUND and other stories. By Mrs. Julia P. Ballard, author of "The Broken Rock," etc. 16mo, 161 pp. New York. National Temperance Society and Publishing House.

If we wish to interest young people, those yet attending the preparatory schools, getting the elements of education in moral principles by means of story telling, we can do it better by short, lively tales, than by long and more or less intricate fiction. In this new book upward of a dozen little sketches of life are given and with neat illustrations, forming a group that will please any intelligent boy or girl.

THE SHELTERING ARMS.

Twenty-fifth Annual Report of the work done by an admirable society in saving and caring for homeless and neglected children. This society is now twenty-five years old and in that time has cared for nearly two thousand little ones. Miss Mary R. Chauncey, Madison avenue, New York, is Secretary.

"BRICK" POMEROY LIBRARY. No. II. of Vol. 2, entitled "Ourselves and Neighbors," is a character expression of the Pomeroy style of writing. Its topics are certainly funny, curious, and various. Price, 25 cents.

A STRANGE CONFLICT. By John M. Batchelor. **A Strange People.** By the same author. Paper. Price 50 cents. J. S. Ogilvie, publisher, New York.

TWELFTH ANNUAL REPORT of the Commissioners of Prisons on the Reformatory Prison for Women, with the Annual Report of the Superintendent.

A powerful showing of the effect of systematic training on the vicious and criminal. Too much credit can scarcely be given to Mrs. E. C. Johnson the able manager of the institution for the excellent results obtained.

A YEAR OF GOOD WISHES. J. Pauline Sunter.

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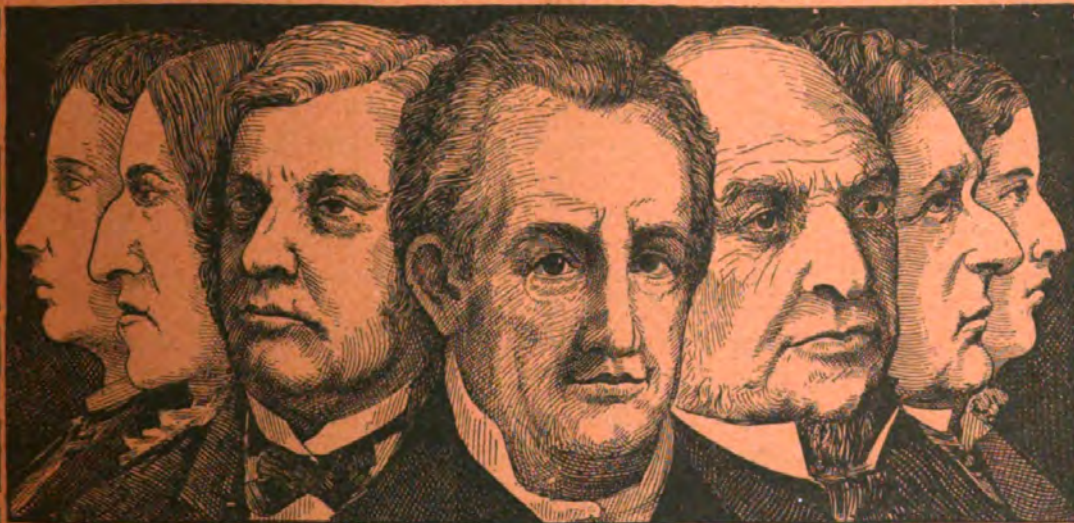
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THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

NUMBER 3.]

MARCH, 1890.

[WHOLE NO. 615



PETER HENDERSON.

PETER HENDERSON.

THE HORTICULTURIST.

THIS is a strong head and face ; the breadth of the head, the mass of the lower forehead, and the breadth and positiveness of the nose, the fullness of the cheek bones and expression of the mouth, indicate energy. The temperament is entirely on the side of action ; his mental faculties find in the temperament that push and stimulus which mark a man of persevering, we might say pertinacious, industry. With him to be convinced of the expediency of a measure, was to enter directly and earnestly upon its prosecution. In general character, he differed from the majority of men, there being nothing of the tendency to hesitate or drift along. He was no time-server ; he waited for no tide in his affairs to carry him forward to fortune.

Nationality is clearly expressed in those features. The old hardihood and emphasis of the Scottish mountaineer seems to have run in the veins of his family, and he inherited a large share of that kind of stock. One might infer from the portrait that while he was most strongly practical in his consideration of the affairs of life, he gave himself up to his work with so much earnestness that there was a tendency to forget self, to neglect those conditions which relate to the maintenance of health, with the result of physical depression, so that in the latter part of his life it was quite probable that he suffered much from functional or organic deficiency. We say this, because naturally he was of very strong and enduring constitution. His energy and activity, the spirit with which he threw himself into his affairs, particularly as his business interests multiplied and grew upon his attention, drained gradually his strength, so that when sickness came, he did not possess sufficient strength to resist its encroachments.

This is a courageous organization. In defense of his interests, he would be very

strong. At the same time, he possessed a great deal of discretion, a discretion founded, not only upon good practical judgment, but upon a natural instinct of Caution. With all his energy and industry he was not the man to attempt enterprises that involved much risk. He did not go outside of his experience, and his advice would be against venturing into the field of the unknown. He was a man who recognized his power, therefore, through what he had accomplished, and if, as time went along, there came occasions for the expansion of his business relations he knew how to hold the reins and keep his forces under control. He had excellent judgment in regard to the association and working of details, and being a thoughtful man he carefully analyzed circumstances.

The power to know and to know for a certainty whatever came within the range of his observation and power of analysis, was his distinguishing intellectual characteristic. The realm of things was to him a revelation, and nothing from the pebble under his feet to the starry universe above, escaped his attention, his thought, and criticism. Science in the realm of things is where such an organization is at home. Not one in fifty thousand do we find with so large a development of perception and ability to gather and retain knowledge, and while he gathered, he criticised, and formed his opinions in connection with facts, and then it became to him both science and history. Experience blended with all he saw and thought and did, so that his knowledge was ever at his tongue's end. He could make anything that he understood of practical service. He had an orderly cast of mind, and with a remarkable memory he had the power of arranging, codifying, sifting, and co-ordinating facts, making them seem clear and practical to other people.

His massive upper forehead indicates

the grasp, the grip, the power, the scope that enabled him to take in large fields of thought and effort, and while he was master of detail and particulars he was scarcely less strong in the power to comprehend ideas and principles. Then his ample strength of talent joined with Ideality gave him an inventive, progressive ability always to select the best, where a selection could be made, and make inventions and improvements where they were possible.

He must have had a good deal of dry wit, the power to see the absurd, as well as to see and appreciate the congruous and the reasonable. The knowledge of men made it easy for him to move easily among men; but with his strong power to think, with his self-reliant determination, his strong sense of duty and obligation, he would organize his line of duty for himself and others, which made it necessary for him to carry out, and to have others carry out in conjunction with him, that which seemed to him to be right; hence he was a leader, a master among men. People of his age and experience would wait to see what he had decided upon as to the best methods, and generally he had the best methods.

If he had been trained to the higher forms of professional life, for instance, engineering in its broadest sense, literature in connection with science, law in connection with ethics, and government or theology, he would have been a strong man there! The length from the opening of the ear to the root of the nose, shows a very strong development of the intellectual brain. Then his perceptive development, making him absolute master of details and particulars and a keen analyst of things, thoughts, and affairs, laid the foundation for scholarship and practical ability. The power to make himself master of his surroundings, his capacity for usefulness, the performance of duty, and the acquaintance and diffusion of knowledge would have made him eminent among men in any department of useful endeavor.

One of the victims of the fierce influenza that recently invaded our country was Mr. Peter Henderson, a man of high prominence in the calling that he had pursued from youth. Probably, in practical horticulture, no man in the United States had achieved a higher reputation. The business that he founded in New York City had grown to colossal dimensions and employed a large number of men and women, while his greenhouses and gardens from which the New York warehouse drew its best supplies, were regarded as inferior to none in the world for perfection of arrangement and completeness of equipment.

Mr. Henderson was a native of Scotland, and born at Path Head, a village near Edinburgh, in 1823. His father was land steward to a gentleman in the neighborhood. Peter was educated at the parish school, where he proved a foremost scholar. At the age of fourteen he became the clerk of a liquor store—what is called in this country a bartender—in Edinburgh, and was there subjected to great temptation, but his moral stamina fortified him against the temptation of his place. At the age of sixteen he was apprenticed to a gardener, where temptations again assailed him. It was the practice of the lads of the establishment to go to a tavern every Saturday night, but against this practice he set his face so firmly that he nearly abolished it, and from that time he was an uncompromising champion of temperance principles. In this congenial employment he quickly showed the enterprise and ambition that have characterized his life, for although he commenced his apprenticeship in a company of ten, before he was eighteen years of age, he had twice successfully competed for the medals given by the Botanical Society of Edinburgh for the best herbarium of native and exotic plants. The competition was open to the whole of Great Britain. It gave him that practical knowledge of botany, which has been a great benefit to him as a horticultural writer.

While he was yet an apprentice, not content with the education he received at school, he and another youth walked ten miles twice a week for two years to attend a mathematical school in Edinburgh. This illustrates the difficulties encountered by young men in those days to obtain a good education, especially one of a technical character. After serving his apprenticeship in Scotland, he emigrated to this country, arriving in New York at the age of twenty. Here he worked one year at Thorburn's Nursery, Astoria, Long Island, and another year with the late Robert Buist, of Philadelphia. Mr. Buist was a life-long friend of Mr. Henderson. From Mr. Buist Mr. Henderson went into the employment of Mr. Charles Spang, of Pittsburg, and remained with him three years, or until he had accumulated a small capital with which to begin for himself.

It was in 1847 that he started as a market gardener on a plot of ground that he hired in the then suburbs of Jersey City, and for many years this was his principal business. Gradually, however, as the taste for ornamental gardening increased and the New York market demanded supplies of flowers and flowering plants, his early botanical training came in use, and the market gardening part of his business was abandoned. His famous book "Gardening for Profit," of which 100,000 copies have been sold, was published in 1866, and it helped to give him an extended

reputation. In 1875 he published "Gardening for Pleasure," of which more than 25,000 copies have been sold. His last book is entitled "Henderson's New Hand Book of Plants and General Horticulture," which is now in press. This work was originally published in 1881, but has been enlarged and brought down to date.

Besides his books Mr. Henderson has been of necessity a contributor to agricultural and horticultural publications, his authority on many essential features of his vocation being accepted as scarcely second to the opinion of any man in the country.

Certainly, on the side of the practical, his views were most highly esteemed, as the sale of his books have evidenced. The gardens and greenhouses that were established on land that he had purchased on Jersey City Heights cover many acres of ground and give employment to an average of a hundred hands throughout the year. He was a member of the New York Horticultural Society, the Society of American Florists, the New York Florists' Club, the Seed Dealers' Association of the United States, and also chairman of the finance committee of the Bergen Improvement Association. He avoided active participation in politics, although he served on several public committees from time to time, and took a deep interest in the local and general improvements of the city.

STUDIES FROM LAVATER.—3.

THE ADVANTAGES OF KNOWING HOW TO READ THE FACE.

LAVATER says: "Who views the antique gems must see enlarged intelligence in Cicero, enterprising resolution in Caesar, profound thought in Solon, invincible fortitude in Brutus, in Plato godlike wisdom, or in modern medals the height of human sagacity; in Montesqueu, in Waller, the energetic, contemplative look and most refined taste; the deep reasoner in Locke, and

the witty satirist in Voltaire." In the lines and curves of the great painters' faces we trace the finer lines of the soul within revealed in the beautiful lines and curves their hands create. Those painters were the best, says Lavater, whose persons were the handsomest—Rubens, Vandyke, and Raphaël possessing three gradations of beauty, possessed three gradations of the genius of

painting. "All the great painters have been handsome or remarkable looking men. Tintoretto had a grand and solemn face, Da Vinci a noble and beautiful face, Rembrandt a sagacious and profound face. Our own sculptors, Brown, Ward, Palmer, and Thompson, look as if illuminated by a ray of the ideal." The finest faces in Europe were Shakspeare, Moliere, and Goethe. Poets, painters, and men of science think on a higher plane; they walk together over thought's mountain tops, and the lines of their faces often resemble each other. Of varied descent they have a kindred nobility of their own. Milton, the scrivener's son, and Burns, the plowman's; Virgil, the porter's, and Homer, the farmer's boy; Demosthenes, the cutler's son, and Claude Lorraine, the pastry cook's; Horace, the shopkeeper's, and Shakspeare, the wool stapler's son; and Moliere, the tapestry maker's—all these, with fadeless faces and fadeless fame, look down from the gallery of immortals, silent, resistless witnesses of the great soul rising through all obstacles and glowing in the face and life.

The face of Albert Durer was the best evidence and type of his genius. In his harmonious features we read the truth of physiognomy. Says Lavater: "Whoever examines this countenance can not but perceive in it the traits of fortitude, deep penetration, determined perseverance, and intense genius." In this face there is dignity and sublimity, and his works in dignity and sublimity are masterpieces of art. His drawing was perfect; he thought out his work, and never altered a line. He was the first German artist who taught the rules of perspective and insisted on the study of anatomy. He invented etching, and raised wood engraving from its feeble infancy to be a pattern for all time. His pictures of Christ, of the Virgin, of the Apostles, the Magi, the Martyrdom, the Adoration, and the Great Passion, show the dignity, the sublimity of his genius. All the chief cities of Germany strove to

obtain them. He had a strong and noble frame, and even when a child drew with great exactness parts of the human body and even whole figures, also lines and circles at the first stroke, without rule or compass.

The face of Thorwalsden, the Danish sculptor, says his countryman Holberg, had the plastic characteristics of one of his own admirable statues. When he moved in the midst of a crowd it would separate as if it felt the presence of a superior being. His masterpieces, Christ and the twelve Apostles, in the Cathedral church of Copenhagen, are unrivaled by any statues of contemporaneous



RAPHAEL.

art in dignity, simplicity, and deep feeling—a dignity, simplicity, and deep feeling revealed in his own illuminated face. The waves of the hair, the lines of the face remind one of the most beautiful pieces of sculpture. His favorite studies when a boy were the classic marbles, and his Venus and Cupid and Psyche were the most successful imitations of the antique. In after years his Day and Night, so well known and admired, were modeled at a single sitting. His face was best beloved in all Denmark, and ever welcome in her royal palaces. (See February number.)

We turn from the greatest of sculptors to the face of Raphael, *Il Diurne*, "the Divine." "In Raphael most of all painters," says Lavater, "is simplicity, greatness of conception, tranquil superiority, sublimity, most exalted. Raphael never can be too much studied, although he only exercised his mind on the rarest forms and the grandest traits of countenance." "No earthly renown was ever so unsullied by reproach, so established by time." Cut off by death at the early age of 37, his last and greatest picture, the Transfiguration, the first oil painting in the world, was suspended over the couch on which his dead body lay in state; and afterward carried before it at his funeral, while the last traces of his



RUBENS.

master hand were yet wet upon the canvas. In the head of the Saviour, on which Raphael lavished all his powers of majesty and beauty, we see an effulgence of eternal glory, an air of Divinity, the last perfection of art and the last work of the immortal master.

"What object so important to man as man?" If all physiognomical knowledge and sensation were lost to the world, how perpetual the vexation of the eternal uncertainty in all we should transact with each other. Physiognomy distinguishes what is permanent in the character from what is habitual, and what is habitual from what is accidental. Each creature is indispensable in the immensity of God's creation. The place of no man can be supplied by another.

This belief in our own and all men's indispensability and individuality is one of the noblest fruits of physiognomy. Much positive good may be found in the worst of men."

"The worst of faces is still a human face, and may be still more debased, or, to a certain degree, be improved or ennobled. Each individual can be what he can." * * He may arrive at a certain degree of perfection, which scourging even to death can not make him surpass." Each man must give his own standard. As each man has a particular circumference of body, each man has a certain sphere of action. To force a man to think and feel like me is equal to forcing him to have my exact forehead and nose, to give the eagle the slowness of the snail, or the snail the swiftness of the eagle. Each man is a sovereign prince, small or great, in his own principality. This he may cultivate so as to produce fruits equal to one twice as large, or that shall be left half uncultivated. Be what thou art and become what thou canst. Physiognomy says to man, "As the pines which grow upwards of a hundred feet high in North Carolina are small enough in Spitzbergen to be enclosed in a letter without doubling the postage, so each man has his distinctive type and gift, he may degenerate into a mere human ant, or give, by dwarfing and stinting his natural powers, as little growth and beauty as a Spitzbergen pine." Physiognomy, by studying the inherent faculties, the working of the mind through every part of the body and taking every part into account, will show where man will fail most and where most excel. Says Lavater: It perceives in child, pupil, friend, or wife any discordant trait of character, endeavors to restore the original congeniality, the equilibrium of character and impulse by acting upon the still remaining harmony by co operating with the yet unimpaired essential powers. It will unfold what nature is desirous of unfolding, give

what nature is capable of receiving, and take away that with which nature would not be encumbered. It will bring out and beautify the real character, and as little seek to add a new character as to add a heterogeneous nose. Physiognomy will give philanthropist and reformer these most powerful levers,



WEAK, ILLITERATE NOSE.

to regenerate mankind. It will teach man to feel that his countenance is improved as his heart is ennobled, that an inward reformation is the sure forerunner of a beautifying reformation on the outward visible marks of the countenance, and that vicious, basilisk faces are beacons warning all of life shoals and shipwrecks that no assumed appearance or borrowed robes of virtue can ever take the place of regal virtue herself. We have touched the borders of the beautiful, immutable truth of physiognomy, revealing itself clearest and brightest in earth's noblest faces. As we draw nearer its central heart we shall find its harmonious laws intervening all, written over and under all art and all science, all of life and faith, the key to all, and the helper of all.

"The countenance is the theatre on which the soul exhibits itself," says Lavater, "here must its emanations be studied and caught. The nose is the foundation or abutment to the brain. Whoever is acquainted with the Gothic arch will perfectly understand what I mean by this abutment, for upon this the whole power of the arch of the forehead rests, and without it the mouth and cheeks would be oppressed by mis-

erable ruins. Without gentle archings, slight indentations, or conspicuous undulations there are no noses which are physiognomically good or intellectually great."

Faces are like houses. Sometimes we look for a home. We find a mansion, stately and commodious, with lofty ceiling, solid masonry, broad verandahs, and beautiful outlook: but disorder has broken the windows and defaced the woodwork; fire has seamed and blackened the walls, and water, bursting from the neglected pipes, made every room damp and unhealthy. Dingy cobwebs wreath the archways. The bell-wires are broken, you can not read the name on the dusty doorplate. Air and sunlight have been kept out so long all the house is dark and cheerless. There are paintings of the old masters on the walls, but some blundering hand covered them with muddy varnish, and through the overlying dust the master's name is completely hidden. The silent clock on the mantel is the best of workmanship, there are jewels shining within, but it looks perfectly good for nothing. The garden is full of weeds; all



STRONG, OBSTINATE NOSE.*

the morning glories and heartsease are dying. Boys have been in and trampled down the forget-me-nots. In one corner you see Love lies bleeding, and a few widows' tears. Crown imperials shone there once, but all are gone; yet we say, "That is a beautiful elm in

*See portrait of Dr. Gall, this number, for type of a refined nose.

front, and what a magnificent view !” The house is well built and faces the sun. The walls can be repaired. Fire can dry it, and skill restore it ; air and sunshine refresh and brighten it. There can be so many flowers in the garden there will be no room for weeds.” We buy the house, the clock, and the pictures. In a month what a pleasant home we have. Happy children look through the bright windows, and loving friends pass in and out the open doors. Every one passing admires the house, and wonders at its transformation. The weeds are all gone, red roses are budding in the garden, and the sun is shining on the widows’ tears. We take great pride in having found out the real value of the house. So there are faces with noble lines, and curves, and once



A PERVERTED FACE.

bright eyes, but evil habits, like bad workmen, have marred and defaced and half ruined the beauty within. The fires of passion and envy have swept over it and scorched and blighted all. There may be a garden in the soul behind the face, but the morning glories and heartsease and crown imperials are gone, their roots may be living yet. We only see growing here and there Love-lies-bleeding and widows’ tears—as says Lavater : “ All the most excellent qualities are stifled by weeds of error. The common unpracticed eye can see only a desolate wilderness there, yet beneath the dark embers on the hearthstone may be smothered the sparks of goodness, perhaps the fire of genius,” and as the desolate house

shows what it has been, and might be, so the marred, blighted face may reveal with the soul’s present poverty wonderful powers of beautiful restoration. Lavater says : “ Be not discouraged so long as a friend or enemy, a child or a brother, though a transgressor, has a good, well-proportioned open forehead there is still much certainty of improvement, much cause of hope.” Herodotus tells us “ it was possible many years afterward on the battle-fields to distinguish the skulls of the effeminate Medes from the manly Persians.” How far more possible through the open eyes of the living face, to distinguish the soul’s effeminacy or manliness. Faces are altars and shrines, confessionals and cloisters, cathedrals and pantheons. Therein are thoughts, processions and transfigurations, matins and masses, Magnificat and Benedictus, remorseful sack-cloth and darkest ashes. These all in marvelous diversity and gradation, glory or desolation are now veiled, and now revealed in the human face. Noblest of tasks, the study of the faculties of man “ diffused throughout the whole body, soul, and spirit.” “ The man who has a mechanical faculty is a mechanic from the crown of his head to the soles of his feet. The man who has the faculty of endurance is an enduring man, through and through—not in one bone but in all.

He who has the scientific faculty is constructed for scientific purposes all throughout his organization, and the musical man is not musical in part, but from the centre to the circumference of his being is permeated with the faculty of music.” Watch him at organ or piano, how his whole being thrills and sways with the power divine.

In no being is the wonderful power of nature and culture together more clearly revealed than in the musician. Many pass through the world and never know or use their own best native powers. The common sparrow in its native state only gives an unmelodious

chirp and spends its laborious days in carrying caterpillars from the garden to the family nest, sometimes two birds will take home three thousand three hundred and sixty in a week—but early taken from their nest and educated under the musical linnet with an occasional lesson from the sweet-voiced goldfinch, the sparrow learns and sings a song blending the beautiful notes of both, and a linnet educated under the skylark learns its soaring song. A bullfinch in the woods has but three cries, none of them tuneful. If it hears often the carter's coarse whistling, he will whistle after them with the same strength and coarseness. But if he is carefully instructed and hears often finer, mellow strains he will imitate and surpass the master.

A great bird lover and a very melodious whistler once whistled some difficult airs and heard a bullfinch repeat them, adding such graceful turns he could scarcely recognize his own music, the bird scholar so far excelled him. Bullfinches adopted and petted in a family, have learned from the children to repeat expressions so accurately and effectively, with so tender an accent, that we might suppose they really felt their force. Most of the parents of canaries from the Tyrol have been taught their richest tones from the nightingale, whose clear, sweet song is the mellowest and most brilliant of all birds. Its song, in its whole compass, has sixteen different beginnings and closes, varying delightfully its intermediate notes, often singing twenty seconds without pauses. Its clear, sweet song may be heard half a mile. The muscles of its larynx are stronger than in any other bird of its size.

The bird is the most beautiful type of man's aspiring soul. As the sweeter bird thrills and inspires the other more silent one, so men's minds are wrought upon by minds greater than themselves. He who has the musical faculty will develop that faculty in others. "A hard

working mind by study develops new faculties in itself, and these, bearing upon others, propagate themselves in a remarkable manner. The lower more animal faculties are common to all; the higher, more refined, and spiritual are much the product of culture and growth." "The gestures and words of our friends," says Lavater, "become our own; so in like manner does often their appearance; whatever in the circle of affection does not change us into itself, we change as far as may be into ourselves." In the faces of the children of



PLATO. FACE OF CULTURE AND HIGH DEVELOPMENT.

exceptionally harmonious parents we often see as if reflected in the children's ways and faces, the father's gentleness and the mother's cheeriness. Thus we see in families some one particular resemblance in all. Children of ordinary parents placed in new, helpful surroundings, cultivated in health and intellect, will show astonishing change in face and form. A late writer says: "The human body and mind are regulated by a system of checks and balances; one defect is often compensated by some excellence; where one good trait is wanting, another trait in excess may

supply the want to assist, as it were, in balancing the character." These defects and excellences in a family recognized and allowed for, may lead to much harmonious happiness. Unity exists in all unimpeded natural growth." When each child has its best gift brought forth all the family lines blend as perfectly as the band of hues in the beautiful rainbow.

There is a great mistake in nagging at the faults or defects of child or friend instead of stimulating and cherishing the good quality that thus encouraged might so luxuriantly thrive as to overgrow and stifle the fault; better cheer the good than forever to bark at the wrong. The most contemptible character in the family is the one always hitting the others' weakest points. All the family toes would not be so often sorely stepped upon if each good gift

were magnanimously acknowledged, each fault gracefully overlooked, and then home might be the sure retreat from outside cares and crosses. Home life is too often turbulent with unhappiness, fault-finding, harsh retort, and squabbling over trifles. There is one of the family sometimes like a household angel, soothing the grief and bringing out the good in each. These joy-bringers are nightingales souls awaking the sweetest bird-song from every dumb, despairing heart.

This rubbing up faults, hitting sore spots is sometimes done heartlessly, often ignorantly. A woman most carefully considerate of her birds, chickens, and cows, in the home perhaps will be forever stirring up some discomfort, hunting for some short-coming. She belongs to the hammer and tongs and poker brigade.—L. M. MILLARD.

NOTABLE PEOPLE OF THE DAY.—No. 29.

LEWIS M. RUTHERFORD,

The Private Astronomer.

OF Americans who have carved their names by their own industry well up on the walls of the temple of science Mr. Lewis M. Rutherford is to be mentioned among the first. Perhaps among those who in the past fifty years have prosecuted investigations in science at their own expense this citizen of New York has no superior when the value of his achievements are fairly estimated. He belongs to an old family that in the past hundred years has produced men fit to bear part in the council of the nation, and who figured in the stern scenes of military life.

Born in Morrisania, N. Y., November 25, 1816, he completed his early education at Williams College, and then studied law at Auburn under Mr. Seward, afterward Secretary of State in Mr. Lincoln's Cabinet. Later he had a desk in the office of Mr. George Wood, of New York City. Entering the prac-

tice of the law in 1837, he continued so engaged until 1849, when he went to Europe, where he spent several years in travel. On returning to America he did not resume his practice, but took up the study of astronomy and optics, and found in this field sufficient occupation. He erected an observatory on the grounds of his residence, and there his scientific work was mainly done.

Of his earlier investigations we may speak of the confirmation of Alvan Clark's discovery of the "Companion of Sirius," his invention of apparatus for the better determination of stellar spectra, and for the correction of chromatic errors in object glasses.

Later he devoted most of his time to experiments for the perfection of astronomical photography, and in 1864, after many experiments in various directions, but all undertaken for the same purpose, he succeeded in devising and con-

structing an objective of $11\frac{1}{4}$ inches aperture and about 15 feet focal length, corrected for photography alone. This instrument was a great success, and was described by him in the *American Journal of Science*. Near us as we write hangs a fine photograph of the moon when about eight days old that was taken on the 6th of March, 1865, by Mr. Rutherford.

He also was the first to show the double character of the D sodium lines in the spectrum, finding that "is re-

matic object glass of 13 inches aperture, which could be readily converted into a photographic objective by the addition of a third glass. With this the inventor produced photographs of the moon that are unsurpassed for fullness of detail and clearness of outline. Several other things might be mentioned that Mr. Rutherford contributed to astronomical science and thus helped materially to promote its advancement. Out of his inventions and suggestions new and later methods and instruments have



LEWIS M. RUTHERFORD.

solved into fourteen fine and close lines, with a beautiful and symmetrical band of finely doubled lines stretching toward A."

About the same time he published criticisms on different forms of spectroscopes that had been used by Secchi, Airy, and Donati, and in 1865 produced an automatic form of a six-prism spectroscope, which still continues the best in use.

In 1868 he constructed a new achro-

grown, so that he must be accorded the reputation of a pioneer in the vanguard of a most important branch of science.

In 1883 failing health led to the discontinuance of his scientific work, and in December, 1889, he presented his astronomical instruments to the observatory of Columbia College. These include a refracting telescope, with its object glass of 13 inches and focal length of 15 feet, supplied with photographic correcting lens made after his own de-

sign ; a transit instrument for observations of time ; micrometers for use with the telescope, and a special micrometer for measuring photographs, besides a fine sidereal clock—together a welcome gift to any educational institution.

In 1858 he was elected a trustee of Columbia, and in 1887 this college conferred the degree of LL.D. upon him. He is a member of several home and foreign societies and holds orders and diplomas awarded him at different times in recognition of his eminent abilities.

The face of Mr. Rutherford is that of a refined, scholarly man. The quality of the organization in itself is much above the average, and associated with an unusually well balanced and symmetrical organization. The expression intimates a delicate and susceptible mind, readiness of perception, liberality and kindness. He has much pride and is averse to associations and practices at all questionable and coarse. The fullness at the temples shows capacity in mechanism, power to arrange, plan, and build. He would have shown superior ability as an architect and engineer, if he had adopted such a profession, but it is most likely that his nicety of touch and perception of intimate relations found in his observatory a suitable field for exercise, and hence his great success.

EDWARD BELLAMY.

THE living questions of the day are social, and he who puts forth a book that discusses one or more of these questions in the manner of one who has earnestly studied them and desires to aid in their solution, and especially to indicate some way by which the great army of labor shall rise in the scale of self-support and personal independence, is almost certain of public recognition. The doctrinaires who write on the side of capital and for the maintenance of the *status in quo*, have their small following, but the broad spirited, liberal mind that sees in every man a brother, finds a large audience. Latterly we

have writers who urge their views of social economy in the form of novel or story, and some of them have received the commendation of a large public. It is needless to say that Mr. Bellamy is one of these, for his "Looking Backward" is one of those books that every body interested in social progress knows about.

He, as can be seen at once in the excellent engraving, is a man of fine grain, and of superior intellectual constitution. He is a thinking man, both the structure of the forehead and the expression of the eye intimate that. He picks up knowledge, he thinks about it, and applies the principle or philosophy that he deduces from it. He is therefore a subjective thinker rather than objective. The head is full in the side, showing endowment in lines mechanical and esthetical. And the posterior brain is fuller than the average imparting a natural disposition to consider social and domestic affairs. He believes in home and family life, and would be found in an emergency a zealous defender of the rights that belong to the parent and householder. His active, impressible, excitable temperament renders him prompt, high-spirited, energetic, and thorough-going. He is a sensitive, modest man in the assertion of opinion, yet while possessing the sagacity of the philosophical phase of mind, he is not afraid of the consequences of declaring his convictions when it may be necessary to disclose them. He loves justice and believes that one of the highest duties of human life is a practical regard for responsibility and duty.

Edward Bellamy is about forty years old, and was born at Chicopee Falls, Mass. He comes of old New England stock in which the theological element appears to be prominent. His father was pastor for 35 years of the Baptist church at Chicopee Falls, and a man well-known the country round for his benevolent character.

A friend of Mr. Bellamy in writing

of him says: "Pains were taken with his early education as may well be supposed, and his mind is well-stored with the knowledge that comes from training and instruction, supplemented by habits of observation and study. A partial course at Union College, a year of study in Germany and a period of law study, resulting in his admission to the bar of Hampden County, constituted the special education of his later youth. Then the appetite for work of a literary character asserted itself, and in 1871 he joined the staff of the New York *Evening Post*, under the management of Mr. Bryant. In 1872 he left the *Evening Post* to take a desk in the rooms of the Springfield (Mass.) *Union*, as literary editor and editorial writer. During his connection with the *Union*, which lasted four years, young Bellamy took the keenest interest in national politics, and was an ardent partisan, wielding his pen with increasing vigor as campaigns waxed in interest. During this time he began what may be considered the first period of his literary career, and besides his journalistic labor he contributed short stories to the magazines.

In 1876 Mr. Bellamy gave up his desk in the *Union* office and after a somewhat extended trip to the Sandwich Islands, returned to his Chicopee Falls home and settled down to the work of the second period of his literary life.

His first volume of fiction, "A Nan-tucket Idyl," was a very pleasant book for summer reading and made something of a "hit" as such. His next effort was "Dr. Heidenhoff's Process." This appeared first as a serial story in the Springfield *Union*. Many good judges have pronounced this book Mr.

Bellamy's masterpiece, and showing more fully than any other the characteristics of his style and the vigor of his imagination. But this book was never very popular. "Miss Ludington's Sister," in which the writer pursued the psychological idea still further, suited the public somewhat better, though by no means superior to his previous work.

Of "Looking Backward" and its picture of a social millennium arising from the general application of a co-opera-



Edward Bellamy
[From Houghton, Mifflin & Company.]

tive system in which the rights and privileges of all classes have become dissolved, and individual assumptions and prejudices are no longer recognized, we need not speak at length. Mr. Bellamy has put himself largely into it, so that the reader discerns the nature of the man who wrote it as he proceeds from page to page.

Mr. Bellamy is genial and agreeable in social contact, fluent and ready in conversation. He is modest and want-

ing in self-assertion, though in his enthusiasm for his new "mission" he has acquired somewhat more of boldness than he formerly showed. He is not religious in the popular acceptance of the term.

"This book reflects his creed. For piety he substitutes morality. This is not uncommon now-a-days with writers who exploit their views on any topic of current importance; nevertheless, it has

been forcibly urged against his book that it fails to recognize the true agency of the Christian faith in the regeneration of the world. His active interest in the social problem is of comparatively recent development, and in fact its growth was practically coincident with the growth of the book under his pen, it having been started with a very different purpose, not much out of line with the motives of his former work."—EDITOR.

THOUGHTS ARE THINGS.

HOW RESULTS ARE SAID TO BE OBTAINED THROUGH THE FORCE OF THOUGHT
AND SILENT POWER OF MIND.

I.

ONE of the most curious intellectual movements in this age, noted as it is for mental activity, is what is called the "White Cross Library," a monthly publication, started in Boston about two and a half years ago, and which holds that thought is a real element, constantly put out or received by the mind; and that in the government and regulation of this element depend health and fortune, success or failure in life. The originator of this enterprise, which in many respects is quite novel, was Prentice Mulford. A few years since, he was connected with the *New York Graphic*, writing for that journal the "history of a day," in which, in a column of short paragraphs, the most notable occurrences of the twenty-four hours preceding the issue of the paper were pithily and often wittily set forth. It was while he was connected with this publication that he conceived the idea of building himself a house, or hut, in a Jersey swamp, and made an unsuccessful effort to hermitize there. He knew nothing about building, but he constructed a house of one or two rooms which answered his purpose for the time, and thither he used to repair daily after he had finished his journalistic labors in the city. It was during this period of self-chosen solitude that he conceived the principle which, in the

library referred to, he is now setting forth. His life has not certainly lacked variety. He proposes, shortly, to publish his autobiography, in which he will give an account of his life when a boy as a sailor on a merchantman; his experiences in a whaler on the Pacific Coast; his trying ordeal as a sea cook; his labors as a gold-digger in the early days of California; his adventures as a prospector in the solitudes of Nevada; his trials as a rancher; his tribulations as a California schoolmaster; his reflections as a juror; his life as an office-seeker, and his career as a journalist. At the present time he appears, broadly speaking, in the guise of a philosopher. It would be very difficult to classify his teachings, or to say what particular school or sect he represents. From some passages in his essays it might be inferred he was a Christian scientist, from others that he was a spiritualist. Now and again there are indications that the writer has dipped into the philosophy of Brahma, and occasionally it seems as if he believed in the influence of personal magnetism and the power of clairvoyance. He has said that one reason he does not call himself after the name of any particular school of thought is because such names are so apt to be misunderstood; if, for instance, he called himself a spiritualist, he would have to father practices and beliefs of which he

did not approve, while the term "Christian" has come to mean, with many, a belief in certain theological constructions and dogmas of purely human origin, with some of which he might not be in sympathy. To some this objection to be called by any name may seem singular and lead silence itself to be misconstrued, but the essays are really designed to reach all classes of persons, no matter what their philosophical or religious belief may be, the constant aim being to show how results may be obtained in all business and art, through the force of thought and silent power of mind.

One curious feature in connection with the enterprise is that the preachers of this doctrine themselves put it in practice. They say that their enterprise has grown in accordance with the business principles they have put forth. They have readers in every part of the world, and yet they have used none of the old methods for securing them. They do not advertise their books, and ask no one to advertise in them. They have had no publishing house to put their scheme before the public. The publication was commenced in an obscure photograph studio, and with barely enough money to print a thousand copies of the first number. At first they had not a single subscriber and knew not where to look for any. They never sought subscriptions, but simply showed their books and waited for results. Many voluntary and favorable criticisms which have been accorded in various newspapers have been given unsolicited. The promoters admit that they have seen some dark hours, that were needless—made in their own minds through uncontrollable fears. They admit that they do not practice all that they suggest, but say that the ability so to do grows, and will continue to grow. They do not call their business a "cause"; they solicit no favors or donations for a "cause." They place a certain value on the ideas they present, as would be

done on any merchantable commodity. As they receive that value, they are placed above the temptation and error of soliciting donations for doing a good work. They think theirs is a good work, and believe it is all the better for making it sustain and support itself as it goes along. They expect in the success of their business to prove a principle and a law.

II.

These books, so far as they have been published, may be divided into two classes, the theoretical and the practical, some set forth the philosophical principle sought to be established, in others the principle is very ingeniously and interestingly applied to the practical demands and experiences of every-day life. The first number issued bore the somewhat startling title: "You travel when you sleep." This is the idea presented: one-half of our life is a blank to us; that is, the life of our spirit when it leaves the body at night. It goes then to far countries, and sees people we never know in the flesh. Sleep is a process, unconsciously performed, of self-mesmerism. When we "go to sleep," the spirit has been, by its day's workings, sent widely scattered away from the body; with so little of its force left by it the body falls into the trance state of slumber. As the mesmerizer draws the spirit away from the body of his subject, so has our spirit drawn itself away from our bodies by its many efforts during the day. Your body is not your real self. Your spirit (your real self) uses your body as the carpenter does his hammer or any tool to work with. It is the spirit that is tired at night, because its forces have in thought been sent in so many different directions during the day that it can not call them together. Every thought is one of these forces, and a part of your spirit. Thought is a substance as much as air or any other unseen element of which chemistry makes us aware. Thoughts are things. A man sends from him in

thought what he (his spirit) is most built of. "As a man thinketh, so is he." Your spirit is a bundle of thought; what you think most of that is your spirit. Dreams are realities. Your spirit away from your body at night goes to and sees persons and places. The confused remembrance you have of these matters on awakening is due to the fact that the memory of your body can hold but a little of what is grasped by the memory of your spirit. You have two memories, one trained and adapted to the life of your body, the other of your spirit.

Your spirit, being an organization distinct from the body, has eyes and ears, touch, taste, and smell. Your body with its coarser senses is for use, in this, the coarser level of life; but you can with your spirit go to a higher and finer order of life. Having been taught all your life to deny the existence of the spiritual senses, through lack of exercise they are not in "working condition." When you leave your body at night, you are as a person in a dazed or bewildered state. Your first error on passing from the body in the state known as sleep lies in thinking that you are moving about your physical body. You must educate yourself out of that mistake. You must fix it in your mind before going to sleep that if you wake up in what you call a dream, you are not then using your physical body. You will fix in your mind before going to sleep, so far as you can, your conception of yourself as a spirit, or, rather as the unseen organization which during the day uses your body. The thought of yourself as a spirit will serve as a clew to powerful unseen friends who will come nearer to you, because they want to draw you up to their beautiful realm where, in part, at least, you may now belong.

A spirit may be ushered into another life on earth in entire forgetfulness of its past existence or identity, even as the subject under the control of the mes-

merizer is for a period entirely oblivious of his own individual self and existence. A mortal may mesmerize a spirit, and this may be done unconsciously. A woman, before and after conception, may dwell in thought much upon some real or ideal character, and this may attract to her that very character in spirit life. There are no ideals in the worldly sense. The ideal in thought represents some living type in the spirit. The spirit in question so attracted to the woman at the period spoken of, may be absolutely, though unconsciously, mesmerized by her. Its opinions are swayed and tinged by her opinions more and more, until at last it ceases to have any of its own. This condition of mind is constantly seen about us. Thousands lose their individuality through the influence of others. Mesmeric control means only thought control. To be much with another person, to have little other association, to be dependent for one's happiness entirely on one association, involves the danger of the mesmeric or thought control of that person; in other words of thinking their thoughts and holding their opinions instead of your own. This condition is to be guarded against by variety of association and periods of solitude, whereby we may "find our real selves."

As a spirit, you are a part of God, or the Infinite Force or spirit of good. As such part you are an ever-growing power which can never lessen, and must always increase, even as it has in the past through many ages always increased, and built you up, as to intelligence, to your present mental stature. The God in yourself—the ever-growing power in yourself—has made you see an incompleteness in your character; yet that incompleteness was never so near a relative completion as now. Of this the greatest proof is that you can now see what you never saw or felt before. Every protest of your mind against any fault you may have is a push of the spirit forward. The corner stone of all

successful effort is never in thought to acknowledge an impossibility. "All things" are possible with God. God works in and through you. To say "impossible" as to what you may do or become is a sin; it is denying God's power to work through you. There is a power to-day working on and in and through every man, woman, and child in this planet. Or to use the biblical expression, it is "God working in and through us." We are all parts of the Infinite Power—a power ever carrying us up to higher, finer, happier grades of being. The God Desire is at work on the lowest drunkard rolling in the gutter. That man's spirit wants to get out of the gutter. It is a great evil, often done unconsciously, to say or think of an intemperate man, "oh, he's gone to the dogs. Its no use doing anything more for him!" because when we do this we put hopeless, discouraging thought out in the air. It meets that person. He or she will feel it; and it is to them an element retarding their progress out of the slough they are in, just as some person's similar thought has retarded us in our effort to get out of some slough we were in or are in now,—slough of indecision; slough of despondency, slough of ill-temper, slough of envious, hating thought.

Under this system it is claimed that there can be co-operation of thought. Such co-operation can be effectual when the physical bodies of those so using their thought, or force, are far apart, and (physically) unknown to each other. In other words, if you are daily for a short time sending out a thought of perfect good will to all, friend or enemy, you are attracting to you the beneficial thought-current of all similarly thinking. If you set apart a certain time each day, so to desire or pray for the good of all, you commence the more to methodize or organize this thought current. If, now, two, three, four, or more of you meet, say once a week, to put your minds, or force, if for ever so

few minutes, in asking for the realization of the highest, happiest, and most perfected life for yourself and others, you are accumulating still more of this constructive unseen force; and as so you continue to meet, and generate it, you will the more and more develop it into an organized power, and send it to operate in more and more channels for individual and public good, even as the larger the boiler, the more force in it is generated, the greater the number of machines moved by it, and the more diversified their use. When you meet together, or retire apart, having chiefly in your mind the desire for the good of all, you draw and acquire power. That power can never be lost. It is not at all necessary, however, when you "sit for power," that your minds be kept bent or strained on the purpose in hand. So long as the purpose is strong and uppermost in your mind, that is enough. Do not "think hard" when you send your thought of good will to others. If you are bent on a certain purpose, it is not necessary that such purpose be always present in your memory. Your force is acting on and for such purpose all the same, whether you are thinking of it or not.

As in combinations of elements, or chemicals, new substances are formed, so in the combination of thought substance, as it flows and mingles from mind to mind, new thoughts are formed, or born. The character and quality of your thought are shaded, and to a greater or less extent changed, by every person with whom you associate, as theirs mingles and forms a new combination with yours. New thought or idea brings strength to the body as well as mind. Peoples' bodies decay and lose vigor through thinking continually the same set of thoughts. Thought is food for your spirit as much as is bread food for the body, old thought is literally old, stale substance, or element. It does not properly nourish the spirit, new thought is 'new life, and renewal' of life. One

secret of the eternal life and happiness is to be ever pushing forward toward the new, or "forgetting the things which are behind and pressing forward to those which are before." When Paul said "I die daily," he inferred that some thought of yesterday was dead to-day, and cast off like an old garment. In its place was the newer one. When our spirits are growing healthfully we have done forever with a part of ourselves at each day's end. That part is dead. It is with us a dead thought, we have no further use for it. To use it will injure us. It is cast off as our bodies daily cast off a certain portion of dead skin. To him or her, who has increase of new thought, a new world is lived in daily.

Who are your relations? The man or woman who is most like you in taste, motives, and habits of thought, and to whom you feel most attracted, may not be brother, sister, cousin, or any physical relative at all. But such a person is to you a very near relation. Physical or "blood relationship" has very little bearing on the real or mental relationship. As a part of domestic life every person should have a room entirely to him or herself, not liable to invasion from others without your permission, where you can build up those "frames of mind" which you desire permanently to live in. You must be entirely alone at times to build up such frames of mind. All rooms are filled with the thought-element most put out by those who live in them, and this element left there acts on people more or less strongly, in proportion to their sensitiveness or capacity to feel the thoughts of others. For such reason you feel the devotional thought of a church, even when empty. You will feel there very different than if in an empty bar-room.

III.

The most interesting part of this philosophy is its application to everyday life. It is claimed that success in any

business or undertaking comes through the working of a law. Your thought, or spirit, and not your body, is your real self. If you think, or keep most in mind, the mere thought of determination, hope, cheerfulness, strength, force and power, you will attract and receive more and more of such thought-elements. Whenever you think, you are affecting your fortunes for good or ill; every thought of yours, silent or spoken, has a literal value. If you think you can not do a thing and continually say to yourself "I can't," you are working your thought-power for non-success. Whatever plan or scheme of business you fix your mind persistently upon in the determination to succeed, it commences then as a thought-construction of unseen element to draw aiding forces to you. These "aiding forces" mean an ever growing fertility of mind for pushing your business, and drawing to you the best people to aid you in your plans. You must first be sure that you can do better service, and then you must develop the talent for pushing the art or invention. But to gain the highest success you must manage your own business, or a department of a business, because responsibility alone can bring out your fullest power and its attendant happiness; otherwise you will be fettered by an employer's demands and conditions; you will see your best ideas imperfectly carried out, because you can not fully control their carrying out yourself.

You must stop worrying. It is very difficult to overcome this habit, because our ancestors for generations have worried before us, but that makes no difference as to the destructive results of taking thought for the morrow. The law involved goes on working, and is as certain to run over and crush you if you get in its way, as the locomotive if you step before it on the track. Think hopeful things instead of hopeless things. Think success instead of failure. People who think badly of themselves are

pretty sure to do badly. The Scripture remarks: "As a man or woman thinketh, so is he or she." When a man thinks poorly of himself he goes off and gets drunk, or does some mean thing. The pride that makes a man value himself is the pride that keeps him from mean and degraded acts.

A principal means for holding and increasing both physical and mental strength lies in the training of the mind and body to do but one thing at a time; in other words, to put all the thought necessary for the performance of any act in that act, and to put aside all other thought whatever save what belongs to that act. If, while you are doing one act with the body, you are thinking of something else, you are wasting your strength and thought. By cultivating the power of concentration you can forget your trouble, your disappointment, your sense of loss; you think of something else, becoming so absorbed in it, and enjoying it, as to forget all things else. This power will come to you if you pray for it, wish for it, demand it. Open your mind to it, and it will by degrees come to you. Think at times, or at regular intervals, on the word "concentration." A word is the symbol of a thought. So placing, if but for a few seconds, your mind on that thought, and you connect yourself with the current of concentrative or constructive thought in the universe; and as you so connect yourself with it, you draw the desired element from it. "Ask and ye shall receive, knock and it shall be opened to you." You can ask when behind the counter. You can knock when walking on the street. You can make a genuine and profitable demand in a second; and seconds so employed are most profitable.

It is right and necessary that you should have the very best of the world's goods—clothing, food, house, surroundings, amusements. You really need all that your higher and most refined tastes call for. There is no merit in being

poor or in desiring to be poor. Strong spirits rich in thought have risen above poverty in spite of its impediments, and many a strong spirit the world never heard of has been crushed by it. The majority of the impelling spirits of the American Revolution—Washington, Jay, Adams, Hancock, Morris—were relatively rich or prosperous, nor could they have developed that mental or spiritual force which really carried our cause to success, had the incessant physical drudgery of poverty been imposed on them. When Christ told his apostles to take neither purse nor scrip he implied that they were not to rely upon the old and material methods for obtaining what they needed. He wished them to depend on their own spiritual or mental force for bringing them the best things as they needed them. Your forces are your daily, hourly thoughts. If you put those thoughts or forces in one direction, they will bring you health and the goods of this world to use and enjoy, but not to hoard; if you put them in another they will bring you disease and poverty. If you think poverty, you put out an actual force to attract poverty. If in mind you are always seeing yourself growing poorer and poorer, if at every venture you fear and teach yourself to expect to lose money; if your heart quakes every time you pull out your purse, you are by an inevitable force in nature, or spiritual law, attracting poverty. On the other hand to think success brings success. Theology calls this desire for better things, prayer, and prayer is the great elevating force in the universe. When you desire or demand anything you pray for that thing, or, in other words, you set at work the force attaching to that thing. You can so pray unconsciously for poor things as good; and if you do you attract poor things. If in mind you see ever disaster, misfortune, and the poorhouse, it is the same as praying for disaster, loss, and the poorhouse, and by this law, disaster, mis-

fortune, and the poorhouse will come to you.

It is a law of riches that use brings gain; hoarding brings loss. If the tree held stingily on to last year's fruit and leaves, and refused to drop them, the vents for next year's fruit and leaves would be choked up. It is a spiritual law that the old must be cast off ere the new can come. If you hold on to half-worn trumpery of any sort, through the mere love of keeping, you are barring out the better thing coming to you. If you will keep company with people who, after all, only tire you and bore you, who ridicule your ideas if you express them, and are utterly profitless to you, you keep the better people from you. If you cling to the old worn-out suit of clothes or seedy bonnet, and out of stinginess hate to give it away, and expend any amount of your force in haggling and dickering to sell it for a dime, you will not near as soon have the better clothing, for every thought put in the old represents just so much force, which could as well have been put on a plan to bring you hundreds of dollars instead of dimes. Mere hoarding brings nothing in the end to him who hoards but pain and trouble. One secret of the kings of finance is that they know when to rid themselves of possessions on seeing how those possessions can be of no farther use to them. Mere hoarding is not business. If every one put away money as they gained it, and lived on as little as possible, and continually decreased their expenses, the world's business would soon stop, not so much from lack of money lying useless in chests and old stockings, but because there would soon be little left for people to do to gain money. The basis for attracting the best of all the world can give to you, is to first surround, own, and live in these things in mind, or what is falsely called imagination. Live in mind in a palace, and gradually palatial surroundings will gravitate to you. You must not envy

and growl at people who are better off than you are, because the growling is just so much capital stock taken from the bank account of mental force.

The state of mind you are most in is a force pushing for or against your business and welfare. The pushing of any kind of business always commences in the mind. If you always keep in a low, unaspiring state of mind, if you look on the best and most beautiful things in the world as things you never can have or enjoy, if you see yourself always at the foot of the ladder, grumbling at those above you, then at the foot of the ladder you are very likely to stay; wherever you put yourself in mind, and persistently keep yourself, toward such position you will be carried. You may not gain the actual place aimed at, but you will stand somewhere near it, which is better than standing in the gutter of aimlessness and hopelessness. You must live in mind as the head of a business, think of yourself as a leader, and keep away from discouraged, despondent people, who are always expecting and thereby courting bad luck. The thought of others can enter into our being, and become, for a time, a part of it, as dampness or foul air can permeate your house or your clothing. The chief of American financiers secludes himself, because, consciously or unconsciously, he lives up to that law of which he realizes enough to know that to keep his head clear he must avoid the confused thought atmosphere of the great mass of people. Napoleon got his plans in the seclusion of his closet and the country. Again, when you cease planning expansion and improvement in a business that business begins to die. It will, for a time, seem to flourish, but the newer enterprise in the same direction, borne of some other energetic brain, is growing and going ahead of it.

There is profit or loss in associates. To be much of the time with a gloomy or despondent person, or one fretful, or

easily angered, or cynical or skeptical, or in any way thinking evil or injurious thought, is for you unsafe. People ruled by the mood of gloom attract to them gloomy things. People always discouraged and despondent do not succeed in anything, and live only by burdening some one else. The hopeful, confident, and cheerful attract the elements of success. A man's front or back yard will advertise that man's ruling mood, in the way it is kept. A woman at home shows her state of mind in her dress. A slattern advertises the ruling mood of hopelessness, carelessness, and lack of system. Rags, tatters, and dirt are always in the mind before being on the body. Too much association with any one of lower thought may lessen your natural power to attract. You may carry a part of their selfish, cynical, gloomy, or other evil thought with you wherever you go. You put it out with your own. Your value and charm for others, as a companion, depends far more on what you think, than on what you say. If your thought is all pure, clean, bright, confident and courageous, you are a value, and an increasing value, wherever you go.

Clothing absorbs thought; it can be rested as much as our bodies. When you put on the garment you have laid aside for a period of weeks or months, although it may not feel as one entirely new still, in a sense, it does not seem quite as stale as when last worn. If hung accessible to sunshine and fresh air, it will cast off more or less of your old thought. The robes worn by priests of any religion, Buddhism, Judaism, or Catholicism, are consecrated to their peculiar use, and wisely so. If worn by the priest at all times it would be permeated by all of his peculiar moods. The costume of the actor becomes saturated with the part he plays. There is profit in putting on a change of apparel for dinner or the theater for, if you wear your business-suit you are

bringing, in that clothing, a part of your business self to a place where all business thought should be temporarily laid aside and forgotten, in order that business shall be the better done next morning.

It is claimed in one of these Libraries, the most important teachings of which have been here summarized, that alcoholic intemperance can be cured through the law of demand. In a preface to this pamphlet Mr. Muford says: "I used liquor immoderately for more than thirty years. I suffered thereby in mind, body, and purse. I became well acquainted with the torments that beset the victim of this excess. That uncontrollable appetite has been for several years cured and gotten rid of. I suffer from no relapses and I do not profess total abstinence. My cure came from means I shall endeavor to set forth in this chapter." Our thoughts it is claimed, being forces, friends can use the law of silent demand in the case of one who is in the habit of drinking immoderately. The man who drinks will feel the craving less if much in the society of the temperate and self-controlled. If, in your own mind, you will say in thought that you do not expect a friend afflicted with this habit to give way to it, he will, through the force of your mind acting on his own, be strengthened to resist the temptation. If several unite in so sending him this thought, and so seeing him in thought, they give him a proportionately stronger force to resist the uncontrollable appetite. They are then praying for him and praying in the strongest way. But if we in our minds always see or image that man as a drunkard, we are sending him a current of thought which will aid the more to make and keep him intemperate. The real man is not the drunkard; the real is the spiritual man or woman. It is only the material man that becomes drunk. With him in our thought we have nothing to do. We refuse in mind to see him. We see only

in mind that man out of the gutter, erect, clothed, self-controlled, and in his right and higher mind. If we see him in imagination always as a drunkard, we help to keep him in mind before himself as a drunkard, and this helps to keep him a drunkard.

Then, again, he should be trusted. The feeling that the bottle is put out of sight because he has entered the room, has made many a man rush from that room or place, and indulge in excessive drinking. Instead of a family thinking at the breakfast-table of a son or relative "I expect he'll get to drinking again to day," they should say in thought "He is not going into any excess. He can govern himself. He will govern himself." If yours is the uncontrollable appetite for liquor, say in your mind, not only "I will conquer this appetite," but "I have conquered it. It is conquered." Then you join your spiritual force with those who regard you in spirit as self controlled. Your real self or spirit has taken a strong, positive, decided hold in this matter. The material, the body, must follow in time.

It is but natural that the people who believe in this system of thought should want a church, or an edifice partaking of the nature of a church. The sugges-

tion has already been made by Mr. Mulford that such a church should be erected. He says it should be a place of silence for the purpose of silent demand or prayer. People who enter it should not bring with them any frivolous mind or thought. It should be a place of earnest demand for permanent good, yet not a place of gloom or sadness. Though the believers in this movement request free-will offerings of money to erect the edifice, they want it understood that they rely altogether on the spiritual power coming of the prayers or demands of those in hearty accord with this special purpose; the material means will be sure to follow from the impulses thus put forth. It is suggested that the name of this chapel shall be "The Church of Silent Prayer to the Supreme Power." Within the building these sentences shall be placed so as to be clearly read:

"Demand first wisdom, so as to know what to ask for."

"Ask and ye shall receive. Ask imperiously, but ask in a willing mood for what the Supreme Power sees best for you."

"Love thy neighbor as thyself, but demand good first for yourself, that you may be the better fitted to do good to all."

GEORGE J. MANSON.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

FRANCIS JOSEPH GALL.—*Concluded.*

"THIS beautiful enterprise would not have been difficult, if, entirely at liberty, I had been abandoned wholly to myself and to nature. But, it too often happens, that the more 'scientific' one becomes, the farther he departs from the simple truth; and this was precisely what I experienced. My imperfectly established conviction was shaken, in proportion as I gained new information, or rather, as I heaped up errors and prejudices. Philosophers assure us, said I to myself, that all our faculties come from external sensations, or, at least, that all men are born with equal faculties, and that the differences between them are owing either to education, or to accidental cir-

cumstances. If it be so, there can be no external signs of any faculty; and, consequently, the project of acquiring in this manner a knowledge of the functions of the brain and its parts, is a mere chimera.

"But I always returned to my first observations. I knew that my brothers and sisters, my companions and schoolfellows, had received nearly the same education, or rather, that in general they had received none. All had grown up in the midst of the same circumstances and analogous impressions. I also saw that, ordinarily, those whose education had been carefully watched, to whom the instructors had given lessons in private, were, in fact, behind other-

in capacity. We were often accused of aversion to study and of want of zeal; but many of our number could not, with the best disposition, and the most determined efforts, raise themselves in certain points, even to mediocrity, while in others they surpassed their schoolmates without effort, and almost, it might be said, without

in proportion to the talents which we had received. Add to this, that I had observed both in tame and wild animals, of which I had always a considerable number about me, differences of faculties and of character, as in men. One dog was almost of himself skillful in the chase, while another of the same race and the same litter could be



FRANCIS JOSEPH GALL.

perceiving it. In fact, our masters did not give much credit to the equality of the faculties, for they thought proper to exact more of one scholar and less of another. It often happened to them to speak to us of our natural gifts, of the gifts of God; and they exhorted us in the words of the gospel, telling us that each would render an account

trained only with great difficulty. One was very cross, and quarreled with all other dogs, while another was very mild and peaceful; this one could not find his way back even from a short distance; while that, on the contrary, though very young, returned, after being lost, from very distant places. Such a bird listened with great attention to

an air that was played before him, and learned it with admirable facility ; another, of the same covey, and fed and treated in the same manner, paid no attention to it, and sang nothing but his own note. In all these cases I could not suppose either evil inclinations, the influence of education or different impressions on the external senses. I was, consequently, obliged to conclude, that the propensities and faculties, both of men and animals, were innate.

"For a long period I continued my researches as I had commenced them, urged on solely by my fondness for observation and reflection. Abandoning myself to chance, I gathered for several years all that it offered me. It was not till after having accumulated a considerable mass of analogous facts, that I felt myself in a state to range them in order. I perceived successively the results, and at length had it in my power to go to meet observations, and to multiply them at my pleasure.

"Strongly impressed with these ideas, and supported by these motives, I turned all my attention to the finding of the means which, in the least possible time, would enable me to accumulate the greatest number of facts. I shall speak of these means when I treat of the propensities and faculties and their organs, particularly. I will here give a single one, which presented itself when I least thought of it, and which greatly contributed to perfect my works.

"The first day of the year 1805, my father, who resided at Telfenbrunn, in the Grand Duchy of Baden, wrote me these words: 'It is late, and night can not be far distant: shall I see you once more?' No thing but such an invitation, joined to the ardent desire which I cherished in my bosom of again seeing my beloved parents after an absence of twenty-five years, could have induced me to leave my friends and my patients for a few months. I wished too, to avail myself of this opportunity to communicate my discoveries to the learned men in the North of Germany. That my interview with them might not terminate in propositions and discussions without proof, I took with me a part of my collection. I was always convinced that, without these visible and palpable proofs, it would never be possible to fight victoriously against so

many preconceptions, prejudices, and contrary opinions, as I must necessarily meet. I experienced everywhere, the most flattering reception. Sovereigns, ministers, philosophers, administrators, artists, seconded my design on all occasions, augmenting my collection, and furnishing me everywhere with new observations.

"These circumstances were too favorable to permit me to resist the invitations which came to me from most of the universities. By this means my journey was lengthened far beyond the term which I had first fixed; but there likewise resulted so many discussions of my doctrine, public and private, that it arrived at a degree of maturity which few founders of new doctrines have been able to attain during their lives.

"This journey afforded me the opportunity of studying the organization of a great number of men of eminent talents, and of others of very limited capacity, and I had the advantage of observing the difference between them. I gathered innumerable facts in the schools, and in the great establishments of education, in the asylums for orphans and foundlings, in the insane hospitals, in houses of correction and prisons, in judicial interrogatories, and even in places of execution; the multiplied researches on suicides, idiots, and madmen, have contributed greatly to correct and confirm my opinions. I have had under contribution several anatomical and physiological cabinets; I have submitted antique statues and busts to my examinations, and have compared with them the records of history.

"After having used, for more than thirty years, such diversified means, I no longer feared the danger of the reproach of having precipitated the publication of my great work."

In vol. 6, p. 100, Dr. Gall says :

"Whoever will convince me of the falsity of all my discoveries, I will be the first to announce it to the public. Truth is my object. I place that above all personal and exterior considerations."

One great discovery of Dr. Gall was the natural language of the organs, or the expression of each organ, as in pantomime, by gestures.

"It was," says Gall, "the expression of

the organ of self-defence which first suggested to me the idea that it is the *seat of the organ* that determines the nature of the gestures. I saw two coachmen fight; one threw himself like a madman on his adversary, who was much smaller than himself; the latter, leaning on one side, clenched his fist, drew his head between his shoulders, depressing it slightly, and repulsed victoriously the attacks of his enemy by vigorous blows. In fine, the greater one endeavored, by turning, to take him in the flank. The smaller leaned still more, took the attitude of the fighting gladiator, bent his body forward, with head drawn back between the shoulders, and continued to repulse his enemy with success. The larger one, in the hope of flooring him, seized him in his arms; his antagonist, with his chin against the chest, grappled with such force, that he overthrew him; the concourse of spectators put an end to the combat.

"While admiring the courage and address of my little victorious athlete, I made the following reflections:

"1st. The organ of self-defence was here in full activity, and produced all the movements of the combatant. I was struck especially with his placing himself with his legs separated, his body drawn up, the occiput bent backward between the shoulders, a position which gives great steadiness to the body, but particularly with his advancing his chin a little. I naturally attributed this act of stiffening the neck, and drawing the head backward, to the state of excitement of the organ of self-defence, since these movements took place so near the seat of the organ; I was still confirmed in this idea, when I saw that my athlete drew back his head toward one of the shoulders, taking an oblique attitude.

"Above all, I saw manifestly, that when there is only one of the double organs in action, the head is turned toward the side of this action. At this period I had already remarked, that animals, when they wish to regard an object attentively, turn the head sometimes on one side, sometimes on the other, according as they look or hear attentively with one or the other of the eyes or ears. I saw then that the same thing takes place in the organs of the qualities or faculties.

"Struck by this idea, I considered the expression of each of the organs which I had then discovered, and, to my great astonishment, I found that this expression always corresponds to the seat of the organ which acts, and that the movements of all the other parts, the hands, feet, etc. correspond to this seat. Never should I have imagined that it was given to man to penetrate into secrets of this nature, and I confess, that the joy of having made this discovery, which furnished, at the same time, such beautiful confirmation of all that I have previously discovered on the subject of the organs, nearly deprived me of my reason. The connexion I establish between the expression and the seat of the organs is too new and too profound a thought to be perceived at the first glance. To understand my ideas on expression requires such exact knowledge of the organization of the brain, of the seat of each of the organs, qualities, and faculties, and of the manner in which each of these organs manifests itself, that neither my hearers nor my readers will be able to agree with me, when this part of my doctrine shall be presented to them. Most persons even refuse to admit that expression exists as I describe it. It is only those whose attention has been fixed on these objects, and who, having observed themselves and others, have thus become convinced, that the pantomime of the same quality, or faculty, for example, of boldness, of devotion, etc., is essentially the same in all individuals, that gradually become disposed to admit that all the movements which compose it are involuntary, and that, consequently, they must proceed from the same determinate and immovable cause.

"When we direct our attention further into nature we soon become familiar with these ideas."

When we wonder how Dr. Gall came to make the discovery of the natural language of the organs, let us remember what he says of himself, namely:

"In youth I was a somnambulist, and frequently saw visions, a certain proof of cerebral exaltations."

To this peculiarity of his organization may be attributable all of his discoveries, but they were not hallucinations.

All his discoveries, as well as all his methods of obtaining proof of them, were nearly as wonderful—as well as original—as that just given. He says :

“I was curious to ascertain what faculties and qualities had attracted popular notice by their outward manifestations. I therefore collected in my house quite a number of individuals of the lower classes of society, following different occupations, such as coachmen, servants, etc. I obtained their confidence, and disposed them to sincerity by giving them beer, wine, and money, and when favorably inclined, I got them to tell me of each other's good and bad qualities, and, in short, all of their most striking characteristics.

“In their different communications, they seemed to particularly notice those who were always provoking disputes and quarrels. Individuals of peaceable habits they knew very well, speaking of them with contempt, and calling them poltroons. As the most quarrelsome found great pleasure in giving me circumstantial narratives of their exploits, I was anxious to see whether anything was to be found in the heads of these *bravos*, which distinguished them from those of the poltroons. I ranged the quarrelsome on one side, and the peaceable on the other, and examined carefully the heads of both. I found that in all the former, the head, immediately behind and on a level with the top of the ears, was much broader than in the latter. On another occasion, I assembled separately those who were most distinguished for their bravery, and those most distinguished for their cowardice. I repeated my researches, and found my first observations confirmed. It was impossible for me to be deceived by the false ideas of philosophers, on the origin of our qualities and faculties. In the individuals I had to deal with, education was entirely out of the question, and the manner in which their character was manifested, could not be attributed to the influence of external circumstances. Such men are the children of nature, yielding themselves unreservedly to their dispositions, and all their actions bearing the impress of their organization.

“I therefore began to conjecture, that the disposition to quarrel might really be the result of a particular organ, and on the

other, men known to be cowards. At the combats of wild beasts, at that time still exhibited in Vienna, there often appeared a first-rate fighter of extreme intrepidity, who presented himself to the arena, to sustain, alone, a fight with any ferocious animal whatever. I found in him the region of the head just pointed out, very broad and rounded. I took a cast of his head, and likewise those of some other *bravos*, that I might run no risk of forgetting their particular conformation. I examined also the heads of some of my comrades, who had been expelled from several universities for duel fighting. One of these knew no greater pleasure than that of sitting down in an ale house and mocking the workmen who came thither to drink; and when he saw them disposed to come to blows, putting out the lights, and giving them battle in the dark, chair in hand. In all these persons I found the region in question formed in the manner above described, although the heads in other respects were formed quite differently.”

Thus Dr. Gall pursued his investigations and established the functions and location of the phrenological organs he discovered. Yet he had excesses and deficiencies in his own organization. For instance, he says a very young dog of his would find its way home from a distance, while *his own* habit of being easily lost was well known by his friends. He gives a vivid description of his methods of procuring casts of the heads of individuals, and crania of animals and men, and his researches of correspondences and differences in the brains of varieties of character, such as maniacs, idiots, subjects of attacks with all kinds of mental disease, obtained from hospitals and public institutions.

From everything we see or hear we learn a lesson. What do we learn from this man's life but to appreciate and venerate the man who discovered the useful and true science of Phrenology? He possesses a philosophical mind which sought for the *causes* that produced the *varieties* of character, not only in different individuals, but also in the same individual under different circum-

stances. His inquiring mind sensed the fact that every manifestation of character was the result of a cause, and when he asked his teachers they gave merely their opinion, but unsubstantiated. This was not sufficient. Medical teachers could show him the form and substance of the brain, the crowning portion of the human organization, but could not explain the function of its different parts, and yet, they knew that a large brain, well nourished by a strong and healthy body, was accompanied by a strong mind, which would at all times give reliable advice, and that idiocy accompanied a small and poorly supported brain.

What were Dr. Gall's chief or controlling characteristics if they were not Causality which gave him that inquiring mind as to what caused different results from apparently similar surroundings; Continuity which gave him wonderful tenacity in the pursuit of his investigations; Firmness to decide for himself and hold fast to what he deemed truth, notwithstanding the opposition of those who were thought by the populace to be the true philosophers; Self-esteem which made him say he had as good a right to his own views when he *knew* they were correct as they had to theirs when he knew they were wrong; Comparison which aided him in analyzing and comparing truth with error and drawing his own conclusions; a broad head which gave him the power and energy, and enterprise which carried him through whatever suggestions the frontal head called for as evidence on the topic which was of the greatest interest at the time; Conscientiousness which gave him a love of truth for its own sake, notwithstanding the ridicule and opprobrium heaped upon him. The fact of his being a seer of visions when young shows that he had a "skylight" in his mental organization which gave him an intuition; a resource possessed by such men as Edison, and other inventors of intricate machinery. My

brother, Professor L. N. Fowler, says:

"A large cerebellum generates thoughts and new ways of giving expression to them."

If that be so, Dr. Gall may have had aid from that source, for it was large in his head, and we know that it gives motive power, and therefore must have been useful in his researches. He was a great man, found his "niche" in life and did not fail to fill it.

That we may have many more men—and women—who will find and fill their niche is the wish of the present writer.

The following is an extract from a description published in the *Gazette*, Birmingham, England, in 1826:

"I found Dr. Gall to be a man of middle stature, with an outline well proportioned; he was thin and rather pallid, and possessed a capacious head and chest. The peculiar brilliancy of his penetrating eye left an indelible impression. Dr. Gall was a man of originality and depth of mind, possessing much urbanity, with some self-esteem and inflexibility of design."

Dr. Nahum Capen says:

"He had slight peculiarities, but they were remarkable only as illustrating self-forgetfulness.

Dr. Fossati, of Paris, says:

"His skill as a physician may be inferred from the fact, that in 1810 a medal was presented to him, executed by M. Bane, an eminent artist of Paris, by order of Count Potosky, a rich Polish nobleman, who took this method of expressing his deep gratitude to Dr. Gall, who had cured him of an old and dangerous malady, for which he had in vain consulted the best medical men in Paris."

He further says:

"It was to his *firmness* that he owed the success of his researches. Without this constancy with which he pursued the same ideas, the same observations, and the same researches, it would have been impossible for him to carry his new science to the point where he left it. Gall was exceedingly benevolent; he succored the unfortunate, and

procured them the assistance of his rich patients; he encouraged talents, and rendered them all the aid in his power. The more intimately he was known, the more he was beloved."

Capen says :

"His views in regard to Deity may be found in his own language. 'Everywhere and in all times, man, pressed by the feeling of dependence by which he is completely surrounded, is forced to recognize at every instant the limits of his powers, and to avow to himself that his fate is in the hands of a supreme power. Hence the unanimous consent of all people to adore a Supreme Being; hence the ever-felt necessity of recurring to Him, and rendering homage to his rule.'"

Gall's first essay on the subject of Phrenology was a letter to his friend, Joseph Fr. DeRetzer, upon the Functions of the Brain in Men and Animals. It was published in the *Journal de la Société Phrenologique de Paris*, in which he gives a succinct description of his discoveries.

"In 1809 Gall and Spurzheim commenced publishing their magnificent work, entitled *The Anatomy and Physiology of the Nervous System in general, and of the Brain in particular, with observations upon the possibility of ascertaining the several intellectual and moral dispositions of man and animals by the configuration of their Heads*. Four volumes folio, with an atlas of 100 plates. Price 1,000 francs.

"This great work was continued by the joint exertions of Gall and Spurzheim to the completion of two and a half volumes, and was ultimately finished by Gall in 1819. In 1817 he delivered one private course of lectures in his own house, and two public courses gratis—one '*A l'Ecole de Médecine*,' and the other in a hall, '*de l'Institution pour les Aveugles*."

"In 1819 Dr. Gall, at the request of the Minister of the Interior, commenced lecturing for the benefit of the Medical Students of Paris. The lectures, were, like others, delivered gratis; but he was provided with the use of an operating-room in the *Hospice de Perfectionnement* for his first course, and afterward, on account of that being too

small, with the large examination-room of the Institution *jeune Aveugles*, which was well fitted for the purpose. His audience amounted to betwixt two and three hundred; and so eagerly was he attended that many more tickets were applied for at each course than could be given, and the apartment was regularly crowded half an hour before the lecture began. The French savants listened to him with the same interest as those of Germany had done, and the celebrated Corvisart was, among others, one of his most enthusiastic admirers. Some were slow and reluctant to admit the great value of his labors. 'At last,' however, said Dr. Fossati, in his funeral ovation on Dr. Gall, 'his work appeared, and several of his eminent contemporaries hastened to do him justice, and still to follow the line of investigation so successfully marked out by him.'"

From 1822 to 1826, Dr. Gall published an edition of his work "*Sur les Fonctions du Cerveau*," etc., in 6 volumes, 8vo.

In March, 1828, at the conclusion of one of his lectures, Dr. Gall was seized with a paralytic attack, from which he never perfectly recovered, and which ultimately carried him off the 22nd of August, 1828, in the seventy-first year of his age.

His remains were followed to the grave by an immense concourse of friends and admirers, five of whom pronounced discourses over his grave, as is the custom in France, on such occasions. His death gave rise to a succession of eulogiums and attacks in the French newspapers that has scarcely ever been paralleled, and public sentiment was warmly and loudly expressed in his favor. In proof of this we quote from a letter to Dr. Andrew Combe, written by a gentleman in Paris, at the time, who was not a professed believer of phrenology, and whose testimony is therefore impartial. After speaking of the political relations of France, he adds:

"You will, I am sure, be more affected by the death of Dr. Gall, than by any po-

litical event. In truth it is an immense loss to science. Whatever opinion we may form of the system of that illustrious man, it must be acknowledged that he has made an immense stride in the sciences of medicine and of man. You must have been satisfied with the homage paid to his memory by the side of his grave, by whatever distinguished men Paris possesses. Nothing was wanting to his glory; not even the abuse and calumnies of our *devots de gazette*."

His burial was in that city of the dead, *Pere la Chaise*, where his monument was seen last summer—1889—by George A. Bacon, of Washington, D. C.

Much more remains that would be interesting and instructive to recount and to know, but we leave Dr. Gall here, feeling that "though dead, he yet speaketh."

C. F. W.

FARM LIFE FOR THE YOUNG. — One gets near to nature, and lives more humanly who makes agriculture his life pursuit. So the *American Garden* is perfectly right in its comments that, "the farm as a means of reform is attracting considerable attention from the press and those actively engaged in the amelioration of the condition of the human race. Wonderful indeed, have been the results in making useful men and women, from the uncompromising material afforded by the neglected children of the larger cities. Many of these, old in wickedness, are young enough in years to be influenced for good. Put upon a beautiful piece of land, most of them quickly reflect the benefits to be derived from wholesome surroundings. We wish to suggest that gardening at home, as a means of prevention, is equally important and has been somewhat overlooked. Give a child a little garden, of a size that will keep it employed, but not overtax its strength or resources, and an immediate gain by the harmless amusement and absence of danger is afforded, as well as the foundation laid for tastes that may prove of the greatest benefit in after life.

It is generally agreed that children, like fowls, are better when living in smaller numbers, so by all means let the "children's home" and similar institutions be where land is plentiful enough to afford little gardens, and much of the care and annoyance will be taken from those having these institutions in charge, in exchange for a moderate amount of care and instruction in teaching the little gardeners how to proceed. In the Eastern States especially, where the relative importance of gardening to larger farming is greatly increasing, will knowledge gained in this way be useful, and teach self-help. In the large institutions, where the inmates are lighted and watered and warmed by machinery, they certainly do not learn to be self-helpful, and there is no intellectual stimulus or anything to develop individuality, and the elements of character die out, with no occasion to provide for their own wants or opportunity to study cause and effect. We wish all young people who have been injured in body or mind by society or circumstances could go back on the soil to be recruited or cured by mother nature."

Many a city man finds an occasional retirement to the wood and meadow, the true hygienic remedy for weariness of body and mind, and return to his field of work with fresh vigor.

UNCERTAINTY.—A FRAGMENT.

SHALL I seek my soul's relief
From the shackles of belief,
And say there's nothing certain—
All is hid behind a curtain?
Or in Nature's ample pages
Read the history of ages?
Hark! a voice within my breast!
Answer, thou, most secret guest!
But there comes this one reply
To my soul's most earnest cry,
'Tis the echo of its crying
Ever sighing, sighing, sighing.

C. C. COLLINS.

will observe by looking at the phrenological head which constantly stands on the first page of this department of the JOURNAL. It is sometimes difficult to comprehend the point where Ideality leaves off and Constructiveness begins. In the production of work, Ideality is supposed to relate to art. It imagines a picture, a statue, a group of figures which are to make up the picture. Ideality imagines a landscape. The artist shuts his eyes, and sees mountains, lakes and rivers and their relation to each other, then Constructiveness elaborates the picture which Ideality has fancied.

Some artists have the power of designing, and that may involve, also, Spirituality, located still farther up on the head than Ideality. This faculty, Spirituality, in its dreamy longings after that which is perfect and beautiful, that which is elevated above mere sensuousness and the realm of things, is a kind of inspiration for Ideality. Spirituality imagines the possibilities and revels in beauty and excellence. Ideality transforms these dreamy fancies into tangibilities and representatives, and their pictures, real and yet not real, like the misty dream of the artist's mind, as he looks upon the block of stainless marble, and sees the angel he proposes to represent, by carving, in the beautiful stone. Without Constructiveness to elaborate the work, to chip away the material that is not wanted, and leave the gleaming figure, guided by Spirituality and Ideality, the picture which art fancies would not become visible. If we have made the matter clear, this is our view of art, working with mechanism and Constructiveness realizing that which the other faculties dream.

In conjunction with Constructiveness in the work of art, we have also, the faculty of Form, which presides over every species of shape. It gives a sense of harmony in form. In penmanship, there is uniformity; that is, oneness of form running through all parts of the

different letters. There may be a sharp, angular form, and if it is continued through a whole page, there is a certain harmony in it that is not disagreeable, even though not one letter may be perfect. Take another hand not especially angular, and if it runs through line after line for a page, and is similar, there is a certain uniformity of style which is acceptable. There is a way of making letters by the pen in which each one is a thing of beauty in itself. Its different parts are so related to each other as to seem each in keeping with all the others. If one makes a capital letter with a pen, for instance, "S." or "F," the large base of the letter in its revolutions should present sides that harmonize. All the parts of the letter are oval. The outside parts should be parallel, and then the inner parts should be parallel with each other and with those that have preceded, and then, Form having completed its perfect work, Ideality is pleased with it. Mechanism employs the faculty of Form to guide the chisel and the graver to produce the requisite shape. Form sits in judgment at every blow. Constructiveness knows what it wants, and Form and Weight guide the tool.

The faculty of Size is also essential in construction. A person with a deficient sense of magnitude will make some parts larger than they should be to harmonize with the other parts. One who has a keen sense of distance, as well as form will make, for instance, letters on a sign-board. It is interesting to see a sign painter with chalk sketching out the letters which are to be painted. He runs them over and finds he has made the letters a little too large for the distance. He wipes off his chalk-marks, and starts again. He may make his letters a little too small, and when he gets half over, he sees he has made them too small. He rubs out what he has done, and does them over again. It is interesting to see how perfect as to relative size all the letters are, and it is all done without

measurement by the eye of the painter. Thus, he puts Size and Form together, and he is constructing. When he gets ready to paint the letters, then Ideality and Constructiveness come in to aid him to pencil his work and execute it.

There are some painters who have fine taste as to design. They will sketch correctly; but, they lack the mechanical part to elaborate their work skillfully and execute it, hence, there are some artists who will make the sketch and put in the spirit; but, others can come with their constructive talent and elaborate the work. Such artist, or mechanist has enough of art talent to drink in the idea of his principal, and with his more excellent mechanical skill, work out the result better than the designer of it could. This brings us to say that an artist ought to have all the organs that belong to his profession equally and amply developed. In the construction of houses, the architect that has Spirituality, Ideality and Constructiveness dreams of the masses that are to enter his construction. He sees the noble design, the pile of architectural poetry glowing in the light, while yet there is no mark of it made. Then, he goes to work with his pencil sketching it in, and studying its proportions, and when he gets the design wrought out *en masse*, he begins to make the working drawings for the builder. Then he measures the proportions of the parts, according to his taste, or according to the rules of proportion which he has designed to use, and he can draw the different parts with such correctness that each might be made miles distant from all the other parts, and when brought together, they would match. After these drawings are all completed, the mechanic proper, the workers in stone, metal and wood, work out the parts, and puts them together according to the original plan.

We have known several instances in which the workman who built the structure, or machine had not the slightest idea what the work was to amount to.

He knew how to follow the drawings, how to construct and combine the parts, but did not know what the work, or machine was to accomplish.

It is said that a good German mechanic made Edison's talking machine, or phonograph from the drawings furnished, and did not dream what it was for, until Edison applied the last part, the tin foil, and talked into the machine, while he turned it; then setting it back, he asked the German machinist to turn it, and when it began to repeat the little hymn, "Mary had a little lamb," which Edison had talked into the machine, while he revolved it, the honest Teuton lifted his hands and shouted, "Mein Gott! It talks." He was afraid of it, at least he was astonished. He had made the machine with his practical faculties, but had not obtained the higher views of the mechanical art which was involved in the combination.

So, a man could make a power-loom, drawings of which should be given by the inventor, and he would be astonished when he saw the new and beautiful patterns which the machine would develop. Thus, it will be seen that the higher forms of mechanism are related and allied to art, that a good sturdy man can build structures and do the hammering work, and can construct the parts which go to make the same, and have very little idea of the higher uses which his work is to subserve. We have said it is possible for a man to be an inventor, and not have the skill to manufacture his own machine, or his own picture.

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PRACTICAL USES OF PHRENOLOGY.

BY A MEMBER OF CLASS '88.

BYOND the study of mind in the abstract and its physical signs comes the study of the relations of character and talent to the outside world.

Interesting as the study of mind may be in the beginning, the intricate problems of life that lie beyond, become fascinating when by the aid of our

knowledge of mental science it becomes possible to solve them.

Among the lines of practical study are those of occupation, marriage, the study of types and races, effect of education, etc., and perhaps the most interesting, and certainly one of the most profitable, owing to its wide scope, is the cultivation of the power to appeal at will to any faculty or set of faculties, the study of mind as it deals with everyday affairs and how to influence and control it in others.

We know that the mental faculties are wonderfully responsive when appealed to in the right manner, and to a certain extent such influences are irresistible. What a power, then, does it give over others to him who can thus rouse in others the feelings he desires. But how? We have all been learning something along this line since childhood, but what blunders we make! blunders more often from carelessness and want of close observation than through ignorance. How often we appeal to others and rouse in them the opposite of what we desire. We wish to make others, and especially those in the home circle, happier for what we say and do, and yet how often when making special effort in this direction do we mar the good results by a wrong word or a thoughtless act.

The Bible is the best of guides in this matter; the Golden Rule helps us to avoid a multitude of errors; but in addition to this we need a knowledge of individual character, and particularly of the present state of mind of the person and of his hopes, fears, and plans. Sometimes we wish to say a soothing word to one who for the time is nervous and irritated. What shall we say? and just when and how? That which would quiet one might perhaps only irritate another.

We wish to encourage the timid, rally the despondent, check the turbulent, and use our influence over others for good in a thousand ways. These are

little things, perhaps, but they go to make up life with its joys and sorrows, its pleasures and discontent, and even all that we call success, either in business or social matters, depends largely upon our ability to say the right word in the right place.

Business men recognize the fact that shrewdness in dealing with men is the main element of success. I am sure we do not devote the time and study to this subject that its importance demands. We must not think these problems easy to solve; we need all that Phrenology can give us, all that the experience of the world can give us, and what we have treasured up from our own experience, and with all this it still requires hard study, close observation, and constant practice to advance in this the highest of all arts. There is many a bright intellect that for want of something better is used in snubbing and criticising others and making its owner generally disagreeable, when if it were used in gaining power and influence over others through the study of human nature, the good results would enrich many a life.

To be able to control the current of human feeling and direct its course, would be a triumph indeed, and a study toward this end becomes positively fascinating. If carried on in a spirit of kindness and good will and a desire to make others happier, it is the best of antidotes for that widespread malady, selfishness. It takes one outside of himself, it makes him keenly observant of the ways and wishes of others; in imagination he is constantly placing himself in the position of others and trying to imagine how they feel and how things seem to them with their peculiar dispositions, and how this or that would affect them. At the same time one can study himself, analyze every thought and motion, and thus detect and check a multitude of wrong impulses that would otherwise escape notice. Such an uncompromising criticism of one's

own character is generally needed to keep down a certain feeling of superiority that a close study of human nature around us is apt to develop; for human nature is faulty at best, and if we place ourselves as among others around us and review our own characters with the same searching criticism, it helps us every way. We are constantly dealing with people who are more or less warped in disposition; whose minds are more or less unbalanced through a combination of strong and weak faculties; and while we can not change them permanently, it is possible to give direction to their thoughts and feelings, and that, too, without their knowing it.

But whatever the dominant feeling may be, the tendency of its expression is to rouse the same in others, and thus firmness is met with firmness, selfishness with selfishness, and kindness with kindness; and this is particularly true of the selfish and animal feelings that are usually more active and excitable. But the phrenologist must resist this natural tendency to thus respond to the feelings of others. Surely he must control himself before he attempts to control others. He must be able to repress as well as express all that is necessary to produce the desired effect.

Of course we know that men are not machines; that mind is an active principle, and all a faculty requires is to be excited to action. A piano responds promptly and accurately to the touch of the musician, but the mental faculties can seldom be appealed to directly with good results. Its very individuality seems to resent a direct appeal as an indignity, but whatever comes from self seems all right, and hence a hint, a suggestion, or a silent influence that throws the mind off its guard, and awakens it in the right direction, is usually the best.

Some practical suggestions through the JOURNAL along this line of study by some one of experience, would, I am sure, be appreciated.

W. P. UNDERWOOD.

A SHARP TEST.

SIX men and their wives, in Brooklyn, were excellent friends, and visited little among other families. They met once a fortnight at each others' houses alternately, and dined and spent the evening. When a lecture, a concert, or a theater was to be attended, twelve reserved seats were bought, and thus they heard and saw the same things together.

One of the women was a great admirer of Phrenology, and her friends used to rally her on the subject. She finally said, "Go to Fowler & Wells, one at a time, on different days, take the seat, and say to Mr. Sizer, the examiner, 'I want a full written description of character,' and say no more. When he asks your name at the close, to write it in your chart, give something by which to identify the description—such as X, Y, Z, or 20, 40, anything—but give no name. When they are all completed, if I can not tell by reading them through once, which character belongs to each of you six men, I will pay to you the amount of the entire bill."

When they were finished, the lady was visiting in Philadelphia. The characters were packed up and sent to her, she read them once, and sent back the parcel with the names correctly. The wife of one of the other men was tested in the same way, and by reading the characters twice, she assigned each description to the proper owner. Phrenology is the true philosophy of the mind, and character can be correctly described by its principles. Guess work never performed a feat like this.

—:O:—

B—S—, Ky., Nov. 14, 1889.

FOWLER & WELLS Co.:

I AM well pleased with the written character you sent me. It is wonderful how well Mr. Sizer can read character by photographs. I have four brothers. Mr. Sizer told me ten times more than they all could have done. I showed the chart to some of my friends, and they did not think it possible to read character so correctly.

I am putting in all the time I can spare from my business studying Phrenology. I want to come to the Institute next fall.

Yours truly,

J. P. B.

CHILD CULTURE.

HETTY DEANE ON OBEDIENCE.

THE prettiest sight in the world is a family of obedient children,—the prettiest and the rarest. Mothers coax, threaten, and shut in dark closets by turn, but as to commanding obedience by a look, a tone, a simple word, it seems to be beyond their power. The woman who frightens her child by stories of bears and policemen, in order to bring his refractory spirit under control, is simply monstrous. She ought to be shut up in Bluebeard's closet with his seven ghastly wives, herself in full possession of her senses. This could not be done, however, for it would take nearly as many closets as there are women in charge of children, and poor old Bluebeard, according to history, had but one of the sort needed. The ubiquitous policeman is the bugaboo of the city nursery, and the Bible story of the bears and the naughty children is the corrective demon of the country household.

I once knew a quiet, obedient, sensitive child who stood many a time motionless with terror, listening to that bear story as it was administered to her harum-scarum little brother. She is a woman now with children of her own, but a thrill, akin to the terror then excited, runs through her nerves to this day as she recalls those monstrous recitals. As to her brother, he remained harum-scarum through childhood and youth, and is not far from it now that he wears the beard of a man. Many a timid did he assure his trembling sister :

"Bears don't live in our woods, and old nurse knows it ; 'sides there ain't no 'Lijah, either, 'Lijah don't live nowadays. I would n't be such a goose to be 'fraid of bears !"

To the nervous, imaginative child the

story gave a shock never to be forgotten to the matter-of-fact boy it was a lesson as to the veracity of his elders, which he, presumably, did not forget. The effect on the little girl has made the woman so positive in her opinion that terror as a corrective is inhuman, that she says she would lay destroying hands on anybody who should try it with her children,—even were it her own mother-in-law,—and there could scarcely be a stronger statement than that !

"But, how in the world do you teach your children to obey you ?" asked one of the helpless incompetents of this woman.

Simply, by always saying just what I mean ; by saying it because I mean to be obeyed, and then by seeing that I am obeyed on the spot," was the firm answer.

There it is in a nut-shell ! The trouble is that mothers do not begin soon enough, the child learns that many commands are not enforced and, so has no respect for any command, and by the time his will is well developed the mother is ready to exclaim :

"Well, do as you have a mind to, I will be obeyed, so there !"

Silly as it sounds I actually heard a mother say this very thing, and the children went on managing her according to their own sweet wills, just as they had been doing ever since they were born.

But obedience to elders and superiors is the foundation upon which the whole structure of home training rests. The teachers in our schools often remark that they can tell what the home training of every pupil is by his manners and conduct in the school. I wonder how a mother thinks her child, in later years,

can be obedient to the dictates of truth and right, if he is not first taught obedience to home authority. For the mother should be the embodied reason and judgment for the child till he attains to reason and judgment himself. The truth is they do not think, or how could they say, as you often and often hear a mother say :

"I can not do anything with him ; I am at my wits' end, for he pays no attention to a word I say."

A humiliating declaration, which should be made, if made at all, only in the silent confessional of her own heart and with an importunate cry for wisdom. The child who hears this confession from his mother is more and more confirmed in his wilfulness. Indeed, he perceives his advantage over her without its being proclaimed upon the house-top.

The kind of obedience which is forced by terror is not the kind the thoughtful mother desires. She wishes it to come through respect and a sense of her unwavering resolution. If she can not win obedience by what she is and must exact it by penalties, then she will see that the penalty never once fails to follow an act

of disobedience. But if she is the happy possessor of that indefinable something which is not only moral force but a quality of character still greater than moral force, the child will know by every inflection of her voice, by the eye, by all that she is, that he must obey, and obedience once become a habit all is easy thereafter.

The gentlest, softest voiced mother that I ever knew ruled her children in this way, and to day, in Bible language, "they rise up to call her blessed."

But, dear me ! that brings me to the consciousness that not one mother in a hundred knows how either to win or to command obedience, and so they must be taught. I apprehend that under this head will be the most severe training and the most difficult lessons for them to master. But it can be done !

In writing down, as well as I can, the notions of my spinster friend on obedience, I have more than once wished that my reader could see the sincere feeling, the earnestness, the depth of sympathy with children, which her face and voice convey to the listener. But, alas ! these can not be transferred to paper.

SARAH E. BURTON.

HARMONIOUS DEVELOPMENT.

THE visitor to Venice must at times have been impressed by the graceful motion and picturesque appearance of the Italian gondolier, as he stands firmly poised on his boat, plying his single oar with an apparent ease which dispels all notion of hard or unpleasant labor. The necessary swaying of the body, the seemingly natural and pleasant exertion, not too rapid, as if urged on by excitement or compulsion ; not too slow, as if shrinking from the task ; aided sometimes by the picturesque costume, combine to make the gondolier one of the most graceful and attractive of laborers. If there were no deeper meaning in this than the gratification of beholding graceful postures and move-

ment it might be thought too slight a matter for serious attention ; but the truth is that it implies much more. It conveys a hint of perfection both as to work and workers. All our ideas of grace, when analyzed, will be found to be based upon economy of force. The hard and angular movements which betray much effort to little purpose are never graceful or pleasant. It is only when the object to be gained is achieved with apparent ease, or at least without an undue expenditure of force, that we call the process graceful and derive pleasure from witnessing it. Now this ease of performance and economy of force, while largely gained by continual practice, is also dependent upon the

equable development of the different parts of the body and powers of the mind. Without this health and happiness can not be full and complete, and the healthy and happy man or woman is both of the most interesting and the most valuable. It may seem to the superficial observer that one set of muscles, or one set of powers, exclusively stimulated, can produce the most perfect work of a special kind, and that this authorizes a one-sided training; but a deeper insight into social needs will show that no want is so great as that of

well-balanced individuals—men and women in whom body and mind have been harmoniously exercised—in whom no faculty has been stunted or left to wither, and no part urged to the point of exhaustion. All special training will be most successful when such a soil is prepared. Yet, supposing some particular work should be a little less perfect in its details, from such broad development, still society would be the gainer in the entire fruits of a life which was healthy in itself and wholesome in its influence. —*Philadelphia Ledger.*

SIMPLE AND COMPLEX CHARACTERS.

THE observing mother cannot fail to note the difference in the characters of her children. Some are simple and harmonious in their organization; their digestion is good, their nerves not easily irritated; they sleep well; they are good-natured and easily amuse themselves. Others are all the time ailing in one way or another: they dislike certain articles of food; they are fretful; they nearly die in getting their teeth; they need to be amused and cared for continually.

As these children grow and associate with their fellows in the play-ground or at school these differences appear more and more marked. One will make friends with everybody; the other will be inclined more to solitude and brooding. "Brutus with himself at war forgets the shows of love to other men." Natural courage in one will make him foremost in feats of agility and strength; natural timidity in the other will restrain him within narrower limits.

These two types of character we meet every day, and few indeed there are who do not delight to analyze and discuss them. This delight "in the proper study of mankind" may properly be charged with a great deal of gossip that cannot otherwise be accounted for. When elevated above the region of gossip it takes the form of historical and biographical

analysis or of studies in Shakespeare or some other delineator of the human soul.

The mother who discovers in her child a complex rather than a simple nature will, if she is wise, address herself to the work of instilling such principles and inspiring such motives in her child as will give him a clew to lead him through the mazes of the labyrinth he must tread, and straighten as far as may be the tortuous path he might follow. If he can be trained to speak the truth, to do the right thing, the unselfish thing, to obey the parental command implicitly and without question, she will have done much to set her complex-natured child in the way to life and peace. Speaking the plain unvarnished truth is the first point to be made when the child can speak; but this must, in the nature of things, be after the habit of obedience is formed, which is done best in infancy, beginning with its earliest stages and long before the child can talk. A child whose word can be depended on, whose simple Yes or No is as good as an oath, can be trained to be depended on to do right in every thing, no matter how complex is its character or how great its tendencies to weakness or vice in any direction. The leaven of habitual truth-telling will work in the character till all is leavened.—*Christian Advocate.*

UNHELPFUL HANDS.

THEY were beautiful hands, soft, white, shapely, but they had not been trained. They couldn't keep accounts, or use the needle, or the broom, or the dish-cloth, or the mop, or the cooking utensils. They had at one time glided skillfully over the piano keys and wielded the pencil to some purpose; they were graceful hands and made pretty gestures, or folded themselves harmoniously over the soft draperies beneath them.

By and by the ample provision that had been left to keep these hands in idleness was wasted because the hands couldn't keep accounts; wicked men took advantage of these helpless hands and stole their treasures from them, and then days of darkness and trouble came.

The owner of the hands had to board because she didn't know how to cook, and, of course, she had to eat what was set before her, and so her digestive apparatus got all out of order. She had to hire her dresses made, and was subject to the dishonesty practiced by some dressmakers, who charge a good price for poor work and appropriate a portion to themselves of the ample pattern they require for a dress. She couldn't manage her business affairs, and so had to trust them to a lawyer, who, in her case, proved untrusty, and made exorbitant charges for work which was poorly done. At every point where she came in contact with the world she lost and lost, until at last she was glad to find a refuge in the church home which in the days of her prosperity she had helped to found. If she had only known how to take care of just her simple self, she might have lived on the wreck of her fortune in modest comfort and independence.

This is a sketch from life. Just such histories are transpiring every day, and yet girls are permitted to grow to womanhood without knowing how to do what is indispensable for their own personal comfort and existence even. If a girl can't learn to cook in her mother's

kitchen, there are cooking schools where she can learn. If she cannot sew with her mother's seamstress, there are sewing schools where the children of the wealthy are taught the use of the needle in embroidery and plain sewing. She can use the broom in her own room. She ought to have trained hands.—*Selected.*

THE FIRST GRANDCHILD.

"GRANDMOTHER!" called the father, and there came
Out through the vine-wreathed porch a blushing dame,
Surprised and eager at the strange new name.

The clock within rang forth the chime for eight.

"A message? Read it quick—how can you wait?"

Her husband, smiling, leaned upon the gate.

At arm's length holding in his trembling hand
The crisp white sheet, while he the writing scanned,

Then read once more, with voice almost unmanned;

"Thy granddaughter salutes thee, 'Baby Bell.'

Mother and child, thank God, are doing well."

A moment's silence on the proud twain fell.

She broke it soon. "Grandfather, I congratulate——"

"What, me?" the good man cried, lifting his hat—

"'Grandfather'—me? I hadn't thought of that."

UNKNOWN HEROES.

THERE are heroes whose prowess never sees light,

Far greater than ever was ancient knight.

In many a heart lies a secret tale
That would make the Homeric legends pale;

And oft is a deed of valour untold
Which is meet to be written in letters of gold!



DRY AIR AND CONSUMPTION.

AT the Congress of Climatology, held in Paris in connection with the late Exposition, there was a discussion of the influence of dry air on the sick that disclosed a good deal of common sense in the views of many of the delegates.

This convention, indeed, of observers, including many distinguished physicians from some of the most renowned health resorts, was nearly unanimous in ascribing very little virtue to the climate of such resorts, and, still more curiously, there was a diversity of opinion as to what qualities of climate would be favorable to invalids, provided they could be secured with certainty. Dr. Labat found in the Isle of Bute, on the coast of Scotland, in the latitude of Labrador, "vegetation very similar to that of the south of France," while "at Nice would be experienced one of the worst climates of the world," and he considered that the real secret of the good effect of a change of air consisted in "the choice of the house where the patient lived," and "the hours and the place where he took exercise." Dr. Chiaï, of Mentone, supported this theory, and believed that if delicate persons, staying in the Riviera for their health, would be more careful about their habitations, and the way in which they spent their time, many lives might be saved. He had found that during

the winter, particularly in January and February, there were atmospheric perturbations on the Mediterranean coast, which were accompanied by a great increase of dryness in the air; and these perturbations were "always followed" by "an increase of illness and dangerous symptoms." For this reason he thought that patients should study the hygrometer, and, on the approach of dry weather, should keep within doors until a change took place, using some means to evaporate water in their rooms, to supply the deficiency of moisture in the air. This observation, remarkable as contradicting nearly all our received notions as to the beneficial influence of dry air in consumptive cases, and in checking the diffusion of contagion and malaria, seems to have met with the approval of the Congress, although it was agreed, in another part of the discussion, that in the treatment of consumption the most favorable climate was a sunny one, free from dampness and wind, such as is found in many mountain resorts; and that, if these conditions are fulfilled, a low temperature was in many cases not injurious. Before adjourning the Congress made the sensible suggestion that the professed health resorts were often so badly drained and policed as to injure rather than benefit the persons who came to them. Dr. de Valcour, of Cannes, said

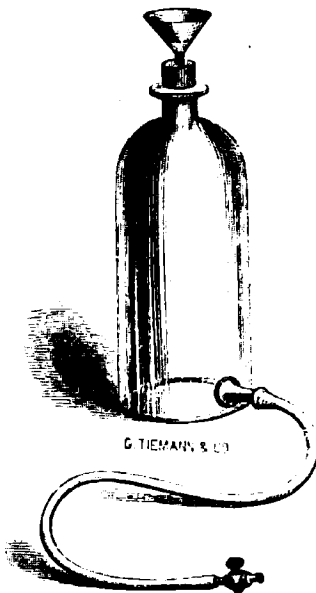
that if it had not been for the pertinacity of the English visitors no sanitary improvement would ever have been made in that town; and it was voted that in France sanitary legislation was desirable, to compel hotel-owners to adopt the measures necessary to avoid poisoning guests with noxious effluvia.

The point in all this is that it is not so much the dampness or dryness of the air as it is the purity of it, and the discretion of the invalid in adapting himself to the weather from day to day. Further, we must not forget the hygiene of *change*.
H.

LOCAL APPLICATIONS IN NASAL CATARRH.

IN the treatment of nasal catarrh with washes, lotions, and other local applications, the main object is to reduce the tendency to exudations of an inflammatory character, and to remove accumulations of hardened matter, if any exist. Understanding as physicians now do the prompt development of morbid germs in tissue that has undergone

that diseases of the tissues are due to changes in the character of the secretions by which poisonous effects or destructive growths are produced, and in this belief long ago advocated treatment that would chemically counteract the poison and render it inert or destroy the parasitic growth that had been set up. The discovery of microbic or bacillic forms in the excretion of the throat and nasal membrane, or in the membrane itself, has definitely settled the pathology of diseases affecting the membrane, and given us light with regard to the local treatment. Hard, crusty deposits may occasion a great deal of pain aside from their interference with breathing through the nose, and in old cases the formation of such deposits may be very obstinate. Their removal is a prerequisite to any treatment of a helpful sort, and care must be exercised in the procedure, so that the soreness shall not be made worse. Generally warm water in which a little bicarbonate of soda or borax has been dissolved is a good solution for the purpose, and the nose tube of a fountain syringe will serve as the instrument, the force of the jet being regulated by the elevation of the water bottle or jar above the nose of the patient. The elevation, indeed, should be slight as what is required is to soften the incrustations, not to force the water up into the sinuses and thus cause pain. The recovery of a free respiration on the removal of the obstructive matter is in most cases a welcome relief, but there follows often a marked sensitiveness of the raw membrane to the incoming air,



NASAL DOUCHE. (TRUDICUM'S.)

almost any degree of pathological change the principle involved in local applications is that of antiseptis, so that the development of the injurious germs shall be arrested. This done, the inflammatory process will subside, and mild, cleansing agents will aid toward the restoration of a healthy condition of the mucous membrane. For years I have been a firm believer in the theory

for which a powder of bismuth, subcarbonate or pulverized starch, blown in through a tube, will prove soothing.

In acute catarrh the membrane of the



A POWDER BLOWER. (ROBINSON'S.)

nose may be so painfully tender that breathing through the nose can not be endured. In such cases we have found that the majority of persons are relieved by inhaling the vapor of hot water from a simple tea-kettle, or from a good atomizer. Medical authors suggest a variety of compositions for inhalation or insufflation, and the manufacturers of surgical apparatus advertise many devices for the use of catarrh sufferers, but in practice a few only are found to be efficient, and these are of the simple character shown in the engravings.

At a discussion of common throat and nose affections that we attended but a short time ago, and in which some of our most prominent specialists participated, it was stated by two or three that they obtained their best results in local treatment by simple measures—a solution of common salt or of borax for cleansing purposes being sufficient, if indeed anything more than a douche of warm water were required.

In cases where the exudation has a fetid smell the solution should have an antiseptic quality, so as to destroy

any malignant or poisonous elements in the secretions. Listerine is a ready and excellent preparation for the purpose, and so is pinol, application of these being made with an atomizer. There are powerful antiseptics that might be named, but it is not advisable to suggest their use by persons unacquainted with the necessary technique of nasal treatment.

In chronic catarrh the disease often extends well up in the post-nasal cavities, so that applications made in front may not reach the part where the most trouble exists, and in using a tube for such post-nasal application knowledge of throat and nose anatomy is required and some skill in handling the tube.

We would not advise a novice in such things to try his hand at this kind of treatment before he had been shown by a physician how to do it. A careful examination with the laryngoscope should be made in chronic cases, so as to determine the place and character of the disease.

We have known cases of annoying, persistent cough that nothing in the way of gargles or a careful diet would relieve. The nose was quite free from disease and the larynx appeared to be healthy. But a careful examination of the membrane high up in the posterior nares at length brought to view a small spot of inflammation, and the existence of that by its reflex nervous in-



POST NASAL BRUSH.
2 STEMS.

fluence produced the cough. Cases of this sort are not rare in the practice of specialists, and they are not easily cured, especially if of long standing. H. S. D.

THE "SAND-BOX" CURE.

A LONG while ago there lived in the city of New York a man who doctored horses, cows and dogs. Ladies then fancied poodles and King Charles's spaniels, and the man's success in curing these pampered pets brought him many patients and much gain. In those days large doses of medicine were given to man and beast, for scarcely anything was known of the remedial power of nature. This successful practitioner, however, did not heed Macbeth's advice to "throw physic to the dogs." On the contrary he gave the dogs nothing—no medicine, no food, no water—for his panacea was starvation.

"Put him in the sand-box," was his only order to his man-of-all-work, when a lady having left a sick dog in the doctor's care, had departed. In the sand-box the dog remained, until it could eat a crust of bread. Then it was sent home, a well dog. The doctor's theory was a simple one. As the dog had been over-fed, dieting would cure the disease.

After the dog doctor had departed, his secret became known, and children who refused to eat what was set before them were told, "Ah! you ought to be put into the sand-box;" for in those days when carpets were costly, every family kept a large box of white sand to sprinkle on the floors of the living-room and the kitchen.

The dog doctor may have read the old story which tells how that much-married and most "merrie" King Henry VIII. cured the Abbot of Reading of a weak stomach.

One day the king, while out hunting, lost his way and found himself outside of the Abbot of Reading's house. It was dinner-time, a sirloin was on the table, and the Abbot, taking the king for one of the Royal Guard, pressed him to dine. The king laid on to the roast

beef with such vigor, that the Abbot, who simply nibbled at it, exclaimed:

"Well fare thy heart, for here in a cup of sack I remember thy master. I would give a hundred pounds on condition that I could feed as lustily on beef as you do. Alas! my weak and squeasy stomach will hardly digest the wing of a small chicken."

The king departed, and several weeks afterward the Abbot was committed to the Tower and fed on bread and water. At the climax of his emptiness, a sirloin of beef was set before him. The Abbot rivalled the king's performance. Just as he was wiping his mouth, out jumped Henry VIII. from a closet.

"My lord," he exclaimed, "deposit your hundred pounds, or else no going hence all the days of your life. I have been your physician to cure you of your squeasy stomach, and I demand my fee."

The Abbot returned to Reading lighter, in heart and purse.

We hear suggestions now and then of a revival of this "sand-box" method of treating disease, and think that if it should receive the approval of the "faculty" it would be found a most efficient offset to the growing use of nostrums and chemicals.

FLESH-EATING A BARBAROUS HABIT.—The following quotation from "Missionary Enterprises," by John Williams, so many years missionary to the South Sea Islands, puts the matter of a flesh diet in emphatic form:—

1. That flesh food is unnecessary for the maintenance of health and strength in human beings.

2. That the taste for flesh food is one so unnatural that when the natural, non-flesh diet is employed for a series of years, taste for flesh is wholly lost.

3. That not only the taste but the smell of flesh food is repugnant to a person whose senses are undepraved.

4. That civilized nations have become so barbarous by the use of flesh food, as to look upon the vegetarian as a barbarian.

The extract which we quote below, is in keeping with this philosophy.

"It was upward of ten years after our arrival in the islands before we tasted

beef; and when we killed our first ox, the mission families from the adjacent islands met at our house to enjoy the treat, but, to our mortification, we had so entirely lost the relish that none of us could bear either the taste or the smell of it. The wife of one of the missionaries burst into tears, and lamented bitterly that she should have become so barbarous as to have lost her relish for English beef."

NATURE'S RECUPERATIVE POWERS.

WE do not mean to be understood by penning these items that physicians are unnecessary. But we wish to show that in some instances patients left to themselves have recovered after having failed to do so under the best approved medical treatment. A young man suffering from an acute attack of inflammatory rheumatism and nervous fever was daily visited by a leading physician, yet continued growing worse.

After several days the physician said: "The rheumatism has gone to his heart, and there is but little, if any, chance for his recovery. However, be sure to administer these drops every fifteen minutes until I call again to-morrow."

A sister of the patient resolved she would care for him, and that no one else should be admitted. She was careful to have the best of ventilation. Every want of the patient was anticipated, and the many things done that an experienced nurse alone knows how to do. Every fifteen minutes *those drops* were given, and in the morning, when the physician called, he was astonished to see the wonderful improvement of his patient.

The sister, bringing forward the vial containing the drops she had so punctiliously administered, found she had not given what the M. D. left, at all, but instead a harmless decoction of *soft maple bark tea*, which her mother had prepared for her sore eyes, and had

exchanged for *the drops*, through mistake.

At first, the sister turned rigid through fear, but soon began to laugh over the ludicrous position of the M. D., who sat shaking the *via*!, appearing to be in doubt as to the evidence of his own senses. We think all there was to it was this: The patient had been gorged with drugs, and the recuperative powers of nature held in abeyance. But while the harmless decoction was being given Nature asserted her rights, commencing a recovery. We knew of a lady who was for a long time ill, at last becoming in a condition she could take neither medicine nor food for many weeks. Nearly every one thought she would die without nourishment. Yet this appeared to be just what she needed, perfect rest, after which she began slowly to recover, finally regaining her health.

Nature finds much assistance through her willing handmaidens, pure air and water, and oft-times, if left to herself, will, if the patient keeps himself free from harrassing thoughts, work out for him a foothold whereby he can once more regain health.

That the mind wields a powerful influence over the body is admitted by the best authorities. Be cheerful, hopeful, and content; keeping on the best of terms with yourself, your neighbors, and your Maker. Carefully obeying sanitary rules, one will find the need for physicians much lessened. S. R. S.

VEGETARIANISM GROWING.

A WRITER in one of our exchanges writes :

Vegetables are good—yes, they are among the best of the many good things with which Heaven has blessed us—and if that same kind Heaven should decide and declare that we must get along without one or the other, that it must be all meat or all vegetable, we should unhesitatingly cling to the vegetable. Thanks now to the ingenuity of man, we depend upon no season for these delicacies; the art of canning has bridged over that dilemma, and green peas are as common a sight upon our winter tables as potatoes.

In some of the large cities on the other side of the Atlantic, vegetarianism would seem to be more in favor than in this country. In London, for instance, there are restaurants and cafes, and even hotels and boarding-houses which profess to serve up only vegetarian meals. What the character of these meals is we can judge from the menus which frequently appear in certain metropolitan journals whose province it is to make a note of them. One of these, the *British*

Baker, Confectioner, and Purveyor, devotes a portion of its columns periodically to arranging vegetarian menus for the benefit of such places of resort or residence as need them. Here is one of these menus which will suggest to our ingenious lady readers other lists as good or better :

A VEGETARIAN MENU.

Stewed Mushrooms.

Carrots in the Flemish Style.

Grilled Vegetable-Marrow.

Poached Eggs in Brown Sauce.

Timbale of Ground Rice.

Currant Sauce.

Stewed Pears. Stewed Plums.

Dessert.

Cherry Plums.

Apples.

Seed or Plum Cake.



NEW YORK,
March, 1890.

AN ENGLISH EDITOR'S DISALLOWANCE.

In a late number of the *British Medical Journal* the editor feels stirred to comment on a recent monograph by Mr. Bernhard Hollander, entitled "De-

monstration of the Centers of Ideation of the Brain, from Observations and Experiment." As we have published two or three articles by Mr. Hollander the reader probably knows the tendency of his investigations. He has studied with much care the experiments of such men as Ferrier, Hitzig, etc., and being convinced of the truth of their bearing in relation to Phrenology, has made not a little reputation in England by showing how the results obtained by observers in the field of motor localization corroborate the organic functions as formulated and described by Phrenology. Mr. Hollander has found opportunity to bring his conclusions to the

notice of several important British societies, and he has obtained the attention of leading scientists, even to the extent of encouragement on the part of some, that there was good ground for his claims in favor of Phrenology. Whether or not the success on the part of Mr. Hollander is taken as an occasion of offence to the editor of the *British Medical Journal*, it is certainly apparent that he is by no means pleased with the status of affairs. He goes to work in his article to discuss the subject in that slap-dash style that reminds one of the attempted criticisms of a noted Scottish writer, who made a fierce attack on Geo. Combe, sixty years or so ago. There is a difference, however, between the Edinburgh critic of that past time and the London editor of the modern, as the latter seems to recognize the fact that the Phrenology of Gall and Spurzheim is not dead, whereas, his noble Scottish exemplar claimed that it was.

It is recognized by the *Medical Journal* that at one time Phrenology counted among its supporters a large number of eminent men in science and literature, and notwithstanding that these men hold to their advocacy of Phrenology very earnestly, yet the modern critic appears to insist that their attitude is no reason why we should pay much respect to it to-day, and he seems to believe that there are few men of eminence to-day who hold to the theory of localization of the different mental faculties in special parts of the brain; whereas, should he take pains to investigate the facts he would be surprised to find a large number who hold firm convictions on the subject. The editor of the British periodical does not appear to be very familiar

with the literature of Phrenology, and like most writers who are compelled to accept second-hand testimony, takes for granted the statement of one or two men as next to conclusive, because there are some inconsistencies between them. Of course, this mode of reasoning has no application to medical science, or any science. The fact that in medicine most eminent men show very little compatibility or agreement on essential points does not operate discredibly upon rational medicine, certainly not. So, in geology, disagreement of leading authorities does not impair the value of that science to the world. It is not to be therefore expected that in the discussion of mental economy with its wonderful differentiation, and the world of opportunity given for discussion and speculation, that those who profess adherence to the principles of Phrenology shall be entirely consistent with each other; indeed, the very greatness of the subject necessitates variation of opinions.

If an impartial person should read Mr. Hollander's book, and then read the British editor's comments, we are pretty sure that he would not say that Mr. Hollander was fairly represented. The slap-dash method of the criticism precludes entire fairness. Besides, there is little attempt to disguise the belief of the writer that the subject is scarcely worth his consideration, and he has only devoted two columns or so of valuable space in his organ because Mr. Hollander has dared to publish such a pamphlet. We wonder that he should have presumed to accord the phrenologist the honor of so extended a notice, and the dignity of a notice, too, in double leaded type.

We note, that in his brief statement some of the statements of Mr. Hollander with reference to the parallelisms existing between the phrenological organs and the observations of Prof. Ferrier and others he does not even discuss them. In the last paragraph, he speaks about it being "somewhat awkward that Gall neither admitted Hope nor Alimentiveness, though they were recognized as organs by the later phrenologists." We can not see how such a fact is "awkward" any more than it should be said of Sir Humphry Davy, that it is awkward that he did not discover many of the facts of chemistry that later students and observers developed. Now, Gall is not the all of Phrenology, any more than Sir Humphry Davy was the all of chemistry.

In regard to such publications as this of the *British Medical Journal*, there is one point that may be taken as significant, and that is the revival of interest among scientific men in Phrenology. We have noted a considerable number of "refutations" the past year or so, but, the writers in all cases labor and drag in their efforts, and their statements when analyzed show one important feature, and that is, a want of knowledge of the essentials of the subject, and also, a want of that careful study of phrenological literature that can be the true basis, only, of a fair criticism.

It seems that Mr. Hollander expected that the editor of the *British Medical Journal* would give him an opportunity to answer, but space for the purpose was declined. Such liberality or fairness, is hardly to be expected from men who will treat a subject Jeffrey-like in ac-

cordance with their feelings rather than according to the light of candor and true intellectual discernment. We shall give Mr. Hollander his opportunity in our columns.

THE DECAY OF WONDER.'

SOME time ago, while scanning the columns of an exchange, we noted a bright little article in which the writer remarked that the American character exhibited a marked defect of the faculty of wonder; that even children failed to exhibit surprise at occurrences that were novel, but took everything in a matter of course fashion. There was some warrant for this expressed in the remarkable developments of the past quarter of a century in the arts that have a practical application to every day life. The masses of the intelligent, in fact, have become so accustomed to seeing and hearing of new inventions and new methods in the affairs of business and society, things contributing to comfort and convenience, rapidity of communication, travel, etc., etc., that they looked upon the continuance of such a current of improvement as a matter of course.

Through the elaborate poly-leaved newspapers of the day news of doings in all parts of the world streams in upon the million readers of town and country; old and young con over these newspapers and expect that each day's edition shall contain a fresh quota of items relating to public and private affairs, in which every phase of the pleasant or ugly, attractive or horrible shall be in some fashion represented. The calamity of to-day is stale and well nigh forgotten to-morrow in the

momentary absorption of attention to later occurrences.

Such an explanation of what is really becoming more and more marked in American character is not to be regarded as unreasonable, since we know that in every department of human activity what at first produces a sharp and lively impression becomes by repetition a subject of indifference. But there is more in this idea of the loss of the quality of wonder than the explanation, if we accept it, can account for. Observers have noticed that the later American head is not as fully developed in the sincipital region as the earlier, while the general size is larger. The region ascribed to the faculty of spirituality, the organ of wonder, according to Combe, is commonly found to be depressed. Certainly there may be a fine development, often is, but usually the head slopes off on each side toward the temples, which are usually well rounded, and indicative of practical capacity. Correspondent with this indication the American of to-day shows less disposition to believe the probable, to take things on trust. He wants evidence and proofs. If he argues about theories he asks for a substantial foundation for the theories. Mere statements do not find him a credulous listener. In some circles it is a growing habit to affect incredulity on all subjects that have not received the stamp of fact, and belief based upon old opinion is often sharply snubbed. What will be the ultimate result of this tendency to indifference and distrust we are not prepared to say, but one thing is evident, that it affects the warm and sentimental side of human character not a little, and deprives it of

much of its tenderness and delicacy ; qualities most beautiful and attractive to those who yet have time to interest themselves in things that are above the merely crass and material.

THE TRAPPISTS OF OKA.

THE power of the human organization to adapt itself to extraordinary and forced conditions is shown, we think, most conspicuously in the life of some religionists. That singular monastic fraternity known as the Trappists, for instance, is an interesting study for the physiologist. Setting at defiance apparently the common regulations of society as regards labor, nutrition, sleep, etc., these monks are known to live to a good average age and keep meanwhile a state of health, that, while it is certainly consistent with principles of rigid temperance, is much more robust than their habit of severe frugality in eating would incline most of us to believe.

Here is a leaf from the daily life of the Trappists at Oka, Canada, as related by one of the brothers in a recent discourse. The monks rise at one o'clock every morning, when they address themselves to prayer. After this they set their cells in order, which being but six feet by five, and provided with a little wooden couch, a hard mattress, a straw pillow, a whip and a crucifix as their furniture, the task is a brief one. An hour for meditation follows. Then the brothers repair to the chapter hall, where each in his turn recounts his offences against the regulations. Should he omit to state a fault that has come under the notice of a companion it is the duty of the latter to mention it. The penance imposed for

offences consists of some bodily mortification, usually a whipping. After this period of mutual confession they chant. At 8 o'clock grand mass is celebrated, and then the brothers go to their labor.

The work done by these monks is hewing cord-wood in the forest, at which they are engaged until two o'clock, when they return to the monastery. At half past two the first meal of the day is taken, and then they "dine" commonly on a plate of soup made of boiled vegetables, with a service of rice for dessert. On Christmas day they "feast," for then they are allowed two meals, but during the Lenten season their one meal does not come until four o'clock P. M.

We are told that the Trappist has a good appetite usually, and we can well believe it. We can easily imagine him like the boy who has emptied his dish of his favorite pudding, looking with eager eyes and spoon in hand for more.

The dinner finished the monks return to their work, which is continued until the time for evening prayer. The brothers rarely exchange a word while at labor, except it be the salutation, "*memento mori*" (remember thou must die), a rather rueful greeting, by the way, and every day each one spends a little time in contemplating a half excavated trench in which he is to be buried at death.

We suppose that the wood cutting largely contributes to the support of the Oka brotherhood, and in that way a service having its quality of use is done for society. *Chacun a son gout*; these Trappists may enjoy their daily round; no doubt many of them positively do, but most of us in the current of active life will wonder how that could be.

THAT PENAL COLONY.

ONE of our contemporaries says: "The day begins to break. The mills of the gods that grind so slowly but so surely are beginning to deliver their grist. It is solemnly proposed to establish a penal colony in Alaska, that cold, dreary monument to by-gone statesmanship and the expenditure of \$7,000,000."

As it has been urged again and again in this magazine one of the best uses Alaska could subserve would be that of a national penal settlement. A proper plan of organization for this purpose carried into effect, would in a few years demonstrate to the country and the world the great wisdom of the purchase of Alaska. We are confident, that aside from all other uses, that territory would in time, under convict industry, show a remarkable development. Congress and the state legislatures can not give attention to a matter of more pressing importance, from both moral and material points of view, than the institution of a penal colony. Wherever we have spoken on this topic—and we have done so several times in public—the wisdom of it appeared to obtain at once the assent of the great majority of our audience, and some have indicated surprise that the matter had not obtained the serious attention of our public men. We think, and our thought is sustained by a calm and careful examination of the bearings of the proposition, that most of the problems of penology, especially the management of inveterate criminals, and their education and reform, would be resolved by a penal establishment apart and at a distance from home communications.

Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

A LIE ON ITS FACE.—J. E. B.—We can not advise the use of any such preparation. Most of the cosmetics and "face improvers" are composed of chemicals that are deleterious, and if used constantly, will seriously impair the vitality of the skin. Some will remove "pimples", (acne) for a time, but later a larger crop is likely to appear to the disgust of the person. A proper diet and an improved general hygiene are the only rational specifics for a rough cuticle if it is improvable—and usually the worst skin is susceptible of betterment.

MAL-NUTRITION.—G. W. CAN.—Your case appears to be a phase of dyspepsia, with probably liver and kidney complications. How far the trouble extends it would be impossible to say without a personal examination, and so it would be useless to give more than the general advice, to eat carefully and avoid over strains. Would suggest the stopping of cheese and puddings, and cakes that have shortening in them of lard or butter. You probably are over concerned about your health, and think too much of what you shall eat and do for it; hence, tend to aggravate the uncomfortable symptoms.

FAIR, WHITE SKIN.—A. S.—A skin of this character is usually associated with light hair and blue or gray eyes. We sometimes find it with dark hair, but then it is an inheritance,

usually from a blond parent. It indicates susceptibility, a ready response to impressions both of the intellectual and emotional types. The character of a person thus constituted may be either agreeable or disagreeable, according to the nature of the faculties in dominance. The expression of qualities in the person, unless carefully cultivated, is naturally prompt and strong one way or the other. As regards the "rich and solemn" delivery of a good soprano voice, that must also depend much upon the faculties that are specially influential in the character. The kind of training the musician has will affect the manner of the voice, but if the singing, as a rule, have a thoughtful, earnest tone the moral nature is active, and Cautiousness and Sublimity are well developed.

AVERAGE DEVELOPMENT IN THE SEXES—H. P.—If you will carefully observe among your acquaintances and others you will find that women in the mass are stronger in proportion to the general development of the head in Approbativeness, Human Nature, and Secretiveness. A larger degree of Amativeness exists in men, and as regards Spirituality we are inclined to think that women have more than men, although our personal investigations have not fully determined the question. In this liberal, free thinking age the tendency is to modify the function of Spirituality and render its expression and influence less marked than formerly in both men and women of culture.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

Biology.—Life is both a great mystery and a plain reality. Our daily experience is the enjoyment of its realities, while it is our privilege to philosophize upon those facts that have heretofore constituted its problems. The principle and type-power by which we are initiated into organic physical life may be classed among the transcendental, and must be viewed from that standpoint. We may reason upon the phenomena of life and conclude that na-

ture affects the ultimate of organization, observing generic and specific limitations, beginning with chemical action among primary elements, but here physical science must stop as the limit of its domain.

Development and reproduction are the order of nature according to generic limitations. With unvarying constancy nature unfolds the elements of genera and species as if directed by inexplicable wisdom.

There is an occult spark of life antecedent to all organization which represents personality; to this nature answers in physical correspondences. The ideal precedes the real, or in other words, the ideal is materialized. Biological science transcends the limits of the physical world and connects the sentient and the transcendental. The seed of every species, both animal and vegetable, contains the elements of latent vitality that will develop into the multifarious powers represented by parentage. The materialist can not arrive at the *ne plus ultra* of the uniformities of succession and co-existence that obtain among vital phenomena. The theory of evolution attempts to break down the immutability of species by making the accidents of development greater than the law, and aims to derive man by developing lower into higher forms of life. Other materialistic views teach that life is a resultant of physical forces, and that all thought and emotions originate in molecular action and are metamorphosed into intellectual and spiritual products. But physical science alone can not explain how the spiritual and the material can be so united as to result in organization and work out the wonders of existence. When its data are exhausted in discussing this subject it will only have shown a counterpart of the philosophy of life which is neither wholly all of mind nor all of matter.

The idealist would teach that all is mind, and matter is not, and that organization is effected by the descent of spirit into matter, which he terms the descending current of involution, or that matter is a condition of spirit and would undertake to explain all the problems of life by intuition. His conclusions are nothing better than baseless hypothesis, and the whole fabric of his system is founded (if it has any foundation) on impersonality. He would rise above the world of sense on the swift wings of thought and end his airy flight in mysticism and pantheism. This philosophy has been and now is a prominent constituent in the religion of many nations, and while the Christian church is combatting it in oriental lands it is making roads at our very doors.

The physical organism from its initiation into life is subjected to disrupting elements till, finally, it wanes and death or a more marked transition is the result, and the immaterial or substantial part retains the same intellectual and moral faculties. Revelation informs us that when God had created man from the dust of the earth He breathed into his nostrils the breath of life and he became a living soul. Here we learn facts both about man and his Creator; we learn that man has a physical organism and that it is animated by a divine influx from the Creator, and that God is a person of intelligence and design, and not as some teach, a universal principle attributable to no personality.—This thought was rudely expressed by the ancients as represented in the following verse:

"Then God smites his hands together,
And strikes out a soul as a spark,
Into the organized glory of things.
From the deeps of the dark."

D. N. CURTIS.

A LESSON.

I WALK in the freshness of morning,
I walk in the sunshine of noon,
I walk in the calm of the evening,
'Neath the rays of the silv'ry moon;
My soul sees the Soul of all being
I' the beams of the Crystalline flood—
The Light of all suns through them shining,
The Life of all life pure and good.

C. C. COLLINS.

PERSONAL.

"PROF." JAMES TAGGART, who recently became demented and committed suicide in California, was not the Professor Taggart who graduated at the American Institute of Phrenology in 1880. His name is Charles Alvan Taggart, and is the last man likely to become demented or to commit suicide.

ADMIRAL SIR PROVO WILLIAM PARRY WALLIS, whose age is nearly ninety-nine, still in active service in the English navy, is also probably the oldest naval officer in the service of any country. Wallis was a second lieutenant on the "Shannon" when she fought and captured the "Chesapeake," off Boston, in 1813, and as the captain was wounded, and the first lieutenant killed, he took charge of both ships, and carried them into Halifax.

MRS. CATHERINE GLADSTONE, wife of the Grand Old Man, was a Miss Glynne half a century ago. At her marriage she brought her husband Hawarden castle. She is the mother, as her illustrious husband puts it, of a quartette of sons and a quartette of daughters.

Her hair is gray but abundant, and resembles satin in texture, so carefully is it brushed over her ears and under a snowy little cap of fine lace and black velvet loops that fall over her neck in the back. She dresses always in black, and her velvet basques are made very high in the collar and finished with a lace ruche that reaches quite to the pointed, slightly dimpled chin.

WISDOM.

—
 "Thou must be true thyself,
 If thou the truth would teach."
 —

JOY never feasts so high as when the first course is misery.—*Suckling.*

SURE as night follows day, death treads in pleasure's footsteps round the world.

LABOR disgraces no man; unfortunately you occasionally find men who disgrace labor. "Compared with this, how poor religious pride,

In all the pomp of method and of art,
 When men display to congregations wide
 Devotion's every grace, except the heart,—"

THE pleasantest things in the world are pleasant thoughts, and the great art in life is to have as many of them as possible.—*Bovee.*

"MUCH as we deplore our condition in life, nothing would make us more satisfied with it than the changing of places, for a few days, with our neighbors."

IF there is really no such a thing as unselfishness, as has been said, it is a very sweet kind of selfishness that prefers the pleasure and happiness of another before his own.

MIRTH.

—
 "A little nonsense now and then
 Is relished by the wisest men."
 —

"MA, when is your wooden wedding?"

"It was when I married your father, Johnnie," she answered, grimly.

OLD lady—"I hope, my boy, you don't sell newspapers Sunday?" Small newsboy (sadly)—"No, mum; I ain't big enough to carry a Sunday edition yet.

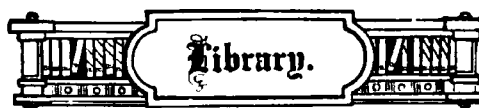
MUDGE—"Doctor, if I were to lose my mind do you suppose I would be aware of it myself?" Dr. Boless—"You would not; and very likely none of your acquaintances would notice it either."

SAID a Missouri preacher: "There's a

powerful sight of giggling back thar in the corner, and it's got to be stopped, or the Lord will delegate me to open the door and throw some one out!" It was stopped.

IN the gloaming: He, with emotion—"Now, dearest, that you have accepted my proposal, let us seal it with a kiss." She, in a business way—"What's the use; your bid has been accepted, and there's no need of sealed proposals."

BARBER (running his hands through customer's hair)—"Your head, sir, is quite—" Customer (irritably)—"You gave it a shampoo yourself two days ago." Barber (quickly recovering)—"It's quite a remarkably well-shaped head, sir."



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

THE ATTIC TENANT, By Mary Dwinell Chellis, author of "The Temperance Doctor," etc. 12 mo, pp. 306, cloth. New York. National Temperance Society Publication House.

Another good story of morals added to the long line of this industrious author. A family of young people in poor circumstances suddenly inherit a handsome fortune from an eccentric uncle. One item of the estate that furnished a good share of the income was a Western distillery. The young people decided to get rid of this as their principles were anti-liquor-making, as well as anti-liquor selling. So they destroyed the buildings with their contents and sold the land. Then turning attention to affairs at home they found among their newly acquired tenants abundant opportunity to play the part of missionary, and at it they went. The efforts of their philanthropic work are well told, and in it occurs some very striking incidents, especially the secret services of Stoker Judd in behalf of temperance. Evidently the author is deeply radical from the way in which she illustrates her objection to the use of wine at the *Communion table*, and we don't know but that she is reasonable.

The temperance reformer, especially one who claims to be a practical Christian should be consistent. Stoker Judd is the "attic tenant," and proves to be a man of capacity in various spheres.

LECTURES ON PHRENOLOGY, Choice of Professions—Matrimony By Prof. William Windsor, L.L.B., Phrenologist and Anthropologist. Published by the author, 1889.

In this series of lectures the author makes strong claims for the utility of Phrenology in all branches of social life, and it must be admitted, by all who read the book, that his points are founded on solid principles. Having studied the science of mental character with much care and with faculties of perception and reflection trained in a profession that weighs the *pros* and *cons* of testimony and argument, Mr. Windsor is prepared to deal with the facts of human nature as he finds them in his wide field of effort. There is no pretence of new ideas or new discoveries, as we have noted in the publications of some lecturers, but an emphatic desire to present the practical side of a most important subject, and this is done in a style at once brief, clear and agreeable. The illustrations, if not numerous, are well selected and add much to the value of the text.

PUBLICATIONS RECEIVED.

ENCLEATION OF TUBERCULOUS GLANDS. By Thomas W. Kay, M.D., of Scranton, Pa.

A history of tuberculosis is given with sufficient reference to authorities succeeding, which follows a description of several cases in which the removal of the tumors occasioned by the tuberculous development was desirable or necessary.

CONCERT TEMPERANCE EXERCISES OR HELPS FOR ENTERTAINMENTS. Collected by L. Penney.

These consist of a variety of exercises in which children can take part, from two to as many as may be desired. They are intended for use in Sunday-schools, day-schools, Bands of Hope, Loyal Temperance Legions, Juvenile Temples, etc., and while most of the contents are good for any occasion, special days are provided for—Christmas, New Year's, Independence Day, Washington's Birthday, Thanksgiving, etc. Nat. Temp. Society, New York.

ORLOVIE. Der Burggraf Von Raab, a Mohammedan-Sclavisch Folksong, from Herzegovina. By Dr. Friedrich S. Krauss.

An interesting poem obtained by this indefatigable ethnologist during his residence in Bosnia and Herzogsland. A poem that gives us much insight to the religious and social customs of a semi-barbarous people in mediæval times, and is probably one of the best specimens of early Oriental poetry that have been

obtained by ethnographers in the field of Slavo-Mohammedan literature. Published by the translator at Freiburg in Bresgau.

THE SCIENCE OF PROLONGING LIFE. By E. T. Craig.

An outcome of a venerable yet vigorous man's experience and observation, and deserves more than a passing notice. His suggestions are based upon hygiene and physiology, and have little reference to the preparations of the pharmacist or the compositions of chemistry. He speaks of methods easily applied for the relief of rheumatism, gout, ankylosis, etc., and gives illustrations of massage apparatus. Published by author, 6 Salisbury Court, Fleet St., London.

CURRENT EXCHANGES

The Century January No. has a fine full length portrait of Emerson in 1859, An Artist's Letters from Japan, The Old Band, The Autobiography of Joseph Jefferson, Washington and Montana, Jaramie Jack, The "Merry Chanter," A Side Light on Greek Art, Abraham Lincoln, How Sal Came Through, A Corner of Old Paris, The Realm of Congo—all these being illustrated.

American Bookseller. Monthly. Interesting expositor of the industry and trade. New York.

Hahnemannian Monthly. A well sustained and respectable organ of the profession. Philadelphia.

Christian Thought for February treats of the Service of Free Thought to Christianity, Christian Scientism, Realism, Natural Immortality, and other topics that are unusually fresh. New York.

American Art Journal. Weekly. Vigorous and enterprising. W. M. Thomas, New York.

Georgia Eclectic Medical. Discusses the new and the old in Treatment. A strong Southern organ of Medicine. Atlanta, Ga.

Vick's Illustrated Monthly. Horticultural. Rochester, N. Y.

Harper's Weekly. Illustrated. New York.

Christian at Work. J. N. Hallock, publisher. Weekly. New York.

Texas Health Journal. "Devoted to Preventive and State Medicine." Not particularly partisan. Dallas, Texas.

America. "Devoted to Honest Politics and Good Literature." Weekly. Chicago.

West Shore. Weekly. Portland, Oregon.

The Brooklyn Medical Journal. Growing in practical features. Monthly. Brooklyn, N. Y.

The Churchman. "An Illustrated Weekly Newspaper-Magazine," representing the Am. Episcopal Church. Weekly. New York.

Saturday Globe. Weekly. A Review in the Democratic interest, and decidedly partisan. New York.

Harper's Magazine for February is attractive. The frontispiece portrays a British Infantry Soldier with new magazine rifle. General Wolseley, K. P., contributes "The Standing Army of Great Britain." "Jamaica, New and Old," "Benvenuto Cellini," "The Lake Dwellers," "New York Banks," "A Majestic Literary Fossil," "Nights and Days with De Quincy," are the leading features. New York.

Homiletic Review. International Monthly of Religious Thought and Sermonic Literature. Discusses in March No. the Ethics of High License on a strong Temperance basis, and other topics of interest. Funk & Wagnalls. New York.

Good morning



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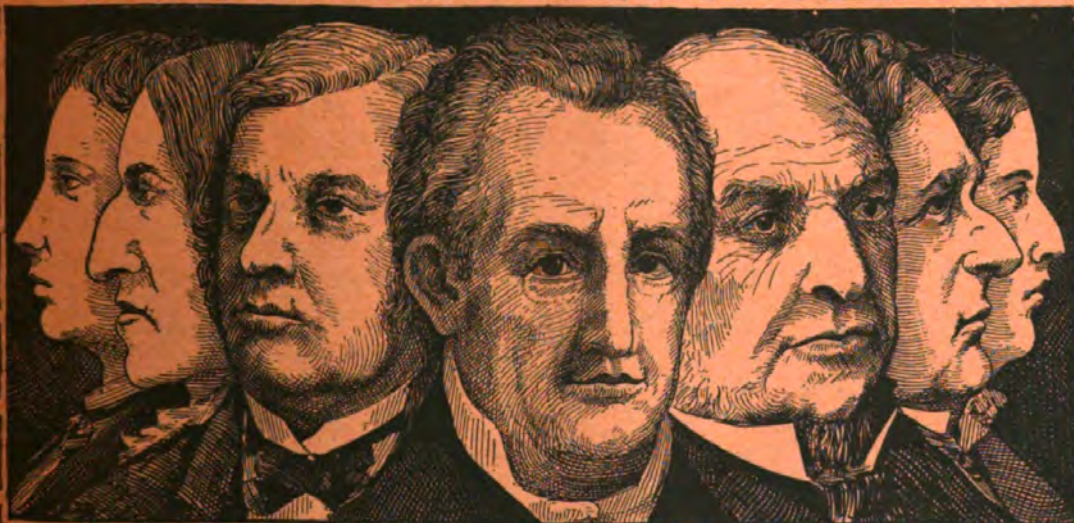
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In this Number you will find a complete descriptive list of the works by Prof. Nelson Sizer.

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[WHOLE NO. 616



ANDREW CARNEGIE.

ANDREW CARNEGIE.

THE SUCCESSFUL MANUFACTURER.

THE very spirited engraving of this widely-known man which is printed on the first page is the basis of the following rapidly drawn sketch of character :

This portrait indicates a marked organization—a person of wonderful health and great power of endurance. It appears to be large and remarkably full in its development. There seems to be little deficiency anywhere. The vital temperament that nourishes and sustains brain and body is very strongly indicated, hence the plump and child-like fulness of his figure and face. The front head is massive, showing ample development of all the perceptive organs, enabling him to gather knowledge from whatever quarter, and hold it with a tenacious memory for future use.

He has a historical mind ; instead of dealing in dry statistics he is naturally inclined to work them into historical form, and must be a great story-teller—for he will illustrate a point by some marked incident in his own history or otherwise. Such an intellect is generally loaded with many kinds of valuable information. If he were devoted to literature it would be difficult to start a topic on which he could not converse intelligently.

There is a wonderful development of the faculty called Human-nature; hence he reads mind and motion in strangers, and knows how to adapt himself to each man. He is known for systematic arrangement, for an orderly, methodical way of thinking and working. He is inclined to classify and tabulate his knowledge, and to regulate and control his affairs by system.

He ought to be good in mathematics, and also in mechanics. The region of the temples is remarkably full ; there is great breadth amounting to a swollen appearance in that region. He understands machinery at a glance, and can make improvements whenever necessity

calls for them. The head appears to be broad from side to side, above and about the ears also, and part of that section is related to power, force, earnestness, executiveness. A little higher up on the side head there is Acquisitiveness, or the sense of property, which, with such an intellect, gives talent for financial operations. Then he has secretiveness enough to keep his plans and purposes well under control. While he is capable of making voluminous explanations he is also capable of restraining himself in the expression of that which does not seem to be called for ; and he would manifest smoothness and shrewdness in presenting a subject which is liable to criticism or objection. If he were in a legislative body he would not only be a leading man on the floor but a first-rate chairman of a committee, for instance, of ways and means. He would do especially well as a member of a conference when the houses were in disagreement.

People have a feeling that they would like to agree with him, he brings such a cordial influence, such a smooth method in expressing his views, that it seems fair, and men are willing to conform to him as far as they may. As a lawyer, he would master a jury and yet seem to be only their assistant and helper. He does, by suggestion, a thousand things that others try to do by dogmatism and coercion. Yet wherever he moves in affairs there is a kind of dynamic power that *people* feel, and they are more or less drawn into the current of his progress. He evidently inherits his mother's face and intellect, the features are small for so large a face, and there is a peculiar smoothness and lack of angularity which a man can rarely inherit except from his mother. A many-sided man, with varied powers of intellect, and wonderful adaptation to manage complicated affairs, and to push whatever course he adopts with an earnest-

ness and a force that are well nigh irresistible.

His large Language enables him to express, smoothly and easily, the purposes and intellectual forces that belong to life. Few men work as easily; few men bring such power to bear upon their work as he.

ment in that city of furnaces, which even then was rising into prominence as a producer of iron work. Young Andrew obtained a place in a telegraph office, where he learned the art of operating in a short time and became self-supporting. A Mr. David Brooks, then manager of a telegraph station in Pitts-



THE CARNEGIE LIBRARY, ALLEGHANY CITY, PA.

Andrew Carnegie was born in Scotland about 1835, and was a mere boy when his parents came to America to seek in the western world a home and a better fortune than had been theirs in the land of their fathers. Going to Pittsburgh, Pa., the elder Carnegie found employ-

ment in that city of furnaces, which even then was rising into prominence as a producer of iron work. Young Andrew obtained a place in a telegraph office, where he learned the art of operating in a short time and became self-supporting. A Mr. David Brooks, then manager of a telegraph station in Pitts-

burg, hired him at \$2.50 a week, and thus gave him his first start in what became in the end an exceptionally prosperous life.

Mr. Carnegie has frequently said that he owes his fortune to a game of checkers. As an incorrect account of his

beginning life is going the rounds, we publish what he himself told of it in a speech at a banquet given last fall in New York to a pioneer telegraphist. These are his words: "Mr. Brooks there was very fond of draughts, although I honestly believe I could beat him at that Scotch game. He played often with my uncle, and one day asked him if he knew where he could get a boy messenger. Uncle told him of me. How well I remember that when my uncle spoke to my parents about it my father objected to my trying it because I was then getting one dollar and twenty cents per week for running a small engine in a cellar in Alleghany City, and uncle said the wages were two dollars and a half a week as messenger. This seemed so much that my father thought that I would not be able to earn it. I was, however, so keen to go, and there was one whose judgment was unerring and whose ambition for her boy never flagged, and so I was allowed to go over and see the dreaded Mr. Brooks. I was then about thirteen. Father went with me through the Pittsburg streets, but when the door was reached I turned and said: 'Now, father, you must leave me I must go through this, and stand or fall alone.' Pluck, pride, and poverty. United, you see, three grand elements for a boy.

"Mr. Brooks eyed me with those penetrating eyes, asked me if I thought I could make a messenger. I said I just wanted a trial. He seemed pleased, thought I would do, and asked me when I could come. 'Now,' I said. He fixed to-morrow morning, and then I was launched. If you want an idea of heaven and earth, imagine what it was to me to be taken from a dark cellar where I fired a boiler and ran an engine from morning till night, and dropped into a large office where the light shone from all sides, and where lay around me books and papers and pencils in profusion; and oh! the tick of those mysterious brass instruments on the desks,

annihilating space, instinct with throbbing spirits, conveying the intelligence of the world. This was my first glimpse of paradise. I was in my proper element at last, thanks to Mr. Brooks."

Later Mr. Thomas A. Scott, of railway fame, who was then Superintendent at Pittsburg of the Pennsylvania Railroad, and having also an instrument in his office, wanted some one to work it. Brooks recommended young Carnegie, who took the place. Mr. Scott became interested in him, and favored him in many ways, giving him opportunities to speculate in oil and coal, by which he derived considerable profit. Pushing ahead and investing his money shrewdly Carnegie has risen to pre-eminence among the iron masters of his adopted country, controlling of one of the largest establishments in the United States.

In late years he has shown a disposition to apply some of his wealth to uses of a philanthropic nature—one of these uses being for the promotion of popular education. On the 20th of February last a fine building was formally opened to the public in Alleghany City, for the purpose of a free library. This building was built and furnished by Mr. Carnegie, and is certainly a handsome structure, as the engraving represents it. Mr. Carnegie has ventured into literature by the publication of a book entitled "Triumphant Democracy," in which he sets forth, in rather earnest terms, the advantages that America possesses in political and social respects for growth and advancement. He has but recently married, viz., in April of last year, being a bachelor till then.

Amid the cares of a growing business Mr. Carnegie has sought to compensate for the lack of early education, and his occasional appearance as a speaker, or writer on important questions of labor or politics shows that his mind is well stored with general information, and does not lack the training essential for the proper discussion of what concerns the substantial interests of society.

A LETTER TO THE BRITISH MEDICAL JOURNAL.

IN the March number the editor of this magazine took occasion to refer in terms, not unreasonable, to a criticism that had appeared in the above entitled publication. The following letter of Mr. Hollander in reply to said criticism was refused a place, and space is accorded here to show the spirit of fairness that animates at least one side of the discussion :

13th January, '90.

To the Editor of the
British Medical Journal.

SIR.—You were kind enough to devote a leading article to a paper on "Phrenology" read by me before the Anthropological Institute in February last year. As the same is calculated to mislead your readers with regard to the nature of my work, I shall be obliged if you will insert these explanatory lines in the next edition of your *Journal*.

You start with the statement that "you are not inclined to subscribe anything to the credit of Gall and Spurzheim," and go on to say : "At one time Phrenology counted as its supporters a number of men, eminent in science and literature. Amongst those may be mentioned Broussais, Bouilland, Jules Cloquet, Auguste Comte, Ferrus, Vimont, and Voisin in France ; and in Britain, Dr. Elliotson, Dr. Macnish, Sir William Ellis, Dr. Evanson, and Dr. William Gregory." I might add Prof. Bain, and Herbert Spencer.

I think you stand alone in denying Gall the credit of having been an eminent anatomist and physiologist—quite apart from his creation of so-called Phrenology, a term which he never acknowledged—and it is very singular, that all the above mentioned men, some of whom are of immortal fame, should have been in error. The truth is, that Phrenology has been judged by inferior publications of some of Gall's followers, and that the founder's work on the Nervous System has not been read in Eng-

land at all, for no translation of it (with the exception of a very deficient one in the United States) has ever appeared. Granted that the subject is no longer under the consideration of scientific men, you must admit that it still numbers many adherents, who, whatever may be the arguments against the system, are convinced of its truth by the correct descriptions made by practical phrenologists.

Now, with regard to your criticism of my own work, perhaps the most satisfactory way would be to state my mode of reasoning, and to leave your readers to judge between us.

Take the following example. Gall, after having made numberless observations declared the posterior portion of the middle frontal convolution to be connected with a talent for imitation of the gestures of other people ; he found this part prominent in all mimics. Now, what could happen if a galvanic current is applied to this region of the brain-cortex but a movement of the facial muscles, and this is actually the result of Prof. Ferrier's experiment.

What happens if a galvanic current is applied to the phrenological organ of destructiveness or irascible emotion ? The animal retracts its ears, opens the mouth, growls, and gives signs of emotional expression, such as spitting, and lashing the tail as if in rage.

Mr. Herbert Spencer gives in vols. 1 and 2 of the "Zoist" his reasons why he thinks that the brain-area, which Gall supposed to be connected with "visions," is the centre for revivification of ideas, and Prof. Ferrier declares this area to be the centre for the movements of head and eyes, which, he argues on page 464 of "Functions of the Brain," "react back on the center of vision, and keep the ideal object in the field of clear consciousness, and through this 'recall' its various elusory and motor associations. It is not essential that the object revived in idea should

be so clearly revived in the visual field as the actual object itself. There are great differences in this respect among different individuals, and there is no relation between the vividness of mental imagery and the faculty of attention and abstract thought," and so forth.

It is quite impossible to demonstrate in a lecture of one hour's duration, the whole topography of the brain as mapped out by Ferrier and Gall, and it is therefore unfair to criticise a pamphlet of 13 pages as if it were a complete work of 500 pages.

For this reason your remark is unjustified, that "it is singular that Mr. Hollander has missed the only good point which Gall really made. He placed the organ of language in the orbital portion of the brain," etc.

Why should I take up a point, which even you, who "are not inclined to subscribe anything to the credit of Gall" admit to be correct, when there is such a wide field of detailed localization, which is still questioned? I have de-

monstrated some other localizations of Gall and their harmony with the results of recent researches, in a lecture delivered at the last meeting of the British Association, and I hope some day to be able to publish a complete account of the evidence which I am collecting in favor of Phrenology. In the meantime, it is gratifying to me to possess the individual encouragement of a number of those who are best qualified to judge my work, *i. e.*, the experimental brain-physiologists, and I draw a lesson from the history of Mesmerism, the followers of which were at one time considered nothing less than either fools or impostors, but whose subject is to-day an acknowledged study, and practiced at least in some Continental hospitals under the changed name of hypnotism.

There are several other points in your article on which I might comment, but I fear I have already taken up too much of your valuable space. I am, Sir,

Your obedient servant,
BERNARD HOLLANDER.

NOTABLE PEOPLE OF THE DAY.—No. 80.

PAUL BLOUET (MAX O'RELL).

THIS gentleman has won a reputation in a few years, that to most literary men would seem enviable. Six years ago he was a scarcely known teacher in a London school, but the thought struck him one day to write a little book on the manners and habits of the English people as they occurred to his observation. He did so in French, and the book was published in Paris in a modest way. This book, *John Bull et Son Ile*—John Bull and his Island—made him famous. Its keen wit and caustic satire at once attracted the attention of the critics and the public; the book was abused by the Paris correspondents of the English press, then translated into English. American reprints of "John Bull and his Island" have had a very good sale, and later, in response to a desire to see and hear an author who had amused us so

cleverly, M. Blouet, who has had some experience as a lecturer in England, came over the Atlantic and gave a series of readings. That was two years ago, and now he is with us again to repeat his tour.

M. Blouet was born in Brittany in 1848, was educated for a soldier in Paris and obtained the degree of B.A., a prize at the Sorbonne, and the rank of Officier d'Academie before he entered the French army. He came of age just in time to fight for his country against the Germans, and he captured in Von Moltke's mouse-trap at Sedan. After a brief imprisonment he was released, and returned to the army to encounter his own countrymen in the war of the Commune. A wound in the right arm incapacitated him for further military service, and he retired upon a pension.

Journalism offered him a means of increasing his income, and he went to London as the correspondent of one of the smaller Paris papers. Energetic and accomplished he made many friends in London, and by them he was recommended for the appointment of teacher in St. Paul's school. Becoming comfortably established he married an English lady, and so, very much of an Englishman, and was enabled to study the society of the Briton at his ease.

Other books written in the same vivacious style as "John Bull and his Island," have come from his pen. "Drat

minds us of the relics of the ancient race found in the drift beds of Western France, the Cro-magnon class of head especially.

He should be a frank, open-hearted, brisk man, clear in statement, earnest and sincere, without much respect for stiff formality or convention. His intuitions are prompt, and so his judgment is quick and sound as a rule. His social nature is warm; the relations of friendship and domestic life find in him a ready sympathy and responsiveness. He enjoys life very much on the sensuous side, but is not without those checks



PAUL BLOUET (MAX O'RELL).

the Boys," "John Bull's Womankind," "The Land of the Mounseer," are among these. One of the latest, to be expected of course, after his tour in America, is "Jonathan and his Continent."

As shown by his portrait, a pretty good one, Mr. Blouet is very much of the Frenchman yet, notwithstanding his years of English life and domestic discipline. We note the peculiar type of head that belongs to the French character, the ready perceptive talent, the liveliness, emphasis, and *elan*. There is a squareness of the cranium that re-

of delicacy and moral discernment that protest against excesses and improprieties. Consequently, in every-day life he makes a good impression, and wins friends and esteem.

His complexion is dark, and hair also, his features, as shown, being quite regular, the plumpness of the face intimating good health and enduring qualities. As a reader or lecturer he engages attention at once by his lively manner, and clear, precise language, the slight French accent adding to the general interest exhibited by his audiences.

ALFONSO XIII.

The Baby King of Spain.

NOT long since the political world and the social world were much concerned about the condition of the little boy to whom belongs the crown of Spain. He was reported dangerously ill, and at

He has a large head, as we see in the pretty picture, and that type of organization that suggests great excess of the nervous organism. Such a child is always hard to raise, and we are not sure that the so-called advantages or privileges of royal birth are very conducive to strong and vigorous development.



KING ALFONSO OF SPAIN.

one time supposed to be in a dying state, but now he appears to be on the road to recovery. Inheriting a weakly organization from his father's side, the little king's career has been from birth a matter of anxiety to mother and all interested in the royal family of Spain.

From all accounts, however, the Queen mother is very practical in her management of the child, and tries to prevent his being exposed to exhaustive forms and ceremonies. She knows what great susceptibility resides in such an organization and the necessity for ample

nourishment, sleep, and freedom from excitement. It is said that the careful, intelligent nurse that attends him is allowed almost absolute authority. On one occasion a great lady wished to see the king, and the Queen accompanied her to the boy's apartments; but the nurse barred the way. "You can't come in," was her peremptory decision; "he is asleep." Then queen and duchess retired smiling.

When the weather is fine the little king is taken out for a drive. Naturally he possesses his carriage, with an equerry who gallops bravely by its side and forms the only escort. He dines alone at a well-garnished table. King Baby has only one trouble in life. It is a trouble which might drive some grown up people to madness; but, since he is usually unconscious of it, it does not worry him very much. The photographer is always on the look out for him. Scarcely a week passes without a demand from some photographer to be allowed to take his portrait. He has been photographed standing, sitting, in his mother's arms, upon her lap, or holding her by the hand; with his hat on and his hat off; full-face, profile, and, in short, in every possible position. It is the ambition of every Madrid photographer to possess a negative of the king, since his portraits

sell by the thousands, not merely in Spain, but in most civilized Europe. And this is not all. He has been painted in oil, he has been engraved and etched, and is the original of numberless miniatures.

He is now about four years of age—a trifle older than when the portrait we have here was taken. As shown, however, he has that breadth of the head that shows caution, intensity, and excitability, the height, spirit, ambition, and pride, qualities that have yet to develop into mature influence. The excess of the nervous organism must be reduced, otherwise the boy will always suffer from its exhaustive effects, and probably not live to full manhood.

We can well believe that Queen Christiana experiences great difficulty in procuring for the little monarch those childish pleasures which are enjoyed and needed by all children. There is always the fear of causing jealousy, and there is every kind of intrigue to be reckoned with. Then there is that terrible Spanish etiquette, in spite of which it is almost impossible to prevent a youthful playmate from breaking the many regulations with which a Spanish king is hedged about. Usually, he is surrounded by grown up people, and this is no help toward a natural child growth.

EDITOR.

TRUE MARRIAGE NOT A FAILURE.

GOD created everything for a good purpose, and said of all He made, "Behold, it was very good." The primary object of all creation was undoubtedly man who is endowed with wonderful faculties, capable of development for innumerable uses. He is even made in the image and likeness of the Creator Himself; so that in the proper performance of these uses not only the individual so doing, but also his community, and even the human race, shall be helped and made happy. The Scriptures are full of directions and examples,

showing uses which one person can and shall perform toward others.

But there is no other use mentioned for which it is so clearly stated that man was especially prepared in the beginning as that of marriage. Man was, for this purpose, created male and female; and after the woman was taken out of the man the commandment was given "Therefore shall a man leave his father and his mother, and shall cleave unto his wife; and they shall be one flesh." Marriage is therefore a divine institution of which the conditions are,

that a man "cleave unto his wife;" and the wife shall be "a helpmeet for him." In all that is said in the Scriptures about the creation of man, and the relation between husband and wife they, the male and female, are together treated of as being one flesh; as the man, or as one person. In Genesis v., 1 and 2, it is stated: "This is the book of the generations of Adam. In the day that God created man in the likeness of God made he him; male and female created he them; and blessed them, and called their name Adam, in the day when they were created." This oneness can imply nothing less than a perfect union in purpose, mind and body. In this union the husband and wife are each a distinct part, so that in no respect can the one take the place of the other.

It was first said that the husband shall cleave or hold to his wife, and she shall be to him a meet or proper help. This clearly implies that each has a special love for the other; that their respective loves and desires are adapted to each other's wants. The man's love of cleaving to his wife implies a desire of not doing aught without her and also to provide for and protect her. While her love of helping him is mainly that of approval and encouragement. His part is more the intellectual and active, to desire and do; and she has the affectionals to approve and accept.

The legal ceremony of asking a man and a woman whether they love each other, and are willing to hold to each other as long as both live in exclusion of all others, and then pronouncing them husband and wife, if they both make affirmative answer, is not in itself marriage. And if one of the partners thus married afterward seeks separation by declaring that the other has not proved faithful to these promises, and there is legal recognition of the charges made, that ceremonial marriage is again annulled by the same authority that made it.

In consideration of the many divorces and separations of this kind that are now sought and granted, and the unloving and unhappy lives which others live under such legal marriages, the cry has been started that marriage is a failure. But, notwithstanding these violent marriage troubles the number is very large and no doubt increasing of those who live most happily together, even under the most adverse circumstances, sharing each other's joys and burdens; to whom separation during life would be far more painful than it is for them to be parted by death; though the dying of the one does seem to the other as the dying of one's own better half. The cry that marriage is a failure does not come from these. The husband and wife who are so thoroughly one in love and purpose as to constitute together one man or "one flesh" according to the Scriptures, could never be induced to take up this unholy cry if even marriage were not divinely instituted, and if every married couple around them would quarrel and seek divorce.

That man and that woman who are truly united in conjugal love, or who are capable of so loving, providing a suitable partner is found, can have no fear that true marriage will ever fail in making men and women most happy, and in forever binding body, mind, and soul of one man to one woman to the utter exclusion of all others of the opposite sex.

No friendship, whether from a person of one's own or the opposite sex, can at all meet the yearnings of the heart for another self that loves more, and is more beloved, than one's own self. Such a self no one can be to another, except a single wife to one man, and one husband to a single woman. The marriage which thus unites a man to a woman is the greatest of all successes. It is a divinely ordained success.

Whether a marriage will prove to be happy or unhappy depends, first, upon

the motive or object the contracting persons have in getting married ; and then upon their lives. If both are moved in the start by true conjugal love, there can never be a desire by either for separation. And if this love is found only on one side the effort or desire for a closer union will not die out of the one who so loves, unless the affections of the other are so fully diverted that the manifestations of true love from this one only add to repulsion from the other. If even publicans, who are regarded as very hard hearted, love those who love them, that man or woman who can repel the loving wife or true husband is probably the worst of all sinners.

In the mere physical love of the sex no special desire for marriage exists ; but the male or female principle is also in the mind and affections of all persons of either sex, in which is grounded a chaste love of sex which can desire only one of the other sex, to whom the person so loving delights in being as true as to himself, and with whom he ever wants to be as one.

Since every person shall love all others as himself, marriage requires greater love than this even, in order to choose one out of all others. It is the love in which one lives for the other. All social and business relations are divinely instituted upon the basis of each loving others as himself, to the end that each shall do to others as he desires them severally to do unto him. Marriage is, however, instituted for a more divine purpose than all these ; for a greater and purer love than can exist in any other human relation.

There is a far more intimate relation between parents and children than between neighbors, friends, and citizens ; but in all these relations males and females figure alike. All are human ; and in loving others as ourselves there is a union of humanity without regard to sex. But in the marriage union of one man with one woman is a union of two

distinct parts of humanity, in matters wherein neither is complete without the other.

Marriage is also the divinely instituted means for continuing the human race upon the earth. Children, well-born and developed, are a precious blessing, and an appreciated comfort to those who are in the marriage of reciprocal love. Yet, a marriage can not be called "a failure" when it is not blessed with children. When children are regarded as a trouble and a responsibility that it is desirable to avoid there may be something very wrong ; for caring and providing for children is a work which a husband and wife who love each other usually delight in doing.

Who can not see that the most perfect state of human society can only be attained when all love others as themselves. Then no person could suffer want unless the general supply were deficient. So when all would be in that love of the sex which fits them for true marriage there could be no fornication or adultery. For a person to do all things in divine order is for him to be a true Christian ; therefore the true Christian can not seek divorce except when the married partner has absolutely discarded him or her. A large number of divorces and unhappy marriages in a community indicate therefore a low state of morality there. The good example of a Christian is even a protection against evil to others ; for by letting his light shine others are induced to follow his example when they see the happy results that follow obedience to the laws of life.

Is the divine law of marriage, which requires husband and wife to be "one flesh," more neglected than the social law, whereby each person shall love his neighbor as himself ? And is there, in either case, now more violation than formerly ? The power of oppression was once so great that resistance was rarely attempted ; but as those who were known as the "lower classes" are being

elevated toward the universal brotherhood of all mankind violent conflicts take place, and now even those of the once oppressed classes are in danger of becoming the most exacting. And when the wife was regarded almost as the absolute property of the husband she patiently endured very cruel treatment; because there was no way of escape. But now, since divorce is easily obtained, she is, perhaps, not always sufficiently careful as to the man from whom she accepts the marriage vow; and the consequence is that divorce is

oftener sought by women than by men.

Courtship is generally the first step toward marriage, and it is too rarely treated as a very important matter in a person's life; but too often it is made a game to win.

Young people, let this be your great concern, that when you marry love and devotion may be on both sides such as to make the union in the order of heaven; and that in your case marriage may never prove to be a "failure."

J. R. HOFFER.

STUDIES FROM LAVATER.—4.

SOME PRACTICAL APPLICATIONS OF PHYSIOGNOMY.

THERE are wise, scholarly men, who study as carefully heads and faces, and the human structure and mind and character through them revealed, as papa John is studying the head, face and structure of the Imago. They believe with Lavater "that the lowest of men is more noble, more wonderful than the most beautiful, most perfect animal; that to discover the radiance of the Creator in the visage of man, is the pre-eminent quality of man; it is the summit of wisdom and benevolence to feel how much of this radiance is there to discern this ray of divinity through the clouds of the most debased countenance and to dig out this small gem of Heaven from amid the ruin and rubbish by which it is encumbered." These thoughtful men when taken into consultation, might introduce the father to the real nature of his boy. Many a boy's nature never reaches the father's understanding or heart. Father and child are almost as wide apart as the beetles and the stars. "My father never understood me; my mother never appreciated me," how often we hear it. Says Lavater "each man is a man of genius in his large or small sphere. He has a certain circle in which he can act with inconceivable force. The less his kingdom the more concentrated

is his power, consequently the more irresistible is his form of government. Thus the bee is the greatest of mathematicians so far as its wants extend." In the family, first, the genius of each should be found out and nothing should hinder its growth and culture. If father and mother can't find it or see it, some one wiser may help them.

The most judicious parents, the most successful ministers, most skillful doctors and ablest lawyers, are good natural physiognomists. Without knowing it perhaps, they have carefully studied faces and character. This character reading is with a rare few an intuitive gift, a thousand-fold perfected by study and practice. I know an able lawyer who will so study judge, jury, client, and witness, that he reads all and reaches all, and almost always wins his case. He treats a rogue as if he believed him honest; an avaricious man as if he were generous; a hot-tempered man as if he were reasonable; giving in his manner to every man the credit of the virtue he most lacks, and possibly really believes himself possessing. Most high-tempered men think they have the best reason for anger, and everybody else unreasonable, and will not tolerate any display of temper in others. I once heard this celebrated lawyer address a

jury of the most stupid looking twelve men I ever saw, and he gracefully complimented them as clear-headed, paying great deference to their supposed sagacity. It was a case of damages laid against the city corporation. A man had broken his neck by his cart-wheel getting into a hole in the street. Fastening the jury's mind on the insignificant size and peculiar shape of that hole, convincing them that it could not have been so terribly dangerous after all; that it was either too round or too square, I forget which, his complimentary and deferential consideration so won them, and they felt so wise, intelligent and responsible, that they decided the case as very much less serious than it deserved. I verily believed he could have convinced them had he tried, that some unusual cat he had seen had six feet or two heads. He read their faces perfectly. So the physician must have added to his skill a power of reading human character and temperament, its natural strength or weakness through the face and form. He should never depress, alarm, or irritate his patient. He can, says Lavater, "by repeatedly examining the firm parts and outlines of the bodies and countenances of the sick, without difficulty predict what are the diseases to which the man in health is most liable. He can say to the healthy you naturally have some time in your life to expect this or that disorder. Take the necessary precaution against such and such a disease. In the countenance frequently is observed the first and only sure symptoms of danger. The progress and change of the disease is also principally to be found in the countenance and all its parts. If a man whose natural aspect is mild and calm stares at me with a florid complexion and a wildness in his eyes, it prognosticates approaching delirium. The movements of the hands and the position of the body are also symptoms of disease. The best position in sickness is the patient's usual position in health. A

physician was lately summoned for the first time to see a lovely young lady suddenly taken sick. As soon as he came he looked at her and said to her with very calm voice and manner, "This is a very dangerous case of pneumonia." After he left she said as I came in. "Do you think I am going to die?" The doctor had nearly frightened her into a raging fever. I was obliged to say all the reassuring words I could. He was not sent for again, but another doctor came who cheerfully gave directions as to her treatment and nourishment, inspired her hopes, and rallying from the fright she recovered in a few



A SYMPATHETIC ORGANIZATION.

days, looking eagerly every day for the kind doctor's coming. Patients are always studying the doctor's face. 'Twere well could all doctors read theirs.

When a physician is sympathetic and skillful, his step is as welcome, his smile as longed for, his voice as inspiring as a visiting angel's. Of all men he is often best beloved and most trusted. "The soul permeates the human frame throughout, manifests itself in the face, hands, neck, hair, and every habitual movement. The degree of intelligence within is faithfully portrayed in the lineaments, and in highly endowed beings we have the reproduction without of the fertile soul within, in a picture of the most sparkling brilliancy. The

light of intelligence and genius ripples and dances over the visage making a picture, a delightful resting place for the eye. This, says Lavater "is the fortunate moment of the countenance of man, the moment of actual intense existence when the soul with all her faculties rushes into the face like the rising sun; when the features are tinged with heavenly serenity." The happy moment of this sunrise of the soul sometimes glows on the artist's canvas. "At the extremity of the opposite scale of faces, we find barrenness and vacuity of thought. There is absolutely nothing

photograph or physiognomical equivalent" become more and more conspicuous, or less and less evanescent. Physiognomy will yet so formulate this unerring reproduction of the pencil of nature herself as to enable its student to read the message from the interior with unfaltering accuracy. The picture will at last become engraved deeper and deeper, be read during sleep or in waking hours with the predominant passion active and at work." The man who reads this book of the face most and best will adapt himself to each character can attract, guide, understand, and

sway others. The laws of animal life are patiently studied and classified. Animals are diffused all over the world, man alone possesses it. Animal's shells, hairs and fur are examined with all possible glasses and appliances, but animals have their climatic habitations and dominion, and their powers of improvement limited, while without native shells or furs man always reappears as the object of creation. In every latitude, in every clime an animal always attends him, to relieve him and to share his labors. "The horse and the ass on the plain, the cows on the mountains, the goat among the rocks, the



EXPRESSIVE FACE.

within, and there is and can be nothing without. The face is the faithful sign-board of the empty ware-house within. In the first, the intelligent face, we have a speaking countenance, as in the face of the artist in the picture. In the other, vacuity." Both faces tell a truthful story, one of the vast wealth of the world within the other of its desolation and poverty. Between these two extremes of face, is a long ladder of degrees—faces innumerable. "In proportion as any particular emotion, or set of emotions sway the breast, so does its

reindeer amid the snows; amid the sands, the camel, in the marsh, the buffalo; the dog in all parts of the world." Thus man travels over the earth, and everywhere "he meets with a servant and brings with him a friend." In India, where man languishes most in the heat of the sun, is the elephant, his strong, willing servant, his strength proportioned to the weakness of his master.

Every evening the horse and the ox stop before the door of the farm house where the hardest labor awaits them.

The dove travels five hundred leagues in three days to return to the dove-cote man has made for him. Besides these, everywhere willing servants and helpers, the air and the sea are filled with an annually traveling cohort for man's help and blessing, "bringing to our shores the fishes of the North, and to our fields the birds of the South." Minds of all ages have studied the nature of these, man's friends and helpers, but man, the lord of them all, the highest of all, crowned with glory and honor, is less known, less studied than all. Everywhere men are gathering a little knowledge from faces as a traveler in crossing a field gathers, here and there, a solitary wild flower, yet they seldom ever think of pursuing the study of physiognomy systematically and accurately, when of all the ologies it is most logical of all philosophies, most philosophical, giving eyes and hands and tools for artisan and artist, an incomparable aid to every craft and college.

MAN CLASSIFIED AND DEFINED.

"Standing at the apex of all creation is man, the very epitome, sublimification and essence of all creative energy. He can," says Lavater, "both suffer and perform more than any other creature, uniting flexibility and fortitude, strength and dexterity, activity and rest, he can the soonest yield and the longest resist. In his high organization are found all the components of the lower creatures." Literally made of the dust of the earth in man "as a chemical compound, will be found made into solid bone, muscle, brain, blood, and tissue, not only the dust of the earth, but also nearly all the elements contained in the earth." Every sand-grain, and every star, and all life and forms between have these constituents, chemical, architectural, and mathematical, that form also man's organisms. "There is," says Lavater, "if I dare use the metaphor, a particular recipe or form of mixture in the great dispensatory of

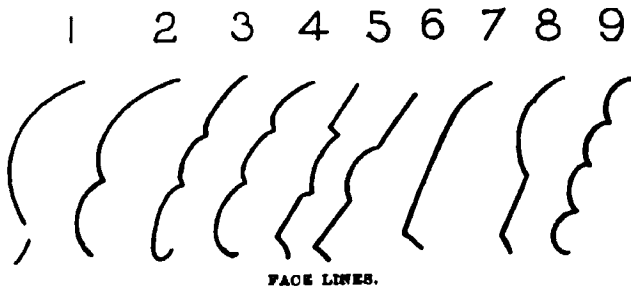
God, for each individual by which his quantity of life, his kind of sensation, his capacity and activity are determined, and that consequently each body has its individual temperament or peculiar degree of irritability, whose four principal qualities of corporeal ingredients are the humid and the dry, the hot and the cold, the four temperaments corresponding to earth, air, fire, and water; the choleric, phlegmatic, sanguine, and melancholic. "These," says Lavater, "are predominant in, or incorporated with, the blood, nerve juices, and indeed, in the latter, in the most subtle and utmost spiritual active form; but



A BLANK FACE.

these four temperaments are so intermingled that innumerable others must arise and clearer distinctions may hereafter be found." Man has been often classified by the color of complexion, eyes, and hair, but the most advanced physiognomists have arrived at the conclusion that "form is a simpler, more decisive factor in the interpretation of character, and as either of these four temperaments are modified or predominant, so are the forms of the body produced. Form is the 'grand determining, dominant principle, underlying all others.'" "The sum total of tem-

perament," says Lavater, "will be sought in the outlines of the body at rest, the interest of the sum total, in the motion of the eyes, eyebrows, and mouth and momentary complexion. The temperament or nervous irritability of organized life, terminates in defined or definable outlines—from the curva-



ture of the profile line, the degree of irritability may be found. The head is the sum total of the body. We learn much from the profile of the face, or of the forehead. The more each line approaches a circle, or rather an oval, the less it denotes choler, on the contrary, it most denotes that temperament, the straighter, more oblique, more interrupted it is. See diagram above.

1. Denotes the ne plus ultra of phlegm.
2. Sanguine.
- 3, 4, 5, 6. Different gradations of excessive choler.
- 7, 8, 9. Some lines of melancholy, that is to say characteristically strengthened.

"Bodily strength or weakness," says Lavater, "are shown in the proportions and motions of the form. A celebrated modern physiognomist designates the different classes of men by their different physical forms, five in number. The Abdominal, the Thoracic, the Muscular, and the Fibrous, the Osseous or Bony, and the Brain and Nerve Form. Those having predominant the abdominal or first developed form, have full cheeks, double chin, one or more wrinkles around the neck, short and irregular wrinkles on the forehead, almond-shaped and sleepy eyes, a round nose, and general fulness in the ab-

dominal region. They are epicurean in taste, prudent, indolent, good-natured, social, and fond of making and spending money. They are inclined to adipse accumulations, and have an abundance of the vital fluids." In the thoracic form the thorax is relatively large. Cicero was a good example of this form, also Thomas H. Benton. "This conformation is found more in mountainous regions. More eminent men have come from the granite shore of Aberdeen in proportion to its population than from any other county in Scotland. The Julza Indian living on

the mountains of South America, have very large and long lungs, they sometimes have prolonged their lives to two hundred years. Birds habitually flying high have larger air vessels than those remaining in the lower air. The wild pigeon, going sometimes three hundred miles an hour, has both lungs and heart



ABDOMINAL ORGANIZATION.

large in comparison with any other birds not migratory. The mountain bears have lung power very superior to the bears living in the valleys. Even the fish in mountain streams and lakes, have larger air-vessels than those swimming in the sluggish waters of the lowlands." Mountain air and mountain

climbing increases the thoracic form. Pioneers, discoverers, warriors, the world over, have this form. "As a



THORACIC ORGANIZATION. CICERO.

rule they retain their youthful vivacity and spirits to an advanced age. Julius Cæsar, Bonaparte, Patrick Henry are

illustrations of this form. They "have usually a large nose, expanded nostrils, prominent and wide cheek bones, protuberant veins, and moderate brain and abdomen." Hercules and Alexander the Great possessed the muscular form, Prof. Wilson, of Edinburgh, Lord Palmerston, Lord Brougham had remarkable muscular strength and activity as well as profound learning. "Shakespeare carried the mortar with which to build the tabernacle in which he afterwards performed his plays before Queen Elizabeth." This muscular form is developed by energetic and healthful muscular exercise. Elihu Burrett, the great linguist, laid the foundations of his greatness "in bone and muscle, while labor-

ing as a blacksmith, he was busily engaged forging out ideas on the anvil of his mind. L. M. MILLARD.

OUR LOVED ONES NEVER DIE.

THEY live! the loved companions of the heart,
Though hidden from our view,
And oft the blessings that their smiles impart
Our faltering steps pursue.

We feel their presence as a living light
About our pathway led;
And oft we hold, in watches of the night,
Communion with the dead.

Our dead! we call them so, forgetting
Our loved ones never die,
But live where love, no buried hopes regretting,
Looks on a cloudless sky.

They weave about our hearts a golden chain;
They beckon us with shining hands to come
Unterrified across death's dusky plain,
And give us promise of a brighter home.

They whisper peace to us, when grief and pain
Call the wild tempest of our passion forth;

They sing to us a sweetly soothing strain
And teach us lessons of divinest worth.

There is no winter in their friendship dear;
No dreary autumn to our hearts they bring;
Though flowers of summer fade and wither here,
Their love knows only a perpetual spring.

They walk with us—the loved of other days—
Unseen, it may be, by our mortal sight;
They tread the airy paths where morning strays,
And talk with us in dreams by day and night.

Why should we droop, then, 'neath our load of care?
Or falter in the path we're called to tread?
Have we not strength the martyr's cross to bear?
With such high fellowship what need we dread?

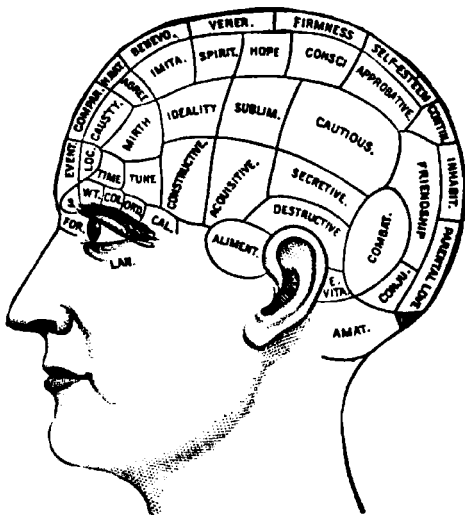
BELLE BUSH.

Belvidere Seminary, New Jersey.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



MENTAL MECHANISM.—NO. 8.

HOW FACULTIES WORK TOGETHER.

IN the studying of faculties, especially Constructiveness and Ideality, we sometimes see a development which seems to be about half way between the two organs, as if the lower half of ideality, and the upper half of constructiveness where they lie together, were largely developed, while the upper part of ideality and the lower part of constructiveness were not well developed; and sometimes it is difficult for the phrenologist to know whether to call the development ideality, or constructiveness. By a long course of observation, we have learned to understand, that where such a development occurs, the faculties have been accustomed to work together in harmony. Constructiveness has taken on the characteristics of inventive ideality, and ideality has been accustomed to mingle its work with elaborating constructiveness. In other words, the organs lean together to work

in a common cause, and this is one of the most interesting thoughts in the whole domain of mental investigation. The faculties hunt in pairs; they work in groups; they combine in a common effort, and each seems to supplement others, and thus enrich and invigorate the functions.

Occasionally, we find ideality developed very high up, as if it were working with spirituality and imitation. That was the case with Edgar A. Poe. All his pictures show an immense development in the region of the temples, involving spirituality, sublimity, ideality and constructiveness, and all his poetic work is a marvel of ingenious combination.

Constructiveness is not confined alone to the elaboration of bridges, mills, tools, implements and apparatus, but it seems to have a relation to the co-ordination of forces, mental or moral, to bring about desired results.

Sometimes, we find Acquisitiveness, which is located directly behind constructiveness apparently working backward to meet it, and there is a large development half way between the two organs. A man, having such a development, if he feels an anxious desire to make money, will contrive some ingenious method, and will invent a machine, or apparatus, on which he may obtain a patent, and thereby gratify acquisitiveness, as if constructiveness had been employed by acquisitiveness to invent something that had money in it, and acquisitiveness for a while being the inspiration and basis of desire for the completion of the work.

At other times, we find constructiveness developed further forward towards

the perceptive organs, and downward rather than upward. In such a case, we look to find a person who is ingenious to elaborate work. If it is a woman, we say, she has nimble fingers that can put material into proper form; she can tie a new ribbon in bows and not muss the fabric. She has skill in draping and arranging decorations for a church at Christmas, for tidying things about a house and making everything look harmonious in it. There are others who have good sense, but everything looks ill at ease, what is called "mussy." There is not an easy grace to anything they do. They can't make a bed so that it looks as if it were easy in itself. It looks strained and queer, as if a raw girl unused to it had tried to make it, or as if a man had consented to officiate in the work with his untrained hands. We have seen people who could not shake up pillows and put them on the bed so that they would look easy and finished. They would be askew and twisted, or not in good form. Some people's fingers seem to be all thumbs, clumsy, awkward, untrained, untrainable. In that case, we expect to find moderate perceptive, and constructiveness developed away from and not towards the perceptive organs, or perhaps, constructiveness poorly developed at the base, or practical part of it.

The organ of Tune is located just forward of constructiveness, and we expect to find skill of performance on instruments with the organ of constructiveness low down and forward, co-operating with tune and the perceptive organs, as if it were accustomed to work with tune and the perceptive.

Acquisitiveness gives the desire for possession, for the gaining of that which we desire and which we lack. Where fruits and other foods are developed by nature spontaneously, as in tropical climates, and all that the hungry eater needs is within his reach, without the labor of cultivation, or manufacture, and where houses are not needed for

comfort to shield the inhabitant from the inclemencies of weather his acquisitiveness does not have much stimulation. What does the dweller in the torrid climate need of a house, except as a shelter from the sun and rain, and then a very cheap, rude affair will serve that purpose. Clothing is not needed, except for ornament, or decency, and such people want to wear little. Naturally, their wants are few, and therefore they do not need to be ingenious, do not need to accumulate. He that lives by a spring does not need elaborate water works. He that lives by a lake, or the sea abounding in fish which respond to his invitation any day in the year, does not need his barrel of salt fish, or his quintal of dried fish. If the orange, the plantain, the banana ripen within his reach, and there is a succession of fruits which makes them perennial, he needs no commerce to bring oranges from the Indies and Florida and in so far as nature in its Abundance furnishes material for the animal wants, acquisitiveness ceases to be active, and ultimately becomes weak. And accordingly, the head of the African is narrow above and about the ears, where Acquisitiveness, Constructiveness and Secretiveness are located. He does not need property and therefore needs neither ingenuity to construct, acquisitiveness to obtain and save, or secretiveness to hide away and secure that which is needful.

But, when men strayed from warm climates and took up their abode where there are six months of winter, they needed houses, clothing, machinery, apparatus of various kinds, and thus their ingenuity, economy, thrift, policy and executiveness became developed. As a matter of fact, the negroes of the Northern States who have lived in a cold climate and have, for several generations been obliged to struggle for subsistence, as their white neighbors do, have acquired, by habit and inheritance a larger development of the organs which give economy, industry and skill

than their brethren in the warmer sections of the country who have not been called on for the exercise of such prudence. And, it is also a matter of fact that forty years ago, the Southern white men, not being obliged to economize and think of property all the time had narrower heads in the region of the organs of economy and policy. It is proverbial that they were easy-going in their financial matters. They were liberal and generous. They were noted for their frankness, for open, out spoken statement. And, as phrenologists, we know that their heads were narrower in that part than the head of the Northerner in Europe and America. We know another thing, that since the war, a generation of Southern people who have been called to exercise ingenuity, and show policy, have acquired broader heads than their fathers had. This is as natural as it is for people to acquire a larger development of their muscles in proportion as they have had to work with their hands

I knew a person who recently sprained an ankle, and was obliged to go on crutches for a few weeks, and the calf of that leg decreased in size an inch and a quarter, by measurement, as compared with the other that was kept in use all the time. When the ankle recovered, and the limb was again brought into use, a few weeks served to bring up the muscles to their normal standard. If the skin on the hand will grow tough and thick by using implements of labor for a few months, and then, when we lay aside the labor, the thick skin will peel off, as is the case with the farmer boy when in school, and then blister in the spring and become thick again by constant use, and so repeat the process summer and winter, while he alternates between school and work; why should not the brain, which is the seat of intellect and emotion become large and strong, or remain small and weak, according as it is exercised, and show that development? We know that it does.

THE INFLUENCE OF PHRENOLOGY.

PHRENOLOGY has had far more influence upon religious, political, and social doctrines than is generally supposed. People are more liberal in opinion and practice now than at any other time, probably in the world's history. Almost it may be said that the lion and the lamb lie down together. People of all religious creeds and of all shades of political opinion become friends, eat and drink and enjoy life and business together. There have been many causes for this, but Phrenology justly claims to be the chief. It has taught men their natural brotherhood, and how they may be friends and useful to each other. It has been lectured on and illustrated in thousands of country school-houses where other sciences have hardly shown their older faces. It has, during the last fifty years, occupied platforms in great cities as often as other sciences, and frequently attracted as large audiences as have theatrical companies.

Books on the subject have been sold to thousands of families whose only other purchases in the book line have been the Bible, Shakespeare, and a few works on medicine and morals. When a man discovers the truth of Phrenology he sees a connection between mind and matter, soul and body, that will widen him in his views of life and duty ever afterward. Phrenology is a philosophical leaven, a little of which will leaven the whole lump of an inquiring mind. Electricity, Astronomy, Geology, have benefited the world, but most modern ideas, most of the modern humanity of man to man, owe their conception and growth in a greater degree to the direct and indirect influence of Phrenology.

JAMES MC BLAIN.

San Francisco, Cal.

—:O:—

Boys are soon to be men; train them and treat them accordingly.

ADDRESS FOR GRADUATION DAY, CLASS OF '89 AMERICAN INSTITUTE OF PHRENOLOGY.

BY MRS. UPTON, OF MAINE.

(*By a mistake left out of Institute Extra.*)

TEACHERS AND CLASSMATES:—The time has arrived when we must separate; bid adieu to our lecture room, to each other, and also to you, kind friends, who have done so much to help us to a proper understanding of Phrenology and its sister sciences Anatomy, Physiology, and Physiognomy.

We came to this Institute with an earnest purpose, that of investigating the science of Phrenology. We believed in it, yet we desired to learn more than books could teach us. We wanted to judge for ourselves by personal observation, by being with those who practice it, by weighing everything for and against it, whether this science is all its advocates claim for it. We longed to drink in knowledge from the very fountain head.

Drawn hither by this desire we left our homes and families and came here from all parts of the country to take advantage of the experience of such able instructors as Mrs. Wells, Prof. Sizer, and Dr. Drayton, to the end that we might ourselves become prepared to go out into the world and preach the true gospel of Phrenology.

The time allotted to us has been all too short, and it is with some trepidation we realize the fact that we are about to step out into the great field of life to gather the harvest which is waiting for the laborers, for "the harvest is abundant but the laborers are few."

We feel thankful to-day that it has been our privilege to listen to the gentle voice, the loving words, and the personal experiences of dear Mrs. Wells. We are glad to have known of her struggles, her efforts, and her successes in the science and business that she has made her life work. It has drawn us all into closer sympathy with her.

We, as a class, have enjoyed advantages which few classes coming after us may enjoy. We have received instruction from both Mrs. Wells and Prof. Nelson Sizer. Together they have worked in the harness for many years. Together they have plan-

ned and executed. Together they are here to-day to listen to our thanks, feebly expressed, to take our hands, to bid us God-speed. It is the sincere, if unspoken, hope of all present that these two, who represent to us Phrenology in America, may be permitted to continue their good work these many years, and again and again meet with their pupils on occasions such as this.

In after life we shall always feel proud to be able to say we were instructed in the principles of Phrenology by the renowned Prof. Nelson Sizer himself, and in the history of the science by the venerable Mrs. Charlotte Fowler Wells.

To Drs. Drayton, N. B. Sizer, Ordronaux, Gunn, and the Rev. A. Cushing Dill, we wish to express our respect and appreciation of their labors in our behalf so freely given; and say that if we seemed to them to comprehend but a small part of all they have so patiently tried to teach us, we beg them to believe that the seed fell in good ground, and, with the faith of the husbandman who, having sown his seed, turns hopefully, waits for the growth and the harvest.

I hope and believe each one of this class will go out from this Institute with an earnest desire to spread the glad tidings, to aid in the uplifting of every man, woman, and child with whom he comes in contact.

Let us not look at this matter from a business point of view only, for, while that is quite essential if we are to earn a living as teachers of Phrenology, or in the lecture field, still there is a nobler side to this subject. The very thought that it lies within our power to help even one poor struggling soul to an understanding of his weaknesses, or consciousness of his strength and abilities should be sufficient satisfaction and payment, if we receive no other. And, when we realize that even in a commonplace life, such as the most of us will pass, it may be possible to so aid thousands of human beings, it is with feelings of awe we appreciate our responsibilities.

Classmates, when an opportunity offers to do good let us not stop to consider whether there is money in it, but lend a helping hand. Encourage when you can, do good while you may. I do not advise talking continually upon the theme of Phre-

nology or Hygiene. Do not become a bore or a fanatic, but when you see some one ignorantly eating or drinking that which you know will directly injure that person, if it can be done, kindly explain to him what the result will be. When you see a child suffering either physically or mentally through lack of knowledge on the part of parents, if possible instruct the parents and aid the child, whether or not it yields you any pecuniary profit. When you see a person evidently in the wrong kind of business and a little of your knowledge will set him right and make his life what it should be, don't hesitate to help him, because your meeting is not professional. Opportunities of this nature will be of frequent occurrence, do not be blind to them.

Of the kindness and generosity of the members of the Fowler & Wells Co. we all, perhaps, have some idea. Through the six weeks that we have been in this city they have, individually and collectively, done all they could to make our stay pleasant and our visit to New York profitable. We extend our thanks to them. We shall carry to our homes pleasant memories connected with them all.

Did time permit I should be glad to tell you how I came to be interested in Phrenology, what it has done for me, how many favors I have received from the Fowler & Wells Co., and how I happened to attend this course of lectures after eight years of anxious waiting for this very opportunity, but it would take too long. I will say, however, that the past weeks have been a season of keen mental enjoyment. In addition to the satisfaction experienced in attaining a long-wished for but unexpected pleasure, and in passing the time in a congenial atmosphere and occupation, I have met with some kindred souls, and gained some friends. I go home strengthened and refreshed, benefited bodily and mentally.

Hoping we shall prove a credit to this Institute, an addition to the cause of Phrenology and morality, and a source of pride to our teachers, I bid one and all good by with best wishes for the success of each member of this class in his chosen work.

—:O:—

Phrenology is the true mental philosophy, and the basis of education and government.

PLEASANT CHAT OF PATRONS.

NEW YORK, March 1, 1890.

PROF. NELSON SIZER—Dear Sir :

AS you promised, the written description came by this morning's mail. Accept my thanks.

As I read it over it vividly recalled my visit to your office, yet I missed your earnest and enjoyable way of expression, in the verbatim report of your lecture. It is marvelous to me, how accurately and wonderfully you can read the very breathings of one's better nature; you told me things that were only (I thought) locked in my own bosom, I mean the longings to be what you say I can be.

Your advice as to the building up of my physical structure, I deem valuable and shall follow it. My wife remarked to me that she would rather pay you for the prevention of disease than the same sum to the physician for its cure. Thanking you heartily,

I remain, yours truly, M. R.

M——, Kansas. Feb. 17th, 1890.

PROF. NELSON SIZER—Dear Sir :

SINCE I have received from your hands the phrenological chart, I have been constantly laboring for an opportunity to follow your advice.

I have often read and heard from you as being able to describe one's character from photographs but never quite understood how it could be done, and I had my character described out of mere curiosity. To my surprise, you told me more about myself than my mother could have done.

Your description is so definite and correct that I have concluded to follow your advice, and ask you to kindly name the best institution for that purpose.

Very truly yours, H. F. J.

FROM A LADY GRADUATE.

"I CAN never express my gratitude for the valuable information I received at the 'American Institute of Phrenology.' As regards the laws of health, how it has helped me by the side of the sick bed, and in a thousand ways, and, as my husband says, as far as expense is concerned, the course of the Institute was one of the best investments we ever made."

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.—No. 2.

DR. J. G. SPURZHEIM.

JOHN GASPAR SPURZHEIM, was born at Longvich, Prussia, December 31st, 1776, the last day of the year of the Declaration of Independence of the United States of America. Longvich was a village on the Moselle, a branch of the Rhine.

His father cultivated a farm of the rich Abbey of St. Maximin de Treves, and John Gaspar received his college

many persons fled for their lives to Vienna. Among them was young Spurzheim. Here in the capital of Austria he became a member of the family of Count Splangen and teacher of his sons. At that time Gall was popular in Vienna, and as a physician had charge of hospitals and other public institutions while investigating his new conception regarding brain and mind.



education at the university of Treves, where he matriculated in 1791 in the 15th year of his age. His parents intended him for the profession of a Lutheran clergyman, and he began his studies with that object in view, and made himself a master of divinity and philosophy. When the French army invaded that part of Germany, in 1799,

Spurzheim had made himself familiar with anatomy in the medical school of Vienna, and about the close of 1799 he became interested in Gall's doctrines, and early in 1800 attended his lectures, where a Mr. Niclas was employed to dissect the brain while Gall explained it, but being dissatisfied with Mr. Niclas' method, which was then in vogue in

medical schools, he was dismissed and Spurzheim took the vacated position, and adopted the advanced ideas of Dr. Gall, which they soon improved upon by pulling the brain apart, minutely dissecting it instead of slicing it horizontally. Thus it came to pass that Spurzheim made the dissections at all of Gall's lectures, both public and private, and in 1804 he became associated with Dr. Gall in his investigations and lectures, and a master of the art of brain dissections by the new methods.

When Gall's public lectures were interdicted by the Austrian government in January, 1802, they still continued their private teachings till 1805, when they began to travel and lecture, visiting more than thirty cities or towns with their universities between March 6, 1805 and November, 1806, remaining at each place from one week to six weeks or more. In November, 1807, they reached Paris where Gall decided to remain and make his permanent home. At that time his lectures were allowed to be given in France, and in the following winter Spurzheim demonstrated the anatomy of the brain, in Paris, while, as before, Gall lectured on and described to the auditors the dissections of Spurzheim.

Here they continued and enlarged their labors, formed new associations with eminent men of science, called out much inquiry, made many worthy converts, and gained the opposition of Napoleon. Theseed they planted here, germinated, notwithstanding powerful opponents, and those who began investigations with the purpose of silencing them, became, themselves, convincing and distinguished advocates. Thus the phrenological ball progressed and increased in momentum, while Gall and Spurzheim also increased in ability to promulgate the truths which were by them so highly prized.

About 1809 Gall and Spurzheim commenced the publication of the 'Anatomy and Physiology of the Nervous

System in general, and of the Brain in particular; with Observations upon the possibility of ascertaining several intellectual and moral dispositions of "Man and Animals, by the configuration of their Heads;" a work in 4 volumes, folio, with an atlas of 100 plates. This great work was continued jointly by them to the completion of one and a half volumes, and was ultimately finished by Gall in 1819.

In 1813 their partnership ceased, and each pursued later the subject by himself.

Having studied the English language for six months with the purpose of continuing his scientific travels, and intending that England was to be the first field of his labors, Dr. Spurzheim paid a visit to Vienna in June, 1813, to receive his degree of M. D. After a few month's residence there he left for England and arrived in London, March, 1814. Here Dr. Spurzheim had to contend against many obstacles, and very wisely opened the campaign by a dissection of the brain, at the Medico-Chirurgical Society in Lincoln's Inn Fields; the novelty, as well as the truth of the demonstration, that this viscusis composed of fibres, created no small surprise among the learned audience. He delivered two courses of lectures, (his first) in London, but to small audiences, owing to prejudices which were inspired by agencies at work before his advent there, yet he made converts of influential men.

He afterward gave successful lectures in Bath and Bristol; thence went to Ireland, where he lectured in Cork and Dublin. Returning to London he published his first book, in 1815, under the title "The Physiognomical System of Drs. Gall and Spurzheim, founded on an Anatomical and Physiological Examination of the Nervous System in General, and of the Brain in Particular; and Indicating the Dispositions and Manifestations of the Mind. By J. G. Spurzheim, M. D. Being at the same time a Book of Reference for Dr. Spurz-

heim's Demonstrative Lectures. Illustrated with Nineteen Copper Plates."

In this work Dr. Spurzheim changed the names of some of the phrenological organs from those given by Dr. Gall, and also announced some new organs which he had himself discovered, and gave good reasons for changing the French names given by Dr. Gall to what in the English language would seem more appropriate. The preface to the second edition of the book is dated June, 1815. In this same month there appeared a severe critique of the views of Gall and Spurzheim (as explained in their publications) in the *Edinburgh Review*, a Medical Quarterly. It was also pounced upon by *The Eclectic*, the *British*, the *Critical* and the *Monthly*, and by the *London Medical Repository* and *The British Critic*. All of them exerted their powers of ridicule, invective and argument, with not one reviewer to defend these new truths as elucidated by Gall the discoverer and Spurzheim his coadjutor.

The vehement opposition thus aroused determined Dr. Spurzheim to visit Edinburgh, the seat of this mental turmoil and "beard the lion in his den," therefore he obtained letters of introduction to influential literary persons in the Scottish Athens and among others to Dr. Gordon, the author of the most scurrilous review, in which he declared that "the writings of Drs. Gall and Spurzheim have not added one fact to the stock of knowledge respecting, either the *structure* or the *functions* of man; but consist of such a mixture of gross errors, extravagant absurdities, downright misstatements, and unmeaning quotations from Scripture as can leave no doubt, we apprehend, in the minds of honest and intelligent men as to the *real ignorance* and *real hypocrisy*, and the *real empiricism* of the authors," and much more to the same effect. Such was the beneficent harbinger that preceded the advent of Dr. Spurzheim to Ireland, in November, 1815, where every mind was

poisoned against him by these liberal effusions," says Mr. Carmichael, of Dublin.

He continues,

"It was with difficulty I could be persuaded to enter his lecture room; but having abundance of leisure I thought a few hours would not be much misspent in indulging an idle curiosity and reaping some little amusement where I could hope for little information. I listened to his first lecture expecting it to breathe nothing but ignorance, hypocrisy, deceit, and empiricism. I found it fraught with learning, and inspired by truth; and in place of a hypocrite and empiric I found a man deeply and earnestly imbued with an unshaken belief in the importance and value of the doctrines he communicated.

"I listened to his second lecture, and I adopted his belief. I was satisfied of the importance and value of those doctrines, and exulted in participating those treasures of knowledge, of whose enjoyment the *Edinburgh Review* had well nigh overreached and swindled me. I listened to his third lecture and perceived with all the force of conviction, that there was nothing of any value in the metaphysics of ancient or modern schools, except so far as they coalesced and amalgamated with the new system. From that hour to the present I have regarded the science with increasing confidence and unalterable devotion. More certain or more important truths the divine finger has not written in any of the pages of nature, than those which Spurzheim, on this occasion, unfolded to our examination — our study — our admiration."

In January, 1816, he went to Cork, where he gave two courses. In February he returned to Dublin and delivered two concurrent courses, giving in the evening the same lectures he had given in the morning. In March he left Ireland and arrived in Liverpool, where he found that the reviewers had formed the public opinion as well as elsewhere.

However, he delivered a course (to a small class) in order to give a better opinion of the objects of Phrenology to those who attended his lectures. In May he visited the public institutions of Manchester and Lancaster. In June he made an extensive tour in Scotland, studying its people and its rugged scenery of mountains, valleys, lakes, and found many things to interest him.

On the 24th of June he arrived at Edinburgh, that city which was then up in arms against his doctrines. He presented his letter of introduction to Dr. Gordon, the man who had maligned him, and Dr. Thompson, his partner. They treated him civilly, and he breakfasted with them, and attended their medical lectures in their hall before their students, and made many converts on the spot. Dr. Gordon listened to the lectures, but when he demonstrated his views by dissectings Dr. Gordon could not see what the students saw, viz., the fibrous structure of a part of the brain. He triumphed over the reviewer by proving to the most eminent members of the faculty in Edinburgh, the truth and importance of his teachings, yet the reviewer disputed about words and definitions, and made believe that his review was true. Finally he lost his temper and charged Spurzheim with teaching things that he had never advocated.

September 23rd he wrote to Mr. Carmichael: "The ground on which I stand is much more solid than I expected. I was prepared to be much longer afloat in this city, but I can assure you it was quite easy to take a strong position. From what I have done, the greatest curiosity is excited. The unfavorable impression which the reviewer had propagated is mostly removed from this place. Our doctrine is no more quackery or trash, on the contrary there is more anxiety here to become acquainted with it than in any other city in the United Kingdoms. Since I left Germany I have not observed a greater en-

thusiasm. I have far the greatest number in favor. Only Dr. Gordon and his satellites are opposed to me," and much more to the same effect.

Before Spurzheim left Edinburgh he delivered two public courses which were received with great approbation by the numerous auditors who attended them. Among these, however, was not to be found Dr. Gordon or any of his sustainers. "None of them had candor enough to look at the proofs which I submit to my auditors. It seems the opponents find it more easy to deny than to examine."

Before leaving Edinburgh Dr. Spurzheim published a prospectus of the anatomical propositions maintained by himself and Dr. Gall, to which Dr. Gordon issued a pamphlet in reply, wherein he did not attempt to defend the statements contained in his *Review*, but used his forces in attempts to prove that their so-called discoveries were not original, and that their teachings about the anatomy of the brain were given to the world a hundred and fifty years before.

It was at this visit in Edinburgh that George Combe was induced to listen to Spurzheim's teachings and became the enthusiast he was, notwithstanding his previous attestations and ridicule against the subject, having obtained his ideas from the criticisms and untrue assertions of the reviewers. Spurzheim's labors in Edinburgh were crowned with success. Here he remained, lecturing, discussing, teaching, dissecting, visiting the various public institutions, schools, workshops and wherever he could teach and learn, and after seven months of great activity he returned to London early in 1817, delivered another course of lectures, became a Licentiate of the Royal College of Physicians and Surgeons, and published "The Physiognomical System of Gall and Spurzheim;" "Outline of the System," a valuable work on Insanity and an answer to the reviewers.

In July, 1817, he returned to Paris,

where he lectured on *l'Anatomie, la Physiologie, et la Pathologie du Cerveau, et des Ses Exterieurs*. Each of these courses lasted three months.

Dr. Andrew Combe attended these lectures, and describes as follows an interesting scene which occurred at one of them. "In the middle of the lecture of the 1st of December, 1818, a brain was handed in, with a request that Dr. Spurzheim would say what dispositions it indicated. Dr. Spurzheim took the brain without any hesitation, and after premising that the experiment was not a fair one, in so far as he was not made acquainted with the state of health, constitution or education of the individual, all of which it was essential for him to be aware of before drawing positive inferences; he added that nevertheless he would give an opinion on the supposition that the brain had been a sound one and endowed with an ordinary activity. After which he proceeded to point out the peculiarities of development which it presented, and desired his auditors to remark the unusual size of the cerebellum, and the great development of the posterior, and of part of the middle lobes of the brain, corresponding to the organs of the lower propensities, the convolutions of which were large and rounded, forming a contrast with the deficient sizes of the anterior lobes which are dedicated to the intellectual faculties.

The convolutions situated under the vertex, and toward the top of the head, belonging to the organs of self-esteem and firmness, were also very large, while those of veneration and benevolence were small. These peculiarities were so well marked, that Spurzheim felt no difficulty in inferring that the individual would be very prone to sensual indulgences; that his natural tendencies would not be toward virtue; that he would be what is familiarly termed in French *un mauvais sujet*, a very comprehensive term for every variety of bad disposition, and that he

would be one to whom the law would be necessary as a guide; but not knowing the circumstances in which he had been placed, he could not say what his actions might have been.

At the conclusion of the lecture, a young man, an *eleve interne* of the Hotel Dieu, came forward and said, that the brain was that of a *suicide*, who had died in that hospital, and that the dispositions inferred by Dr. Spurzheim coincided perfectly with those manifested during life. As I was at the same time following the surgical clinique of the celebrated Dupuytren, whose patient he was, and as the case was interesting both in a professional and phrenological point of view, my attention had been particularly directed to this very individual from the day of his entrance into the Hotel Dieu to that of his death, a period of about fourteen days; and I was thus better able to appreciate the perfect accuracy of Dr. Spurzheim's conclusions, than if I had merely trusted to the report of the *eleve*. The man, it appeared, had been a soldier, and had for some time suffered ignominious punishment, and had been dismissed from the army. He returned to Orleans to resume his trade of barber, but everyone shunned him; and suspecting his wife to have been his enemy he attempted to kill her with a knife, and being defeated in this he stabbed himself in the side, was carried to the hospital, and died of the wound. As he lay in bed, the head sunk in the pillow, its size seemed to be small, but this arose from the anterior part, or the seat of intellect (which was very deficient) being alone visible, the whole bulk consisting of the organs of the propensities. Dupuytren, when commenting on the case, in his lecture, made daily complaints of the man's *mauvais moral*, imperiousness, and violence of temper, and represented these qualities as great obstacles to his recovery, so that, altogether, the close coincidence between the facts with which I was familiar, and the remarks

of Spurzheim, who had never seen the skull, and judged from the brain alone, as it lay misshapen on a flat dish, made a deep impression on my mind, as it went far to prove, not only that organic size had a powerful influence on energy of function, but that there actually were differences in different brains, appreciable to the senses, and indicative of diversity of function." C. F. W.

(*To be continued.*)

PLATO AND PAUL.—Plato was born in Athens; Paul in Tarsus of Cilicia. Plato lived more than four hundred years before Christ, during the Peloponnesian war; Paul was contemporary with Jesus, and lived just after the age of Augustus. Plato belonged to the most intelligent race of the great Indo-European family; Paul was a Hebrew, the most advanced race of the Semitic family. The native language of Plato was Greek; that of Paul was Hebrew. Plato was the greatest of philosophers; Paul the greatest of apostles.

The superiority of Paul to Plato consisted in the superiority of his profession to that of the immortal Greek. Had Paul never been anything more than a disciple of Gamaliel, he would have never reached a higher position in the world than did the disciple of the great Socrates. It was in the fact that Paul became a disciple of Christ, that he has wielded such an influence over the nations. His influence towers above that of Plato as a great mountain towers above the sea. The time has not been when Paul had a greater influence in the world than he has at the present time. It is because the influence of Christianity is greater now.

It is claimed by some that Christianity was borrowed from the philosophy of Plato. How does it happen, then, that this religion rises so much above what has been called the divine philosophy? In nature we know that a stream can not rise above its source. If this posi-

tion in reference to the origin of Christianity were true, the stream must rise above its source and thus contradict an established fact in nature. A miracle would then have to be introduced in order to account for the progress of Christianity, and for its universal spirit, in contrast with the narrowness of the Platonic philosophy. A careful study of Plato and Paul will convince any reasonable man that Paul had a source of inspiration far superior to anything known to the intellectual Greeks.

Paul had a knowledge of immortality unknown to Plato. Among the Greek philosophers, the Epicureans were Materialists, the Stoics were Pantheists, while the disciples of Socrates, Plato, and Aristotle were believers in the immortality of the soul. The doctrine of Materialism was as ably presented then as at the present time; and considering the then condition of physiological science the doctrine of immortality was as ably discussed by the Greek philosophers as by the philosophers of the present time. Philosophy has no new arguments to present on the subject. The distinction which Paul made between the spirit and the soul was not clearly made by Plato, nor does philosophy at the present time fully recognize it.

The Christian doctrine of the resurrection gives immortality a force which was but poorly understood by the ancients. There is a great difference between the dreamy spiritland of Plato, and the eternal house of Paul, where will dwell the man who has been redeemed body, soul, and spirit. Paul clearly teaches that in the future state man will have a body. It will be a spiritual body, but still a body. *

While Plato's philosophy provides for the soul, that of Paul takes care of body, soul, and spirit. We should not look with contempt upon matter, for these bodies have each a grand principle that will become spiritual, and be associated with spirit in the eternal state.

J. W. LOWBER, PH. D.

CHILD CULTURE.

A ROYAL BOY.

HE was only a mechanic's son, but when only a baby somebody formed a habit of calling him "Little Royalty." The name clung to him, and when people were in a hurry, as they usually were, they called him Roy, then the other children called him Roy, and as every one said Roy when they spoke to the little fellow he soon took it for granted as something applying specially to himself, and smiled and crowed and looked happy whenever anybody said "Roy."

Perhaps it was the pleasant tone of utterance that always so lighted up the baby's face, for Roy was only a baby then. But one day everybody said Roy in such a sorrowful tone of voice that the baby face grew very sober, and there was a look of wise wonder in the bright eyes.

"I actually believe that baby understands about it, for he hasn't laughed out once to-day, and his eyes follow us about in such a strange way," said a neighborly hearted woman. Roy's parents were dead, but he didn't know that, but there was something very different in the manner of every one about him; of course he didn't laugh as usual when there were so many tears and sorrowful voices everywhere. What wonder that there was a sensitive quiver about the little mouth and a tearful glisten in the eyes, yet he didn't know what was the matter. And what it was to be an orphan the child perhaps never realized, for an uncle took him under his care, an uncle wise and intelligent as he was kind. This uncle taught a school of boys, and gossips said he had some very cranky notions, and now they supposed he would begin practicing on this poor orphan boy that had been left

in his care. But this whimsical uncle had moral courage enough to do whatever appeared to be the best thing without regard to what people were saying about him, and he gave his little charge in the keeping of a motherly woman who soon brought the sunshine and gladness back to the sobered baby face.

Out in the beautiful country where apple orchards blossomed and bore the mellowest fruit, and birds sang the loudest, sweetest notes, Roy existed in one dream of happiness and health until nearly nine years old; often visited by his uncle he had learned to love him dearly, and one day when he proposed to take him away to school he consented willingly, although he knew only as much about schools as did the sheep and lambs he played among. How the gossips gossipped! A boy nine years old and had never been in a school-room, couldn't so much as spell cat and dog, why, their children could do more than that when not half as old! It was a shame to let a child grow up in such ignorance, so the neighbors said, and very much more. But they could not deny that the boy was a model of physical beauty; a healthful gladness seemed to permeate his every movement, and although brimful of life and joy he carried a poise and grace of manner that was deferential, kindly, polite. "Train the body well and cultivate the heart life first," was one of the schoolmaster's whims, at which the neighbors turned up their noses.

In nature's school Roy had found out a good deal about many plants and animals, he knew the names of different trees, birds, and insects, with the habits of many animals. But the school of books opened a new world to him.

Those odd looking marks called letters and words were dull, inanimate things, he didn't like them and didn't wish to learn their names; he puzzled himself over the alphabet and reasoned about it; he could not see why A might not just as well be called B, and B called Q.

The master showed him a large library and told him that by learning the names and meanings of the crooked marks in the book given him he would, after awhile, be able to read all the books contained in that great library. The boy's eyes opened wide in astonishment and dismay. "I never want to say all the words in that great pile of books; I don't like at all to learn them in my one little book."

But the little boy loved his uncle, and to obey his every wish came to be a ruling motive of his life, and although he could not at first see the use or reason of book learning he applied himself in a diligent way and soon his strong, vigorous brain gained entrance into new realms of pleasure; with strange delight he read his own story books, and one day he was reveling in some charming fairy tales, when he confided to his uncle that when he became a man he intended to have a very, very large library of wonderful fairy books, and he would just read and read until he couldn't read any more. His uncle smiled and replied, "Only do my will in other things as you did in learning to read, and you will find opening to you many a source of happiness."

Some stirring incidents, hard work, sports, frolic, and temptations common to schoolboy life, were Roy's experiences.

Not always perfect in his doings, but any yieldings to wrong were turned from with an added tinge of humility in his after confidences with his beloved teacher, so closely allied became Roy's inner life with that of the schoolmaster that his character seemed to be forming itself after the same pattern, and a harmonious union of idea and sentiment

made their association together peculiarly pleasant.

But there came a time when Roy was a schoolboy no longer; his inclinations had been consulted, advantageous opportunities given him, and with all his physical vigor and cultured intellect and heart he pursued a course in life so showered with blessings that a happy usefulness grew all along his way.

Years passed on. In a sunny clime dwelt a world-renowned artist; his palatial home betokened wealth. One day a white-haired old man was seen ascending the steps. Some one inside a window glanced out, and before there was time to knock for entrance a middle-aged man of noble bearing came to open the door. Quickly were the two men clasped in each other's arms. "My master!" "My pupil!" were words uttered in joy. Roy and his teacher had met again after long years of separation. How glad they were, and how much there was to talk about. Their old love for each other seemed to have become intensified in the years gone by.

The artist had much to show in his beautiful home. In the studio the teacher found a life-size portrait of himself, a fine painting; surely loving thoughts had mingled with the artist's colors, and his gifted touches had shaded the features into so much expression. In another room was a large library. The old man stood looking over the vast range of compiled knowledge, and saw represented science, history, literature, poetry, religion. "These are not all fairy books, I see," he finally said, "as I remember the little schoolboy thought would be the sum of his manhood's delight." "So it will be," he added soberly; "in the Great Hereafter there will be new worlds of beauty opened to us. In this world we are like little children with our toys and pleasures, our thumps and heartaches, but we have a Father in Heaven who leads us by the hand, and if we cling to Him and trust Him fully all along the way, we shall

find that all has been for a much greater good than anything we could have chosen for ourselves.

"Our existence in this world is but the germ life; we are as little children learning our daily lessons, slowly developing our faculties, and in the eternal future what our enlarged capacities may delight in we can as little comprehend as you in your boyish dream supposed a library or fairy stories would be the sum of manhood's happiness. Now you have realms of thought and pleasures opened to you of which you once could have formed no conception.

"My beloved master," exclaimed the artist, rising and throwing his arms around the dear old man's neck, "I can never thank you enough for all the good you have done me; and your own lovely nature will always bring joys to you.

But whatever blessed things await you in the world to come, I hope you may yet be long detained here, and that we may have many more of our delightful talks together. When you finally walk the golden streets I doubt not there will be One by your side who has had you always in His keeping, and in full-hearted joy you will repeat "I owe it all to you! I owe it all to you!"

The tinkle of a tea-bell recalled the old man and his pupil from their wanderings in high places, and arm in arm they walked down the stairs to a well-spread table where surrounded with the artist's family they were in doubt whether there was more pleasure in the real or ideal. At any rate there was happiness somewhere that filled the atmosphere with the most fragrant sweetness.

LISBA B.

SHOULD CHILDREN BE KEPT AT HOME?

PARENTS always display considerable anxiety concerning their children's welfare, especially while yet young, and of the numerous questions which arise for family discussion, a large proportion emanates from this source. No doubt the decisions rendered by different families are often greatly at variance, and it necessarily follows that error frequently prevails, either through a lack of judgment or a wrong education, and may lead to very harmful results. Parents can not be too careful with their children, but they should know what it is to be careful.

One question which will rise sooner or later in every household, and which must be answered, is: Should the children be permitted to go out into society? In every home this question is answered, for good or ill; too often for the latter. In proof of this fact we have but to listen to the chat of young people, at school, or even in their own homes. A small group are gathered in the schoolroom eagerly discussing the coming birthday party to be given to one of their inti-

mates. "I know I can't go," says one, "for pa and ma never let me go any where." "Oh, that needn't make any difference, I'd go anyhow," says another with a toss of her head. Surely both of these cases bespeak something wrong in their respective families. But what is it, and how may it be remedied?

Spurzheim says, "No faculty of human nature can be bad in itself." The fact that each one is endowed with the organ of friendship, is proof enough that the gratification of this organ is right, then how wrong must it be of parents to forbid their children the pleasure of society the desire for company is a perfectly natural one, and should not be hampered and chained down by parents, who think that children should be kept at home at all times lest they should get into bad company. Indeed, if they are kept at home they become ill-tempered and gloomy, tired of home, almost weary of life. Is this the condition to which children should be reduced? On the other hand, if they are strong-willed you force them to diso-

bey their parents; for if forbidden they will seek companionship for themselves, and when left to their own judgment are likely to choose amiss.

Let those who have failed in their attempt to train up their offspring according to their own idea; those who have followed their own wills, despite the most persuasive teaching of their parents, attest to the truth of this.

A disappointed mother says "My children do not mind their parents as they should; they go into all kinds of society, and half the time I have no idea where they are or what they are doing, but I know it is not my fault, I have done all in my power to keep them at home, but all to no avail."

Was it, in reality, not her fault after all? Had she not forbidden her children those

little privileges and pleasures in the first place, she had not lived to see the time when they would disobey her, and bring to her grief instead of joy.

When children reach such an age as to desire company let them go to such places as may afford them pleasure and enjoyment, being careful only to keep them out of society that will tend to lower them. Your permission in one sense is the source of the very power by which you will be enabled to restrict them, and keep them at home when it is best to do so; and further, by continually forbidding parents soon teach their children that they do not do it from principle, and a lack of principle is as productive of discontent in children as it is in grown folks.

EDITH S. CRAIG.

TRUE EXALTATION.

"I THINK I never received more real benefit from a duty performed than when I have asked pardon of my little ones for some hasty speech or unjust reprimand," said a conscientious little mother to me.

My face perhaps spoke my astonishment, for she hastened to add, "When my children were small—there were seven of them as near of an age as they could well be—I could only keep them comfortable at great cost to mind and body.

Under these circumstances, impatience became my besetting sin, and often upon the impulse of the moment I have uttered words which in my calmer moments I have sadly regretted. I went to my Heavenly Father with my sin, but often returned to my work with the same feeling of heaviness with which I had sought my closet. I found that it was not enough that I should ask Divine forgiveness. I had sinned against Heaven, it is true, but I had also sinned against my child, and I could not find peace until I had forgiveness there. So I learned to go to my children, older or

younger, as the case might be, and ask their forgiveness.

"Did you not find it a very hard thing to do?" I inquired.

"Yes, very hard, and that perhaps was the reason why it proved such a help to me. I learned in time to speak less hastily, to weigh my words before uttering them."

My friend's counsel left a lasting impression upon my mind. During the press of overwork and weariness I too often found myself speaking hasty words in a tone of irritation. I resolved to watch myself closely, and when I fell into error to make all the reparation in my power. I am sorry to say that I soon found occasion to test my new resolve, and not only once but many times have I gone to my little ones with humbled demeanor and repentant words always to find their dear little hearts opening wider to me than ever before.

I am willing to add my testimony to that of my friend, and assure all weak, erring mothers that both myself and my children have obtained much benefit from my new rule of action. It is not

an easy one to follow, it is true, but the result has shown that it was well worth all it cost. Are you afraid of losing self-respect by such a proceeding? To whom, think you, will children be likely to give the greater honor—to one who, overtaken in a fault, humbly acknowledges her error, or to one who no less quietly goes on in her pride as though

nothing had happened, ignoring both the fault and the rights of her little ones?

Children are quick to perceive the finer points of right and wrong, and we may be certain that we shall lose none of our self-respect by humbling ourselves before them. We lose respect by sin, but never by acknowledgment.

MRS. S. E. KENNEDY.



A BURIED TALENT.

(See *January Number*.)

CHAPTER II.

THE subject of Vinnie's misapplication of her powers was not allowed to drop by either Mrs. or Miss Germaine during the remainder of their stay. So persistent were Miss Minna's remarks, that poor Vinnie often rebelled inwardly, asking herself in perplexity, "Why can not they let me alone? Before they came I was contented—more, I was happy, or believed myself to be."

Again, recognizing the many grains of truth in their often exaggerated opinions, the question repeatedly arose, unbidden, "Have I buried my talent?"

In an unpretending way, Vinnie Shelburne sincerely tried to lead a Christian life, and therefore such queries had the greater weight, and could not be readily dismissed from consideration.

A trifle eventually turned the scale. How many of the most important decisions of our life hang upon just such a

The chance remark of a caller in regard to a young servant girl who had received only a very ordinary education, but who was naturally so intelligent that it seemed a pity to put her into the kitchen, being certainly "worthy of better things." How that idle speech stung!

"*Worthy of better things!*"

"Then what of *me*?" was her inward query. "My dear, lost father spared no expense upon my education. My advantages were such as to fit me for a more than common high standing among people of culture. My girlhood undoubtedly gave great promise. Yet I have succumbed to adverse circumstances, when I ought to have surmounted them. Many of the best years of my life have slipped away, but I will make the most of those that remain."

Her slow decision once reached, was

unalterable. With a character of so much force, to resolve was to act. Mrs. Shelbourne soon had a girl installed in the kitchen, and immediately devoted herself with great earnestness to faithful study under a competent master. The foundation of her musical education had been so solid, and her present determination to succeed was so intense, that failure to advance was practically impossible. The extravagant ambition of the mother and sister, who really thought Vinnie capable of performing upon the concert stage, was, of course, not destined to be realized. Vinnie, herself, did not dream of it. But she did aim to become a thorough, conscientious teacher, and eventually this hope was crowned with success.

Vinnie did not allow the home life to be interfered with by her earnestness in musical work. Her children continued to be as well cared for, her husband proudly averred, *better*, than when their mother's over-taxed energies took from her the vitality necessary to a full exercise of intelligent supervision.

Some two years after the visit referred to in the first chapter Mrs. Germaine and Minna again came to the Shelbournes. During the interval they had traveled both in their own land and in Europe. The young lady had returned rather more elegant in her appearance, a trifle more airy in manner, inexpressibly more bored in spirit. Poor Mrs. Germaine had often wearied for the quiet of a home, and it was with a secret sense of deep satisfaction that she domiciled herself and her restless daughter for the winter in the restful atmosphere of Vinnie's tasteful home.

Mr. Shelbourne having had his attention called to the advantage of well-managed Building Loan Associations, had, after careful consideration, concluded to join one, and had decided to locate in a growing suburban district delightfully situated on high ground, and convenient to a neighboring older town of larger population.

"I had no idea you were so prettily situated," exclaimed Mrs. Germaine the morning after their arrival, Vinnie with quiet pride having exhibited every nook and corner of the dainty cottage.

"It must have cost a great deal?" inquiringly.

"Only a few dollars a month over what we were paying for rent, with nothing to show for it. Now, in less than ten years, this conveniently arranged modern house will be our own. I feel amply repaid for the effort by the pleasure we take in the consideration of the fact that we are permanently settled and that whatever we spend upon the place we shall enjoy for years to come, if our lives are spared."

"There is just one thing I miss in this house!" exclaimed Miss Minna, critically viewing Mrs. Shelbourne's careful toilet.

"And that is?"

"The print dress in which you always washed dishes."

The ladies laughed at this sally.

"How I shall regret having lost my chance to dry them!" lamented Minna.

"I have no doubt Bessie would be very glad of occasional assistance," replied Mrs. Shelbourne, indicating the tidy Swede who was proving a real house help.

"I guess it *will* be occasional," cried Miss Germaine. "I'd rather do almost anything else."

"For instance, go out to give lessons in this drenching rain?"

"Hardly," with a shrug. "But who looks after the children when you are gone?"

"The eldest attends a good school near by, and for the others I hire a nursery governess at ten cents an hour, who takes nice care of them. Even the youngest has already learned many things from listening to the others, and all consider their lessons very pleasant."

"A most excellent arrangement," said Mrs. Germaine.

"Yes, for I could not teach, were I

obliged to worry about them. When supplemented by as good help as Bessie, things really move quite smoothly."

"No doubt you are sorry you have changed your line of work?" half sarcastically."

"No," gently, "for I am far happier in this. But," with a pleasant smile, "I am very glad you realize that I do still work, and hard too."

"I am anxious to hear you play, Vinnie," said her mother that evening.

"Probably you will observe little improvement except in repose of manner, and confidence of touch. My study has been principally directed toward the best method of teaching. I have also striven to acquire some knowledge of harmony, of which I was entirely ignorant."

"I am proud of you, my dear," said Minna, kissing her sister enthusiastically, as she finished the piece.

"We all are," echoed Mr. Shelburne, looking at his wife with a tender smile.

"Vinnie doesn't look like the same person we left two years ago," observed her mother. "Her physical condition is far better. The weary look which so distressed me, has disappeared."

"Yes," assented Mr. Shelburne, gravely. "Her active mind no longer cries aloud in its starvation. Its powers, kept alert and vigorous, are satisfied. I can not be too thankful that your words and Minna's, distasteful though they were at the time, opened my eyes in season to the very unnecessary, yet none the less noble, sacrifice which my brave wife was making to a misconceived idea of duty."

There were tears in Vinnie's eyes as her husband's look of affection met hers.

But they were joyful tears, born of a sweet content.

So we take our last look at Vinnie Shelburne, a lingering one, for there is something peculiarly interesting about this countenance, irradiated by such a calm, strong, living intelligence. To be sure it is a face now past the bloom of youth, the soft, brown hair being streaked with white; but the trustful eyes, and cheerful mouth are exceedingly pleasant to behold. The whole expression charms far more than mere prettiness. Vinnie is happier now than in the old days, and her altered condition reacts more favorably upon all the members of the domestic circle.

Are there not many others like our heroine, trying so hard to be patient and brave, as they mistakenly follow the supposed path of duty, while all the time, would they but see, a higher, more inspiring road lies open to them? A way not opposed to, but rather, a broader and more harmonious fulfilment of duty.

Oh the joy, the satisfaction of being able to feel confident that however small the talent intrusted to our use, we have made the most of it, and are therefore entitled to receive the blessed reward—

"Faithful servant!"

ADA H. HAZELL.*

* Died Jan. 7, at Plainfield, N. J., of pneumonia, Ada H. Hazell. It is with much regret that this announcement is made. Mrs. Hazell was young, talented, earnest, a thoughtful observer, and one whose pen was always enlisted in those things that concern the true interests of home and social life. She sought to help, instruct, not to amuse; to be true to her womanly instincts, not to gratify a passing humor or an unworthy ambition.—

EDITOR P. J., &c.

DIET IN SICKNESS.

ONE of the commonest questions that the physician hears from the sick is, what can I or shall I eat? And yet it is a question that few physicians can answer properly, because few are intelligently and scientifically versed in

dietetics or food hygiene. A writer in the *Dietetic Gazette* says:

"Laborious investigations have very accurately classified the various articles of our food according to its chemical constitution and physical characters,

and physiology very plainly and attractively points out how each and every one of these different kinds are effectively attacked and digested by the secretions with which the alimentary canal is successively flooded. We not only know how many ounces of meat, bread, butter, water, etc. are required for the healthy maintenance of the human being at any given age, but have elaborate tables of the amounts and relative proportions of carbon, hydrogen, oxygen, nitrogen, etc., requisite for the same end, and painstaking and painful experiments by the score are recorded wherein it has been proved that man can not long survive upon a pure diet of any one of the proximate principles of his body. In fact, the physiology of nutrition has now been brought almost to the condition of an exact science, so far as what takes place in a healthy individual is concerned.

"Under a normal state of affairs it never occurs to one, when he is hungry, to calculate the relative proportions of albuminoids, carbohydrates, and hydrocarbons in the dishes before him. Instinct teaches him to so regulate his appetite as to adapt the supply to the physiological demand. This is what the lower animals do, and it is what we do when, as Herbert Spencer says, 'we are in perfect harmony with our environments.'

"Here is the trouble. Our physiological organism is out of tune with the concert pitch which characterizes the requirements of modern business and pleasure, and we feel confident that our readers will bear us out in this statement, that one of the first evidences of this discord will be manifest in the digestive organs. Right now, if we are on the alert, subsequent serious and fatal degenerations can be averted. The manifestations of derangement are generally flatulence, a sense of weight or pain in the stomach, palpitation, nausea, constipation, dizziness, hypochondria, and many other familiar

symptoms. The books classify these features into a variety of forms: nervous, atonic, and acute dyspepsia; but we doubt whether any such arrangement would modify the dietetic treatment. To comprehend these symptoms it is necessary, of course, that the physician should be familiar with the physiology of digestion, and of chemical characters of the various classes of food. That sugars, fats, and starches by means of organisms swallowed with them are all fermentable and convertible into irritable gases and ichorous acids, which not only distress by their physical presence, but hinder the normal processes by their chemical properties. A patient presenting such symptoms should immediately be put upon a natural plan of living. It will not do to put him off with general instructions to eat and drink 'what agrees with him.' The general catarrhal condition of his mucous membrane, of which he now complains so much, may be cured by copious draughts of hot water before meals. Antiseptic and astringent sprays to the upper air passages may be necessary, but our experience and belief is, that the whole track will clear up when physiological life is resumed. Washing out the stomach is rarely called for, except in extreme cases.

* * * * *

The great difficulty will be to hold the patient to strict diet. In order to obtain success, however, this must be done, and in the majority of cases the result will fully justify the effort."

THE SECRET OF HIS SUCCESS.—A writer in *The Canada Lancet* says that the secret of a very distinguished American physician's success is due to "a naturally keen intellect, a profound knowledge of human nature, particularly of the frailer portion of it, and living faith in the value of *dietetic* and *hygienic measures in the treatment of the sick*." This is true of all *real* physicians.

A NEW THERMAL APPARATUS.

THE illustration shows a recent device by Mr. D. M. Small, of Providence, for the application of hot water to any part of the body for the relief of inflammatory or painful conditions. Mr. Small is a strong hygienist, and believes in the use of methods that are simple to prevent or cure the common ailments of the body. In a letter to the editor of the PHRENOLOGICAL he says:

Among nature's marvelously simple and marvelously effective remedies, none equals heat when properly applied,

vey the water as heated from and to this heater, through whatever appliance may be connected therewith—the appliance being placed *higher* than the heater, as much higher as desired.

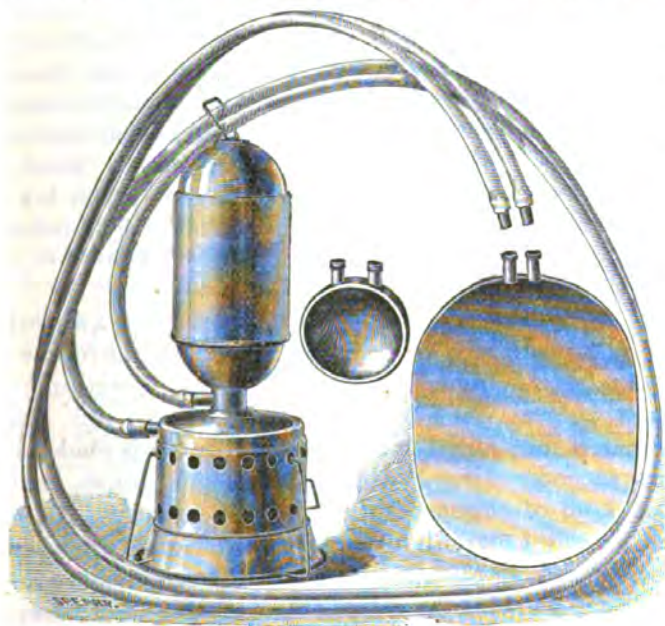
The receptable is first filled with water and the air all expelled by holding the heater up when filling it, with the tubes and appliance hanging down. The water can be heated in five minutes, and will circulate about forty hours without attention.

Different shaped appliances are used for different parts of the body, and any temperature can be maintained therein by regulating or setting the lamp or burner at any point.

The appliance for the chest, bowels, or back is flat, oblong, and slightly concave, about 1-8 of an inch thick, with a space between the two surfaces for the circulation of a thin film or sheet of water around a central partition. There is also a small, round, plano-concave appliance for boils, carbuncles, and any part where a small, flat, or concave application is needed.

Flannel bags or wet cloths may be used in

connection with the appliances, if deemed necessary. The circulation of the water, of course, depends on the law of gravity, the specific gravity of *hot* water being less than cold, the heated water ascending through the upper tube, and when cooled, down through the lower one. The appliance being airtight it can be placed as high above the heater as desired, when we have the apparent anomaly of water flowing higher than the source from an *open* boiler, for it is found to work just as well with the top off, as the water can be seen.



SMALL THERMAL APPLIANCE.

which should generally be in connection with moisture and maintained long enough and hot enough to accomplish the desired results. This, he claims, has been found impracticable with any device heretofore known, and goes on to describe his apparatus in the following terms: It consists of a small metallic vessel, holding about a cupful of water, under which is placed an adjustable alcohol lamp (special in design and absolutely safe), which is best secured to carpet with little hooks so that the apparatus cannot be upset. Flexible tubes con-

SUPPOSED DIFFERENCES IN TASTES AND APPETITES.

I UTTERLY deny the truth of the adage so often quoted by sensualists—claiming that every man should “be a law unto himself”—that “what is one’s meat is another’s poison,” perhaps, aside from very rare exceptions, dietetic monstrosities. (It is probable that the author of this falsehood simply wished to excuse himself for many indulgences and excesses not usual among his associates.) We have reason to suppose that human beings, as a distinct class, were originally created in the same type, the present differences resulting from self-creations, modified by the application of the laws of heredity. To illustrate, the lion, tiger, ox, etc., are substantially the same as in the dawn of creation, man having a more elastic nature. The ox of to-day is sustained by the same food, in kind, that he was thousands of years ago, while the tastes of the lion lead him to slay and eat as his ancestors did; no two, unless trained in the menagerie, differing in the kind of appetite. They are never poisoned by eating what the others, as a class, do. Who ever knew an infant, before bad habits had been formed, to reject the mother’s milk—when both are in good health—clamoring for another kind of food, or milk from another mother? “Milk for babes” is the universal rule. But in the elasticity of our present nature we can learn to like anything that is ever eaten—as illustrated by the use of that “vile weed,” tobacco, which all who use it tolerate only by learning to do so, directly or indirectly—though this fact is no guide for us in the selection of our food, judgment and an enlightened conscience being our guides, not morbid tastes.

The fact that we like (“love”) an article of food is no good reason why we should eat it, since that preference may be the result of a bad habit, as in the case of the relish for tobacco. The material differences in the matter—tastes aside from very rare dietetic monstrosi-

ties—result from bad habits, these differences being as unnecessary and unnatural as the morbid relish for tobacco. Taking into the account the whole age of man, who ever knew one who did not naturally relish mother’s milk, and later, apples, pears, peaches, the berries as a whole, the more usual vegetables, as the potato, with the more substantial foods, such as the true bread, the grains, peas, beans, rice, and the like? Here I will remark that there is a better natural relish, aside from habits, for plain and simple foods, in a moderate variety, as we might infer from the very small range of articles eaten by the hardy ox, elephant, etc., grass and leaves being the staple articles. We frequently hear persons say that they can not eat certain articles of food, which simply means that they will not, that they prefer luxuries, thus being controlled by morbid appetites.

DR. J. H. HANAFORD.

A BREATHING COMPOSITION.—A school boy, 14 years old, handed in the following as his composition on “Breathing.” The instruction was “Tell all you can about breathing.” “Breath is made of air. We breath with our lungs, our lights, our liver and kidneys. If it wasn’t for our breath we would die when we slept. Our breath keeps the life agoing through the nose when we are asleep. Boys that stay in a room all day should not breathe. They should wait till they get outdoors. Boys in a room make bad, unwholesome air. They make carbonicide. Carbonicide is poisoner than mad dogs. A heap of soldiers was in a black hole in India, and a carbonicide got in that there hole, and nearly killed every one afore morning. Girls kill the breath, with corosits that squeeze the diagram. Girls can’t holler or run like boys because their diagram is squeezed too much. If I was a girl, I had rather be a boy, so I can run and holler, and run and have a great big diagram.”

NOTES IN SCIENCE AND INDUSTRY.

Some Items in the Croton Water Supply.—It is a curious commentary on the demands of modern civilization to observe the effect of building this dam (the new Croton water dam). The million people in the city need a reserve of drinking water, and twenty-one families must move out of their quiet rural homes and see their hearths sink deep under the water. The entire area to be taken for the reservoir is 1,471 acres. Twenty-one dwellings, three saw and grist mills, a sash and blind factory, and a carriage factory must be torn down and removed. A mile and a quarter of railroad tract must be relaid, and six miles of country roads must be abandoned. A road twenty-three miles long will extend around the two lakes, and a border or "safety margin" three hundred feet wide will be cleared all around the edge to prevent any contamination of the water. This safety border will include a carriage road, and all the rest will be laid down to grass. As the dam rises, the water will spread wider and wider over fields, farms and roads. Every tree will be cut down and carried away. Every building will be carted off, and the cellars burned out and filled with clean soil to prevent any possibility of injury to the water. Fortunately there is no cemetery within the limits of the land taken for the reservoir. Had there been one it would have been completely removed before the water should cover the ground. Fifty-eight persons and corporations, holding one hundred and eleven parcels of land, will be dispossessed in order to clear the land for the two lakes and the dams, roads, and safety borders."—*Century*.

The Walled Lake.—One of the wonders of the United States, is the walled Lake, in Iowa. It covers a surface of 2,800 acres, with a depth of twenty-five feet of water. It is from two to three feet higher than the surrounding country, and is enclosed by a wall ten feet high, fifteen feet wide, at the bottom, and sloping up to five feet wide at the top. The stones of which the wall is built, vary in size from one weighing one hundred pounds to those

weighing three tons. Around the entire lake is a belt of trees, half a mile in width; with this exception, the country in which the lake is located, is a rolling prairie. When, how, or by whom this wall was constructed, or these trees set out, is a mystery.

The Bible and Egyptology.—The points of contact between the Bible and Egyptology on which recent excavations have thrown light are (1) the arrival of Abraham in Egypt, (2) the rise of Joseph, (3) the stay of the Israelites in the country, (4) the Exodus. It is generally agreed that the arrival of Abraham and the settlement of the Israelites occurred at a time when Egypt was governed not by native Pharaohs but by the *Hyksos*. It is highly probable that their invasion of Egypt in connection with the conquest of Lower Mesopotamia by the Elamites. The name of Apepi, Joseph's king, is repeatedly found on the monuments. His statues have been found at Bubastis, which was doubtless an important Hyksos settlement. "Goshen" has been located in the immediate vicinity. Apepi became involved in war with the native prince, the result of which, not appearing, however, in his reign, was the expulsion of the Hyksos. Rameses II. was the oppressor of the Hebrews. His reign is known very fully to us. Pithom, his store city, has been discovered. Rameses remains unknown. At Naukratis granaries, probably similar to those in these cities, have been discovered. We are still doubtful about the place of the Exodus. The name "Rameses," whence they started, must be regarded as describing a district. The view of Ebers and Dawson makes the Israelites pass south of the Bitter Lakes. The objection is that then they would have had to cross a range of mountains. The view of Lesseps is better, that the passage was north of these lakes. The slightly undulating desert, which has all the appearance of an ancient sea, witnessed that deliverance.

Cost of Education and Drinking Saloons.—The following table furnishes a temperance lecture, and one to

which no whiskey apologists can object. Let it be written upon every black-board of every school-room in the State, and explained to the boys and girls. It is a table from the *Voice*, showing the expenditure for schools and salons in the States named:

<i>Schools. Saloons.</i>		<i>Schools. Saloons.</i>	
Ala. .	.55 2.74	Conn. . .	2.67 15.88
Ark. .	.92 2.57	Ill. . . .	3.09 12.41
Ga. .	.42 4.89	Ia.	2.53 10.54
Ky. .	.89 7.64	Mass. . .	3.68 14.74
La. .	.44 18.09	Mich. . .	2.26 11.41
Miss. .	.67 3.48	Minn. . .	2.12 13.03
N. C. .	.44 4.38	N. J. . . .	1.89 21.47
S. C. .	.89 3.06	N. Y. . . .	2.49 22.78
Tenn. .	.61 4.00	O.	2.78 17.81
Va. .	.87 5.54	Penn. . .	2.12 14.78
Cal. .	3.50 40.16	Wis. . . .	2.33 14.47

From this table it will be seen that New York spends over *nine times* as much money for saloons as she does for schools, and yet there are those who keep perpetually complaining about the cost of schools.

Standards of Light.—It is a delicate matter to obtain an accurate standard of light. Candles are still more relied upon for the tests of comparison, but it is obvious that they are susceptible of great variations in the intensity of the light they afford. Still, if made according to fixed rules, and their burning similarity regulated, they will give a fair approach to accuracy. Various English acts prescribe a sperm candle, of six to the pound, and burning at the rate of one hundred and twenty grains per hour; also that the tip of the wick shall be glowing and slightly bent. Gas examiners are not always as particular in the matter as they ought to be, and, by allowing the wick to remain upright, they obtain a result indicating a gas of slightly more value than it really has. The German Gas and Water Society recommend an amyl acetate lamp, which is not quite as intense as a candle, and is objected to by Mr. W. J. Dibdin as being unsuitable in the color of its light. Dr. Werner Siemens has devised a selenium photometer, the electric resistance of which is exactly dependent on the light falling upon it. The pentane lamp, and the Methven screen, in which a coal-gas light is admitted through an aperture of fixed dimensions are favored by many persons; and a standard afforded by a melting or a solidifying platinum wire is well spoken of.

Defects in the Signal System.—

General Greeley, chief signal officer of the army, says that signal instruction in the army is at the lowest ebb it has ever been. He recommends, therefore, either that instruction in the art of military signaling be abandoned or ample material and moral support be given the chief so that he may raise it to a high standard of efficiency. Speaking of weather forecasts, Gen. Greeley calls attention to the fact that under present conditions the forecast officer can devote barely half a minute to all the predictions for any particular State or district. The demand for weather forecasts is continually increasing and they are appreciating in value in the estimation of the public.

An Old Observer.—I have been interested in the science of Phrenology and health, and have lectured a number of times on these subjects. I have taken the *JOURNAL* most of this time, and am more interested now at the age of sixty years than ever before. Of late years I have inclined to believe that the organ of Spirituality lies about where the soft spot is in infants; that the organ does not take an active part in the congress of the organs until later in life, than most of the other organs; that it often has a wonderful growth from twenty-five to forty years of age, and illustrates the scriptural statement, "your young men shall dream dreams and your old men shall see visions." That Spirituality can show us things that hearing, seeing, feeling cannot take cognizance of; that its leading use is in old age when the sight and hearing are growing feeble.

L. SALLIES.

MAKE LIFE HAPPY.

MAKE this life beautiful while you may,
For we have not sunshine every day.
There comes a time when mirth's profane,
For every life has sorrow and pain;
Unto others be as kind and true
As you would that they should be to you;
Try to make all things work for the best,
And Love Divine will see to the rest.

The winter's cold and summer's rain
Each will produce a needed gain;
So let the blunders, care, and strife
You meet with in this busy life,
Give wisdom, love, and strength to thee
To feel for others more tenderly;
And make them happier while you may,
For we have not sunshine every day.

A. P. BEEBE.



NEW YORK,
April, 1890.

HOME TRAINING VS. HEREDITY.

AT a meeting in which we participated the subject of criminal heredity was discussed. The leading speaker of the evening took the ground that the development of active crime in society was not so much due to inheritance of a special disposition toward wicked and lawless conduct as it was to improper home training and vicious social influences. In many homes of comfort and seeming respectability the very atmosphere teemed with deceit and prevarication. The little children of those homes were fairly nursed in lies by fashionably ease-seeking mothers, and glib-tongued, selfish attendants, becoming, ere old enough to attend school, skilful in arts of duplicity and cunning. Unless their later teaching contained wholesome moral checks, the bias of development was naturally toward that level of mental perversion that is fruitful in arts of vice and crime.

Take any community, for example, how many mothers are in the habit of making promises to their restless little ones that they do not think of keeping! "If Freddy will be a good boy and not make so much noise mamma will give him some candy." Freddy tries his best to keep quiet, and does really well for

his excitable temperament, and after a time comes for the candy, and is met with a "Oh, go away, child, I haven't any for you." A mother has a call to make. She has already promised to take little Alice with her "the next time" she goes out. So the little girl closely watches mother while she is dressing and waits eagerly for her turn to be dressed. But mamma is all ready for the street without a single word to the eager child. And when, at last, she tearfully asks "Mamma, aren't you going to take me?" she is sharply answered "I can't do it to-day, child. *Next time.*"

We have known a mother who had made promises of this kind repeatedly to send her little one down to the kitchen, or into the back yard, on some flimsy errand, so that she could slip out of the house unperceived. Fine moral training this! And yet, if we were to attempt to show the real character of such conduct to such mothers as these, we should be taxed with gross impertinence and misrepresentation.

We believe that thousands of cases of misconduct, with their varying degrees of viciousness, that are attributed to heredity, nay, that the great majority of cases so imputed by scientific authority, can be shown by inquiry into their history to be due first to improper treatment, or the lack of judicious moral training in early childhood. Heredity may be held responsible for a sufficient proportion of the deformities mental and physical that afflict society, but that proportion on candid analysis will, we think, shrink greatly below the size it holds in common estimation.

We have given an instance or two of

conduct on the part of mothers that has a perverting effect upon the young minds. We could point to the conduct of fathers, very respectable men as society goes, that is equally reprehensible. Of course the bright, ambitious boy looks up admiringly to his father, and in his simple ignorance thinks papa's vices of manner and habit great things, and resolves to adopt them too when he is big enough. So the boy not yet out of short clothes learns to smoke and to drink, to play games for money, and to use language that suggests evil.

The close observer who contributes the sketches from Lavater draws in one number a portrait of a refined and cultured gentleman, who employs his leisure in scientific study, and in the absorption of such study is harsh and unjust to his little children, carelessly sowing germs of distrust and disrespect in their innocent minds, that later a favoring environment will nourish into dangerous flower.

When a young man has been detected in some penal act, do his parents think of the extent to which they may be responsible for his offence? On the contrary, as a rule, they "wonder what could have gotten into him to do such a thing!" or they attribute his fall to "that club," or "that young man, Jones, with whom he was so intimate." They bestow little thought upon their own inconsistencies, not to say abuses, of treatment when he was a child. Perhaps they were *too busy* with their own personal affairs to give him the care he should have received and if reference be made to this, they plaintively protest that he would do as he pleased, and they "couldn't help it."

The subject of heredity was not unknown in Pope's day, and he was certainly philosopher enough to consider its bearing on human character, yet he wrote, and we think with most truthful pertinency:

" 'Tis education forms the common mind,
Just as the twig is bent the tree's inclined."

An old saw, indeed, and of late seemingly become unfashionable to quote.

PHYSIOGNOMY AND CRIME.

A French observer in lines of anthropology, M. Tarde, has published a volume lately, in which he gives the results of a study of criminal physiognomy. He deduces one principle that should be noted, viz., that ugliness or irregularity of form and feature is the chief physical characteristic of the head and face of the criminal. As it is customary in all European prisons to shave the head and face of offenders an observer can obtain thus a clear view of the effect of moral expression as furnished by the contours of the cranium and of the features. Prof. Garofalo of Naples, is quoted as bearing similar testimony. He says: "The wicked expression of the face, the evil mien which is by common consent called patibulary, is very common in prisons. It is rare to find a criminal with regular features and gentle expression. Extreme ugliness, ugliness that is repulsive, is extremely common among the women."

Other authors are quoted also by M. Tarde whose views are much the same.

To be sure the criminal of low origin, little intellectual training and debauched habits, wherever met, is an ugly, repulsive person as a rule; but we have seen men, and women too, whose per-

sonal appearance was attractive even handsome, but whose character was notoriously disreputable. Well dressed and good looking knaves abound in city society. "Sweet looking" women are known to detectives for their perversity in shop-lifting and other practices of a darker complexion. We can not always tell the rogue off hand by his face, but *shave his head* and then we have a clue in the bare poll that guides to the truth of the organization.

Some excellent people are plain even to ugliness, do not attract us at first by their faces, but let us have a survey of the head contour and we find in its markings of brain development, the intimations of faculty that impart excellence of character.

It must be admitted that while the eyes, nose, mouth and chin have a value in our estimation of character, it is the shape of the brain case that has more to do in determining opinion with regard to character. Should we ask one considered an expert in reading the lines of vice and mental irregularity in a face to give us an estimate of a man whose head had been carefully covered above the eyes, he would most probably complain of the method, and assign to predications made under such circumstances, much of the character of guessing.

It is to be noted that most of the observers who give dignity to the so-called criminalistic school in anthropology, say comparatively little that has value about the common features of the face, but devote most of their analysis to the form and structure of the cranial vault, and the corresponding development of the brain.

BAD ENOUGH BUT MUCH THE LESSER EVIL.

We have seen lately in the papers some bitter denunciations of the Louisiana lottery company, the managers of which are seeking to obtain a renewal of their charter which will soon expire by limitation. As a money making scheme that lottery has been a great success, and of course its managers, like those of any successful "trust" or "combination," don't care to be deprived of it.

Interested as we are in the welfare of the American people, we have no sympathy for any undertaking, chartered or unchartered that exerts a corrupting influence, or robs the masses. No argument is required to show the demoralizing effect of lotteries—for public sentiment in most of the States, North and South is against them, and the growth of this sentiment has led to their gradual suppression.

But we feel concerned about a far greater evil than the lottery, and when we note the strong terms of censure with which the religious and secular press attack the sale of chances for the drawing of a fortune from the hollow cylinder, we wonder that the greater evil seems forgotten. Of course we refer to the universal dram shop, the corrupting effects of which on body and soul are unspeakably unhappy in every way. Then the lottery, like many games of chance, owes its existence or maintenance for the most part, to the dram shop. Is there not in the attitude that is shown in dealing with lotteries much of that spirit which was the subject of certain comments quoted in the New Testament? The reader will remember

how certain people were said to "strain at a gnat and swallow a camel."

A GOOD BUSINESS FOR WOMEN.

Our enterprising women who rise to an understanding of the work and duty demanded by the age, are constantly finding some fresh sphere for the exercise of their active heads and ready hands. We know of a young lady who has lately found remunerative employment in replenishing and cleaning oil lamps used in the homes of well-to-do people. Three or four times a week she visits the houses of her patrons, and performs this service for the household. A mean service by no means, when we consider the elegance and elaborate construction of the modern parlor lamp. A lady who owns such a lamp is loth to intrust it for cleaning and refilling to the ordinary kitchen maid, and may not feel herself altogether competent to perform the work perfectly, so that intelligent and careful assistance for the

purpose is readily accepted. This professional lamp cleaner started the business at the suggestion of a lady friend, and it has grown to respectable proportions, giving her a really comfortable monthly return.

Here in New York there are a few women who are "making a good thing" of the work of a collector, and there is ample room we know for more operators in that line. The moral effect of being invited by a bright-eyed young woman to pay a bill that has somehow "escaped" attention is excellent upon most men, and while the demand of the typical male dunner would be politely or otherwise evaded, the good natured and expectant lady dunner would be irresistible, especially with gentlemen of comparatively youthful years.

The tailor, the shoemaker, the jeweler as well as the grocer and the butcher, would do well in engaging a neat, brisk woman to look after tardy debtors, and of course pay her the same commission that is allowed the trousered collector.

Our Mentorship Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is pro-

vided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

T. M.—The columns of this magazine are open to all who are interested in the subjects that come within its range. Those who have anything to say—no matter what their sphere—with regard to the science of mind study, anything of a practical bearing and which can be useful to others, are welcomed by the editor. Nothing would please

him more than to count among his chief contributors one hundred men and women with ears and eyes open to the phenomena of mind and ready to note down whatever is interesting and send it to the New York office of the PHRENOLOGICAL JOURNAL.

Your comparison of this magazine with a trade paper is not fair, because nearly all the subscribers to a trade paper like the *Metal Worker*, or the *Boot and Shoe Weekly*, or *Hatter's Gazette*, etc., are persons who get their living in the trade such papers represent, and are therefore actively interested in the information given therein.

But an exceedingly small proportion of the readers of the PHRENOLOGICAL are professional phrenologists, or even systematic observers of character, the great majority reading it much as they would a literary periodical, taking what they find of good in it and using it or not in their daily life without thought of personal remark that may reach the editorial sanctum.

"NERVO-BILIOUS" ORGANIZATION—DIET. W. G.—One constituted as you are must be actively employed, and if the employment affords a good degree of out-of-door life, it is well. Your food should have a large proportion of those elements that contribute to the formation of brain and muscle—as your activity causes a rapid consumption of such elements. The ordinary fine flour bread, tea biscuit and griddle cakes do not supply those elements in sufficient proportion; while whole-meal bread and biscuit do; so also do oat meal and barley meal. Of course you can find the requisites in lean mutton, beef, and game. An active out-of-door life requires a good supply of carbonaceous matter; just as the engine that is kept running needs a constant supply of oil for lubrication. And for your purposes this oil is found in the albuminous foods, and in the vegetable juices. Olive oil, fresh cream, good butter lightly salted, may be eaten with your bread. In the grains boiled and eaten with milk there is usually sufficient carbon for the needs of most workers.

MOLES.—A. S.—These unpleasant skin marks are due to local disturbances in the nutritive supply of the skin by which an excess of capillary tissue is accumulated in certain places, and coloring matter is de-

posited in the skin tissue. We do not regard them as having any special psychological indication.

SALIVARY EXCRETION.—J. R.—The trouble you experience may be due to your diet containing too much of saline elements, or substance that excites the glands to over secretion. Do you drink a great deal, especially at night? Again the trouble may be due to medical treatment that you have had at some time. It would be impossible to advise you without a full examination. Sometimes the organism is at fault in a constitutional way, and then the case is very difficult to manage.

WHISKEY POISONING.—G. A. M.—Your experiments are in keeping with the observations of others. The healthy organism unaccustomed to alcohol experiences the poisonous effects of the spirit, and is depressed. In your case the nerve centres very promptly respond to the toxic impression of the agent, and are thrown out of balance, losing control of the muscles. You are certainly convinced by these experiments that it is the part of wisdom to let alcoholic liquor alone.

As for tobacco the narcotic property effects a similar nervous condition, the same loss of muscular control, with perhaps the additional effect of disturbing the digestion. Essentially the nicotine of tobacco is more poisonous than alcohol.



! Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

THE PHRENOLOGICAL JOURNAL of New York, grows with each number and is, without doubt, one of the most liberal and progressive publications in this field.—*Journal of Inebriety.*

THIS monthly, THE PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH, is well styled an "Illustrated Magazine of Human Nature." In its numerous departments are found articles on health, hygiene, child culture and science, which cannot fail to instruct and be a benefit to the reader.—*Printers Circular.*

PERSONAL.

JOSEPH HOWE, one of the survivors of the famous charge of "the six hundred" at Baklava lives in Hartford Conn. He is an ornamental plasterer, and carries the marks of the battle on his face and neck, which were badly cut by pieces of shell. Although Howe came to the United States twenty-five years ago, he has never become a full American citizen.

ABRAHAM LINCOLN, the only son of Robert Lincoln, United States Minister to England, died in London on the morning of March 5, at the age of seventeen. He was a bright and manly boy, first in studies and first in sports, and always called "Jack" by his family and friends, as an affectionate *soubriquet*. His death was due to blood poisoning, the result of an unskillful operation performed on a carbuncle by a French surgeon at Versailles, where the lad was at school, last October.

LEVY SIMPSON ELPHIOK, a very well-known character in San Francisco, is eighty-four years old. He says of himself: "I was born in Yorkshire, Eng., in 1805. Twice married; raised and educated two families, good and dutiful children all. For fifty years I have not eaten flesh or fowl, and during many years have not tasted fish, pastries or condiments of any kind, not even salt. I find that good health pays, and try to live in accordance with my ideas of the laws of life. I take my food in its natural state. I choose a variety of fruits, olives, nuts and occasionally a piece of graham bread or a glass of milk, but not often. I do not drink while eating, and am careful not to eat too much, and that very slowly, and sit from half an hour to an hour at table." One of his peculiarities is to go about without a hat.

WISDOM.

"Thou must be true thyself,
If thou the truth would teach."

CHEERFULNESS enables nature to recruit its strength; whereas worry and discontent debilitate, with their constant wear and tear.

No one can ask honestly or hopefully to

be delivered from temptation unless he has himself honestly and firmly determined to do the best he can to keep out of it.—*Ruskin*.

"PLEASURE is very seldom found where it is sought; our brightest blazes of gladness are commonly kindled by unexpected sparks."—*Johnson*.

THE better a woman is, the more she believes other women to be both good and kind, a phenomenon not hitherto explained, though frequently observed.

THE little things which you may do for those about you will fall back upon your heart as the summer dews fall upon the vineyards. What if it is nothing but a kind word to a school boy crying in the street; it dries his tears, and the grieved heart grows light and glad again.

Cut it short,—since life is fleeting,
Barely time for nod or greeting,
Harp not much on any string,
Touch and go, and on the wing
Stay not long in one resort,

Cut it short.

ALMOST all men believe that right shall ultimately triumph, but why do they not act up to their convictions? Because either selfishness or thoughtlessness controls them.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

SHE (at the mint)—"Ah, now I know, Harry, why I think you as good as gold." He—"O, get out!" She—"No; but you are, really. You are pressed for money, you know."

PHYSIOLOGISTS say that the older a man grows the smaller his brain becomes. This explains why the old man knows nothing and the young one knows everything.

DOCTOR—Well, my fine little fellow, you have got quite well again! I was sure that the pills I left for you would cure you. How did you take them, in water or in cake? Patient—Oh, I used them in my blow gun.

"PAPA," said a boy much given to reading, "I have often seen the phrase, 'all right thinking people,' in the papers. What

kind of people are right-thinking people?" "They are the sort of people," said the father, "who think as we do."

MINNIE—"I hear that you are going to enter the lecture field." Mamie—"The idea! I am engaged to be married. Minnie—"Well, I knew it was something of the sort.

KITCHEN BROOM—"Hair Brush will you allow me to present my friend, Stove Pipe?" Hair Brush—"No, thanks; he doesn't carry himself straight enough to suit me." Stove Pipe (scornfully)—"For a thing that wears bristles, you are very fastidious."

RESULTS of the Elixir.—Moses—Isaac, mine son, go down to the clinic und ask de doctor for a dose of dot lamb elixir. It will gost noddings, und you will grow a fine all-wool suit of clodings. Isaac—No, fadder, it would ruin my gabacity for pisness. Beeples would bull the wool over the eyes of your son. Moses (reflectively and aside)—Dot poy vas smarter as his fadder.



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

SPINAL CONCUSSION: surgically considered as a cause of Spinal Injury, and neurologically restricted to a certain symptom group, for which is suggested the designation Erichsen's Disease, as one form of the Traumatic Neuroses. By S. V. Clevenger, M. D., Consulting Physician in the Reese and Alexian Hospitals, &c., author of "Comparative Physiology and Psychology," etc., etc. 8vo, pp. 359. Price, Cloth, \$2.50. F. A. Davis, Publisher, Philadelphia and London.

Recognizing in this author a careful observer, we are naturally disposed to give his latest volume that attention that so im-

portant a subject as spinal concussion demands. In this era of railways and of frequent accidents in their operating, the subject has forced itself upon the attention of experts with the result of more or less diversity of opinion. In fact, the literature of spinal concussion has been increasing to an unwieldy shape for the general student, and Dr. Clevenger, after taking up the study of it and pursuing it for five years, has in this work arranged and reviewed all that has been done by observers since the days of Erichsen and those who preceded him. It is not known to the majority of medical practitioners how extensive has been the field of controversy regarding the nature of the spinal disturbances incident to the disease, especially abroad. Dr. Clevenger supplies an epitome of the views taken by leading surgeons, drawing from Erichsen, Page Oppenheim, Erb, Westphal, Abercrombie, Sir Astley Cooper, Boyer, Charcot, Leyden, Rigler, Spitzka, Putman, Knapp, Dana, and other European and American students of the subject. The small, but important, work of Oppenheim, of the Berlin University, is fully translated, and constitutes a chapter of Dr. Clevenger's book, and reference is made wherever discussions occurred in American medico-legal societies.

The chapter titles are: I. Historical Introduction; II. Erichsen on Spinal Concussion; III. Page on Injuries of the Spine and Spinal Cord; IV. Recent Discussions of Spinal Concussion; V. Oppenheim on Traumatic Neuroses; VI. Illustrative Cases from Original and all other Sources; VII. Traumatic Insanity; VIII. The Spinal Column; IX. Symptoms; X. Diagnosis; XI. Pathology; XII. Treatment; XIII. Medico-legal Consideration.

A description of the modern methods of determining nerve lesions by electricity is given, a discussion of the nature of hysteria, in which the author takes new ground with regard to the influence of the sympathetic system. Of nervous diseases no other presents so wide and interesting a field of observation as this of "railway spine."

THE PURITAN SPIRIT. By Richard Salters Storrs, D. D., LL.D. An oration delivered before the Congregational Club in Tremont Temple, Boston, Dec. 18, 1889.

Published by the Congregational Sunday School and Publishing Soc'y, Boston and Chicago.

Who more worthy to discuss a large theme like this than the veteran preacher of the Church of the Puritans, Brooklyn, N. Y. It goes, therefore, *sans dire* that the whole treatment of the Puritan character is masterly, and the grand elements of that character, "an intense sense of the authority of righteousness," is most vividly set forth. The publishers have done well to put the address into such neat form in response to the demand for it that immediately arose after its delivery. An excellent portrait on steel forms the frontispiece, and a picture of the Puritan statue by St. Gaudens is inserted in the current of the volume. Price, 75 cents.

PUBLICATIONS RECEIVED.

PROCEEDINGS AT A COMPLIMENTARY DINNER, given to Dr. Joseph Parrish, of Burlington, N. J. By the American Association for the Study and Cure of Inebriety with a sketch of his life, by Paul R. Shipman, etc., etc.

This pamphlet, reprinted from the *Journal of Inebriety*, is a condensed review of one of the most important enterprises in modern science, the reformation of inebriates. On its face a compliment most deserved to an eminent and gifted physician, it sets forth a most interesting record of systematic benevolence in behalf of a large class of unfortunates, began but a few years ago by a few thoughtful, zealous men.

SKETCH OF THE LATE DR. J. EDWARD TURNER, the founder of Inebriate Asylums. By T. D. Crothers, M. D., of Hartford, Conn.

A worthy tribute to a pioneer philanthropist. By a co-worker, and able physician. An excellent portrait of Dr. Turner serves for frontispiece.

TRANSACTIONS OF THE TWENTIETH AND TWENTY-FIRST MEETINGS OF THE KANSAS

ACADEMY OF SCIENCE, 1887-88. with the Reports of the Secretary.

Contains several interesting papers, especially relating to American botany. E. H. S. Bailey, Secretary, State University, Lawrence, Kan.

ROTHERMAL.—A story of Lost Identity. By Louis Reeves Harrison. 12mo., pp. 281, New York: American News Company.

OUTLINES OF A COMMON-SENSE SYSTEM OF TREATMENT WITHOUT DRUGS. By Robert Walter, M. D., Reading, Pa.

In this brief pamphlet the author sets forth a scheme of treatment based upon hygiene and physiology, which, so far as the exposition goes, can not be said to differ from that advocated by other advanced hygienic practitioners.

DR. RIS, of Kloten, Switzerland, says *The British Medical Journal*, emphatically recommends pea-soup for invalids, convalescents, and more especially for patients suffering from cancer of the stomach, or *diabetes mellitus*. Take peas, water, and sufficient amount of some vegetable suitable for soup, and one-half per cent. of carbonate of soda, and boil the whole until the peas are completely disintegrated; then let the soup stand until sedimentation is complete, and decant the fairly clear, thin fluid above the deposit. The product is stated to resemble a good meat soup in its taste, to be at least equally digestible, and at the same time to surpass the very best meat soup in nutritive value. The latter statement may appear surprising to those not acquainted with comparative food values, but it is true that peas (as well as beans or lentils, either of which may be used instead of peas) contain a considerable portion of legumen; that is, a vegetable albumen which is easily soluble in a faintly alkaline water, is not coagulated by heat (while flesh albumen is—hence the small nutritive value of beef tea), is easily absorbed, and equal to the albumen of eggs in its nutritiousness.





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Personal. Wisdom. Mirth. Library.

The Phrenological Journal is published monthly at \$1.50 a year, or 15c. a number. To each new yearly subscriber is given either the Plaster Paris Phrenological BUST or the New Lithographic Phrenological CHART Premium, a new plate, 19 x 24 in., with rings for hanging. When the Premium is wanted, 15c. extra must be received with the subscription to pay postage on the JOURNAL and the expense of boxing and packing the Bust, which will be sent by express, at expense of the subscriber ; or No. 2, a smaller size, or the Chart Premium, will be sent by mail, postpaid.

Agents wanted to canvass for the JOURNAL. Send for terms.

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NUMBER 5.]

MAY, 1890.

[WHOLE No. 617



DR. JOSEPH PARRISH.

DR. JOSEPH PARRISH.

AT one of the broadest parts of our noble Delaware sits the quaint old city of Burlington. Like all American cities it boasts some of the latest inventions of progress. A railroad threads its principal thoroughfare, and electricity has succeeded the dimmer age of gas in illuminating its highways. Crafts of many kinds dot the blue river on whose banks it rests queen of all, at least by right of age. Yet it contains an individuality wholly its own, and in some respects resembles a city of mediæval mould set down in the midst of the bustle of the New World. We might call it a meeting of the ages. Fronting the water are houses, constructed in all the fashions of modern architecture, albeit the *Renaissance* in Queen Anne style is represented among them.

But walk with me in some of the antiquated parts where the iconoclast of advance has not despoiled the old, and with trowel and hammer built on the site of destruction the airy homes that so frequently, in their insecurity, make the word advance a misnomer. Better the heavy beams and rafters of our forefathers, their low ceilings and deep embrasures that protected life, than many of the flimsy structures that menace it to-day. On some of these old timers lichens have painted their peculiar green, and the light gains admission through tiny diamond-shaped panes, that carry one to Padua, or some time-worn city in the green shires of England or bonny Scotland. A space beyond the city is Oxmead, the old country estate which gave name to one of the handsomest country drives in America. This drive, passing by villas, farm houses, wooded dells and forests, joins one which takes us to Lorillard's, where some of the famous kings of the turf have resided.

With all its modern touches, Burlington, until within the last few years, was accounted a finished city. In perambulating her streets one would find an

absence of that haste and worry generally depicted on the faces of America's citizens. A Rip-Van-Winkleism, if I may so express it, hovered over all. The ladies and gentlemen sauntered nonchalantly, as if they had stepped out of the year 1590, instead of breathing in this dashing, surprising nineteenth century. Within the past few years, however, the lethargy has been broken, and a spirit of enterprise awakened. New houses, and whole blocks and streets of houses have sprung up, and trade received a fresh impetus. Scattered among the new are still a few old landmarks, noteworthy among which are J. Fennimore Cooper's birthplace, and coming down the years to our own times, stands the home that sheltered General Grant's family during our great conflict. The railroad, which leaves Burlington on its way to Philadelphia, runs for some distance parallel to the road once known as the King's highway, and over which King George's troops marched before they were whipped from the soil by our sturdy progenitors. All around this spot we hear the old Dutch and Hessian names, Van Rensselaer, Van Kirk, Vansciver, Wigan, Schuyler, and others; names, some of which represented the rank and file of men who gave their blood in freedom's cause, and also names, which by grit and worth have scaled the heights of fame.

In this historical atmosphere the name of Joseph Parrish shines resplendent. Although born in Philadelphia the 11th of November, 1818, much of his maturer life has been spent in Burlington, and the associations of his boyhood cluster about the old Oxmead estate, the home of his ancestors. It is in Burlington, too, that he now rests on his oars. In this age, when everything has a tendency to resolve itself into science, or, at least, be viewed from that standpoint, it may not be irrelevant to mention, *en passant*, the grandfather of Dr. Parrish, if for nothing else to illustrate the law

of heredity, showing how closely the son has followed in the footsteps of his honored sire. John Cox, the founder of Oxmead, an estate, which in its most flourishing days numbered eight hundred acres, and was kept on the scale of English country mansions, was the maternal grandfather of Dr. Parrish, and a Quaker of the old-fashioned or-

could hold the interest and close attention of his congregation for much more than half an hour. His sermons and prayers were alike short, but his acts of philanthropy and kindness were unceasing. He had an evening school in winter for his farm boys and hired people, as well as for such of his bound people who might be there. He was



HOUSE IN WHICH J. FENNIMORE COOPER WAS BORN.

thodox type. He was a man of fine presence, full of suavity, and that famed hospitality, which, sad to say, is becoming, amid the complexity of the domestic problems agitating the world of today, a rare virtue. He was a minister of the Society of Friends, and frequently said he did not know a preacher who

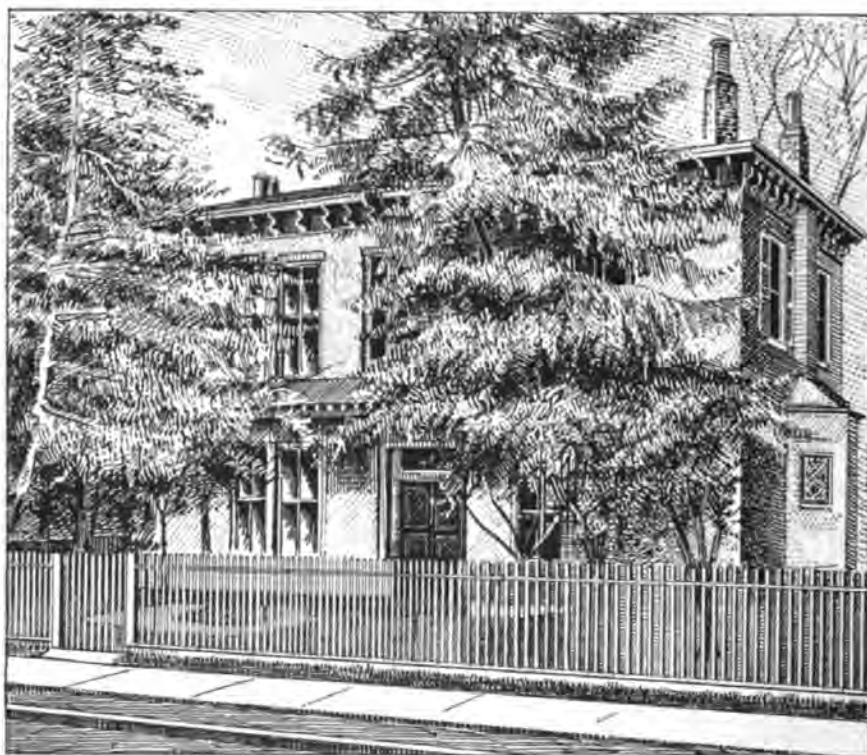
fond of children and often took part in their games, and not only assisted in unraveling their riddles and conundrums, but originated many for their amusement. So deep was his attachment for the little ones that in the last hours of his life, in his 93rd year, he unconsciously indulged in rehearsing

their conversations and entertainments. The following furnishes an example of his quaint and kindly way of admonishing. One summer afternoon he was sitting quietly on his piazza, while in front of him on the lawn were some boys playing, among whom was his little grandson Joseph Parrish. Something occurring which aroused the indignation of the youthful Joseph, he proceeded to administer condign punishment to the offending playmate in

historical value bearing on the death scene of John Randolph of Roanoke, in which Dr. Parrish the elder played a conspicuous part. The paper has been kindly furnished me by the present Dr. Parrish.

"From the Deposition of Dr. Joseph Parrish in John Randolph's case.

"The morning of the day that John Randolph died I received an early and urgent message to visit him. Several persons were in the room, but left it,



HOUSE IN WHICH GENERAL GRANT'S FAMILY LIVED.

the shape of a hearty kick, whereupon his grandfather, who from his coigne of vantage witnessed the assault, called him to the piazza and said: "Joseph, I saw thee kick one of thy playfellows, but it was not properly done; next time thee has occasion to kick anybody thee must do it with both thy feet at once."

Before leaving the ancestry of my subject I can not forbear giving to the public some statements from a paper of

except his servant John, who appeared affected at the situation of his dying master. I remarked to John that I had seen his master very low several times before and he had revived, and perhaps he would again; the patient directly said, 'John knows better than that.' The interview of the morning was particularly impressive. I had not been long with him before he looked at me with great intensity and said in a very

earnest and distinct voice: 'I confirm every disposition in my will, especially that respecting my slaves, whom I have manumitted and for whom I have made provision.' This declaration to me was altogether unexpected; it involved a subject which in our previous interviews had never been touched. It was one I should not have introduced. I assured him that I was rejoiced to hear such a declaration from him; he appeared anxious to impress it on my mind. Soon after this I proposed to go for a short time, to attend an urgent message received just before I left home, assuring my patient that I would return as speedily as possible. He positively objected to my leaving him. 'You must not go, you can not, you shall not leave me.' He called to his servant John to take care that the Doctor did not leave the room, and John accordingly locked the door, and soon reported: 'Master, I have locked the door and put the key in my pocket; the Doctor can't go now.' My proposal to leave him for a short time, even on a promise of return, evidently irritated him for a moment.

"It may show the situation of his mind when I state that in the moment of excitement to which I referred he said, 'If you do go you need not return.' I appealed to him as to the propriety of such an order, inasmuch as I was only desirous of discharging my duty toward another patient who might stand in need of assistance. His manner instantly changed and he said, 'I retract that expression.' I told him I thought I understood him distinctly on the subject he had communicated, and I presumed the will would explain itself fully. He replied in his peculiar way: 'No, you don't understand, I know you don't. Our laws are extremely particular on the subject of slaves; a will may manumit them, but provision for their subsequent support requires that a declaration be made in the presence of a white witness, and it is requisite that the witness after hearing the declaration should

continue with the party and never lose sight of him until he is gone or dead. You are a good witness for John. You see the propriety and importance of your remaining with me. Your patients must make allowance for the force of your situation.' I saw and I felt the force of the appeal.

"The interest of the scene increased every moment. I was now locked in the chamber with a dying statesman of no common order, one whose commanding talents, elevated political station, combined with great eccentricity of character, had spread his fame not only through his native land, but over Europe. He then said, 'John told me this morning, "Master, you are dying;"' I made no attempt to conceal my views; on the contrary I assured him I would speak to him with entire candor on the occasion, and told him it had been rather a subject of surprise that he had continued so long. He now made his preparations to die. Between him and his faithful servant there appeared to be a complete understanding. He directed John to bring him his father's breast-button, which was immediately produced. He then directed him to place it in the bosom of his shirt. It was an old fashioned largesized gold stud. John placed it in the button-hole of the shirt bosom, but to fix it completely required a hole on the opposite side, when this was announced to his master, he quickly said, 'Get a knife and cut one.'

"I handed my penknife to John, who cut the hole and fixed the valued relic to the satisfaction of the dying patient. A napkin was also called for and was placed by John upon the breast of the patient. For a short time he lay perfectly quiet, his eyes were closed and I concluded he was disposed to sleep. He suddenly roused from this state with the word, 'Remorse, remorse.' It was twice repeated; at the last time at the top of his voice. Evidently with great agitation he cried out, 'Let me see the word.' No reply followed, having

learned enough of the character of my patient to ascertain that when I did not know exactly what to say it was best to say nothing. He then exclaimed, 'Get a dictionary, let me see the word!' I cast my eyes around me and told him I believed there was none in the room. 'Write it down then; let me see the word.' I picked up one of his cards from the table, 'Randolph of Roanoke,' and inquired whether I should write on that. 'Yes, nothing more proper.' Then with my pencil I wrote 'remorse.' He took the card in his hand in a hurried manner and fastened his eye on it with great intensity, 'Write it on the back!' he exclaimed. I did so and handed it to him again.

"He was excessively agitated at this period—he repeated, 'Remorse! You have no idea what it is, you can form no idea of it whatever; it has contributed to bring me to my present situation, but I have looked to the Lord Jesus Christ and I hope I have obtained pardon.' He then said, 'Now let John take your pencil and draw a line under the word,' which was accordingly done.

"I inquired what was to be done with the card; he replied, 'Put it in your pocket and take care of it, and when I am dead look at it.' This was an impressive scene, all the plans of ambition, the honors, the wealth of this world had vanished as bubbles on the water. He knew and he felt that his very moments were few and even they were numbered. It afforded his physician an opportunity without being intrusive of offering to him a few serious observations, and pointing the expiring statesman to a hope beyond the grave.

"My situation, at this period was serious and embarrassing, locked in the chamber of a patient and solemnly called upon as a witness, confirming a will already made for the liberation and support of his slaves when the only human ear that heard these declarations except myself and the testator was one of the very slaves included in the bequest; it

required no unusual foresight to anticipate the construction which might be put upon such testimony; perhaps in a distant court where the witness might be personally unknown, especially when added to this it was found he was a member of the Religious Society of Friends, who had long since washed their hands from the stain of slavery, and whose sentiments on that subject were universally known. I saw that under a charitable construction of the testimony the force of early impressions and the bias of education might be supposed to imperceptibly influence even an upright mind, and give a coloring to words and facts which to others differently educated might be viewed in another light.

"Under these views I introduced the subject of calling in some additional witnesses, and suggested sending down stairs for Edmund Badger, whose attentions were very great to him. He replied: 'I have already communicated that to him.' I stated it was my intention to be with him as steadily as possible until his death, but with his concurrence I would send for two young physicians who should remain and never lose sight of him until he was dead, and to whom he could make the declaration. My son, Dr. Isaac Parish, and my friend and late pupil, Dr. Frances West, were proposed to him. He quickly asked, 'Captain West of the Packet?' On receiving an affirmative reply he said, 'Send for him, he is the man—I'll have him.' From some circumstances that had come to my knowledge I had reason to believe that Captain James West was a favorite with the patient. Before the door was unlocked he pointed to a bureau and requested that I should take from it a remuneration for my services. To this I promptly objected, informing him that I should feel as though I were acting indelicately to comply. He then waived the subject by saying in England it is always customary.

"The witnesses were now sent for and

soon arrived. The dying man was propped up in bed with pillows, nearly erect. Those only who know his form and singular physiognomy can form an idea of his appearance at this moment. Being extremely sensitive to cold, he had a blanket over his head and shoulders, and he directed John to place his hat on over the blanket. The hat bore evident marks of age and was probably the one exposed to the peltings of the storm during the discomforts on the day of his arrival.

"With a countenance full of sorrow, John stood close to the bedside of his dying master. The four witnesses, viz.: Edmund Badger, Dr. Francis West, my son, Dr. Isaac Parrish, and myself were placed in a semi circle in full view. It was evidently an awfully interesting moment to the patient. He rallied all the expiring energies of mind and body to this last effort; his whole soul seemed concentrated in the act; his eyes flashed feeling and intelligence. Pointing toward us with his long index finger, he thus addressed us: I confirm all the directions in my will respecting my slaves, and direct them to be enforced particularly in regard to a provision for their support;" and then raising his arm as high as he could, he brought it down with his open hand on the shoulder of his favorite John, adding these words, 'especially for this man.' At the close of this exhausting effort I remarked to my fellow witnesses that my patient a short time before informed me, in private, that according to the laws of Virginia a will might manumit slaves, yet in order for their subsequent support it was necessary that a declaration should be made in the presence of one or more white witnesses, who after receiving it from the party should remain and never lose sight of him until he was dead. I then appealed to the dying man to know whether I had stated it correctly: he replied, 'Yes,' and gracefully waving his hand as a token of our dismissal, he said, 'The young gentle-

men will remain with me.' I took leave with an assurance that I would return as speedily as possible and remain with him.

"After an absence of perhaps an hour or more, and about fifty minutes before his decease, I returned to his sick room—but now the scene was changed; his keen, penetrating eye had lost its expression; his powerful mind had given way, and he appeared totally incapable of giving any correct directions relative to his worldly concerns. To record what took place may not be required, further than to say that almost to the last moment some of his eccentricities could be seen lingering about him.

"He had entered within the dark valley of the shadow of death, and what was passing in his chamber was like the distant voice of words which fell with confusion on the ear: the further this master-spirit receded from human view, the sounds became less distinct, until they were finally lost in the deep recesses of the valley, and all that was mortal of Randolph of Roanoke was hushed in death.

"In conclusion perhaps it may be proper for me clearly and distinctly to state that at the time he made the declaration in my presence relative to his will he was capable of correctly discriminating between thing and thing, and he also possessed tenacity of memory; hence I give it as my decided belief that he was of sound, disposing mind and memory. Early on the afternoon of the day on which John Randolph died it was concluded by the four witnesses to commit to writing the declaration which he had made according to their understanding of them. This I did in a room contiguous to the one wherein he died, and where his corpse was then lying, and the original paper is now in my possession.

"The paper hereto annexed, marked and subscribed with my name, is a copy of the same.

(Signed) JOSEPH PARRISH."

Dr. Joseph Parrish, the second bearer of that illustrious name, has had a checkered career and one of interest in both public and private life. Early in his professional career he started the *New Jersey Medical Reporter*, and while editing it attended also to his practice. We find him in the flower of manhood at Rome, the once proud mistress of the world, interviewing princes of the church, and reaching with success the Papal Throne itself in his impetuous desire to reform abuses which he found so startling in the asylums and hospitals of that city. Again he is on his native soil, amid the smoke and carnage of battle, having during the Rebellion entered the Sanitary Commission, and although by education and religion he morally condemned war, filled with pity for the wounded and dying, he thrust aside all personal feeling of objection and was found among the suffering humanity that filled the camps and bloody fields, as he had been about the peaceful couches of the rich and poor.

So great was the trust of our own Government in Dr. Parrish, that later he was appointed by President Grant to negotiate a treaty with the hostile Indians in the territory north of Texas. He, however, was obliged to decline on account of the illness of his wife, but his brother, Edward Parrish, undertook the commission, and after successfully settling the difficulties of the Red Men, died in their midst. Subsequently these warlike tribes sent a delegation of their Chiefs to Washington, and after conferring with the Great Father there they paid a visit of respect to Dr. Parrish, during which by means of pantomime they gave him a description of his brother's death. So vivid and touching was the portrayal of these poor, rude children of the forest, that nothing was wanting to convey the full details of the sad death of their pale-faced friend. The tribes of the Kiowas, Comanches, Arrapahoes, Caddoes, Delawares, and others,

were represented by their Chiefs, upon whom Dr. Parrish bestowed a kind hospitality, feasting them not only on viands for the grosser man, but reaching their higher emotions through music. He also delivered a speech which for simplicity and clearness may take rank with those delivered by his kinsman William Penn, when under the spreading woods which once covered the place where his city now stands, he made his amicable treaties with the Red Skins, and taught mankind that peace is better than war.

The fame of Dr. Parrish spreading abroad, he was summoned to appear before the English Parliament, and the testimony there taken in regard to inebriety as a disease, was published by the British government. Some years subsequently he was again sent as a delegate from the American Association for the Study and Cure of Inebriety to the International and Colonial Congress held in Westminster Hall, London. Among the first to organize sanitariums for the cure of inebriety, he has lived to see them multiply at home and abroad. Fifty houses, public and private, have been established in America alone, and so valuable was his testimony in London that it led to the enactment of laws by Parliament for the establishment of retreats throughout Great Britain.

If inebriety is a symptom of disease, prison bars and strait-jackets will not cure it. True, by such discipline it may be temporarily lessened or removed, but when occasion offers, it will return in aggravated form. He condemned these severe methods with all the vehemence of his nature, and protested against their illegality. The inebriate members of the community he insisted must be cared for in retreats as diseased brothers, and restored as valuable citizens. In the advocacy of this theory it was inevitable that he should come into collision with opponents. Nothing daunted, with the energy of a strong nature he pursued the path marked out for himself. From

the make of his mind, as well as his moral seriousness, he had a true sense of the eternal fitness of things, and he saw if there is any approach to a happier life the advance must be made on the lines already indicated.

Dr. Parrish does not treat the subject of inebriety entirely from an ethical point, but believing it to be a physical malady, as such is to be attacked from the physician's standpoint; moral responsibility must be considered, but holds a secondary rather than a primary place in the treatment. Under this conviction prohibitory laws do not prohibit, nor do acts of state legislatures or Congress extinguish disease, or for that matter make humanity moral. No! legislation alone can not suppress inebriety; it is for benevolent persons, or voluntary organizations, or individual men and women who feel their kinship to the unfortunate, to undertake the work for which the state is inadequate. It is the function of the state to accomplish by legislation the general elevation of human life and the improvement of the material condition of the people, but to minister to a body diseased it can not, save by indirect methods, such as chartering retreats in which these subjects may obtain proper care and attention. Necessarily restoration depends much upon their own efforts, the remedy being subjective rather than objective, and does not therefore come within the domain of penal law, which exists for the punishment of evil-doers and the protection of man's rights, not for the cure of nervous maladies. Nor can law alone raise the standard of existence. Part of its duty is to discriminate between crimes, and minister accordingly. By treating inebriety as a disease, and not as a crime—the subjects thereof are encouraged to healthy effort, and manhood is strengthened and reinstated. Prohibition is a scheme of reform, it is claimed by Dr. Parrish and those like him. To be of real value it should strike at the root of the evil, and this can best be attained by

reaching the ethical nature of man. In the majority of cases moral suasion is more satisfactory in its results than force, and to reach dipsomania there is, so far as we now know, but one method—attack it as a physical disease—a morbid condition of the nerves through heredity transmission, or other abnormal neurological causes, in which the will is involved to such an extent as prevents free action.

The scope of this paper does not admit of debating the matter fully here; suffice it for the present to say that Dr. Parrish has taken a step which is of vast importance in solving one of the most momentous problems in sociology. He may be called the father of the American Association for the Study and Cure of Inebriety. To his faculty of organization the society owes much of its success, and what at first appeared an untenable theory became an actual realization, and it now stands upon a firm basis. The work indeed has been steadily widening and deepening until most obstacles which impeded its progress have disappeared.

Dr. Parrish has marked gifts of many kinds, a largeness of intellect in handling the subject he discusses, a masculine sagacity, and not only that "touch of nature" that makes the world akin, his active benevolence has been the result in part of his organization, and in part of the manners of that remarkable spiritual society in which he was born. His place in the medical life of his country is unique. It is not merely as an eminent physician, neurologist and writer that his name will live, but as a philanthropist. As a writer he possesses versatility. In his simple exposition of the subject of inebriety he is always felicitous, and whether as editor, lecturer or writer he invariably arrests and holds the attention. As editor, he created the *New Jersey Medical Reporter*, which later on merging into the *Philadelphia Medical and Surgical Reporter*, has lived half a century. He also edited *The Probe* and *Medical Mirror*. I

can not perhaps better illustrate his manner of speech than by quoting from an address he delivered on education. He said: "Money spent in education is money invested with the most reliable security, and yields the most tangible interest; money spent in philanthropic effort is money invested with security equally valid, and a return of per centage that can not be counted. Look abroad for a few moments upon the claimants who are asking for protection in our midst. There are hundreds of thousands of bright children asking the State for money to build school-houses and pay teachers. Her ear is open, her great heart throbs; for a moment her generous hand trembles, and then is opened; for her children have cried, and she can not turn from the cry of her children. School-houses are built; teachers are paid. The people are educated, and she gets back in the shape of mind, and the product of minds in the shape of morals, and the fruits of morality, ten fold more than she gave. Look again. There are her speechless children, mute and deaf. They stand in silent, touching dignity, and look at the great purse of the commonwealth, while their hearts throb in earnest appeal for houses and teachers to give what is needed for this class of infirmity, and while they stand, and look, and yearn the treasure is given, and the good mother of these unfortunates takes back from them abundant rewards that are more valuable than the gold she gave; and she is all the better and nobler for her giving.

Dr. Parrish's writings embrace a wide field, and have attracted attention at home and abroad; among them may be mentioned "Philosophy of Intemperance;" "Classification and Treatment of Inebriates;" "Intemperance as a Disease;" "Opium Intoxication;" "The Pathology of Intoxication;" "Alcoholic Inebriety;" besides numerous brochures and lectures delivered on important occasions. But he has not written merely

in the silence of his study, he has, as we have seen, created activities that shall go on when his generation and succeeding ones are mouldering in the dust.

The teacher-physician is of medium height, inclined to stoutness, and although his three-score years and ten have been reached, he has all the spirit and playfulness of a boy. With a dark, penetrating eye, twinkling now and again with merriment, and a flowing white beard, this combination of youth and age is very attractive. Simple in tastes and habits he has something of reticence akin to reserve, but this latter is in reality the outcome of a native modesty which, as is always the case in true merit, knows not its own high worth. Withal he is one of the most independent of men, contented that right prevail, though the heavens fall. Possessing abundant humor, with which there is a perfect blending of pathos and imagination, he can draw with admirable *verve* upon a store of anecdotes and reminiscences ranging from grave to gay.

In assisting the down-trodden, the inebriate, the idiot, the weak of our race, the dominating desire of his life is realized, crowning his years with that halo of benevolence, which quality stood Abou Ben Adhem in such good stead. Its evening is passing tranquilly, surrounded by those who revere and love him. Alas! those "nearer and dearer still," the beloved wife and children, await him in that mysterious hereafter; but there are still left to brighten his days a little granddaughter, his sisters, nieces and nephews. Upon one of the latter, Dr. Wm. Parrish, has fallen his mantle. His youngest brother, Mr. Samuel Parrish, lives near him, and is known in private circles as a Shakespearean scholar. I should not omit to mention, as belonging to the family environment, Col. Robert A. Parrish, a favorite cousin of the doctor's, and one of the most accomplished minds of our time. He is also an elegant and delight-

ful writer, his published account of a famous case against the French Government, originated and prosecuted under the Second empire, being as fas-

cinating as a romance. Thus surrounded we leave Dr. Parrish reaping in peace the good seed he has sown.

ALICE D. SHIPMAN.

STUDIES FROM LAVATER.—5.

SOME anatomists say there are thirty-six pairs and two single muscles in the face alone, and in the entire body more than five hundred. All eminent actors, singers, musicians, and sculptors are largely endowed with a fine quality of

“bold conceptions, in natural science, mechanism, and the fine arts. Dr. Johnson, Burns, Franklin, Shakspeare were all physically strong.”

The osseous or bony form gives firmness and tangibility of character. Men



THE MUSCULAR TYPE.

muscle. “These professions require a perfect control of the muscular sense. These faces show the muscular system pre-eminent in their organisms with a suitable brain system added. Great authors who are at the same time strong in muscular proportions will have

with this form are often, though not always tall, but they have large bones in proportion to other parts of the body. They often have sallow or dark complexions, long limbs and fingers, square shoulders, prominent nose, high cheek bones, hollow cheeks and temples,

and straight hair. The predominance of the lower part of the forehead projecting over and beyond, the eyes, the prominent chin, and often height, indicate the prevailing bone build. "Wrists, knuckles, nose, cheeks, and foreheads stand out plainly as if to say here I am, you can depend upon me in case of emergency. In all the portraits of Lincoln the bones jut out all over his face, and his honesty has marked the [pages of history as it did his fea-

the development of this bony structure. "The very constituents of bone, lime, phosphate, magnesia, soda, etc., give stability, integrity, and firmness to the organization in which they largely abound."

Where the square-boned form predominates, the man acts on the square and goes straight and clear at his object. "Built upon straight principles, the bones forming right angles to each other, the character accords with its up-



BONY FORM—MOTIVE TEMPERAMENT.

tures with indistructible glory. Wellington was made of more bone than any other material, and a crown of honor encircles his name. The horse and the ox, most useful servants to man, have large bones. The camel carrying human beings so safely through pathless deserts is an animal of large bones." Large bones are as much an evidence of trustworthiness in men as in animals. Sunlight and exercise tend to

right and downright architectural formation." The most conscientious men have this square, bony structure. We see it plainly in the face of William Tyndale, a translator of the Bible and a martyr for the same. These bone structured men may be awkward, ungraceful, or slow, yet they are unselfish, enduring, loyal, peace-loving, yet full of moral courage. How often we see a man great in his toweringness and towering in

his greatness, "like a tall pine among oaks," with large bone form, and large brain form. Lincoln, Lafayette, and Holman are all noble examples of these bony structured men.

The brain and nerve form is the most important of all. To the rest it sustains the relation of master. Herbert Spenser is a fine example of this brain form of face shown in the breadth, fulness, and height of the forehead. This brain and nerve form requires food suited for its healthy and nervous action, suitable recreation after hard work, and sufficient and refreshing sleep. The brain is the seat of sensation, and by its "beautiful, diversified system of nerves, related to all parts of the body, whatever organ is damaged the brain suffers with it. An appropriate education and living may so modify the relative developments of all these forms so as to bring them all into that harmonious proportion, the condition of the highest mental and physical health." With all this classification of forms there is still left a degree of individuality. Says Lavater, "We are assured that the activity of nature wholly changes the body within a year, yet are we sensible of no change of mind, although our body has been subjected to the greatest changes of meat, drink, and other accidents, difference of air and manner of life does not change the temperament. The foundation of character lies deeper, and it is, in a certain measure, independent of all accidents. It is probably the spiritual and immortal texture into which all that is visible, corruptible, and transitory is interwoven. The statuary may carve a block of wood into whatever form he pleases, may make it an Eros or an Antinous, but he will never change the inherent nature of the wood." Says Mr. Sturtz, a celebrated savant, extensively quoted and admired by Lavater, "The outline of the soul forms itself in the arching of its veil and its motion in the folds of its garment. Each arching, each sinuosity of

the external adapts itself to the individuality of the internal. When the soul is in motion it shines through the body as the moon through the ghosts of Ossian.' From East to West envy everywhere looks like envy, and patience like patience, so every other passion is everywhere expressed by the same signs. Joy and pain have each their peculiar expression, acting upon peculiar muscles and nerves, till the oft-repeated passion plows deeper furrows in the face," and adds Lavater, "If joy and grief have each their peculiar expressions, so will the state of rest, the medium between joy and grief, have its peculiar expression. Had man for cen-



BRAIN FORM—MENTAL TEMPERAMENT.

turies past examined the human form, studied and compared and arrayed characteristic features, expressions, lines, and inflections, and proportions, the alphabet of the race of man might now be complete, we might only open it to find the interpretation of any countenance. We may yet obtain a physiognomical language, so rich and complete that an accurate description of the mind shall give an outline of the body." We need only to devote a single day to comparing and examining a collection of characters either in nature or in well painted portraits to find the clearly revealed lines of understanding,

the marks of poetical genius, or the curves of wit. Place side by side the pictures of the greatest musicians and see the striking resemblances in the lines and curves of the mouth and ear. See the high degree of harmony in the faces of Jenny Lind, Parepa Rosa, and Lucca, and other best singers of the age. I have shown the photographs of friends of mine, utterly unknown to him, to one of the best physiognomists in New York, and he has given a striking description of their temperament, and physical and mental peculiarities.

FACES AND FOREHEADS.

As through the mists the sun bursts forth, bathing with golden tide the



HARMONIOUS FACE.

dreariest landscape, so the innermost soul flashes forth its rising or regnant light, irradiating and ennobling the plainest features. So we see the twilight of hope, the dawn of faith, the lightning of purpose, the blaze of enthusiasm, or the glare of passion. This smiling, sorrowing human face arrests and attracts us more than than all earth's varying skies or shores. Nature is cheerless and lonely till the human face shines or smiles upon it.

It is because poet, painter, and sculptor, and all the world beside, have given to sky and sun and wind and wave the expressions of human feeling that they are so friendly and beautiful to us. Mirrors of our own face are the smiling sun, the weeping sky, the restless sea,

and the raging wind. The home-coming and departing of our dearest faces are inseparably associated with sunrise or sunset, nightly gloom or noonday glow. More than fire, or lamp, or crystal, than all art or all adornment, the most palatial home needs the noble, tender human face, to smile upon its weariness, to look out of the windows for our coming. The face hallows and consecrates all. At the door of every fortunate life has shone some loving face.

In the long procession of faces in the crowded street, some challenge and charm us; some are lowering or brightening, others sensitive, stupid, deficient, harsh, cold, cruel, repellant. Most we pass and forget, but like the blue violets in the open windows, whose sweet breath goes with us as we pass them, so the sympathetic sweetness of some faces seems to follow us and abide with us. In church, on Sabbath morning, how the faces here and there, like lights along a shore, rest and refresh.

"Lit up with the glow of sainthood, shining with the love and worship of the Highest, a heavenly nobility, they are in regal contrast to other heartless or earth-bound thoughtless faces. One I see with the plainest of bonnets and quaintest of shawls, but the star of Heaven's Legion of Honor gleams on her breast, and if ever ascending soul climbs the "delectable mountains," hers will, and I know it only by her face. In the shaded, silent chapel of our souls these sublime faces all the week are with us looking choirward still.

Street faces, and church faces, and home faces. We gather brightness or darkness or dullness from all. The atmosphere of our soul is chilling or glowing very much according to the faces nearest us. Some faces seem to freeze us. After being with these we are discontented with ourselves and every one else, we wish some good soul would come in and clear and cheer the air.

"A sublime face," says Lavater, "can neither be painted nor described, that by

which it is distinguished from all others can only be felt. It not only moves, it exalts the spectator. We must at once feel ourselves greater or less in its presence than in the presence of all others." "Nourish the mind with the presence of a great countenance, its emanations shall attract and exalt thee." Persons who are very much together often grow to resemble each other. We see this often in husband and wife who have lived together for years harmoniously. Among the church faces I have seen two whose lines of expression are marvelously alike. Both are thought worn and toil-worn, but both serene and benevolent; you can see, as the old hymn says, their fears, their hopes, their aims are one, their comforts and their cares.

Lavater gives profiles of a very ordinary married couple who had come to resemble each other. There are certain precious moments he says for the correct observation of the face, moments of unexpected meeting, of welcome and farewell, of emotion and anger, of tranquillity or passion—moments when a man is entirely himself, or entirely forgets himself. Trifles, he says, show much of the real character. The smallest office well done shows the power of doing something greater. The few moments at the beginning of a first visit may reveal more of true character than many hours thereafter. Each man has his favorite gesture which might decipher his whole character, might he be observed with sufficient accuracy to be drawn in that precise position. Much of a man's understanding and power may be shown by his manner of listening and paying attention.

The rarest of all gifts is the gift of unaffected, critical, patient attention. Such an one is an eloquent listener. In sleep the features and outlines, particularly the disposition of the body, are very significant. These are very distinct in sleeping children. In the form of the countenance and position a wonderful harmony will be discovered. Each coun-

tenance has its peculiar disposition of body and of arms.

In the settled features of the dead this harmony is still more discoverable. Death leaves at times a sublime, peaceful expression on a truly noble face, and sometimes sixteen, eighteen or twenty-four hours after death, the features seem more beautiful, better defined, more harmonious, more noble, more exalted than even during life. As says Lavater, "may there not be in all men an original physiognomy subject to be disturbed by the ebb and flow of accident and passion, and is not this restored by the calm of death like as troubled waters being again left at rest become clear?"

I have seen the face of the dead shine as if illumined with an expression infinitely more radiant than ever brightened the living face. Someone has said the first act of a living babe is a cry of pain, the first expression of a dead face is a smile. A face, says Lavater, to be accurately observed should be seen in full, in three fourths, in seven-eighths, in profile, and from top to bottom.

There are two lines on the face from which the key to the character of the countenance is to be obtained. These lines are that formed by the mouth when the lips are closed or open, and that described by the eyelid over the pupil. To understand these is to understand the countenance. Lavater maintains that these two lineaments can define the mind and heart of any man. The very soul of resemblance in every portrait depends upon a strict adherence to these lineaments. They are so finely arched, so movable, that an exceedingly experienced eye is requisite to define them with precision. One should study also the line of descent of the forehead to the nose, and that of the nose to the mouth. These two almost unchangeable parts of the profile as compared with the before mentioned two movable lines, will teach us that they have a most immediate relation to each other, so that the one will be immediately denoted by

the other, and experience will teach us in time having the one given to produce the other.

"When," says Lavater, "we find the following features distinctly marked and proportionally combined, we have a face almost preternaturally perfect. A striking symmetry between the three principal features, the forehead, nose, and chin; a forehead ending horizontally, consequently eyebrows nearly horizontal, bold and compressed; eyes of a clear blue, or a clear brown, that at a little distance appear black, with the upper eyelid covering about a fourth or fifth part of the pupil; the ridge of the nose broad, almost straight, somewhat bent; a mouth in its general form horizontal, the upper lip of which and the middle line in the center are gently but somewhat deeply sunken; the under lip not larger than the upper; a round, projecting chin; short, dark brown curly hair in large divisions." This is Lavater's idea of a perfectly formed face: "In man alone we find the eyes are horizontal. The Mystics derive no small satisfaction

from the fact that this line crossing the straight line that divides the face perpendicularly, forms thus a genuine cross—a symbol from which they obtain strange sympathies and wondrous relations." In many a far away log house we find corncob dollies with their white cloth faces marked with a cross inclosing two circles for eyes; but yet in real faces these eye-lines are not always quite horizontal. Painters tell us that in most faces one eye stands a little above or below the straight line, a serious deviation that is really disfigurement, but a slight difference of elevation is found in all distinguished men of thought or genius. One side of the face is most always a little unlike the other. We all have our best side.

How often I have seen a lady arrange and rearrange her hair, adjust and re-adjust her bonnet, trying to make both sides suit, but she could not make them look equally well. The profile of the face taken from the right side will always look differently from one taken from the left. L. M. MILLARD.

NOTABLE PEOPLE OF THE DAY.—No. 31.

GEN. GEORGE VON CAPRIVI,

The New Chancellor of the German Empire.

THE retirement of Prince Bismarck from the Chancellorship of Germany surprised the political world. He had now and then threatened to resign his eminent position at the head of affairs, when the Reichstag did not appear inclined to vote for measures that he considered essential to the integrity of the Empire, and it was thought that in this last case he had merely attempted to show his disapprobation of recent successes of the liberals and socialists in returning delegates to the Reichstag. But the people were not to be intimidated by any declarations on the part of imperialism and "strong" government, as the elections this year in Berlin and elsewhere have shown, and they have sent

a larger body of men than ever before to represent their demand for a proper consideration of the wants of the masses.

This is one view of the withdrawal of the man who may be said to have controlled the destinies of Germany for over twenty years. Another view is that the young and ambitious man who wears the imperial purple has opinions of his own, and desires to bear a more conspicuous part in the management of the nation, and thinks that he can get along without the supervision of the man who had grown old in the service of his grandfather. Taking this view of the event, of whose real nature we confess ourselves ignorant, we are reminded

of the relations between Louis XV. and Richelieu, but we trust that Wilhelm II. will prove a more capable sovereign than the pleasure-loving king of the French.

Of General von Caprivi, the new Chancellor, the reader naturally expects us to say a word or two, and in connection with the portrait herewith given we submit remarks by Professor Sizer.

analyze subjects, and to theorize soundly and wisely upon the facts that he acquires.

"He is exceedingly broad in the region of the temples, which indicates inventive, creative ingenuity, ability to comprehend affairs *en masse* or in detail, to appreciate the relations of forces to results, of things to their uses, and to understand complications without confu-



GEN. GEO. VON CAPRIVI, GERMAN CHANCELLOR.

"We infer," says he, "that the original is a man of large frame, good stature, ample vital power, and that he has a large and well-balanced brain. The front head shows abundant intellectual sagacity, and power of analysis and criticism, the ability to gather knowledge accurately and to keep it ready for use. Then he has large Comparison and Causality, which enable him to

sion; just as a skilful weaver will look at a piece of complicated textile fabric, and at once see how he can reproduce it in the loom. He has also large Ideality, which is connected with Constructiveness in its action; hence he has invention, power to create resources from given conditions;—and if he shall not prove to be a master in diplomacy, as he is doubtless a master in the evolution of

and control of troops, we shall be disappointed.

"We infer from the development that General von Caprivi has excellent financial capability, and would show skill in managing the revenues of a nation, making what is drawn from the people in the way of taxation subserve the public interest. As a business man he would conduct manufactures and workshops in such a way as to make good articles at as small expenditure of capital and labor as any other man in such lines of business.

"He is a man of wonderful order; systemizes everything and makes all work together like clockwork. We judge that he has refinement and good taste, a ready sympathy for those in trouble, and a strong tendency to spirituality and religious feeling. He ought to be a thoroughly good talker so far as fluency is concerned, but especially an accurate talker so far as definiteness, clearness and vigor of style are required.

"The head is decidedly broad in the central region and it is likely so in the posterior region, so that we should credit him with force, courage and enterprise, and at the same time give him a good degree of Secretiveness. In affairs of state he would be able to act with proper reticence and concealment when it was necessary.

"If we had a side view of the head, showing the back part, we could judge better of his social and aspiring disposition. As it is, from the attitude and expression, we are inclined to regard him as a man of ambitious and dignified tendencies, aiming to keep himself clean, upright, and moral in his work and demeanor. He seems to be hopeful, firm, honest and thorough. There is less of the sternness of expression, and of that which may be called roughness and hardness of feature than have been attributed to his great predecessor."

Little has been known of George von Caprivi on the American side of the Atlantic, so that not a little curiosity was

awakened among Americans on the announcement of his name in so prominent a relation to the German government. From a sketch furnished the *London Times* our details of his career are obtained.

George von Caprivi de Caprera de Montecucculi was born at Berlin on Feb. 24, 1831, and descended from an illustrious Italian family. His father was a high legal functionary in the service of the Prussian State. Entering a general regiment in his eighteenth year, he won rapid promotion, and served with distinction in the campaigns of 1864 and 1866. In 1870 he acted as chief of the staff to the Tenth Corps, of which he is now the commander, and won laurels in all the battles on the Loire. Swiftly ascending the military ladder, he was appointed in 1883 to the command of the Thirtieth Division at Metz, and next year, passing at a single bound from the army to the navy, he succeeded Herr von Stosch, on the latter's retirement from the head of the Admiralty.

In a short time naval men by profession were amazed at the mastery of their art and the perception of their interests which were displayed by a mere landsman and soldier like von Caprivi, and his administration conclusively proved at least that here was a man with power to adapt himself to new modes and lines of activity. Soon after the present Emperor's accession, on the death of Count Monts, he reorganized the navy, the command of the imperial fleet being invested in Admiral von der Goltz, while something like a Ministry of Marine was created under Rear Admiral von Heusner; and it was on this occasion that Gen. von Caprivi, sharing in the redistribution of military commands, was rewarded for his naval services with the Tenth or Hanoverian Army Corps, which is one of the finest in the whole army.

During the manœuvres of last Autumn, when the Hanoverians and Westphalians met in mimic warfare, with smokeless powder and other innovations

on their trial, the Emperor had opportunity to study this General's character and ability, and he must have been fairly convinced of their high degree, otherwise he would never have asked him to assume the great burden of responsibility which Prince Bismarck has now laid down. It was not without grave scruples that Gen. von Caprivi listened to the flattering proposals of the Emperor; his Majesty, as it is said, finally decided to have a soldier for his new Chancellor, thinking, as he does, with Frederick the Great, that a General must be the surest conductor of a foreign policy, as knowing best how far he can go with the army behind him.

The new German Chancellor looks a typical Teuton of the most impressive type. He might very well pass for a brother of Prince Bismarck himself, the personal likeness between the two men being remarkable. In point, indeed, of stature and breadth of shoulders Gen. von Caprivi even has the advantage of the man he is going to succeed, but otherwise he is characterized by the same massive jaw, heavy gray mustache, and bushy eyebrows, thick neck, solid square head, shrewd, penetrating glance, and general air of blood and iron, tempered with the polished suavity of a nineteenth century statesman.

A difference in the character of the two men might by some be discerned in their walk, for, while Prince Bismarck treads sharply and heavily, like a trooper, the gait of Gen. von Caprivi has something in it of deliberation and leisurely elegance, while not lacking emphasis. He is a good enough speaker but a brief one, and when at the head of the Admiralty he never failed, from his place on the Federal Council bench in the Reichstag, to put his case clearly and well. Indeed, it may be said that it was his tenure of office at the Admiralty which enabled him to become fairly acquainted with the internal machinery of the Imperial Government.

EDITOR.

A SONNET.

A FESTIVAL OF SONG.

Obedient to the early robin's call,
And to the bluebird's soft and tender note,
On wings of many colors came afloat
The airy choir, to their own festival,
Within the horizon's hospitable hall;
And each guest wore his daintiest dress-coat,
Fastened with plumes about his songful
throat.
It was a feast of song and free to all.

The oriole was a most gorgeous guest,
Attired in richest hues, all trimmed with gold,
The boblink sang sweeter than the rest,
His notes were blossoms written on the mold,
But who can find the tuneful rhythmic words,
Fit to interpret music of the birds?

GEORGE W. BUNGAY.

WISHING.

There's lots of time that people spend
Wishing.

In seeking some desired end
By wishing.

They seem to think, without doubt,
That anything they've figured out
Can in some way be brought about
By wishing.

They plant themselves upon a chair
Wishing.

The hour for working finds them there
Wishing.

They find that labors gall and irk,
They have no love for any work,
And so they sit around and shirk,
Wishing.

If you've a wish you would fulfill
Wishing.

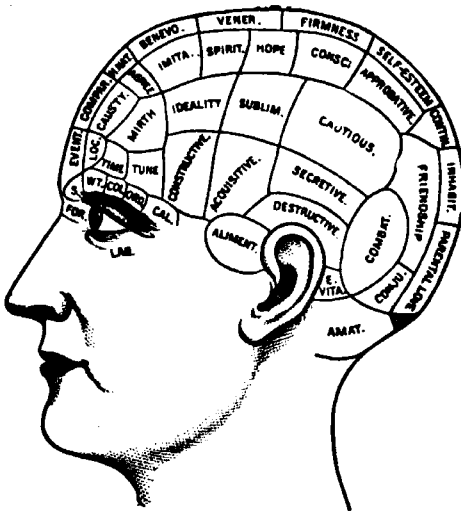
Just bear in mind you never will
Wishing.

To make the highest wish come true
You've got a lot of work to do,
You'll never be successful through
Wishing.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



MENTAL MECHANISM.—NO. 9.

HOW FACULTIES WORK TOGETHER.

WHEN faculties act habitually together they make a common development. The parts of the brain which constitute two organs, or four organs, if they are habitually worked at the same time in harmony, they incline to concentrate, as it were to flow together, to lean toward each other. Some of the best inferences, or what people call "hits," are made by the study of these combinations. A person who is accustomed to work his Combative-ness, and struggle against time, distance, and opposition for the glory there is in it, for the praise and distinction he gets, it will be found that his Combative-ness and Approbative-ness draw together in their development. Approbative-ness works downward toward Combative-ness, and Combative-ness develops upward toward Approbative-ness, and the fullness is at the region which divides the two devel-

opments. Base ball players, although they expect to get pay, the inspiration which praise gives them through Approbative-ness, the honor which is bestowed upon those who are counted successful, will lead men to do marvels of energy and effort in the accomplishment of skill and success in their work. Really, it can't be a very pleasant or comfortable thing for a man, in order to reach a base, to fall forward on his breast and arms, and slide ten feet on the ground, to avoid being touched by the ball and put out, or to get to that base quicker in that way than he could reach it in any other way. His Approbative-ness inspires Combative-ness to make the achievement, and an acre of men will shout his praise. We often notice that Approbative-ness is sagged down, and developed toward the animal propensities, toward Secretive-ness and Acquisitive-ness, as well as toward Combative-ness, and then we expect that the Acquisitive-ness, or the activity of Secretive-ness in working out some sly trick that will furnish the food for Approbative-ness. His pleasure comes from the exercise of Approbative-ness in conjunction with Secretive-ness, which sometimes stretches a point, or strains the truth, or thins it out so as to make it too tenuous to be strong, and produce mutual gratification in all that group of faculties.

Occasionally, we find Approbative-ness elevated high up; it works with Self esteem, Firmness, and Conscientiousness, as if it were too elevated in its notions to consort with fear, force, and appetite, and the other lower organs.

There are persons who crave recognition, reputation, and praise through Ap-

probativeness, but the channels are all low. The faculty seems to consort with the propensities, and not with the higher sentiments. Again, this upward reaching of Approbativeness which takes in Self-esteem, Firmness, and Conscientiousness has a more moral and superior field of activity. It works with higher company. It talks of honor. It sues a man for slander, or libel, and then offers the money, which the verdict gives to some religious, or charitable object, as much as to say,—"I am too dignified, I am too high toned to seek pecuniary profit as a redress for being scandalized. I will not touch the filthy lucre. I will use it only as a means of sweating the wicked libeller, and making it as a plenary punishment for his slanderous tongue and libellous pen, and then, I will devote the money not to myself, but to some object of charity which needs it." We confess to a liking for this sort of clean-handed ambition and dignity that will punish the scandal-monger and libeller, and yet devote the fruits of the verdict to high and holy purposes.

The marvelous influence which Approbativeness wields in its exercise with other faculties furnishes a rich study, and one of the aids to the following of the influence of Approbativeness, is, that it has its significant signs and tokens, its natural language, its open face, including the attitudes and walk of the individual. We recently read of a conflict between a game cock and a hawk. The game cock struck with his spurs at the head of the hawk, which brought his breast in contact with the hawk's beak, and the hawk fastened his beak to the breast of his antagonist, and ripped the skin from the neck, laying bare the crop and breast, thus inflicting a death wound, but the cock made one final effort and brained the hawk with his spurs, and then, half raising himself, too weak to stand, he crowed three times in triumph, and fell over in death, but the hawk was dead first. That must be

called the "ruling passion," Combativeness and Approbativeness, "strong in death." That was "fighting to the finish."

—:O:—

. PHRENOLOGY EASILY APPLIED.

WE often hear it stated that Phrenology is not practicable, or in other words, that only those make character reading a business can derive any benefit from it, or who can benefit those whose characters they read.

The writer does not claim to be a phrenologist, other than any one may become by reading the PHRENOLOGICAL JOURNAL, a few other books, and the study of the phrenological charts and models, as he has done.

A few years ago, while staying a month or two at a private boarding house in a small town in Nebraska, I took from my pocket a late number of the JOURNAL, when the lady of the house eagerly asked me if I was acquainted with Phrenology. I answered that I was to a limited extent only. This proved to be a rash assertion, for I got no rest of body or mind until the whole family had an examination, including four college students and the hired girl; the victim in each case receiving such exclamations as, "I told you so!" from the others. The examination seemed to be satisfactory to the recipients, and the hits made were almost as much of a surprise to myself as to the others.

As I had been there several days previous to this time, and had, of course, become somewhat acquainted, so in order to prove to them that from this alone that I had been enabled to read their characters to such an extent as to surprise them, I requested that they have an examination given to any of their friends who might stop with them over night, and of whom I could have had no previous knowledge.

A few evenings after this, on entering the house I met a gentleman whom I had never seen or heard of; when the lady of the house said, "With your

consent and the permission of this gentleman, we will have you give him a phrenological examination"; and I proceeded to do so.

Among other things I told him that he had a good organization, with the Vital, Motive, and Mental temperaments almost equal, and a head measuring twenty-three inches in circumference and well balanced, and, therefore, he ought to succeed in almost anything in which he should engage, more especially in a mechanical line, as the organs of Constructiveness were very large. He then asked what particular trade he would do the best in. I replied, "As you have strength as well as activity, you should be a good house builder, and do the stone work for the foundation, do the brick work, the carpentry and the plastering, and all kinds of work in that line.

Now which, if any, of these trades do you follow?" He said, "I work at *all* the trades you have mentioned, and flatter myself I am reasonably good at each of them."

These people who had known him for thirty years, told me afterwards that "he was accounted the best all-around mechanic in the West."

Soon after this, a very different subject was presented for examination. He was a low, heavy set man, with very heavy gray beard and hair. He looked as mild as a sheep, and very much like one, but I soon discovered that he was "a wolf in sheep's clothing." His head was very large in circumference, heavy at the base, broad between the ears, strong in animal propensity and selfish feeling, large in the organs of perception and fair in Constructiveness, there was a sharp, bony ridge running from front to rear, the back part the higher and sloping away like a roof on each side, showing meager moral development. I described him as adapted to heavy work as a farmer or mechanic, that he had a strong appetite for food and drink, and especially a strong sex-

ual tendency, and this was all I wished to say at that time.

The people asked me afterwards why I did not say more about him. I replied that the organ of Cautiousness in me was large in my brain, and I feared I might go too far. They said he was one of the worst characters in the country—that he had just left his fourth wife, and that there was nothing too bad for him to do. I have since heard that his last wife died soon after he left her, and it is suspected he was the cause of it.

I could give more instances of like character, but these are sufficient to show that by the aid of this science almost any one may read character to an extent impossible without it.

M. B. NICHOLS.

—:O:—

A MISTAKE.

A CUSTOMER writes us from Iowa, March 18th, saying he had met and been examined by a man who called himself Prof. Eaton. Thinking the examination very incorrect, he asked the "Prof." if he had a diploma, and he replied "No, Congress would not permit a diploma on Phrenology." He said he was with us for six years.

We beg to say that no person of that name was ever a day with this house as student or employe, and we are not aware that such a person ever crossed our threshold.

The "American Institute of Phrenology" was incorporated by the legislature of the State of New York in 1865, and every year since then it has taught classes of students, and given them its diploma, and that its diploma was recognized in a law court in the State of Pennsylvania and recently in a court in Alabama as giving its holder lawful authority for the practice of Phrenology as a profession. State Legislatures incorporate colleges and confer authority to grant diplomas.

Not a few persons successfully and ably practice Phrenology who have never taken a course of instruction in the "American Institute of Phrenology," but it is very common for quacks and ignorant pretenders to

claim that they have been through the "Institute," or that they have been employed by us in our office and to lecture in public or go from house to house to make examinations, who may be utterly unknown to us. All persons who have been graduated by the Institute can show a diploma. Just ask them to show it, and if they fail to do so you may be sure you have met a lineal descendant of "Ananias and Sapphira." Every year the Institute issues a circular containing the names of all who have graduated, which will be sent by mail to any person who may write for it.

—:O:—

NOT A MISTAKE.

—, Va., March 22, 1890.

PROF. SIZER:—Your delineation of the character of the lady from Photographs, including the adaptation to me, etc., was received in due time. The lady regards the description as very true, and says she will accept your advice as to health, habits, and pursuits, and put it in practice. I also shall ever feel deeply obligated to you for timely advice.

Thankfully yours, ***

—:O:—

J. H. THOMAS, graduate of the American Institute of Phrenology, is in the class circular erroneously made to reside in Illinois when it should be Ohio. His address is Navarre, Stark Co., Ohio.

—:O:—

CHARACTER FROM PHOTOGRAPHS.

MANY persons who reside at so great a distance that they can not visit us, desiring to avail themselves of our professional services, have written to us inclosing photographs, requesting our opinion of the character, talents, and proper pursuits of the originals.

These requests becoming very numerous, and the likenesses generally being taken in a manner not adapted to the purpose, we deemed it necessary to prepare a circular giving full instructions how likenesses should be taken for examination; also rules for the measurement of head and body, and such other points of information as would form a basis of judgment in regard to temperament, constitution, and health.

This circular, called "Mirror of the

Mind," is illustrated by engravings showing the forms of many heads, with full directions for those desiring descriptions of character.

Thousands have availed themselves of this method of learning their true character, and to what profession, trade, or occupation they are adapted; and not a few have been saved from bad habits and wrong pursuits, as well as from unfavorable, social and domestic alliances, by sending the portraits of persons of whose real characters they desired to know more than they had the time and opportunity to learn in the ordinary way.

Parents consult us in regard to the choice of pursuits for sons, whether educational, mechanical, or agricultural; or for daughters who must make their own way in the world, and who would know whether in a trade, art, or teaching they would be most successful.

Many people are broken down in health and constitution, and need plain advice as to the proper means of recovery. Their physicians do not always tell them how to escape from their morbid conditions, because not employed to explain the case, but to treat and cure the patient. We aim to instruct the applicant, when necessary, as to the right mode of living to get rid of morbid conditions, and how to retain health and vigor by normal means. The words of thanks which come to us from those who are benefited make working for mankind a pleasure.

We have received likenesses for examination from English settlers at the Cape of Good Hope in South Africa, from New Zealand and Australia, from Japan, the West Indies, from England, Scotland, Canada, Mexico, and scores of them from Oregon, California, and the Rocky Mountain settlements, as well as many from persons at shorter distances, yet so far that the cost of coming to New York would be far more than the cost of our professional services.

The circular, "Mirror of the Mind," alluded to before, explains terms, etc., and will be sent promptly to all who request it.

We have numerous letters testifying to the accuracy of these delineations, and the great practical benefit derived from the advice and instruction imparted.

SKETCHES OF PHENOLOGICAL BIOGRAPHY.—No. 2.

DR. J. G. SPURZHEIM.—*Concluded.*

DR. SPURZHEIM found in Paris every facility for prosecuting his studies and opportunities to teach his doctrines to students from every part of the civilized world. These considerations decided him to make that his permanent home. Here he published several works, in the French language, entitled *Sur la Folie; Sur la Phrenologie; and Essai Philosophique sur la Nature Morale et Intellectuelle de l'Homme*; besides his medical dissertation *Du Cerveau sous les rapports Anatomiques*. In 1821 the degree of Doctor of Medicine was conferred on him by the University of Paris.

In 1818* Dr. Spurzheim married a widow—a French lady—who was in every way well suited to him, and with whom he had long been acquainted, and he felt her loss most deeply after her death in the winter of 1829-30. It has been thought by some that America would not have been blessed with his presence and his lectures had he not met with this sad deprivation. A short time previous to his own departure from this life, in speaking of her, he said: "She possessed a mind of an uncommon character," and "that he had never found one superior to her." "One of the reasons," he said, "which influenced him in choosing her for his wife was the knowledge that she had undergone great suffering, which he thought essential to the perfection of human nature." Thus said Dr. Follen.

In 1825 they went to London, where he commenced a course of lectures at the Crown and Anchor Tavern, March 15th, at 8 P. M., and another course in the west end of the city at 3 P. M., beginning April 7th.

He now lectured to crowded audiences instead of a small number as in 1815, and the notices from the press and in the medical magazines were compliment-

ary and advised an attendance on his lectures. The London *Lancet* reported the initiatory lecture in full, and said: "We never listened to the addresses of any lecturer whose language was so characteristic of candor and truth; indeed *we are perfectly satisfied*, and here we are sure we shall be joined by all those who have had the pleasure of hearing him."

The *Globe* gave the following notice of his dissection of the brain:

"Dr. Spurzheim, on Wednesday, dissected the brain, in the presence of several of the gentlemen who attend his lectures. Whatever difference of opinion there may be as to Phrenology, there can be no doubt, we think, as to the superiority of the mode of dissection which Drs. Gall and Spurzheim have recourse to, over that which has been hitherto practiced in the anatomical schools. According to the old plan of dissecting the brain, the operation is commenced by slicing off horizontally a portion equal to about half its bulk, and containing the most material part of its organization. This may be very well when the object is merely to discover whether there is effusion in the ventricles; but it is quite obvious that neither this nor any plan of slicing a soft structure with a sharp instrument can show the organization satisfactorily. Dr. Spurzheim follows the more rational plan that has been adopted in the case of all other parts of the body, namely, tracing the course of the fibers. He showed, in the most satisfactory manner, the fibrous structure of the brain, commencing at the base, the decussation of the fibers, and their divergence from the base to the several upper and exterior parts, which he considers as the several organs of propensities, sentiments, and intellect. By a comparison of two brains, he showed the diversity in the size of the folds or organs of the brain externally, and the identity of their general arrangement and direction in both cases. By a dilatation of the lateral ventricles, he showed the manner in which, in hydrocephalic heads, the brain might be distended without any destruction of its parts. He attempted, we think, with perfect success,

* See page 239, vol. 8, *Edinburgh Phren. Jour.*

to show the frivolousness of the objections, drawn from the anatomy of the brain, to the foundations of the system of Phrenology. It appears that the fibers which diverge from the base are continued from the outermost parts of the brain, but that in their course new fibers are added. Where this addition takes place there is uniformly observed gray or cineritious matter. In this way the difference is accounted for, observable in the color of the brain, according to the direction in which it is cut, whether across the fibers or in the direction of them."

The students of the different hospitals subscribed a handsome sum, and paid it as a fee to Dr. Spurzheim to teach them his method of dissecting the brain.

In 1826 he had published several works in English, in London. "Phrenology in connexion with the study of Physiognomy;" "Phrenology, or the Doctrine of Mental Phenomena;" "Philosophical Principles of Phrenology;" "Philosophical Catechism of the Natural Laws of Man;" "Anatomy of the Brain, with a general view of the Nervous System;" "Outlines of Phrenology;" "Elementary Principles of Education."

During that year he visited Cambridge and was received in that seat of exact learning with honors seldom bestowed. An eminent scholar of Cambridge says: "He was feasted in the college halls every day he was here. Our anatomical, and, I believe, our medical professors, are among those most favorably disposed to his science."

Early in 1827 he lectured in Bath and Bristol to crowded houses. The interest increased with each lecture, and the last lecture was the most numerously attended at both places. That year he took a house in Gower street, London, where he had a large collection of phrenological specimens which were open for inspection every Thursday, from 2 to 4 o'clock; at which time he answered any question or objection concerning the science.

He also lectured at his own house; and on the evenings of Mondays and Thursdays he had practical conver-

sations on Phrenology, with an examination of his auditors.

In January, 1828, he re visited Edinburgh, where he delivered a popular course of lectures on Phrenology which was attended by a large number of ladies and gentlemen, also a separate course on the anatomy, physiology, and pathology of the brain, to eighty medical gentlemen, four-fifths of whom were students. By solicitation, he repeated his popular lectures, which were listened to with the deepest interest. A great change had occurred in the minds of the people of Edinburgh since his visit in 1815. Sir William Hamilton still opposed Phrenology, and Dr. Spurzheim challenged him to a public discussion of its truths and benefits, but could not enlist him in a public defense of his views.

On Friday, January 25th, 1828, the Phrenological Society of Edinburgh, which was formed February 22d, 1820, by George Combe and others, gave a dinner in honor of Dr. Spurzheim. As chairman, Mr. Combe made a felicitous speech in which occurs the following testimony expressive of his love and appreciation of the science and of Dr. Spurzheim as its advocate, by whose teachings he had fallen in love with, and himself became a teacher of its doctrines:

"It is eleven years this very month, since, by the kindness of Mr. Brownlee, I was first introduced to Dr. Spurzheim; and I speak literally, and in sincerity, when I say, that, were I at this moment offered the wealth of India on condition of Phrenology being blotted from my mind forever, I would scorn the gift; nay, were everything I possessed in the world placed in one hand, and Phrenology in the other, and orders issued for me to choose one, Phrenology, without a moment's hesitation, would be preferred." Mr. Combe's toast at the close of his speech contained this sentiment: "Long life, health, and prosperity to Dr. Spurzheim!"

In Dr. Spurzheim's response to this toast occurs the following sentence:

"This day is for me a day of joy which I never hoped to see. My joy would be complete were Dr. Gall amongst us. The ideas crowd upon me, and I scarcely know what to say. I heartily thank you in the name of Dr. Gall and in mine, for the honor you have done us. Dr. Gall and myself often conversed together about the future admission of our doctrines. Though we relied with confidence on the invariable laws of the Creator, we, however, never expected to see them in our lifetime admitted to such a degree as they usually are."

Seven months from that memorable day of January 22d, 1828, in Edinburgh, was the day we mourn as the day when the founder of Phrenology, Dr. Gall, breathed his last at Paris, on the 22d of August, 1828, at the age of 70 years.

During his stay in Edinburgh he visited many places and institutions where he saw persons with peculiarities of character that were confirmatory of the doctrines he taught, and accumulated facts for future use in his writings and lectures. Having been invited to re-visit England and Ireland, he spent the first part of that year in lecturing to large and enthusiastic audiences in various cities of the United Kingdom before leaving for Paris, where he continued to lecture and teach. It was in Paris that he lost his wife in the latter part of 1829. To that loss he attributed the disease of his heart when he said his pulse had intermitted ever since her death.

In March, 1830, he accepted an invitation to re-visit Dublin, where he added many converts to the science and received new honors from the most intelligent classes of society. By invitation he then visited Belfast, where all the medical men of note, all the literary characters of Belfast and the leading divines attended his lectures.

In June he returned to London, and to Paris, where, during July, August and September he witnessed the revolution which placed Philippe on the throne of the French.

In November he lectured in Liver-

pool, and in January, 1831, he gave a course at the Literary Institution in Bath. In April, 1831, the Phrenological Society of Dublin were gratified by his acceding to their request to visit them again. He gave them two courses, the later course being confined to the brain, its anatomy, pathology and physiology, and enthused all who listened to the outpourings from his vast store house of the knowledge he had gained, and now imparted to them.

Soon after his return to Paris from Dublin, Dr. Spurzheim received pressing invitations from the United States to visit and lecture in the principal cities of America, and having long desired to study its people, laws and institutions, its Indians and its geography, he at length concluded to attempt the tedious journey.

A full history of Phrenology in America could not be given without including the labors of Spurzheim. He left Havre for America on a sailing vessel, June 20th, 1832, and arrived at New York August 4th, after a tedious voyage lasting six weeks. Cholera was prevailing fearfully in New York at that time, making it dangerous for him to remain here, hence his stay lasted but a few days, when he went to New Haven, Conn. Commencement week at Yale began on the 11th, and he attended the whole of their exercises, at the close of which he went to Hartford on the 16th. There he visited—in company with the most learned men of the place—the State's prison, the Retreat for the Insane, the Asylum for the Deaf and Dumb, putting the science to the severest test, constantly learning, while he was also giving valuable instruction.

Dr. Amariah Brigham, superintendent of the Retreat was among those who accompanied him on these visits, and was exceedingly interested with what he heard and saw, for he, too, loved Phrenology and said it was of great benefit to him in his treatment of the insane.

Spurzheim arrived in Boston August

20, but sixteen days after he reached New York, and, having kept himself busy from the time of his landing, of course, had not rested after his fatiguing voyage.

His arrival in Boston was heralded by the press, and then began another round of visiting and visitors, for the literati of Boston paid him deference, and he was besieged by invitations to breakfasts, dinners and suppers. Being interested in educational efforts, he visited the schools whenever he heard of any method of teaching that was out of the usual course. He also wished to listen to those preachers of whose fame he had heard, and therefore "lost" no time in resting, as would have been wisdom for him to do. He had great confidence in his power of physical endurance, and therefore overtaxed it before he had become accustomed to the Autumn climate and the east winds of that region.

On the 17th of September (less than one month from his arrival in Boston, August 20th) he began his first course of—18—lectures in Atheneum Hall, which was too small to admit all who wished to attend, and he therefore engaged the Hall of the Masonic Temple, afterwards used as the United States Court House.

Dr. Nahum Capen, in his "Reminiscences of Spurzheim" says:

"It would be difficult to describe his person and presence. An interview with him was indeed 'A feasting presence full of light.' His cordial greeting, his inimitable smile, and dignified suavity were irresistibly captivating. In him there was

'A combination, and a form, indeed,

Where every god did seem to set his seal,

To give the world assurance of a man.'

"He was tall—about six feet in height—and well proportioned, the picture of vigor and good health, and had a countenance beaming with superior intelligence. He was slow and graceful in his walk, and, without the air of uneducated curiosity, he appeared to see everything that was peculiar or had a meaning.

"It was my privilege to meet him almost daily, to converse, to walk, or to ride with

him; and, though always cheerful, and sometimes playful, he seldom indulged in remarks upon trifles without giving instruction. Soon after his arrival I called upon him. I had a desire to become acquainted with his philosophy. I sought him as a teacher. * * * From this time forth we were together more or less every day.

"He gave me control of his business affairs, and placed in my hands from time to time all his money, and without counting. One day, when in his room, he remarked to me, 'I believe I have some money in my trunk. Please take care of it.' I found nearly five hundred dollars in gold on the bottom of the trunk, but I could not persuade him to count it. The receipts from his lectures were frequently handed to him tied up in a paper by his business agent, and he would pass them to me unopened, with the simple remark, 'Please take care of this money.' When he died, all his property, papers, and money were in my hands."

Soon after the beginning of his lectures in Boston he began another course at Cambridge, where his lectures lasted two hours. Those in Atheneum Hall lasted an hour and a half. Besides these he delivered a course of five lectures in the afternoon of every other day before the Medical Faculty and other professional gentlemen of Boston and its vicinity on the Anatomy of the Brain.

Thus we see he was lecturing six evenings in the week and three times during the days. He became warm and exhausted at an evening lecture, and on leaving the hall became chilled and contracted a cold that caused fever, from which he did not take time to rest and thus recuperate. He would not consent to take any kind of medicine until he had evidently become too feeble to longer resist, when he took some simple drinks. Feeling convinced that he could not live he expressed himself as willing to go. Several physicians were constantly with him, day and night, and everything was done for him that love or duty could suggest, but the end came November 10th, at eleven o'clock at night, and on the 17th, just two months

from the opening of his first lecture in Boston — September 17th — his funeral was solemnized in the Old South Church on Washington street.

In his *Reminiscences of Spurzheim* Dr. Capen says :

"The solemn funeral rites were paid to the remains of Dr. Spurzheim, at the appointed time and place. The body of the deceased was removed from the Medical College to the Church at 12 o'clock, accompanied by the Boston Medical Association. The bells of the city were tolled from two to three o'clock.

"The services were commenced at three o'clock, by a dirge on the organ by Zeuner. The Rev. Dr. Tuckerman addressed the throne of grace in a most fervent prayer. An able and eloquent oration was then delivered by Prof. Follen, of Harvard University. The following beautiful Ode, by Rev. John Pierpont, was then sung with great effect by the Handel and Haydn Society :

Stranger, there is bending o'er thee
Many an eye with sorrow wet:
All our stricken hearts deplore thee;
Who, that knew thee, can forget?
Who forget what thou hast spoken?
Who thine eye—thy noble frame?
But that golden bowl is broken,
In the greatness of thy fame.

Autumn's leaves shall fall and perish
On the spot where thou shalt rest,
'Tis in love we bear thee thither
To thy mourning mother's breast.
For the stores of science brought us,
For the charm thy goodness gave,
To the lessons thou hast taught us,
Can we give thee but a grave?

Nature's priest, how true and fervent
Was thy worship at her shrine!
Friend of man, of God the servant,
Advocate of truths divine,—
Taught and charmed as by no other,
We have been, and hope to be;
But while waiting round thee, Brother,
For thy light—'tis dark with thee!

Dark with thee! no; thy Creator,
All whose creatures and whose laws
Thou didst love shall give thee greater
Light than earth's, as earth withdraws.
To thy God thy god-like spirit
Back we give, in filial trust;
Thy cold clay—we grieve to bear it
To its chamber—but we must.

"On the evening (Nov. 17th) of the funeral several of his friends met and agreed to meet again and organize a society to be called the Boston Phrenological Society, at the next recurrence of Spurzheim's birthday, Dec. 31st. It was formed according to appointment, and in three months numbered 90 members, more than half of whom were professional men. They are all, now, numbered with the dead, and the society did not arrange for its perpetuation.

"Casts of the head and brain were taken, and several sketches made by different artists, among whom was Audubon, our American ornithologist. His body was examined after death by the Medical Society and embalmed, and deposited in the receiving vault of Mount Auburn Cemetery, under Park Street Church, so that, if his relatives desired, he might be removed to them. In those days several weeks necessarily elapsed before word could be obtained from them, and his remains were finally deposited in Mount Auburn, and were the first deposited there with the exception of a little girl, and Hannah Adams, author of a History of the Jews.

"A subscription was started at once to procure and erect a suitable monument and several hundred dollars subscribed, when, a few weeks later, Hon. William Sturgis procured an appropriate Italian monument—the first erected at Mount Auburn—and placed it over his grave. The name of the illustrious occupant alone — SPURZHEIM — is engraved thereon. Mr. Sturgis paid its entire cost, and received from the Boston Phrenological Society a vote of thanks, and a donation of a bust of Spurzheim from the artistic hand of Bally, giving the accurate outlines of the original."

Thus we see that although we owe much to Dr. Gall, the discoverer of Phrenology, we also owe much to Dr. Spurzheim for popularizing it and for discoveries of his own, as well as improvements in its nomenclature and in arranging and harmonizing what was yet unfinished when he commenced its study and dissemination.

The following is copied from the *Edinburgh Phrenological Journal*:

"When Dr. Spurzheim last visited Edinburgh, Mr. Lawrence Macdonald executed

an admirable bust of him, exactly the size of life, and combining the most perfect likeness with the majesty and grace of an antique. It is by far the best which we have seen, and the mind of the philosopher is portrayed in it in all its strength and simplicity. This bust is now a classical relic of a man whom posterity will unquestionably reverence and admire. The portrait, of which an engraving accompanies this article, was painted by Mr. William Stewart Watson, a member of the Phrenological Society—Edinburgh—who has kindly permitted us to take impressions from the plate."

The following development and measurements of Dr Spurzheim's head were, on 3d March, 1828, taken by Mr. Combe and Mr. Walter Tod. They are on a scale of from 1 to 20, as adopted by the Edinburgh Phrenological Society and described in Combe's System :

DEVELOPMENT.

1. Amativeness, full, or rather large,	15
2. Philoprogenitiveness, large,	18
3. Concentrativeness, rather small,	8
4. Adhesiveness, rather large,	16
5. Combativeness, rather full,	12
6. Destructiveness, very large,	20
7. Secretiveness, large,	18
8. Acquisitiveness, rather large,	16
9. Constructiveness, " "	16
10. Self-Esteem,	18
11. Approbation, large, or very large,	19
12. Cautiousness, rather large, or large,	17
13. Benevolence, very large,	20
14. Veneration, " "	20
15. Firmness, " "	20
16. Conscientiousness, rather large, or large,	17
17. Hope, rather full, or full,	13
18. Wonder — Marvelousness — full, or rather large,	15
19. Ideality, rather large,	16
20. Wit—Mirthfulness—rather large, or large,	17
21. Imitation, rather large, or large,	16
22. Individuality, large,	18
23. Form, rather large, or large,	17
24. Size, large,	18
25. Weight, full,	14
26. Coloring, rather full, or full,	13
27. Locality, large,	18
28. Number — Calculation — rather full, or full,	13
29. Order, rather large,	16
30. Eventuality, full,	14
31. Time, large,	18
32. Tune, " "	18
33. Language, rather large, or large,	17
34. Comparison, very large,	20
35. Causality, " "	20

See p. 140, vol. 8, Edinburgh *Phren. Jour.*

Mr. Capen communicated the intelligence of the decease of Spurzheim to his family, and also to his friends in Great Britain, and received from Mr. Combe a statement that he had often been heard to say he hoped his skull would not be buried; saying, "It will prove what my dispositions were and afford the best answer to my calumniators." Measures were therefore taken to preserve it, and the brain, heart, and lungs.*

In 1843 I saw his skull and brain, in the custody of Dr. Flagg, in Boston. The brain was preserved in alcohol. Since then it has perished, having become dissolved. Later the Boston Phrenological Society placed them with his collection of busts in the Warren Medical Museum connected with Harvard Medical School at Cambridge, a suburb of Boston, where it is very difficult to obtain access to them.

It was my wish to obtain those precious relics for the benefit of the American Phrenological Institute; and during the life of Dr. Nahum Capen, who was the only member of the B. P. S. left to say anything concerning their disposition I made every effort that could be suggested for that purpose, even proposing to become a member of the Society and induce other residents of New York to do so, in order to have the power to say something as to their disposal, and also wrote him that in my opinion, could Spurzheim himself be consulted in the matter, he would prefer to have them in our Cabinet, where they could speak for themselves, rather than be stored away where it was a "Sabbath day's journey" to obtain the privilege

* See copy of Capen's letter to George Combe p. 125, vol. 8, Edinburgh *Phren. Jour.*

to look at them. His final reply was that *they could not be had*. Soon after that, Mr. Capen passed away to the better land.

This sketch is necessarily limited, although the temptation to lengthen it is very strong—not, however, to eulogize

the man merely, but to credit him for the great good he accomplished in the 56 years of his life in this world.

That he may be a model for those who follow him as advocates of our heaven-born science is the prayer of

C. F. W.

STRANGE RECOVERIES OF LOST MONEY.

THE following incidents are certainly interesting as they concerned very large amounts of money :

The paymaster of a railroad company, having its headquarters in Boston, went out on one occasion with \$30,000 to pay off its employes. The money was carried under his arm, wrapped up in an old newspaper. He stopped at a little wayside eating-house for dinner, and on going away in a fit of absent-mindedness, left the money lying on a chair. He had not gone many miles from the place before he missed it, and his dismay on discovering its loss can well be imagined. Almost despairing of recovering the package left in so public a place, he hurried back, and, with trembling voice, asked the woman in charge if she had seen the parcel. "There's a bit of paper on the chair beyant," said she ; "perhaps that's it," which it proved to be, and the gentleman returned a happier and a wiser man.

A man in the same city lost a roll of bills amounting to \$10,000, which also was wrapped up in a newspaper. He told a friend of his loss, and the friend made him describe all the ground he had been over since he had the money. The last place mentioned was the post-office. The night was wet overhead and slushy under foot. They visited the postoffice, and going to the spot where the man had been standing they found two or three bits of torn newspaper. It was the same. They looked further, and at last found the lost treasure. It had been kicked in turn by every one who came into the office, and when found was untied and completely

soaked with water. It was all there, however, and the friends returned to the hotel and spent several hours in cleaning and drying it. The gentleman was so grateful for the sensible advice which had saved him from serious loss that he took out his friend and bought him the handsomest gold watch chain that he could find in the city.

A still more remarkable incident is related of the finding of \$130,000, lost by M. Pages in the Northern Railway station in Paris some ten years ago. As one Ezelot, a French soldier, was walking with two comrades through the station, they noticed on the floor a small package wrapped in a newspaper. They kicked it along before them for some distance, and when Ezelot was getting into the train, going home on short leave, one of his comrades, picking up the package, thrust it into the canvas forage bag slung at his side, Ezelot going on his way without having perceived the little pleasantry. Arriving at Neuilly, where his parents lived, Ezelot's mother, emptying the forage bag, discovered the bundle, but, thinking it a roll of old newspapers, put it on a table in the kitchen. There it remained for four or five days, till a married sister, calling in and seeing the package, was moved by an unwonted curiosity. Opening it she discovered documents representing £26,000, the loss of which M. Pages had advertised throughout Europe. The soldier and his parents, however, had not seen the advertisement, and not knowing what else to do, had recourse to the maire. That functionary, communicating with Paris, speedily

brought down M. Pages, who, gladly paying the promised reward of £1,000, went off with his oddly recovered treasure.

It would be an interesting supple-

ment to the narrative if we could have a record of the feelings of the soldier who thrust this unexpected good fortune upon Ezelot, when he heard the sequel of his little joke.

PARENTS' MISTAKES.

MANY mothers never understand their children. Poles are set up in family discipline and regimen of the same size and heights for all, as if their natures were like bean-vines climbing up just as far and high alike. So far as the mother knows their real needs and gifts, they might as well be so many bean-vines. Papa John spends his leisure when away from the bank in his room upstairs, comparing and classifying insects—a fourth type of the animal kingdom. He is deeply interested in the diptera, particularly the *sulicidæ* the flea family. He finds the flea has more muscular strength than any known animal, leaping to a distance of two hundred times its own length, dragging after it a chain a hundred times heavier than itself, and eating ten times its own weight of provision in a day. He greatly admires through the microscope its clean, bright shelly armor, and its agility and elegance. While thinking over the transformations in its development, he forgets that his boy John down stairs might do ten times more than he is doing and be a hundred times happier, if his energies were turned in the right direction with one-tenth the skill and patience. Mr. Borerick of London has shown in drilling a single flea to drive its four wheeled ivory chaise. He thinks the possibilities of the *Imago* family wonderful. He only leaves his absorbing study twice in all the afternoon. It is a holiday, and from the window where he has been looking at his last arrived beetle to get a better light, he sees his little Eva fall down on the sidewalk, and in a great fury he descends to the nursery to insist upon Mrs. John's giving her a good whipping

for falling upon the sidewalk and soiling her new cloak.

The poor child has lost by the fall a visit to her dearest aunt, is housed up for the rest of the day and then must enjoy in addition to her misfortune the "good" whipping. Once again in the afternoon, he comes down from his perch of contemplation in another rage to punish Harry for picking a grass blade from the newly mown lawn. He saw this fearful breach of the paternal code while examining another member of the diptera family at the window. Eva's and Harry's ideas of right and wrong are getting rather mixed. They have learned through the paternal physiognomy that it must be a sin to pick a grass-blade or to fall down. Eva thinks it must be a greater crime than to tell a little story. Lucy is older and has a fine perception of color. She likes blue dresses and blue bonnet ribbons, and she looks well in blue, with her golden hair and clear blue eyes and lovely complexion, but mamma John prefers brown dresses with great ugly brick-colored plaids and bonnets to match, so Lucy wears the brown dresses. She thinks them so unbecoming that she walks in the back streets to hide from observations and goes around often to see Mary and try on her blue dresses to see how pretty they are. When she is old enough to earn them, she will have blue dresses for herself. Young John has a fine ear and taste for music. Papa John thinks music "nonsense" in a boy, so John goes around the corner when he can keep it from his father and plays on Edward's violin. He improves wonderfully. Edward's father would be delighted if his own boy had John's

musical ability. So papa John and Mrs. John are trying to press these round children into their square holes; meantime everything shines in the house, not a grass blade is missing outside. The bees and beetles in the glass cases are increasing in number and variety. Little Eva is quite adroit in improvising stories to keep all annoying falls or mistakes from papa John. He is such a piece of dynamite when he gets roused. Papa John's frown bounds the horizon of the children's joys; they do not think much of what is good or noble in itself; they steer their lives so as to keep papa from getting mad.

When they play papa in the nursery, they shout at their dolls as if they would take their innocent heads off, imitating his vociferous example, often violently beating their helpless hands and enthus-

astically boxing their waxen ears. Meanwhile papa John tries hard and succeeds very well in fastening all the bees and beetles in their cases so as to look perfectly natural as if at rest in their native element.

Could he look into Lucy's starry eyes and see the brow arching over, then he might discover her artistic gift and encourage it. He might see in John's "round ear, round nose, round muscular body" the boy's musical gift and have his rare talent cultivated. He might leave his beetles awhile and help expand the folded wings in his boy's soul, that the transformations therein incomplete, might be developed into strength and beauty, and lay up for himself in his children's hearts a golden wealth of memories.

L. M. M.

HANNAH AS A MOTHER.

WHEN Hannah's child came, she considered it a part of her religious duty to take care of it. Instead, therefore, of going up to Shiloh to attend all the great feasts, as she had done before, she staid at home for some time, to give personal attention to the little one that God had given her, and that was still too young to be taken with safety and comfort on such long journeys. No doubt she supposed she was worshipping God just as acceptably in doing this, as if she had gone up to all the great meetings. And who will say that she was not right? A mother's first obligations are to her children. She can have no holier or more sacred duties than those which relate to them. No amount of public religious service will atone for neglect of these. She may run to temperance and missionary meetings, and abound in all kinds of charitable activities, and may do very much good among the poor, carrying blessings to many other homes, and being a blessing to other people's children, through the Sunday-school or Mission-school;

but if she fails meanwhile to care for her own children, she can scarcely be commended as a faithful Christian mother. She has overlooked her first and most sacred duties, to give her hand and heart to those that are but secondary to her. Hannah's way evidently was the true one. A mother had better be missed in the church, and at the public meetings, than be missed in her own household. Some things must be crowded out of every earnest life; but the last thing to be crowded out of a mother's life should be the faithful and loving care of her children. The preacher may urge that every one should do something in the general work of the church, and the superintendent may appeal for teachers for the Sabbath-school; but the mother herself must decide whether the Master really wants her to take up any religious work outside her own home. For the work there she surely is responsible; for that outside she is not responsible until the other is well done.

Another thing about Hannah was, that she looked after her own baby. She

did the nursing herself. She did not go to an intelligence office and hire a foreign woman at so much a week, and then commit her tender child to her care, that she herself might have "a free foot" for parties and calls and operas, and social and religious duties. She was old-fashioned enough to prefer to nurse her own child. She does not seem to have felt it any great personal deprivation to be kept at home rather closely for a year or two on this account.

She even appears to have thought it a big honor and distinguished privilege to be a mother, and to do, with her own hands, a mother's duties. And when we think what this child became in after years, what the outcome was of all her pains and toils, it certainly looks as if Hannah was right. It is not likely

she ever regretted, when she saw her son in the prime and splendor of his power and usefulness, that she had missed a few parties and other social privileges in nursing and caring for him in his tender infancy. If anything, even half so good, comes ordinarily out of faithful mothering, there are certainly few occupations open to women, even in these advanced nineteenth century days, which will yield such satisfactory results in the end as the wise and true bringing up of children. Many women are sighing for distinctions in the professions, or as authors, or artists, or singers; but, after all, is there any distinction so noble, so honorable, so worthy, and so endearing as that which a true woman wins when she has brought up a son who takes his place in the ranks of good and true men?—*S. S. Times.*

SCHOOL SAVINGS BANKS.

THE subject of the general introduction of School Saving Banks into the public schools of the United States is being discussed by the thoughtful in various localities. The system has reformatory and economic advantages no philanthropic mind can ignore.

The Saving School System has been in use in Europe since 1834, and is under the fostering care of the governments in France, England, Austria, Germany, Belgium, and Italy. They have found it satisfactory and advantageous.

American growth and development has been unexampled during the past century. Our "country is so big," as an Englishman in London lately said apologetically to me after introducing Mr. Morris, of Sydney, as a gentleman from my city, "so big we get the cities confused." We acknowledge the size, and though we do not cover Australia, we are "big."

Instruction in the daily use, growth, and decay of money, inasmuch as it is the one acknowledged medium of earthly trade, is man's primal want. The alpha-

bet introduces us to the world of letters and proper economy of pennies should acquaint us with the figures whereby we could early solve the problem of our bodily needs. Parents in some cases are able to administer this practical instruction. Apportion your child at birth any given sum, even \$10, if you are poor. Put it on compound interest for him. When he is able to reason, show him the note for it, and teach him the laws of earning and accumulation. Keep this economic training of your child in view, and when he reaches manhood, with your aid, he will have a nice little income, bond or mortgage, and what is more valuable, practical, independent ideas of money and money's worth. Girls need this nucleus and training even more than boys, as custom makes their opportunities for earning in after life less, while their demands are equal. Individual educators may exercise like care. The Savings Bank System has been in successful operation in the Indian Industrial School at Carlisle, Pa., since 1880. Capt. R. H. Pratt said he

could not teach the Indians the use of money without having it, so he instituted a system of paying the students small amounts for their works and taught them to husband it, until they have large bank accounts; having now to their credit \$5,500.

To reach the greatest number and accomplish general good we must enter the public schools. Mr. J. H. King, a French educator and ex-school commissioner of Long Island City, N. Y., has devoted time and thought to the accommodation of the best features of foreign Saving School Systems to our use. His plan as perfected is simple, practical, and excellent.

Sixty schools in seven different states and territories are now using it with expressed satisfaction. \$58,000 have been collected and stand to the credit of 9,700 pupils. Other school authorities are falling into line. The subject has been agitated by educators in Eastern Pennsylvania, and the system will be adopted in several districts this season.

The care of administration is comparatively light. The children bring their pennies on Monday morning only, and in answering to roll-call, take the money to their teacher, who credits it on the deposit slip which the pupil holds. Each child is provided with a bank book when he has accumulated 50 cents, and is an interest receiver when he has \$3. The money is kept in a regular Savings Bank.

The teacher has no power to withdraw or manipulate amounts, the child having in a little time the banking rights of an adult depositor.

Instructors have ample opportunity while collecting the pupils' savings to inculcate lessons of thrift and encourage generosity, which is often the outgrowth of economy.

Much of the money now wasted on sweetmeats, cigarettes, and other needless and hurtful indulgences, will be put to better use, and we shall have in

time a purer, wiser, happier, and more provident nation.

SARA LOUISA OBERHOLTZER.

"BOYS WANTED."—In the following vein, a contemporary serves up one of the greatest social "institutions" of the era: "Have you a boy to spare?—The saloon must have boys or it must shut up shop. Can't you furnish it one? It is a great factory and unless it can get 2,000,000 boys from each generation for raw material, some of these factories must close out, and its operatives must be thrown on a cold world, and the public revenue will dwindle. 'Wanted—2,000,000 boys,' is the notice. One family out of every five must contribute a boy to keep up the supply. Will you help? Which of your boys will it be? Have you given your share to keep up the supply for this great public institution that is helping to pay your taxes and kindly electing public officials for you. Have you contributed a boy? If not, some other family has had to give more than its share. Are you satisfied, voting to keep the saloon open to grind up boys, and then doing nothing to keep up the supply?"

"GOOD MORNING."

"Good-morning, world!" On the window
 seat
 She balanced her two little timid feet;
 She clung with her dimpled hands, and
 stood
 Framed in like a picture of babyhood.
 The clambering vines hung low and green
 'Round the sunniest curls that e'er were
 seen.
 As she stood with beauty and light im-
 pearled,
 And bade "Good-morning" to all the world.
 "Good-morning, world!" and the great
 world heard,
 Each rustling tree and each singing bird.
 The dancing flowers and the fields of grass
 Nodded and waved at the little lass
 And the far-off hills and the sky overhead
 Listened and beamed as the word was said;
 And the old sun lifted his head and smiled—
 "Good-morning, world!" "Good-morning,
 child!"



SECOND SIGHT.

DR. JOHNSON'S OPINION—CASES IN 1773 IN THE HEBRIDES—THE PROFOUND
HYPNOTIC TRANCE—THE CLAIRVOYANT FACULTY—KANT'S ACCOUNT
OF EMANUEL SWEDENBORG'S CLAIRVOYANCE IN 1767.

WHEN the great (and good) Samuel Johnson was roaming among the Hebrides more than a hundred years ago, he inquired * if there were any remains of the second sight. Mr. Macpherson, Minister of State, said he was *resolved* not to believe it because it was founded on no principle. JOHNSON.—“There are many things then which we are sure are true, that you will not believe. What principle is there why a loadstone attracts iron? Why an egg produces a chicken by heat? Why a tree grows upwards, when the natural tendency of all things is downward? Sir, it depends upon the degree of evidence that you have.” “Young Mr. M’Kinnon,” continues Boswell, “mentioned one M’Kenzie, who is still alive, who had often fainted in his presence, and when he recovered mentioned visions which had been presented to him.”†

In the Isle of Ulva, at one M’Quarrie’s house, M’Quarrie told them a strong instance of the second sight.‡ He had gone to Edinburgh, he said, and taken a man servant along with

him. An old woman, who was in the house, said one day, “M’Quarrie will be at home to-morrow, and will bring two gentlemen with him;” and she said she saw his servant in red and green. He did come home next day. He had two gentlemen with him, and his servant had a new red and green livery, which M’Quarrie had bought for him at Edinburgh, upon a sudden thought, not having the least intention when he left home to put his servant in livery; so that the old woman could not have heard any previous mention of it. This he assured them was a true story.

The “fainting fit” of M’Kenzie will be recognized as the deep hypnotic trance. Artificially induced this is a beautiful phenomenon. Two observed instances may be worth recording as showing the condition of the patient in this state as tested by the hand, the eye, and the ear. Both men were young, healthy, and in good condition, and had never been deeply hypnotized before.

One subject (noted in my field book as C B 33; a figure given here for convenience of reference) after passing through a stage of “delusions” (a stage of hypnotism when one is made to think that whatever is suggested is true and

* On Tuesday, September 7, 1773, at Sky.

† Boswell’s *Life of Johnson*, vol. ii., chap. xv.

‡ *Ib.*, chap. xx.

act accordingly), passed gradually into a profound hypnotic trance. His breathing was gentle and general; his pulsation delicate though regular, the secondary or systemic throb as heard at the heart being, as contrary to the normal beat, sharper and louder, even at the apex of the heart, than the primary throb.

The throb at the wrist was felt to be firm, regular, and normal, perhaps at the rate of 72. It is recollected of some other experiments that this was exceptionally free; altogether automatic, like a rippling brook. A somewhat later experiment was made when, the eyes fast closed, the eyelids assumed a characteristic horizontal margin; and on the lids being with some difficulty parted, the eyeballs (as would be natural in repose) were found turned upward and backward, by the pulling up of one muscle and the relaxation of the other; but while the eyes were handled, the pupil of one eye (and of the other as well) came slowly down into view, one more completely than the other, as they were relinquished. He said, on being awakened, that he did not dream.

At another time afterward a second subject (distinguished in my memorandum by C B 61) having revived from a deep trance said he had had a beautiful dream. His countenance during this sleep was sweetly irradiated, and he confessed on awaking that he deeply enjoyed the trance; a stage of this phenomenon which was quite new to him.

One, while in the partially complete stage was tested in the usual way for clairvoyance. A pen he named a pencil; a writing pad, a collar or a cuff; a bit of elastic—he did not know.

On a piece of paper, the second subject was required to draw a figure like the figure I drew, his face being turned from me. He drew what I drew—a triangle.

The reader can easily judge each of these examples, trivial enough as an ex-

periment in clairvoyance; and there was very little, indeed, elicited. As far as I know, neither was a pronounced clairvoyant. But the little found out goes to show, in the first case, how keen the ear must have been to judge the quality itself in the objects presented; and in the second case, how sharpened wits can work by assuming that the first figure one would be likely to draw or guess at random would be, if not a circle, a triangle. Any of us, would, perhaps, guess one of these figures if required to venture a guess upon what figure another would first draw. Perhaps, however, as showing the dawning of a sense not incapable of development these examples are of some value.

These awkwardly-cited cases serve to throw light upon the condition of the "sensitive" when he has reached the profound stage of hypnotism. He is, indeed, in a greatly different state from his ordinary condition in several respects; as regards pulsation—which, both calmer and freer, is differently accentuated—as regards the quiescent surface of the skin; his passive helplessness; his characteristically exalted sensibility; the strange horizontal outline of the eyelid; the diffuse or almost imperceptible respiration, so gentle as to be very striking and remarkable. Again, in partial stages, the exalted senses—of hearing or of seeing. I have more than once known subjects to name letters at a long distance who were of ordinary normal eyesight, everything tending to show a large increase of perceptive ability along the lines of test applied. This, accentuated, readily accounts for some phenomena well known, without regarding imperceptible suggestions of the operator, a factor I have purposely left out of view.

If we are not sure that a certain remarkable apprehensiveness related of Emanuel Swedenborg falls into the line of second sight, we can easily find it similar to second sight. Immanuel Kant, the celebrated transcendental

philosopher, is the historian of an occurrence that took place in 1759.

"On Saturday, at 4 o'clock P. M." he says, "when Swedenborg arrived at Gottenburg from England,* Mr. Wm. Castle invited him to his house, together with a party of fifteen persons. About six o'clock, Swedenborg went out, and after a short interval returned to the company quite pale and alarmed. He said that a dangerous fire had just broken out in Stockholm, at the Sudermahn (Gottenburg is 300 miles from Stockholm), and that it was spreading very fast. He was restless, and went out again. He said that the house of one of his friends, whom he named, was already in ashes, and that his own was in danger. At eight o'clock, after he had been out again, he joyfully exclaimed, 'Thank God! the fire is extinguished the third door from my house.' This news occasioned great consternation through the whole city, and particularly the company in which he was. It was announced to the governor the same evening. On the Sunday morning Swedenborg was sent for by the governor, who questioned him concerning the disaster. Swedenborg described the fire precisely, how it had begun, in what manner it had ceased, and how long it had continued. On the same day the news was spread through the city, and, as the governor had thought it worthy of attention the consternation was considerably increased; because many were in trouble on account of their friends and property that might have been involved in the disaster. On the Monday evening a messenger arrived at Gottenburg, who was dispatched during the time of the fire. In the letters brought by him the fire was described precisely in the manner stated by Swedenborg. On the Tuesday morning the royal courier arrived at the governor's with the melancholy intelligence of the fire, of the loss it had

occasioned, and of the houses it had damaged and ruined, not in the least differing from that which Swedenborg had given immediately it had ceased; for the fire was extinguished at eight o'clock." *

Though I have read of two or three remarkable instances of Swedenborg's ability to apprehend far away events as well as secret matters by means entirely unexplainable by any present knowledge that we have in general, I do not remember ever to have seen of them any scientific explanation going so far into the region of the mysterious. Swedenborg himself is understood to have thought little of such examples of his ability as a seer. We know what his ordinary testimony to the means of obtaining such knowledge seems to be, † and if we are not willing to admit his theory (which I do not entertain myself, I may say in parenthesis) we must find some explanation which better suits our prevailing notions of these things or remain in the same mind of our good and wise Doctor Johnson, who said to Mrs. Williams one day when at tea, in company with Boswell, that "he

*Life and Writings of Emanuel Swedenborg. Boston, 1860.

†Some of Emanuel Swedenborg's ideas concerning second sight (if that is a good name) may be noted here. It is said of him that when the Queen of Sweden asked whether his spiritual intercourse was a science or art that could be communicated to others, he said, "No, that it was a gift of the Lord." "Can you then," said she, "speak with every one deceased or only with certain persons?" He answered, "I can not converse with all, but with such as I have known in this world, with all royal and princely persons, with all renowned heroes, or great and learned men, whom I have known either personally or from their actions or writings; consequently with all of whom I could form an idea; for it may be supposed that a person whom I never knew, and of whom I could form no idea, I neither could nor would wish to speak with." [Life and Writings of Emanuel Swedenborg p. 107.]

One day when a person objected to something he had said, and argued the point in his own way, Swedenborg is said to have replied, "I receive information from angels upon such things." [Ib. p. 109.] He admits upon one occasion many months after he had spoken with spirits he perceived that if he were remitted into his former state, he might still fall back into the opinion that all he had seen was fantasy. [Ib. p. 108.]

He informed one man that "every man has either his good or his bad spirit, who is not constantly with him, but sometimes a little removed from him, and appears in the world of spirits. But of this the man living knows nothing." [Ib. p. 123.]

*He returned there July 19, 1759.

should be glad to have some instances of the faculty well authenticated.*"

I think, however, that at present there are people now living who can say as much as this and more; for I am ready to add further, that I should be willing to know myself also what kind of well-known principles are sufficient for explanation of such phenomena of second sight as are already well attested; and to say that Mr. Swedenborg's belief upon those matters, notwithstanding his great familiarity with their phenomena, does not in the least explain them, but rather puzzles me more than ever, since he brings in the aid of spirits, about which, as far as I understand, very little is definitely known. Eastern magic, if not so creditable, is a great deal more intelligible, Madame Blavatsky's theories not excluded: who asserts, if I recollect correctly, that what are known there as apparitions are manifestations: not real things seen, not even so definitely identified as a man's "double," but simply representations of things which may be interiorly viewed.

So far I have written as near as I could about our present knowledge of such things; as I understand it to be; supposing that clairvoyance and second sight; hypnotism and trance; the skill of the seer, the apprehension of the "magnetic sensitive" to be ruled by laws having a common character to each other.

*Boswell, vol. ii., chap. iv.

A pretty phenomenon, an account of which I have once introduced in the rough draft of this article, is that faculty, which two persons—both "magnetic"—have told me about. They see interiorly a face and a form of a person whom they know, and they say that it so often happens that the person soon meets them that when the vision is seen the person is expected to be met, and generally the suggestion is entirely involuntary.

A few weeks ago a bold bank robbery happened in the city where I dwell. One of the persons just referred to told me that some time before it occurred, he being present at the counter of the bank, saw (by a suggestion of the possibility of such an event) the occurrence very much the same way in which it afterward happened, in an imaginary line of acts; in his own mind. He did not then speak of this imaginary scene, but of course thought of it afterward.

This would not be remarkable in a person who is not so "sensitive;" since in another it would go no farther than the simple suggestion of the possibility of such an event, but in him the suggestion at once spread out into a mental scene, when the actors did what he thought they might do. Perhaps such may be the kind of origin for the vision of a "seer," whose mind takes up the train of thought suggested and carries it unconsciously as well as involuntary on.

HENRY OLARK.

DRUG ADULTERATION AND UNCERTAIN PRESCRIBING.

THE indictment that hygienists bring against the practice of medicine as commonly pursued, viz., that it is experimental, and uncertain in results, especially in cases of serious disease, is strong enough in itself, and its force is recognized by all candid physicians in proportion to the extent of their experience. Of the four or five hundred substances having place in the ma-

teria medica of the three leading schools that use drugs, scarcely a dozen possess well defined characteristics that may be depended upon in favorable conditions of administration, i. e., when the selection of the drug can be said to be appropriate, and the drug itself of normal strength. The physician is often disappointed by the phenomena that follow his administration of such well known

drugs as quinine, belladonna, aconite, opium, or digitalis, and if his confidence in their essential virtues remains he must ascribe the failure of his treatment to adulteration, or to variation in strength that may be attributed to different methods of chemical preparation.

Systematic examination of the tinctures, and extracts, and powders, etc., supplied by druggists, have shown great variations in quality and strength. As Dr. C. J. Dietz, of Toledo, said not long ago in a paper, "If any one doubts for a moment that the remedies placed at our command in the retail drug store are unreliable and ununiform, let him consider the reports of the New York State Pharmaceutical Association's Committee on Adulteration for the years 1888 and 1889." These reports cover many of the 'remedies' in common use, and show variations in the quality and medicinal value of all, in some cases even the *identity* of a drug could not be determined except from the label placed upon the package by the dealer."

Tests made at different times, and by reliable experts, show that the tinctures of aconite, belladonna, digitalis, hyoscyamus, gelsemium, etc., obtainable at the retail pharmacies varied in strength as 1 is to 8.

Granting that the physician had made a correct diagnosis, and had 'exhibited' the proper remedy, with such a fact in view could his medicine be trusted? or in the language of the committee: "What earthly chance would a doctor have in trying to save the life of a patient . . . with such an article?"

Dr. Dietz illustrates in a forcible style the unhappy situation of a conscientious physician who is at the same time with his patient, although in a different way, a victim of this vicious state of affairs pharmaceutical.

"Take the article tincture of digitalis for example, and suppose that you have a patient, suffering from some heart lesion, under a digitalis treatment. You

have worked up to a 30-drops dose of a tincture represented by one in the scale as 1 is to 8. The patient is doing nicely until the prescription is exhausted; then, following the ordinary custom, the bottle is sent to be refilled. The druggist has in the mean time, obtained a new bottle of tincture digitalis from the same or another wholesaler, or he has made some from a F. E. or another specimen of drug purchased for the purpose. The druggist, well knowing, possibly, the nature of digitalis, does not hesitate to refill the prescription. This sample happens to be a good one, and ranks about 8 in the scale. The patient takes the dose, getting really about eight times as much action as before. The doctor is called in, but can do nothing, and he is the only one blamed for the death in that family.

"Take the opposite position in which the stronger preparation was first obtained, and the dose required was only 3 or 4 drops. The refilling was from the weaker sample.

"Patient says after a few days' use of it: 'Medicine does no good—did do good at first, but does not any more. Guess I will try Dr. X. and see if he can not do good for a longer time than Dr. A. has.' Doctor gets all the blame, druggist none. And why should he? The doctor has not demanded more than the druggist has supplied. The druggist, being no practitioner, is not supposed to know how a medicine *acts*, excepting from the testimony of the physician."

Who can wonder that the sick public are dissatisfied with the doctors, and are disposed to throw them and their physic to the dogs, or that so many resort to the "metaphysical" curers, and the multi-named faith healers?

That other effect of drug adulteration exhibited in the growing disuse of drugs by many physicians is the more healthful, and receives the approval of the advanced hygienist and sanitarian.

H. S. D.

THE TRUE PHYSICIAN.

THOSE who have labored and hoped for so many years in the reformatory sphere of hygiene are beginning to see results of a most practical character in the general walks of medical practice. The truths that they have preached and taught are being absorbed into the new physiology of the day, and a recent writer thus describes how hygienic principles are affecting the practice and art of medicine:

The great study now is to know what are the precise preservative and curative powers of the human system and of each particular person, and how far and in what way they are most available. Also, how they can be aided by natural methods, such as by air, food, water, exercise, etc. Hence it is that hygiene is no longer a thing to be patronized. It is radical and essential to the practice of medicine. Many a practitioner past fifty years of age has become a poor practitioner because he practices just as he was taught, and knows more about *Materia Medica* than he does about the *Materia Natura*. The profoundest questions now before the medical mind are those of nutrition, of tissue repair, of preservation, or renovation by natural processes. Flint and Gross signalized their latest works by insisting upon the change. Weir Mitchell opens his institution for restorative treatment mostly along the lines of sanitary and dietetic methods. Sargent attempts both prevention and cure by resort to the legitimate ways of body building as Nature conducts it. These are but specimens of hundreds who have caught the advancing light. They know how important, and yet how narrow, a sphere drugs have on the one hand, and also how superficial on the other are many of the plans of alimentation through pepsin and baby foods, etc. Sir Wm. Gull does not feel his profession compromised when he states that the prince of Wales, when sick with typhoid fever, took only two doses of medicine, because he knows that

there is greater skill in conducting the other lines of treatment in all that relates to temperature, rest, food, etc., than there can be in mere medication.

The greatest mortification and embarrassment to the hygienist of the present day is that so many think that sanitation means skill in finding a nuisance, rather than deep knowledge of causes which prevent their occurrence. He is the modern physician who, finding results in the form of sickness, knows how to deal with them in full knowledge of the curative resources of the sanitary or real medical art. The time has really come when every family that can afford it, should put itself under the care of the physician, with the expectation that he will guide the life in particulars in which every one cannot be expected to have knowledge, and so secure vigor, and ward off disease. It is now more practicable to get more service out of your medical adviser by his investigations of states of health and means of vigor, than it is to depend upon him merely when sickness has arrived.

A HYGENIO SUBSTITUTE FOR QUINIA !
—Dr. Alois Fenykovy communicates to a Vienna medical journal an account of some observations made on the treatment of intermittent fever by means of friction of the back along the spine. Many years ago, as stated in the *Lancet*, while at Nisch with his regiment, there occurred so many cases of intermittent fever that the stock of quinine was becoming exhausted, and, in order that the patients might not be entirely without some sort of treatment, it was ordered that they should be rubbed twice a day along the spine with simple ointment. The day after this order had been given, it appeared that the usual attack had not come on. Accordingly, since that time Dr. Fenykovy has very frequently employed this treatment, and usually with marked success. Indeed, he says that three-fourths of his

cases have done very well without any quinine at all. What is this but a form of massage with associated suggestion of which the nervous system takes account?

SACCHARINE A POISON.—Recent researches show that saccharine, the sweetest of all sweets, like all the other derivations from coal tar, is a poison, and may produce the most serious results

when habitually used even in minute quantities. It is made in Germany, and is sold for about fifteen dollars a pound. Its sweetening properties are about three hundred times as great as those of cane sugar, hence it is used in some manufactories as a substitute for ordinary sugar. Recognizing its poisonous quality, the importation of saccharine has been forbidden by France, Spain, and Portugal.

NOTES IN SCIENCE AND INDUSTRY.

Great Longevity in a Japanese Family.—"A thousand years in one household" (*ikka sen-nen*) is an old Japanese saying, employed with reference to an event which, in respect of extreme rarity, may be classed with the sight of a dead donkey or a tinker's funeral. The *Hochi Shimbun* says that an instance may be found in the household of a merchant called Mizuma Gensuke, who resides at Kanazawa, in the Saitama district of Sado. The family consists of the following members: Great-great-great-grandpapa Gengo, aged 180; Great-great-great-grandmamma Tomi, aged 182; Great-great-great-grandpapa Gembel, aged 101; Great-great-grandmamma Miyo, aged 99; Great-great-grandaunt Yoshi, aged 105; Great-grandpapa Gensuke, aged 81; Great-grandmamma Kimi, aged 79; Grandpapa Gempachi, aged 61; Grandmamma Toyo, aged 60; Papa Genkichi, aged 40; Mamma Tomo, aged 38; Uncle Genroku, aged 35; Son Genshichi, aged 14; Daughter Toki, aged 5. The united ages of the fourteen amounted at the close of last year to 980, and consequently became 994 on the first day of this year, according to the Japanese method of calculation. Next New Year's Day, supposing that death had not intervened meanwhile, the aggregate ages would be 1,008, and as 994 is nearer 1,000 than 1,008, the family have resolved to celebrate their *ikka sen-nen* this spring by a visit to the shrine of Ise, and afterward to Koyto, where the whole fourteen, from the little tot of 5 to the grayhead—if he still has any hair—of 180, will go sightseeing in company.

Who Invented the Steamboat?

—It seems to be a favorite policy of the local press throughout the country to occasionally print an account of some one who, as has just been discovered, is the true and original inventor of some great invention now in practical use for these great many years. An instance of this kind is the story now afloat to the effect that to a New Hampshire man, Captain Morey, belongs the credit of having invented the steamboat. It is stated that fully fourteen years previous to Fulton's famous experiment with the Clermont, Morey had built a small boat, and in the test on the Connecticut River, it attained a speed of four miles per hour against the current. It is said that after this experiment Morey went to New York with his models and had several interviews with Fulton, who suggested some improvements, and as it is claimed that Fulton in this manner obtained the idea of the steamboat. The story, we think, lacks the elements of truthfulness, containing too much mere "tradition."

Professor Winchell's Paste.

—Professor Alex. Winchell uses a cement that will stick anything. The recipe is: Take two ounces of clear gum arabic, one ounce and a half of fine starch, and one half ounce of white sugar. Pulverize the gum arabic, and dissolve it in as much water as the laundress would use for the quantity of starch indicated. Dissolve the starch and sugar in the gum solution. Then cook the mixture in a vessel suspended in boiling water, until the starch becomes

clear. The cement should be as thick as tar, and kept so. It can be kept from spoiling by dropping in a lump of gum-camphor, or a little oil of cloves or sassafras. This cement is very strong indeed, and will stick perfectly to glazed surfaces, and is good to repair broken glass, rocks, minerals, or fossils.

How to Determine the Earth's Size.—The method of determining the size of the earth that is theoretically simple, is described by a scientific journal as follows : It is a well-known fact that the farther west one travels the later the sun rises, and that by traveling completely around the world in a westerly direction we can make the sun fall behindhand an entire day. The same is true of the stars and other heavenly bodies and since it is more usual to use the stars in the process of measuring the earth than to use the sun, we shall confine our attention to them. First, we must understand that owing to the fact that the stars rise 3m. 56s. earlier each night, the sidereal day is only 22h. 56m. 4s. long instead of 24h. Any one can satisfy himself of this by noting that, owing to the revolution of the earth around the sun, any given star will rise 366 times in a year, while the sun rises 365 times. The stars will therefore gain 1-366th of a day each day, which is 236s. or 3m. 56s. Now let us imagine to ourselves, A and B on the earth's equator, and diametrically opposite to one another. By means of a telegraph wire they can set their clocks exactly alike, and after they have done so it is plain that B will see Sirius rise exactly twelve hours later than A. Now suppose B moves his observation eastward till he is only a quarter of the earth's circumference away from A, then it is plain that he will see Sirius rise six hours later than A. If B moves eastward again until he is only an eighth of the circumference away from A, he will see Sirius rise three hours later than A; and so on. Suppose, now, that the two observers are only thirty or forty miles apart, and that by careful observing it is found out that B sees the star precisely 2m. 14.7s. later than A; and let us further suppose that when the distance is carefully measured with a steel tape it is found to be thirty-eight miles, 1,622 yards. Then as the difference in time is to an entire

day, so is this distance to the circumference of the earth. Thus the circumference is figured out as 24,897 miles, and the diameter 7,925 miles.

Our Climate Not Changing.—Mr. Cleveland Abbe, of the Meteorological Building at Washington, who is the real founder of our weather service, takes up in the *Forum* the popular idea that our climate is changing. After showing in an interesting way how changes, if any occur, are calculated from meteorological tables, he shows that rational climatology gives no basis for the much-talked-of influence upon the climate of a country produced by the growth or destruction of forests, the building of railroads or telegraphs, and the cultivation of crops over a wide extent of prairie. "Any opinion as to the meteorological effect of a man's activity," he says, "must be based either upon the records of observations or on *a-priori* theoretical reasoning. Now the records of experience are exceedingly diverse in various parts of the world, and lead to no uniform conclusion. The palæontological evidences of the former existence of animals and plants where they can not now thrive, show clearly that great changes have taken place during geological ages, perhaps 50,000 years distant; but no important climatic change has yet been demonstrated since the human history began."

What Man is Made Of.—Dr. Lancaster, a London physician and surgeon, recently analyzed a man and gave the results to his class in chemistry. The body operated upon weighed 154.4 pounds. The lecturer exhibited upon the platform 23.1 pounds of carbon, 2.2 pounds of lime, 22.3 ounces phosphorous, and about one ounce each of sodium, iron, potassium, magnesium, and silicon. Besides this solid residue Dr. Lancaster estimated that there were 5,595 cubic feet of oxygen, weighing 121 pounds; 105,900 cubic feet of hydrogen, weighing 15.4 pounds, and 62 cubic feet of nitrogen in the man's body. All of these elements combined in the following: One hundred and twenty-one pounds of water, 16.5 pounds gelatine, 1.32 pounds fat, 8.8 pounds fibrin and albumen, and 7.7 pounds of phosphate of lime and other minerals.



NEW YORK, May, 1890.

TO TEACH OR NOT TO TEACH.

A PROMINENT educational organ, in a late number, has an article on the qualifications of teachers, and makes the strong assertion that no one should teach who has not "a call" for such work. By this statement we infer that the writer means that he who would teach feels himself specially adapted to the sphere of guiding the young in the lines of mental development. The "essential" qualification, we are told by this organ, is "power of control" or "government," but we are not told the nature of this "power of control." A man or woman may possess that poise of character that will enable them to bear themselves with dignity and firmness in a school-room, and to maintain a good degree of order. Thus they may exhibit "power of control" and yet they may fail to be *good* teachers in the true sense of the term. Discipline is of high importance in school management, but it is far from covering the majority of the essentials.

We are also told by the same organ that "scholarship" is the other of the "two prime qualifications for a teacher." But manifestly a man may have high scholarship and yet be a poor

teacher. Now according to our view of the subject the prime essential is to *understand character*, and the next facility in imparting instruction. The dignity, firmness and tact that would make one a good drill master are most valuable adjuvants in school, and conduce to the best success, but there have been admirable teachers who were lacking in the elements of discipline. We do not find that Arnold of Rugby was distinguished by qualities of severity or rigid method in his relations to his famous boy pupils but was always kind and affectionate; an amiable teacher in strong contrast to a rigid disciplinarian. And yet what a teacher! How grateful the tributes of Tom Brown and the hundred others who sat under his instruction!

A graduate of Williams College told me one day of the attitude of the late Mark Hopkins toward the young men who came under his care. It was always gentle and kind, yet there was a mastery about it that every student recognized. He seemed to know the nature of every youth, and was rich in counsel suited to each case. For this reason no student could stay long at Williams without learning to esteem Dr. Hopkins, and to take pleasure in winning his approval.

We remember well a teacher of our college days who was no disciplinarian, far from it, and a man, too, who made no display of scholarship in the classroom, and yet there was no other man in the faculty to whom we so promptly went at recitation time, and in whose room there were fewer incidents of disorder or mischief making. That teacher was John William Draper, the eminent chemist and discoverer. I trow every

student who enjoyed his instructions during the long professorship that was his in connection with the New York University, recalls his name with reverence. Always kind, frank, simple in manner, he invited the same conduct in his pupils, and his inimitable way of explaining scientific principles and conducting experiments made the lesson of his hour clear to the dullest perception. Of his scholarship the world outside our college walls knew far more than we boys who sat daily under his lips. But later in life we learned what his simple, easy methods meant, how broad was his mastery of nature's secrets, and how profound his erudition.

They who would be successful with children must have the "call" to teach; in other words, they should love the vocation for itself, and should have those elements of personal constitution that enable them to adapt themselves to the children put under their training.

Knowledge of the child mind is the prerequisite of this adaptation, and such knowledge is no simple matter. Indeed, it is so complex that the system of pedagogics that does not give it a prominent place is greatly defective, and sure to fail of high attainment.

GRATITUDE AN ESSENTIAL.

WOULD not the world be brighter if more expression were given to the feeling of gratitude? It seems to be considered in some circles unnecessary or undignified to show by look and word that one is indebted to another for anything. A kind act may be interpreted as a mere matter of personal duty on the part of him who does it, but that does not nulli-

fy the propriety of some expression on the part of the benefited to show that he appreciates the kindness.

We suppose, however, that this is not the view taken of benevolent acts by those who ignore a grateful emotion. They assume, we are inclined to think, a special privilege; that they are entitled to what they get from others, and there is no need "to make a fuss" about things that are after all, commonplace.

There is a class of beggars met every day on the street who stand with head bent to one side, eyes pathetically uplifted, and a hand extended with open palm. Whatever one drops into that open palm is received with very slight movement of the eyelids or a tremor of the lip, while the attitude remains unchanged. These beggars appeal by their very posture to the benevolent, and the coin dropped into the hand is but a response to the expression of urgent need artistically depicted in face and form.

But your average ingrate, as met in society, makes no appeal in this imported fashion; his expectation is in the nature of a demand, and often the gift is received with an air of condescension. It is the giver who should feel grateful that his kindness is accepted.

Really, it does not appear to be understood that gratitude has something in it of cheer to both sides, and when sincerely and frankly expressed warms the whole mental being of the beneficiary. It is really one of the most wholesome of human emotions. As expressed by children its joy-giving influence is seen in a marked degree, and whoever recognizes its relation to sunny, cheerful character knows how its repression conduces to frigid, taciturn mannerisms.

Then let us keep alive the mental elements that enter into gratitude. It is not the manifestation of a single faculty, but of several in combination, and those in the higher range of human sentiment. No man or woman is so situated that occasion does not offer daily for the expression of gratitude, and its lack in any one can be taken as significant of defective culture in things that concern true happiness.

PREHISTORIC MAN AN EPICURE.

AN English microscopist has been examining the teeth of a prehistoric skull, and his findings are interesting because of their fresh contribution to our knowledge of the life of stone-age man. In the cement like deposit surrounding some of these teeth the microscope revealed minute relics of food in such variety that we must conclude that those early

people, or at least the race that inhabited Western Europe, were far from restricted in forms of diet, for there appeared to be bits of wheat husk, vegetable and fruit cells, particles of fish and animal bone, barblets of feathers and other food indications. All these things point to the conclusion that our prehistoric ancestors who lived so long ago that we can not definitely fix the date, and to whom some archæologists have imputed a low mental condition, were intelligent enough to recognize the bountiful supply of nutritious elements that nature afforded. It would appear, too, that they were sufficiently advanced to cultivate the soil, and to be able to exercise a taste or preference for certain kinds of food. Certainly the man we can design from a tooth in this fashion is much removed from the ape as we know him, or from the supposititious dryopithecoid improvement of the miocene strata.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed

to the Editor in the professional capacity of a physician will also receive his early attention.

KNOWLEDGE OF THE FACE.—*Question.*—I would like to know very much some things about the face; In fact there about a hundred questions I want to ask about human nature, but the one I am going to ask is this: What good or intellectual faculties are lacking in a narrow face?

MRS. W. M.

Answer.—There are several books that you might read with good result. On the catalogue of the Fowler & Wells Company you will find a list of treatises on both physiognomy and phrenology. A perusal of some of them would furnish the answers to many of your questions. A narrow face usually intimates that the intellectual facul-

ties are somewhat limited in their range of action, are specific rather than general, and do their best work when devoted to simple purposes. There may be sharpness of discernment and a ready intuition with the narrow head and face, and we expect to find also amiability of disposition if the forehead is high, and the crown well rounded.

MEASURING THE HEAD.—P. R.—Observers have used several methods for determining the size of the head in life, but whatever the manner there is a lack of perfect accuracy. For ordinary comparison we use measurements with tape line; for circumference, over the head from ear opening to ear opening; over the head from the root of the nose to the occipital prominence; around the centre of the forehead from the tragus of one ear to the tragus of the other, and also around the centre of the occipital region from ear opening to ear opening. Also the length, breadth and height of the head by caliper measurement. In taking the breadth of the head, it is well to measure it at three regions—between the temples, centrally at a point about an inch above the ears, and posteriorly at the junction of the occipital, temporal and parietal bones. In estimating the capacity of skulls the method by the displacement of water is a good one. A watertight box, ten inches in length, breadth, and height may be made. In this water to the depth of five inches is poured; then the skulls with sutures carefully sealed, so as to admit no water to their interiors, are pressed into the water, crowns down, until sunk to the ear and super orbital level. The height to which the water has risen is marked and the difference in inches between that mark and the five inch level shows the capacity of the brain pan, including, of course, the bone covering. A more convenient method is that of filling the skull to be measured with small shot, through the large basal opening, but the water method, if carefully practiced is more accurate.

SEXUAL INCONTINENCE.—W. M.—It seems to us that you do not sufficiently consider your part in the sad state of your domestic life, for if you did realize how much is due to your own conduct it would be but reasonable to expect that you would so act as to

avoid the consequences that bring to your wife so much of suffering and to your growing family so much of discomfort and trial. A distinguished doctor once said to a lady who complained that every time she moved her arm it pained greatly, "Don't moved it then, madam." We have but to repeat the like advice to you. A man who professes to be kind to wife and family is very inconsistent, if not something worse, if he keeps doing things that make them miserable. Then, too, if he bewails his ill luck, and protests that it makes him wretched to see their suffering, he must be mentally disordered if not quite insane to persist in conduct that injures himself as well as them.

Why not restrain your animal nature, and be more of the man? You should do your simple duty in this matter. Be continent. Respect the feelings and wishes of your wife. Her rights are equal to yours. The man who does not believe this social principle is not fit to be the husband of a worthy woman. In marriage he is likely to deteriorate morally, and to drag wife and family downward toward a brutish level. By the culture of your higher nature, and the repressing of your passions and selfish propensities by an earnest, sympathetic interest in the growth and welfare of your children, you will show yourself the true man, and so rise in self respect. You must do this if you would secure the end a man commonly wants in his maturity—a happy home.

If an apology is asked by some reader for the plain talk indulged in the above, we make it now, but at the same time must express our sense of the injury done to our manhood by the weak confession of so many for habitual sinning in domestic life, "I can't help it."

IMPORTANCE OF CAUSALITY.—*Question.*—Why should Causality be called one of the noblest faculties, and yet when marked very large the word "Restrain" follows the description of the organ? M. B. V.

Answer.—Any faculty may in a given case be too strong to produce harmony of character; and also any faculty may some times be too weak. A faculty much too strong for the others will make a person warped and unbalanced. If it be Causality he may be too speculative and impractical

and then it should be restrained and not allowed to master every other quality.

TOBACCO AND CATARRH.—*Question.*—I have known doctors to advise people to smoke who had catarrhal trouble, alleging that the tobacco smoke dried up the excessive mucous secretion. What do you think of such advice for me? I am a victim of catarrh.

Answer.—We have known of such advice, but are not ready to sanction it. Tobacco has a poisonous effect upon the system. Experiments by different physiologists have proved that smoking affects digestion, the action of the heart and the nervous system. It is a nerve depressant, or paralyzant—thus reducing the tone of the functions generally. Catarrh, as a rule is a functional trouble—at least in its early stages—and due to a reduced nervous state. Everybody who knows anything about tobacco pathologically will tell you that it has great power as a laxative of muscular fibre, and this effect alone can explain much of the heart disturbance of regular smokers, and also explain why smoking will cause throat and nose trouble. Dr. Morell Mackenzie, the throat specialist, so well known in the case of the late Emperor Frederick, says that “the baleful effects of immoderate smoking” can be seen “writ large on nearly every part of the mucous membrane of the throat.” The use of tobacco is in very many cases at the bottom of nose, throat, and eye affections that are ascribed to almost every thing else.

PERSONAL.

DR. JOSEPH HURFORD, of Ohio, is one of the many illustrations of longevity among practicing phrenologists. He is now over eighty years of age, and promises to live many years longer. A sketch of him will appear in an early number of this journal.

VISCOUNT HAMPDEN, an ex-Speaker of the House of Commons, has gone into trade as a retail dealer in provisions. He carries on a dairy farm on strict business principles, and every egg is said to be marked, and every pat of butter stamped with a coronet and a letter H. No doubt this stamp makes his goods sell readily.

GENERAL JUBAL EARLY, of La. lottery fame, has given \$1,000 toward the expenses of the exercises at the unveiling of the Lee monument which is to take place at Richmond, Va., on May 29. No doubt the lottery business will be helped by this sagacious act.

WISDOM.

“Thou must be true thyself,
If thou the truth would teach.”

RICHNESS of mind will hide the poverty of the poor.

NARROW minds think nothing right that is above their own capacity.—*Rochefoucauld.*

DISCRETION is the perfection of reason, and a guide in all the duties of life.—*Addison.*

HOPE is like the sun, which, as we journey toward it, casts the shadow of our burden behind us.

WORK within the lines of your strength. Do not imagine that you are nothing because you are not everything.

THE cheerful are the busy. When trouble knocks at your door, or rings the bell, he will generally retire if you send him word you are engaged.

HE is happy whose circumstances suit his temper; but he is the more excellent who can suit his temper to any circumstances.—*Hume*

MIRTH.

“A little nonsense now and then
Is relished by the wisest men.”

“I SAY, doctor, you who know medicine from A to Izzard, what do you do yourself when you have a bad cold?” Physician (who does not believe in giving advice gratis) “Cough.”

THERE are two reasons why some people don't mind their own business. One is, that they haven't any mind; the other, that they haven't any business.

“WE must have a class of men between the laity and the ministry,” said Mr. Moody, recently. “Sure, we have them already,” was the comment of a witty Irishman. “They are the women, God bless them.”

OUR BIRTHRIGHT.

WE hold these truths to be self-evident:

1. That the earth is capable of supporting the population living upon it, and that the American Continent is capable of supporting a population many times greater than the number of persons now living on our soil.

2. That our people are a frugal, industrious and enterprising people, prolific in thought willing to work with their hands; skilled in the application of every kind of mechanical device to the assistance of labor, and that they do produce every useful commodity, largely in excess of their own requirements, even if every person on the continent were provided with abundance.

3. That it is not possible for the American people to consume what they produce, even at the present rate of production, while by employing labor production might be many times increased.

4. That the only important factor in the great problem, how the people are to live in this country is the RATIO between consumption and production.

If this ratio is merely subsistence, then they have a right to subsist. If it is abundance, then they have a right to plenty. If it is luxury, they have a right to live luxuriously.

We claim that we the people, have a right to all that we can create. That we own this continent, and are not very largely in debt for it; that the limit of our right to enjoy is the limit of the soil to produce, and the willingness of our hands to labor.

That our claim to the wealth of this country is not limited to the simple possibilities of what our hands can earn working for some kind of a task master to be paid wages, and to buy in an artificial market simply what the wage money will pay for; but we claim the inalienable right of every American citizen to an equal share of the undivided wealth of this country, and we disclaim entirely the right of a few to usurp ownership and to keep in perpetual vassalage any class of American citizens, every individual of whom is born in a condition of freedom, fraternity, and equality. We claim also, that if any citizen be without patrimony he is not free and equal, but must necessarily become the subject of some other citizen. Then freedom is not universal, but only belongs to the dominant class.

The dominant class in any community is the class who own the property. Then it necessarily follows that any class not owning property is a serf, or subject class. But it is not according to the genius of American in-

stitutions that there shall be a class of serfs in this country, but the person who is compelled to work for a subsistence, and pay rent for a place to dwell in, is necessarily a slave and a dependent.

A person who does not own a foot of ground whereon he may stand, that some other person may not come along and drive him off, can not properly be called a citizen. Now which shall be sacrificed, the citizen or our feudal systems?

Citizenship means rights which other citizens are bound to respect. The pauper class have not an earthly right except to breathe. They may be driven anywhere, and herded like cattle, and fully four millions of people are in this condition in the United States today. Is this the best possible outcome of the great battle for freedom that was fought by the fathers of the Republic? The question is very pertinent. Were their labors, and sacrifices, and achievements really a failure, and has the battle of freedom yet to be fought? If so, the sooner we get about it the better.

The people of the Colonies fought their own battles, and gained their own victories. They did not wait for some other people to show them how, or to stand in their stead at the cannon's mouth. They simply made up their minds what they wanted, and pressed their demands with an energy not to be denied. Can it be possible that after the growth of one hundred years we are less capable of knowing what we want, or how to get it, than the early settlers of a new country? No, we do not believe it.

1. We want a place whereon to dwell. This is the first want and the first right of every human being—a right so self-evident that even six thousand years ago it was provided for as a birth-right. If progress means drifting away from every thing practical, let us go back to the Mosaic law for precedent (rather than to the laws of the Goths and Picts.) The first law of our being is that the human body occupies space; therefore the first right of a citizen is a place whereon to dwell. The birth-right is the first right ever talked about. Esau bartered his birth-right for a mess of pottage. The American people have given theirs away for nothing. The fathers of the Revolution fought the battles of freedom, and gained the victory, so far as Great Britain was concerned, that they might leave the American continent, as an inheritance, to their *posterity forever*. And they did leave it without debt or incumbrance of any kind, title undisputed, and indisputable.

But we were imbecile enough to nurse such a progeny as the slave power till it destroyed the family unity, arrayed part against part, brought us into sectional strife, then into civil war, and worst of all found us so wanting in common understanding as to mortgage our continent. Next to the error of perpetuating slavery for a hundred years we never have committed so unpardonable a blunder as that of bonding our inheritance.

But that is a subject too voluminous to be treated in a paragraph, and the writer hardly knows how to do the reader better justice than to refer him to the various works on Political Economy that have been published by the new school of teachers on that subject. Notably on that list may be mentioned "The Money Question," by Wm. A. Berkey.

Leaving the financial question in the money sense for the time being, we confine our attention in this article to the rights of the American citizen to an inheritance in land, and by an *inheritance in land* we mean a portion of land, and not merely some kind of talk about it. We have had a great deal of 4th of July buncombe about the inheritance of the free born American, and yet he is just as landless, and homeless, and helpless, if any kind of calamity befalls him, as any child of monarchy that ever was born.

To be sure, as a whole people, we own a continent, but as individuals we own little or nothing. Now it is the province of a true republic to see to it that her individual citizens are provided for. Life is mainly an individual affair. We are born individually, we live individually, we die individually, and rights to be worth any thing must be guaranteed to us individually. To be sure we have certain community interests, and where we have we claim community rights. These include every kind of public thoroughfare, the water courses, the common schools, the public mails, and should include artificial lights and every kind of travel by rail, horse cars not excepted, and the transmission of news by the electric telegraph.

Instead of having the property all controlled by the State we propose that the people shall own as individuals, all the wealth of the continent that is not included in community rights.

And we also propose to see to it that the individual citizen shall be guaranteed his or her individual rights, and that these be held as sacred and inviolate as the community rights.

As things now stand no person or combination of persons dare to obstruct the public thoroughfares, the water courses, the administration of government, or anything that belongs to the public.

It will only require a little education and a little legislation to make it impossible for any power whatever to interfere with the rights of the citizen, and first of all rights we claim emphatically the right of a place whereon to dwell; a right so sacred that we inherit it by our birth; and that no human being can be justly deprived of it; and that we have no right to call ourselves a republic while we drive our people about from stall to stall, like cattle in the market place, and more than three-fourths of our number have no more settled abode than a tribe of wandering gypsies.

How we are to obtain this land—or rather possession of our individual portion of it—is the question that will naturally arise in the mind of the reader. We will discuss that part of this subject in a future number.

In fact we can tell you now in a sentence. Remember that LAW, in this country is the express will of the people. Make up your minds what you want, and then contrive a plan for working harmoniously till you get it.

The Old Homestead act came from some one raising the campaign cry, vote yourself a home. Let the labor organizations throughout the land send up the cry, *Vote yourself a home and a thousand dollars to go with it.* Don't be afraid to ask for what you want. The land is yours and the money also. In the mean time, let the school-boys debate this subject at every cross roads school house. Let the family talk it over at the fireside, and let the voter discuss at the town meeting the important question. Has the American citizen a right to a foothold upon the soil, and if so, have we, the people of this generation, enough of character and enterprise to assert that right?

CAROLINE A. BLODGETT.



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

IN A COUNTRY TOWN. By Annette L. Noble, author of "Miss Janet's Old House." 16mo, pp. 385. Cloth. \$1.25. New York: Na-

tional Temperance Society and Publication House.

"Miss Janet's Old House" was a well conceived and neatly wrought out story of youthful life, and they who have read it will receive this new book from the same author with a really good nature. The seaside picture that greets us on opening the book is a promise in itself of an interesting story, which is really the case. The author describes well a little country village and a variety of people who live in it. The moral lesson is derived mainly from a sad incident of opium intemperance, which is neatly and unobtrusively woven into the current of talk and narrative that fill the volume. The book is an accession to the list of the Temperance Society's that is above the average in quality.

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY. By G. A. Liebig, Jr., Ph. D., Lecturer on Medical Electricity, College of Physicians and Surgeons, Baltimore, etc., and George H. Rohe, M. D., Professor of Obstetrics and Hygiene, College of Physicians and Surgeons, Baltimore, etc. Illustrated. 8vo, pp. 383. F. A. Davis, Philadelphia and London.

The importance of Electricity in Therapeutics has become established, and from a once small, empirical beginning a system of treatment has been formulated that involves extensive study and much practice for its mastery. The literature of medical electricity has been growing meanwhile. Thirty years ago scarcely one educated physician in a thousand paid any attention to the then innovation, and he who did incurred the risk of censure for tampering with absurd and quackish devices. To-day a library could be formed of the books and theses written by careful observers and practitioners, and in Europe and America physicians and surgeons of the highest character advocate the use of the galvanic battery in nerve diseases and certain forms of tissue change.

An examination of the treatise before us shows it to be a carefully prepared digest of the subject indicated by its title. The purpose of its author has been to furnish the medical profession with a treatise in which the theory and practice of electrical therapeutics should be presented in a systematic and scientific form, and at the same time be so clear and in-

telligible that the average physician could employ it as a trustworthy guide in his practice. We think that this purpose has been well accomplished, and a work of high value has been given to the medical profession.

PUBLICATIONS RECEIVED.

SOUND ENGLISH. A Language for the World. By Austin Knuslach, author of "German Simplified," etc., etc. G. E. Stechert, Publisher, New York.

A brochure of sixty pages that suggests a well considered method for the phonetic representation of the English language. The author as a teacher of languages writes from the point of view of experience rather than of theory and so offers points that the advocates of spelling reform may examine to advantage.

PROCEEDINGS OF THE DEPARTMENT OF SUPERINTENDENCE OF THE NATIONAL EDUCATION ASSOCIATION at its meeting in Washington, March 6-8, 1889.

Acknowledging the courtesy of the Commissioner of Education, Mr. N. H. R. Dawson, for this and other documents, we would say that we find this pamphlet of 300 pages an interesting review of the status of American schools, as concerns especially the following subjects: The Training of Teachers, Manual Training, City Superintendents, Examinations, Higher Education, and Education in the South. Of these, Manual Training occupies the larger space, as it properly does in the discussions of to-day's school methods.

THE ADVENTURES OF A SKELETON. By Beecher W. Waltermire. No. 2 of the "Peerless Series." Published by J. S. Ogilvie, New York.

A singular story of a very attenuated man who slips into the bowels of the earth through a bore for natural gas. A sort of imitation of Poe without Poe's genius and culture.

THE HISTORY OF FEDERAL AND STATE AID TO HIGHER EDUCATION in the United States. By Frank W. Blackman, Ph. D. No. 9 of "Contributions to American Educational History," and No. 1 of the Circulars of Information, issued by the Bureau of Education in 1890.

In this essay of 340 pages the writer discusses the subject comprehensively and with much force.





Good morning! Have you used Sears' soap?

PHYSIOLOGY IN A NEW FORM.

THERE was recently published a Physiology, which presents the matter in a new form, making this subject the most attractive and the easiest to teach of any on the course of study.



This Physiology is called "The MAN WONDERFUL in the HOUSE BEAUTIFUL," and is an allegory, teaching the principles of Physiology and Hygiene, and the effects of Stimulants and Narcotics, and is to this subject what Pilgrim's Progress is to religious thought and teaching. The House is the Body, in which the Foundations are the Bones, the Walls are Muscles, the Skin and Hair the Siding and Shingles, the Head an Observatory in which are found a pair of Telescopes, and radiating from it are the Nerves which are compared to a Telegraph, while communications are kept up with the Kitchen, Dining-room, Pantry, Laundry, etc.

The House is heated with a Furnace, supplied with Telephone and Telegraph Appointments and a Wonderful Phonograph. There are also Mysterious Chambers, and the whole is protected by a Burglar Alarm. In this charming story we learn all about how we Grow, how we See, Hear, Feel, and Smell, and Talk; how food is made a part of our bodies. In studying the inhabitant of the House, the "Man Wonderful," we learn of his growth, development, and habits of the guests whom he introduces. He finds that some of them are friends, others are doubtful acquaintances, and some decidedly wicked. Under this form, we ascertain the effects of Food and Drink, Narcotics and Stimulants.

IT IS A WONDERFUL BOOK,

which if placed in the hands of children will lead them to the truths of Physiology and Hygiene, and the Laws of Life and Health in a way they will never forget.

USE IT WITH "THE MAN WONDERFUL MANIKIN"

and wonderful success is sure. By the use of the Manikin the parts referred to as the House, Foundation, Walls, Kitchen, Pump, etc., etc., can be examined and the exact location and relative sizes noticed. By the use of these two publications the "Science in Story" has been presented in a wonderfully attractive form.

This allegory will teach how to avoid violation of the Laws of Health, and many causes of disease. It meets the requirements of the laws, and in those departments where only a few minutes per day can be devoted to this subject, it is so attractive that it is easily remembered, while in higher grades we have our whole subject based on a never-to-be-forgotten allegory.

The Man Wonderful Manikin, \$5.00. The Man Wonderful in the House Beautiful, very fully illustrated, \$1.50. Both will be sent by mail for \$5.50.

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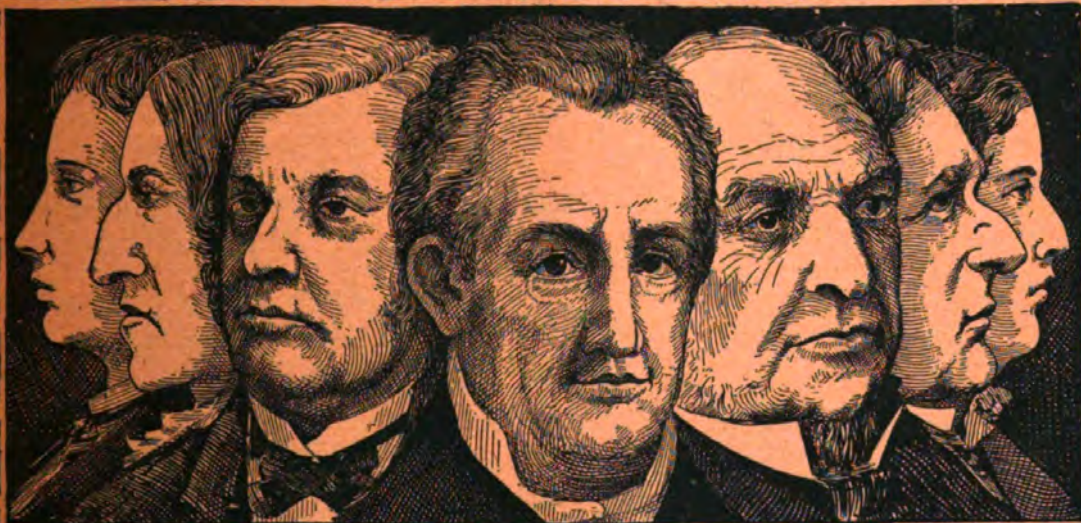
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Agents wanted to canvass for the JOURNAL. Send for terms.

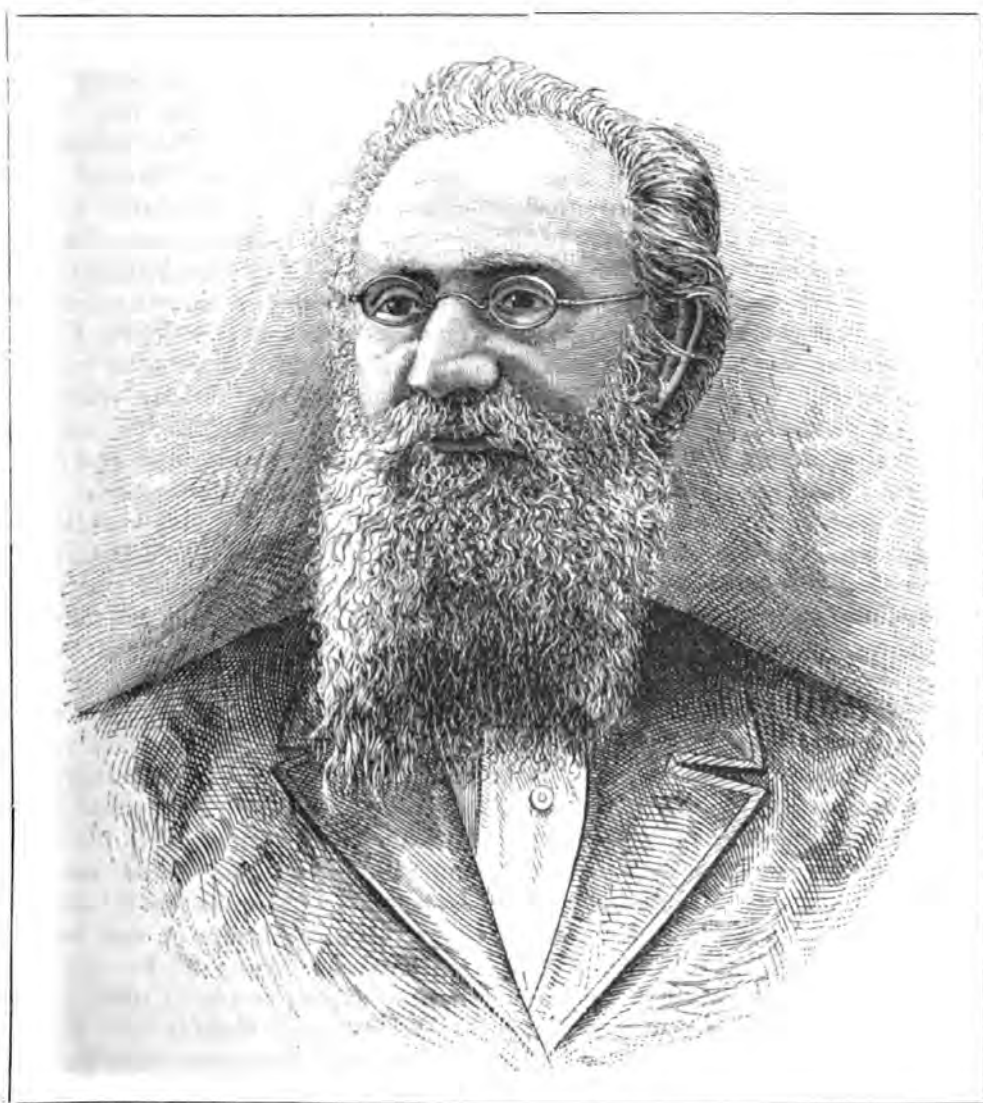
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AND
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NUMBER 6.]

JUNE, 1890.

[WHOLE NO. 618



DR. JOSEPH HURFORD.

JOSEPH HURFORD.

THE VETERAN ADVOCATE OF PHRENOLOGY.

DR. JOSEPH HURFORD was born and raised in Harrison County, Ohio; he is now eighty years of age. He was of the Friends' persuasion and of English descent. When quite young he commenced the practice of dentistry, which was then in its infancy in this country, no plate work being done at that time, and became a very successful operator, making from ten to thirty dollars a day. At this vocation he continued to practice for several years. Being very tall, 6 feet 4 inches, he found the stooping and confinement of an office wearisome and exhaustive, so that he felt compelled to abandon the business. He then gave all his time to the study of Law, reading all day, and night often till late. The effect was hard on his eyes, but he persevered and finished the course, and was admitted to practice at the bar. But the painful result of his unremitting study was the discovery that he had incurred an attack of amaurosis, which compelled him to give up the use of the eyes for nearly a year before he dared to read or write, and knowing that to practice law successfully it would require constant reading and writing, he procured the best works on the eyes in print, and was very careful how he used them. It was not long ere he became well informed as to the treatment of both the eye and ear. Following this line of study he also read anatomy and medicine. About that time he happened to meet with Combe's "Constitution of Man." He purchased a copy and found it an invaluable book. He loaned it to many different persons, until it was quite worn out; then he procured another copy and sent that on its round among his acquaintances. He keeps up this practice to-day, having for years taken six copies of the PHRENOLOGICAL for the special purpose of distributing them among his neighbors. He also read Combe's Treatise on Phre-

nology, and other books relating to that science, and took the PHRENOLOGICAL JOURNAL. Becoming as well posted as any one could be in those days by reading, he procured nearly a dozen skulls, Indian and others, among them an Esquimo and that of Catachee, the celebrated Indian chief who divided the Black Hawk Tribe. He obtained busts and casts of the brain of different types, taking some himself, and so pursued his study and observations until he felt certain that he was well informed with regard to Phrenology; then in company with Dr. Jesse B. Thomas, of Philadelphia, he started out on a lecturing tour. Dr. Thomas had an excellent magic lantern and many very fine English astronomical views. This combination proved successful for Hurford, as his charts and examinations were much in demand, and he easily cleared from 25 to 40 dollars a day after getting fairly to work. The lantern entertainment drew good audiences on free tickets, but gave Thomas very little to do as he was not a phrenologist, and nobody wanted his astronomical charts, so Thomas withdrew. Hurford continued, and made it pay well. Many professional people attended his lectures, and complimented him for his methods and accuracy as an examiner. He was about thirty years old at this time. Later he married a highly accomplished lady of Western Pennsylvania who did not wish him to travel and lecture, as she could not accompany him, so he reluctantly settled on a farm, and remained there for a number of years. Meanwhile he lost not a particle of interest in the science of Phrenology, and found occasional opportunity to lecture on it; and even now, at eighty years of age, he is the old advocate, doing all he can in the way of urging people to study its principles and apply them in their lives.

After spending some years in travel,

Dr. Hurford was induced to go to a water-cure in Pittsburgh and engage in the practice of hydropathy. There he remained but one year. Afterward he settled in Salem, Ohio, where he devoted himself to the treatment of the eye and ear, and with remarkable success. Securing a competency he retired from business and settled in New Brighton, Pa., where he has lived since, enjoying the highest regard of his fellow townspeople. Mrs. Hurford died about five years ago.

While engaged in the study of Phrenology before his marriage, he discovered a composition of which he made casts of the brain and other parts of the body. This proved so valuable that his brother John, who died in January last at an advanced age, manufactured and sold in one summer six thousand dollars' worth of such casts, and for a while a very lucrative business was conducted in this way.

The above brief sketch is supplied by Mrs. Henry Craig, of New Brighton, who has known its subject for many years.

The portrait indicates a fine organization, mentally, with physical powers unusually well preserved. The general tone of the make-up is elevated, and at the same time there is a decided practical vein in the character. The fullness of the forehead and the marked projection of the orbital ridge show strength in observation, power to criticise, power to combine, arrange, and devise. The mechanical faculty is indicated to a very unusual degree by the swelling temporal region, and associated with it is that taste and desire for harmony that are essential to the creation of successful designs.

There can be no doubt that if he had devoted himself to a pursuit requiring the exercise of the mechanical elements of mind in association with those that impart grace, symmetry, and beauty to work, he would have reached a very creditable place. For instance he would have excelled in architectural design, and constructive engineering. He has the organization that adapts one to a pursuit requiring delicacy of manipulation, as in the finer departments of surgery. He has ability to understand details in their relation to the out-working of a definite object. His judgment should be quickly drawn, and he should be inclined to rather prompt action. The nose shows strength of will and a penetrating view of matters. His self-esteem, however, is but moderate, and has not helped him much in the furtherance of his purposes, because he has always been disinclined to anything partaking of assumption or pretense, but on the other hand has been modest and reserved, sensitive and deferential — giving way to others even where valuable personal interests suffered loss by such lack of self assertion. Probably, too, his consideration for the rights of others has been somewhat excessive, and led him to overlook his own side of right and privilege.

It is altogether likely that with an organization and temperament so well adapted to a pursuit that relates to human nature on either its physical or mental side he would have attained conspicuous eminence as a phrenologist had he remained in the lecture field. The success that was so early achieved was but the promise of further and better rewards.

STUDIES FROM LAVATER.—6.

THE FOREHEAD LINE.

I THINK as we try to recollect a face the forehead is the first remembered and last forgotten. Though years may have passed since our dearest ones left

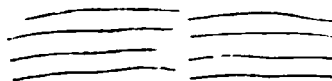
the earth, I think the forehead is most vividly remembered. Lavater says an experienced eye contemplating a multitude from a window would, from this

outline alone, read the character of each individual. He begins his study of the face with the forehead. The muscle of the forehead is the instrument most important to the abstract thinker; for which reason we always seek for abstract thought in the forehead, rather near and between the eyebrows. Notice any particular moment when the thinker is listening or preparing an acute answer. From the forehead one may learn best what a man is by nature, and what he may become according to his intellectual nature. According to Lavater the general form, proportion, arching, obliquity, and position of the bones of the forehead denote the degree of thought, the sensibility, the mental

across the brow—furrows that can never be effaced." When the mind is riveted for a time upon one subject the brow at the top of the nose is naturally drawn together by the contraction of the muscles, and if this action be often independently prolonged the brows will remain fixed in the position so often assumed, with a wrinkle or two of a vertical kind directing the series. We see these deep, well marked lines in faces of all our most illustrious thinkers. You see these lines of thought in the face of Cyrus W. Field, as deep laid and enduring as the cable lines beneath the wave. In the face of Professor Morse you see these deep, perpendicular wrinkles and the vertical wrinkles



1. Arched Symmetrical.



2. Broken Straight.



3. Double Arched.

FOREHEAD WRINKLES.

vigor, and the dispositions of man. The covering or skin of the forehead, by its color, tension, or wrinkles, denotes the passions and present state of the mind. The bones give the internal quantity, and their covering the application of power. The wrinkling varies according to the forms of the bones, though the bones remain unaltered. A degree of flatness of the bones produces certain wrinkles, a certain arching is attended by certain other wrinkles. Certain foreheads have perpendicular, others horizontal, others curved, others confused and mixed wrinkles. Smooth, cornerless foreheads, when in motion, commonly have the simplest, least perplexed wrinkles.

No great thinker ever had a smooth face. "Slowly but surely the ploughshare of thought turns up the furrows

very clearly. Before the telegraph lines crossed the country from city to city, they crossed the plane of his face clear and deep as they had long crossed the realm of his thought. Always in his place at church, how often when a girl, from my pew so near, have I looked at his strong face, with its towering nose and deep lines so vivid in memory still, that were I an artist I could sketch it well. There is a grandeur in a rugged face you never find in a face simply beautiful. So during the first weary weeks of the overwhelming cares of his presidentship how deep and deeper grew the furrows of intense thought in the patient brow of Abraham Lincoln. Deep lines of thought are seen in the faces of every great inventor and discoverer.

In the deep lines and wrinkles of the

face of Aristotle may be read his two greatest qualities, aptitude for observation, and logical method.

Many "short, fine wrinkles all over the face, saving one peculiar, strong, rounding wrinkle under the eye, forming a complete semi-circle, are sure evidence of penuriousness. When the wrinkles are very deep, they reveal the miserly habits of a lifetime. We see these wrinkles in the face of misers, half starved for lack of food, and nearly

ceding forehead and prominent nose of Peter Cooper.

The most beautiful and noble forehead, says Lavater, is in exact proportion to other parts of the countenance. It must equal the nose or the under part of the face in length, that is one-third. In breadth it must be oval at the top (like the forehead of most of the great men of England) or nearly square. The skin must be free from great unevenness, and wrinkled only when the



PROF. S. F. B. MORSE.

frozen for want of fire, who have died unloved and uncared for, leaving behind them hidden bowls filled with guineas, and old chairs stuffed with bank notes. Compare these miserly faces with the faces of Wilberforce and Dr. Muhlenburg, founding hospitals for the aged, and retreats for the destitute. In the miser's face self is regnant supreme, in the others love and sympathy for humanity. We see this generosity and nobility also on the long face, re-

mind is roused to just indignation, or deeply immersed in thought, and during the paroxysms of pain; the upper part must recede, and the lower project; the eye-bones must be horizontal and present a perfect curve upon being observed from above; an intersecting cavity should divide the forehead into four distinct parts, but with that slight effect as to be only visible with a clear, descending light. The four lines should be so harmonious that when the section

of one-third only is observed, one can hardly decide whether they are circular or straight. To complete this portrait of a transcendent forehead, the skin must be more transparent and of a finer tint than the remainder of the face. We see a few faces with such faultless foreheads, serene, noble, beautiful. "All great and excellent men have their eye-bones firmly arched and well defined. Men with square fore-



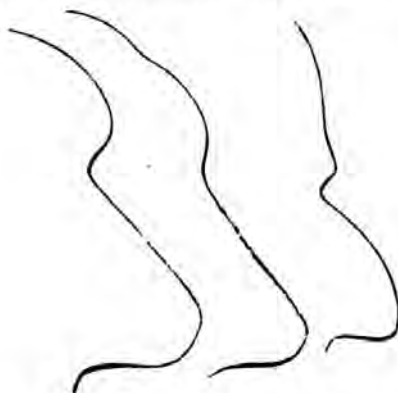
MISERLY.

heads and spacious temples, and these firmly arched eyebrows have great circumspection and stability; those with perpendicular natural wrinkles express power of mind and application. The more straight lines a forehead has the less capacious and more contracted it must be. The more it is arched the more it must be roomy. As we frequently live more conveniently in a small, well-contrived chamber than in large, magnificent apartments, so we find in many small, short foreheads, the wise mind resides at its ease. A blue vena frontalis in the form of a Y, situated in an arched, smooth forehead is only seen in men of extraordinary talent, and of an ardent and generous character. Lavater divides foreheads into three classes, the perpendicular, projecting, and retreating, each of these possessing a number of variations, "half round, half rectilinear, flowing into each other; half round, half rectilinear interrupted; curve-lined, simple; the curve-lined, double and triple."

The projecting forehead indicates stupidity and mental weakness, the retreating, brightness and mental strength. The nearly perpendicular

forehead, gently arched at the top, is an evidence of cool and profound thought. A deep indenting of the bones of the forehead, between the eyebrows, and extending in a perpendicular direction, is an evidence of ability and thought. A high, open forehead, with large, prominent eyes, denote natural power of attractiveness. Such men have the most polite and winning manners. Full, long, arching eyebrows, lowered down close to the eyes, shows great capacity of observation, as in Charles Darwin.

A fullness of the lower brow, with a nose divided at the point into a right and left part, shows great signs of discrimination, as we see in the pictures of celebrated naturalists, and very plainly in the face of Linnaeus, the Swedish naturalist. A very wide upper forehead, in comparison with the rest of the face, shows great powers of imitating the intellectual efforts of others. It shows great powers of receiving vivid impressions of thought. Fullness of the forehead, immediately above the top of the nose, with the head carried well forward from the body, shows great desire and power to follow after and persistently



FACE OUTLINES IN PROFILE.

pursue any object. This we see also in animals, as in the hunting leopard of India and Africa. "This projecting carriage of the head, as near as possible to the desired goal, a modern physiognomist has called Huntativeness. Persons gifted with great, piercing range of vision have eyes strongly reinforced

by this fullness in the immediately overlying portion of the forehead. Fullness in the center of the forehead, face, and every bone of the whole frame indicates a playful nature; this fullness we see in the squirrel. When the frontal bone attains its greatest fullness in its center there is great muscular activity, the index of a playful or sportive character. When we find all the bones of the nose

When we see this deep indent in the forehead of horses we can never trust them; we find the elephant exceedingly retaliative, never forgetting or forgiving an injury, revenging it twenty years after.

The most intellectual, ferocious, and stupid of the animal creation, says a keen observer of animals, show a level between the eye and the forehead,



WASHINGTON ALLSTON, THE PAINTER.

and lower part of the forehead very prominent relatively as compared with other portions of the face, we find great power of perceiving and judging tints, hues, and colors. We see this prominence of the bones in the face of Corregio and other distinguished painters. A hollow in the center of the forehead is a sign of inflexible resistance to wrong—of returning good for good and evil for evil. (See Washington Allston.)

while the ox, on the contrary, with greater capacity than these, more nobility and docility, displays a depression across the head just above the eyes, and exhibits rather prominent eye bones. These marks, so emblematic of intelligence in the ox, are invariably found in the most intelligent of men. Observing these marks more closely we might more highly prize, more carefully consider our animal friends and helpers.

UNCOMMON FACES.

"In every public gathering, at every street crossing, in every town, under every cope of Heaven," says Lavater, "we can always find noble faces uncorrupted by fame and adulation, for in all countries on earth wherein a hundred common men are assembled, one not common may be found—ten out of every thousand. I know," he says, "these noble faces by the proportionate, gentle intermingling of the different lines, by the

and the deep and shining attraction of the eye. The well-proportioned profile is equal in length and breadth. The head of this man neither projects forward nor sinks backward. In the best formed heads a horizontal line drawn from the tip of the nose to the back of the bald head is generally equal to the perpendicular line from the highest point of the top of the head to where the chin and neck separate. This noble man walks with a free, firm, even step, looks



A PROFILE. AMIABLE, REFINED, AND STRONG.

upper outline of the wrinkleless, compressed, yet open forehead, the basis of the nose and the mouth so conformable to each other, so parallel and horizontal, at the first glance. By the powerful eyebrows, the easily discerned, easily delineated space between the eyebrows which extends itself to the back of the nose, like the great street from the market place to the chief gate of a city, by the closed but freely breathing mouth, the chin neither haggard nor fleshy,

little about him, neither carrying his head aloft, nor contemplating his legs and feet.

"In this magnificent, superb form how much is there contained of the study of God, the genius of God, the poetry of God! * * * As the most translucent water flowing over a surface on which grows beauteous flowers whose bloom, though beneath, is seen through the pellucid waves, even so is it with the fair flower of the soul, planted in a

beauteous body, through which its beauteous bloom is seen."

Lavater tells us that when preaching, one single face before him might rob him of all ardor, or inspire him with enthusiasm. Whenever he preached he selected the noblest countenance before him and fixed his mind on that one on which he endeavored to act. Sometimes he selected six representative or characteristic faces and fixed them in his memory, speaking thus to one, thus

faces attracting, winning, irresistible, —amusing faces—superior, spiritually beautiful faces, a noble countenance, exalted above us without possibility of envy, a great countenance in grand divisions without wrinkles, a sublime countenance that can neither be painted nor described, it not only moves but exalts us." These last three must be good faces to preach to.

Besides all these there are faces we call insignificant, with very small fea-



MICHAEL ANGELO BUONAROTTI.

to another, and in such a manner to a third, accommodating himself to each. Having six or seven of these characteristic countenances before him, whose capacity he knew, he says: "I have nearly my whole audience, I do not speak to the wind. So every preacher may classify his hearers and act upon the best of men by the best of means." With these often used adjectives Lavater classifies a majority of faces: "A regular face, a beautiful face, a pleasant face, a gracious face, a charming face,

tures, in persons that are apt to be led by others. The kind of face we see on the sheep, whose head, says Lavater, is rounded at the top, and it is incapable of any acuteness or penetration, how inactive, how patiently stupid! None but the shepherd can tell one sheep from another. "There is no such close resemblance in any other domestic animal, and none follows its leader more implicitly, and apparently stupidly, as if it durst not think for itself.

L. M. MILLARD.

NOTABLE PEOPLE OF THE DAY.—No. 32.

MAJOR-GENERAL GEORGE CROOK.

THE sudden death of General Crook at Chicago, on the 21st of March, reminds us that the number of our distinguished veteran officers is being reduced to a handful. The man who from the beginning of his military career never faltered, and in the late Civil War and in the frontier operations won honor by his skill and courage, died in a Chicago hotel with all the calmness that had characterized him on the field of battle.

Looking at his portrait, one would say that he possessed an organization in which there was more than common symmetry, and the expression denotes a fair co-ordination of the faculties. The temperament was active and susceptible to influences that tend to arouse feeling and stimulate purpose. He was evidently a man of expedients; with his ready, intuitive grasp of the meaning of circumstances, his power to arrange and plan was in close relationship. Hence in an emergency his brain was thoroughly alive and worked promptly, conceiving measures that, in the great majority of cases, were efficient. He had the ambition that prompts a man to work earnestly and steadily for success, but enough of caution and circumspection to prevent him from attempting rash, headstrong things. The expression of the eyes is that of a close, calculating observer—one accustomed to weigh considerations, and not to make up his mind at one view. Yet the forehead shows the tendency to quick judgment. Such a man can review a rather wide field of data relating to things that come within his experience in a very short time, and so appear to others to make up his mind on the instant. There is a squareness of contour to the head and a clear cut to the face that intimate strength of character; we scarcely need a record of his life to satisfy us that he was possessed of indomitable courage,

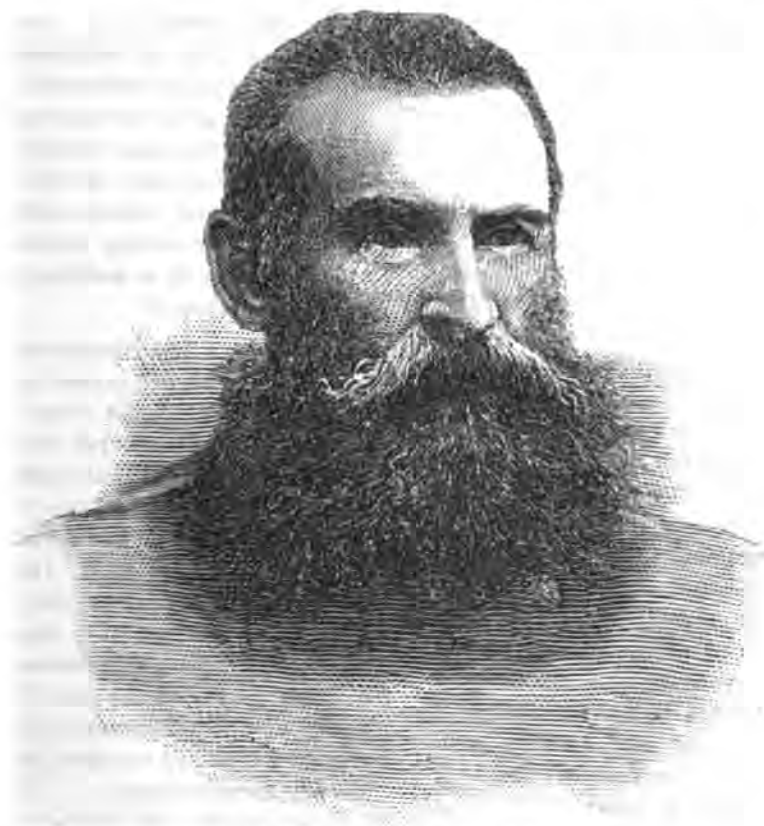
for the shape of the head imports a higher degree of courage than of the element that gives thoroughness of execution or "destructiveness." His sense of duty was strong, and that associating with his courage led him forward in carrying out what he deemed necessary, but there was no bitterness or cruelty in his method. In the fashion of the soldier he might retaliate upon the enemy for damages or wrong done, but the retaliation had to him the nature of deserved punishment: it was not *revenge*. General Crook was a thoroughbred soldier, but a generous one; when circumstances admitted kindness toward his enemy, kindness was shown. As a rule he could not be vindictive toward a conquered foe, and malice was no part of his nature or policy.

General George Crook was born near Dayton, Ohio, on the 8th of September, 1828. At the age of twenty-four he was graduated from the United States Military Academy, and appointed to service in California. In the Red River and Pitt River expeditions he participated, and when the war between North and South opened he came East and was appointed Colonel of the 36th Ohio. During the war he performed an active and important part, as those familiar with the history of the four years' struggle know. In West Virginia, Northern Virginia, and Maryland he won praise and promotion, was breveted Lieutenant Colonel of the U. S. Army for his heroism at Antietam, and later Brigadier-General and Major-General, for brilliant cavalry service in the Army of the Potomac.

Mustered out of the volunteer service in January, 1866, he received the commission of Lieutenant-Colonel of the 23d U. S. Infantry, and was assigned to the district of Boise, Idaho. Now began the second chapter of his military life, which is scarcely less interesting than

the first. Quoting from a writer in this regard, "It would be misleading to say that General Crook first earned his reputation as an Indian fighter in the course of his command in Idaho, but it is certain that his splendid record caused his assignment to the disturbed and difficult District of Arizona. No post could have been more uninviting. For years Southwestern warfare had been conducted on the simple principle of killing Indians,

of animals at bay. Such were the conditions which confronted General Crook when he entered Arizona in 1872. His first step was to teach the hostile Apaches the necessity of obedience, and they learned it after an overwhelming defeat in their stronghold in the Tonto Basin. Then the Apaches learned that this great warrior, the invincible 'Gray Eagle,' as they termed him, always kept his word. It was a cardinal principle with General



MAJOR GENERAL GEORGE CROOK.

good or bad, wherever found. In 1869 General Ord reported that the maintenance of troops on that frontier was costing the Government \$3,000,000 a year. He himself said that he 'hunted the Apaches as though they were wild animals,' and the Apaches, seeing themselves hunted down, robbed by agents and traders, and even massacred when at peace, as happened near Fort Grant in 1871, fought with all the desperation

Crook that the truth was the same for the red man and for the white. If he had succeeded in carrying out his own plans for the Chiricahuas who were placed upon a separate reservation conveniently near the Mexican frontier, we should have heard less of Southwestern Indian troubles in subsequent years. The same principles guided his Northwestern campaigns against the powerful Sioux and the Cheyennes from 1875 to

1877. The activity, energy, and brilliant generalship of the campaigns which subdued the Northwestern tribes have made them memorable in the history of our Indian wars.

"General Crook's second command in Arizona will be recognized by history as illustrating not only heroic bravery, but also a spirit of justice, and a worthy purpose to make these Indians self-supporting and self-respecting beings. When he returned to Arizona in 1882 he found the lands of the Apaches overrun with squatters, and the Indians themselves living in abject idleness, and harassed by treachery, deceit, and abuse. He secured for them their rights. When, in 1883, the Chiricahuas broke out from the reservation unwisely chosen for them near the frontier, General Crook followed them into the fastnesses of the Sierra Madre, and secured the surrender of the band. This campaign will remain one of the most brilliant exploits in the records of our Indian wars. When these Indians had been taught that they must yield, General Crook proved to them that his word was good, and that their welfare was his concern. They were encouraged in a practical way to occupy themselves with agriculture, and in the two years of General Crook's complete control his constructive policy proved as successful as his policy of swift and certain punishment of wrongdoing. We need not dwell upon the causes of the outbreak of 1885. It is enough to say that most of the hostile Indians were recaptured by General Crook in the early spring of 1886. Considering the peculiar difficulties which he encountered in his Southwestern experiences and the injustice of criticisms, often interested, which were made upon his work, it is not strange that he should have desired a change to less exacting and less ungracious duty.

"But his record can not be dimmed. It is the record of one who as a soldier was always ready to punish hostile Indians, while as a citizen he was always

just, truthful, and anxious to build up rather than to destroy. To General Crook the Indian was not a reptile to be crushed, but a human being capable, with the exercise of patience, justice, and honesty, of final development into self-supporting independence and citizenship."

THOMAS DIXON, JR.

The Baptist Orator.

A NEW star has recently risen in the intellectual firmament of New York that in brilliancy promises to equal the most celebrated in the constellation of great divines of that city.

This new luminary flashes across the literary firmament, in the person of the young man named above, and of whom the following delineation was made recently by a well known phrenological examiner.*

You have a head measuring twenty-two and five-eighth inches in circumference, and your head from ear to ear over the top, measures fifteen and a quarter inches, and that is about an inch more from ear to ear than the circumference calls for. Therefore the head is larger, by being taller, than the hat measurement requires for a balance. This indicates that the organs in the top part of the head are more influential in the counsels of the mind, and in the forces of the character than the other organs which are reached by a circumference measurement.

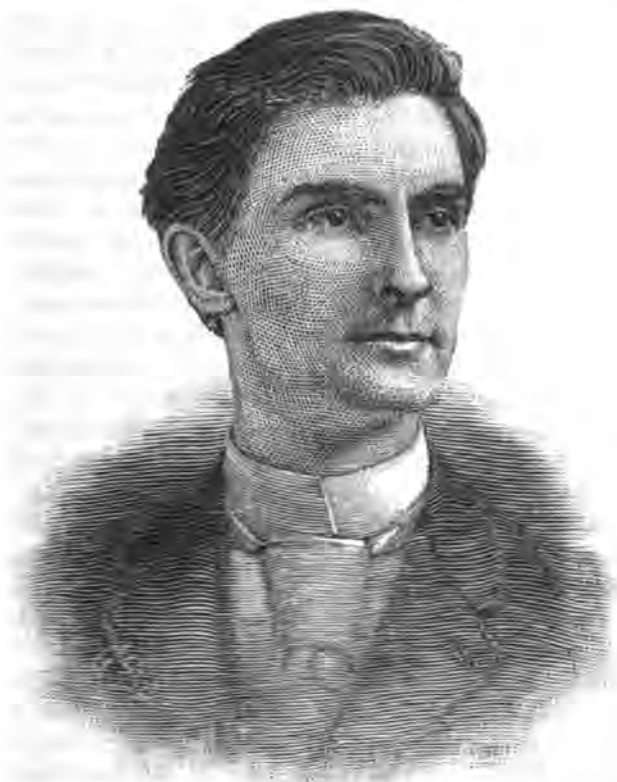
Occasionally we find a man with a low, broad head, and he is "of the earth, earthy." He seeks his good things here and gets them. A man with a high, narrow head, lives more in the realm of moral sentiment and intelligence and sociability; not so much in the realm of the selfish and sordid. You

* The description of character is from a dictation by Prof. Nelson Sizer, who did not know until afterward, the name or profession of the gentleman under his hand. The engraving is kindly furnished by the publishers of *The Christian Inquirer* of New York.

really ought to weigh 170 pounds, if you were not more than five feet, eight inches, but being six feet, three, you might weigh a few pounds more than that on that account, because you have more room to put the weight.

You ought to be known as a thinker, a very sharp thinker; you observe everything that is worth seeing. There are few men that see as much and see it so closely as you do; no matter whether it belongs within the purview of your

development, and the organs lying in that range are ruling. The power of observation is first, the ability to remember and retain comes next, and the power of analysis and criticism makes you exceedingly sharp to know the difference between one thing be it thought or sentiment, and another. Then you read character, understand mind and motive. Your first judgments of strangers are generally clear-cut and rarely need modifying or revising, and therefore



THOMAS DIXON, JR.

daily life, or not everything that interests the human race and requires thought challenges your attention; and you like to know something about it; and therefore you are likely to know about a great many things that you have no daily use for, but which may come in play sometimes with wonderful service. The line from the root of the nose, drawn over the top of your head to the back of the neck, is the long line of your mental

you have the power to study men, and adapt yourself to them. We do not regard you as a particularly pliable, adaptable man; you are more likely to lead off and expect others to follow in your path—as the military man who says, "Forward march," and does not look back—than you are to cater to the public. It is more likely that you are a master of men, and a leader of thought, and a mold of the public manners,

rather than an imitator or conformist to the ways and usages of society.

You have Benevolence enough to make you sorry for three-quarters of the human race, for one reason or another. You have Veneration enough to give you respect for all that is great or sacred. You have Firmness enough to be accounted headstrong and obstinate, and to feel pretty comfortable when you are balanced on your own center. Your Self-esteem is large enough to make you feel that your center is central, and therefore it does not occur to you that you need to change places to get a good one. Continuity is not quite as large as it ought to be, and that enables you to change from one thought or care or effort to another without delay. You could attend to miscellaneous affairs and take your mind from one thing and put it on another, and serve that, and change to another without loss of time or patience. Stupidity and dullness in people, obduracy and blind stubbornness, annoy and vex you to impatience, but you are not vexed and annoyed by a multiplicity of cares that you can control, but to be hindered, to have people in the way, and they not know it, and to be frustrated in the accomplishment of your purposes by the stupidity and ignorance or obstinacy of people, makes you nervous, and if you had the right to command, you would try to straighten out things, and train people to know what they were about; and if you had persons in your employment you would manage to sift out all that you could not train into active conformity to the duties of the situation.

Your love for home makes you patriotic; your fondness for children makes you welcome where they are: you are courteous in society, and among ladies who are intellectual and cultivated you are welcome; but you are not what the world calls "a ladies' man," and if a scandal were started at your expense not one man in fifty that knows you would believe a word of it.

You have a great deal of energy, and it is not wasted on divergencies, but applied in the direct line of effort and success. You are not very fond of complications or mixed-up affairs; you would try to organize a business so that it would not be onerous and bothersome to deal with. For example, if you had a large establishment to conduct you would place good men in the proper positions, and put the responsibility on each man of his department, and in that way you would get brain so assigned, where brain was required, as to secure success and save yourself the trouble of superintending in detail; you would instruct a man for his position, and hold him responsible, and thus get first-rate service. You have constructive talent which gives you the power of co-ordinating affairs that are under your control, and thus bringing many people to work in harmony with the general plan. You have the faculties which are required to obtain knowledge, to organize it and to classify it and operate it. As a thinker you would be very definite, and rather concise. You might have a great many points for discussion in a discourse or in an essay, but each point would be as distinct from everything else as one picket on a fence is distinct from the other pickets—although they co-operate in producing what is called fence, but each part is by itself, and as it were independent of the rest—and so you would in writing or talking make each point stand on its own merits, define it and leave it, and take the next.

If you were a preacher you would have several heads, and a good many sub-heads, and discuss each point, by itself, and make it co-operate with the rest, as tier after tier of shingles on a house co-operate with the rest to produce complete results.

You ought to be able to remember a great deal clearly. If you were a lawyer you would not carry many books into court. You might take a paper with references, for the benefit of the op-

posing counsel and the court, but you would carry the matter in your head. If you were in the editorial world you could go into a room with a ream of paper and a bottle of ink, and from your memory edit a paper without a text-book to look at; you would get the facts you wanted to discuss nearly enough correct to satisfy the public necessity, and yet with books of reference you would be critically accurate; but you could talk or write on a general subject and bring in nearly everything that was necessary for the consideration of a subject, without anything but your memory to assist.

You ought to be a controlling spirit somewhere; you have brain enough, and it is so developed, and in such position, as to show authority, self-reliance, criticism, memory, discrimination, knowledge of character, and the power to dominate men pleasantly, yet absolutely and persistently. If, for instance, you were the principal of a school the school would revolve around you, the pupils and the teachers would seek to conciliate you, knowing what you desired and adapting themselves to it. You can reprove people that do wrong with fewer words and less venom and rudeness than is common, and yet you get the results you seek, conformity to your requests. As a preacher you would go straight to the points you wished to make; your style would have nerve and fire and force, and be masterful in influence.

The Rev. Thomas Dixon is of Southern birth, and combines in his nature all the fire and enthusiasm so peculiar to his climate, with a very marked admixture of the cool, calculating force and energy of the northern character.

Mr. Dixon was born in Cleveland Co., North Carolina, January 11, 1864, near the close of the late fratricidal struggle, and beyond all question bears many marks of the highly wrought mental and nervous activity which so peculiarly characterized the people of the South during that critical period. A period when life, liberty, home, worldly

possessions, in short everything that life holds dear hung in an uncertain balance.

Mr. Dixon's father is a clergyman of the Baptist persuasion, and one of the most noted of the State. Mr. Dixon's mother, it should be said, was keenly alive to the great issues of her time, and as the wife of a leading clergyman of his State she naturally held a conspicuous position in all the movements of her sex. It is well known that the Southern women were far more earnest and enthusiastic over the issues of the war than the women of the North. This, however, being only in accord with the natural fire of the Southern temperament, and the fact that the devastations of war were on their own territory, with the march of armies, the firing of artillery, the burning of camp fires about their very doors, would be apt to stir the soul to its very depths.

Thomas entered Wake Forest College, North Carolina, in September, 1879, where he soon became a marked man among professors and students. He was graduated with the highest honors in June, 1883, and at once entered Johns Hopkins University in Baltimore. Here he took a post-graduate course of one year. He then spent one winter in New York, studying dramatic art and oratory. He returned to North Carolina, and was elected to the Legislature of the State before he was twenty-one years of age, and gained reputation for his oratory and skill in political affairs. Immediately after this he studied law and was admitted to the bar; but becoming persuaded that it was his duty to preach the gospel he became a minister and filled pastorates in Goldsboro and Raleigh, N. C., doing excellent work in both. He was then invited to the pulpit of the Dudley Street Church, in Boston, going there in January, 1888. In Boston Mr. Dixon soon became known as a pulpit orator, and crowds flocked to hear him. In eighteen months he added more than 200 to the membership, and

exerted a widespread and wholesome influence.

When the call came from the Twenty-third Street Church, New York, believing this city to be the strategic point of America, especially in its possibilities for wide and aggressive Christian work, Mr. Dixon was constrained to leave the large congregation he had gathered about him in Boston for the purpose of doing a cosmopolitan work and of carrying into effect some plans which he was firmly convinced should be put in operation in this city.

Mr. Dixon evidently proves the saying, that orators, like poets, are born, not made. A young man, scarcely at the full measure of physical development, evidently not of the full breadth of shoulders and depth of chest that will come with a few more years of bearing the responsibility of leadership of a growing society, spiritually, intellectually, and politically, he has already outranked most other clergymen of his day in the result of having in one year developed a small, almost lifeless, church into a congregation that forms the largest Sabbath audience that assembles regularly in New York City. After a pastorate of six months in the Twenty-Third street Baptist Church, he was compelled to move into one of the large halls of the city to accommodate his ever-increasing audience, and the preliminary steps have already been taken for the erection of a new church edifice that shall afford greater seating capacity than any auditorium now in the city, either religious or secular.

Politically, Mr. Dixon is fully in sympathy with the common people, even to the extent of declaring himself in favor of Christian Socialism. This shows that his heart is in the right place, whatever may be thought of the wisdom of such a choice. It is far easier to correct a mistake of the judgment, when the heart beats high and quick for humanity, than to change the errors of heart and brain when an austere orthodoxy petrifies

with the belief that the smallest sin deserves unmitigated punishment.

In style of oratory Mr. Dixon more nearly resembles Patrick Henry, we think, than any man of the century. His style is suited to great subjects and great occasions, while theological hair-splitting does not suit his capacity. He was born for larger effort, and the opportunity before him is ample. That he may be faithful to the highest possibilities of his endowments and the pressing demands of the age in which he lives, is the anxious thought of many who have watched this phenomenal character with close attention.

WHAT THE OLD MAN SAID.

COME hither child.

I am an old, old man,
Yet once like thee I had a sunny brow,
And curls of gold, and I was fair as thou,
With gentle voice and spirit undefiled.

And so I grew
Into a merry youth,
And saw the finer side of all delights;
My days were joyous all, and blest my nights,
And love was mine and innocence and truth.

One hour there came
A tempter to my side,
He held the ruby glass close to my lip,
And I, unwary, took the fatal sip,
And all my better nature crucified.

For day by day
The tempter came again,
Until the poison grew a nectar sweet,
And nothing to my vision seemed complete
Without its honeyed guile, its witching pain.

My boy believe
Thou never can'st be safe,
If once that lurking poison fires thy veins;
Ask God to keep thee from its awful pains,
And be not then a drunken, aimless wail.

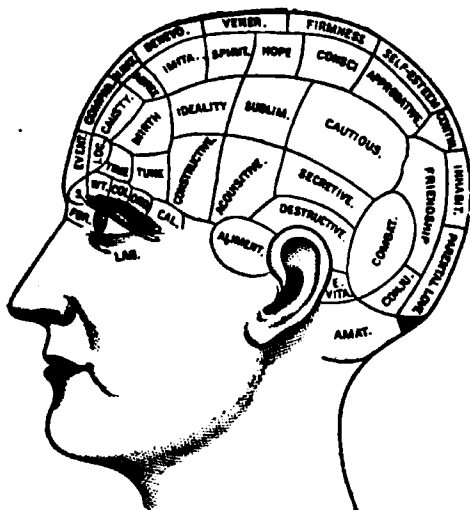
And boy, believe
Even though at the last
His wondrous love has dashed the cup
aside,
And given repentance, better I had died
A child, uncursed by memories of the past.

MARY A. DENISON.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



MENTAL MECHANISM.—NO. 10.

HOW FACULTIES WORK TOGETHER.

SOMETIMES, Approbativeness works towards the social faculties. It works downward and the social feelings seem to work upward to meet it. Then, it rejoices in cultivating acquaintance, in knowing everybody, keeping up correspondence. The old fashion of visiting everybody on New Year's, and even extending the visits beyond one's personal acquaintance by going with those who will introduce one to new families. Thus, one man will take two friends and introduce them to forty families, and thus broaden the field of mutual acquaintance, and each one reciprocating the favor. For instance, a carriage will take four men, each having a "visiting list," each introducing his three friends to his own acquaintances. Of course the social feelings are gratified, but the ambition to have a wide social list, and widen one's acquaintances is largely the work of Approbativeness. There is

hardly anything with which a society person feels so pleased as an extended acquaintance with smart and respectable people. We hear a person say, "I have visited at their house. I was introduced to them at such a watering place, or such a lady's party."

In the South this extending of acquaintance seems to be a matter of ambition. A young man of twenty-five years of age, if he hears the name mentioned of a person that lives in his county, or in an adjoining county, that is not familiar to him, he seems puzzled. In the South each person seems to know everybody else within forty miles, and there, intimate acquaintance is easy. One man will say, "I don't think that man lives in such a county. I have never heard his name." In the thickly settled portions of the country there is a social center, and one scarcely knows anybody five miles from his home, outside of his own town, but, when people live in the rural, agricultural, or planting districts, and the county seat is the only center, and gentlemen make it their business to ride on horseback to the Court House every market day, or every Saturday, and then to go a considerable distance on Sunday to a church, that perhaps stands alone, because it is central to the region in which it stands, furnishes another opportunity for people to congregate from long distances.

In the thickly settled portions of the North, where people are huddled in villages, and can walk to church in fifteen minutes, where the farmers that live a mile or two out drive in, and a place five miles square constitutes the township and the village within it,—the focal point of religious, social, and

commercial intercourse, it has a tendency to make a few hundred people well acquainted with each other, and not well acquainted with people in another town. Moreover, in the North, nearly every person is daily occupied in something. He has no leisure to travel and visit and hunt and fish, and extend his acquaintance. People who have leisure thus to do, seem to be more social and hospitable than those who are engaged in stirring occupations which occupy every hour, and, therefore, have little time to spend in social converse, except in the intimate associations of the store, workshop, household and home, and the church and the school.

In some sections of the country, Northern Ohio, for instance, the townships are laid out five miles square, and the roads lead from town to town right through the center of each township, and these are the main roads, running at right angles through every township, and the people from the outskirts of these townships work towards the center for trade, for society, for church, and for schools. They will have a high school in the center, and other schools in the outer sections. As soon as the people get leisure, on Sundays, or holidays, they begin to group themselves towards the center, and, of course, that segregates them from the other towns. Men whose farms lie together on the outer edges of their townships will dress themselves on Sundays and holidays, and travel away from each other to the center of their own township.

In the South, there is a county town, and people from all over the county will go to that common center, and in doing so, they will know everybody on the road from the outer edge to the center. There they will meet everybody else at one time, or another, and be introduced, and we fancy that Self Esteem and Approbativeness work more strongly in the South than in the North. In the North, we think Approbativeness works more toward the economic, the intellec-

tual and the moral. It has a more quiet and complex manifestation. In the South a man does not care so much about his appearance, his style, his dress, but, he clamors for what he calls "personal honor," and will fight to the death to keep his reputation intact.

Approbativeness and Combaticiveness lie pretty near together, each touching the social group. We think the duelling code was born of Approbativeness and Self Esteem in connection with the social faculties, Approbativeness coming to the rescue of social honor, or honor among associates. Where that code does not obtain, we do not see this special spirit of ambition and social feeling combined to protect one's reputation. The feeling, however, will take a different manifestation and show itself in the desire for financial success, for artistic, or mechanical excellence, and for intellectual and scholastic culture and knowledge, especially among religious people in regard to their religious standing and reputation.

Public sentiment becomes codified and solidified, or crystallized around certain other elements—in the South personal sociability with the manifestation of Combaticiveness and Destructiveness as protectors of personal honor. There is many a Northern boy who has not much social standing,—he belongs to nobody and nobody belongs to him,—yet, he wants public esteem, and the desire to make himself of some consequence will cause him to pore over his books, and he will work at his trade, or profession, and hope for the time when his name shall ring through the land as a distinguished man, and yet, he may be almost as silent as a sphynx so far as sociability is concerned. He has not been cultivated socially, but he has ambition to make people note his power and skill, and honor his name, though they do it at a distance. Under another type of civilization the same spirit would lead a person to excel in all those social relationships which make a man personally interesting to

his friends—in politeness, in dancing, in horsemanship, in military achievement, in public oratory, or politics.

Character is a wonderful complexity. It melts and modifies itself according to circumstances. The environment does much to incite and urge the activity of certain faculties, and to curb and diminish the force of others. If we go among the lowest dregs of human existence, we find in any group of ragged urchins who have no culture, except that of the pavement, or the huddled crib where they sleep; they even will have their public sentiment,—who can beat at marbles, who can fight and master the other boys, who can steal and not be found out, who can pilfer the most from the groceries and peanut stands. I have met a group of wrangling boys, dirty, perverted, unkempt, and unwashed, and one would stand up and say, "I am better than you." I have heard the fathers of such boys say, "I am a better man than he," that is to say, I am a better man in a fight. The word "better" is a pretty poor one in such company, and so, ambition, Approbativeness and Self Esteem work through low channels, with perverted faculties, and work with an earnestness worthy of a better cause, and a better destiny.

—:O:—

A STUDENT'S LETTER.

FROM a sprightly letter written in March last by a member of the Institute Class of '89, the following is taken. It is dated at Marion, Va.:

It hardly seems five months since the closing exercises of the Institute of Phrenology took place. Time flies; and this season passed swiftly in an almost vernal and even summer-like climate. Shakspeare, "the myriad-minded," has described, in "Midsummer-night's Dream," just such a season as we have had, although the writers of to-day seem unequal to the task:

"Therefore the winds, piping to us in vain,
"As in revenge, have suck'd up from the sea

"Contagious fogs; which falling in the land
"Have every pelting river made so proud,
"That they have overborne their continents;
"Therefore, the moon, governess of the floods,
"Pale in her anger, washes all the air,
"That rheumatic diseases do abound;
"And through this distemperature we see
"The seasons alter, hoary-headed frosts
"Fall in the fresh lap of the crimson rose;
"And old Hyein's thin and icy crown,
"An odorous chaplet of sweet summer buds
"Is, as in mockery, set. The spring, the summer,
"The chiding autumn, angry winter, change
"Their unwanted liveries; and the mazed world,
"By their increase now knows which is which."

Save a slight snow at Thanksgiving, there has been none here this winter, until recently, when for an hour or two at a time the air would be filled with large flakes of the falling fleece. But the snow did not remain long, the earth being too warm to retain it. Spring seemed surely to have come the first of February when, for a few weeks, Southern strawberries had been a novelty at the North. The trailing arbutus, clematis, and other spring flowers were in bud, and the blue-grass threw up its stalks; the blackberry, peach, Japan quince, and other plants were in bloom, and summer flowers gave promise of coming fragrance.

But the late cold wave dashed its snowy cap over the premature summer solstice, and "set back" the season for a time, damaging the blossoming plants, the coming peach crop, etc. As I write, a "confounded concert" is being continually carried on, in the meadow below, by an army of frogs of all denomination, age, color and "previous condition of servitude." It is deafening, in fact. So, if this communication is slightly mixed and fragmentary, please attribute to environments!

Of course this enterprising "New South" was not to be outdone by the rest of the civilized world, and we "followed the fashion"—taking hold of *La Grippe* with great gusto, and it returned

the compliment with equal hospitality. Few cases were followed by such serious results as were so many in colder climates. In fact, many felt that as the French word *grippe* means "a whim," it was merely what old Virginians called a "whimsy." When a fellow was (as we say) "all broken up," though nothing much was the matter with him, they called it having the "whimsies."

I have not paid much attention to Phrenology since I came here; especially as soon after my arrival, my family was increased by one, said by "the natives and neighbors" to be the best and brightest baby ever seen in these parts—presumably a young Phrenologist! I have often thought of the Class of '89, A. I of P., and of the agreement as well as class "resolution" for each to contribute articles and items to "our corner" of the JOURNAL. So I have written these few "sticks" of matter, partly personal, for the eyes of the friends, students, and professors—whose forms and faces, as well as hands, became so familiar to my mind in the time spent in the Lecture Hall, while studying the great science of "Ourselves and Others;" or while in the Cabinet of Casts and "place of skulls"—the headquarters for heads and the interpretation thereof.

Where are the students of that session? Scattered to the four corners of the globe whence they came; but with many a lesson learned in Human Science, and for human good. May each one, in his sphere, put in practice, and teach the same to his fellows!

Leaving New York, by steamer, on the 12th of Oct., six of the class of '89 sailed southward: Heitzman, of Indiana, Grammer, of Texas, Duval, of Arkansas, Asbell, of Kansas, myself, and last, not least, Hendrikson, of Minn.

The latter was presented to the collected passengers by our fellow-student, "Professor" Duval, in a few appropriate remarks introductory of the subject (Phrenology), and then the other sub-

ject (a passenger) was thoroughly "shown up" by Prof. Hendrikson, who did "the cause," himself, his instructors and fellow pupils much honor by his delineation. Success to Hendrikson; best wishes to all, phrenologically and in all other respects.

I shall stop about Marion, Va., and vicinity another month or so, and then return to my residence in Maine.

EUGENE H. JUDKINS.

N. B.—Hendrikson has, during the last winter, justified the good opinion entertained of him by his fellow-students in several prosperous courses of lectures in Minnesota. ED.

—:O:—

A—, MINN, April 14, 1890.

MESSRS. FOWLER & WELLS Co.:

THE April number of the PHRENOLOGICAL JOURNAL received; also No. 13 of the Human Nature Library, containing matter concerning the session of the Institute of Phrenology. Many thanks.

Perhaps it may interest you to learn why I did not go into the "field" as I intended last fall. Well—"Man proposes, but God disposes,"—at the earnest request of the people, I took charge of the school here, and have just closed a successful term. I have not whipped or punished a scholar; and some pupils who have before attended solely for the purpose of making mischief, and having "fun," worked hard and earnestly, and they expressed great regret that the school was closed.

I do not tell you this to show off my abilities, but it is to show what can be accomplished by applying the principles of Phrenology to teaching.

I may be rather severe in my criticism, but—having read recently some comments on Phrenology which the writer called "an exploded idea"—I have arrived at the conclusion that there are only two classes of people that oppose and deride Phrenology. First, those who know nothing about the sci-

ence; and second, those whose organizations are so low and (also their life and practice) that they hate the science that impartially shows what they are—whether in palace or college.

D— G—.

—:O:—

CLEVELAND, O., April 19, 1890.

MESSRS. FOWLER & WELLS Co.—

Dear Sirs :

I RECEIVED the description of character from my photographs sent by you this morning, and was highly pleased with it. My mind has always been in a muddle as to what to do, but I can see my way clear now, thanks to you. I think you are right when you say I would make a good salesman; I have the reputation of being a very fluent talker. But I would like to be a physician better than to be a salesman.

As I told you, I am going to follow your directions out, and from time to time, I will report to you. I will do all I can to get business orders for you, and, if I get any, I will take my commission in books published by your firm.

Your description of the person I ought to marry fits exactly my conception of a "beau ideal," but, before I wed, I will send her pictures to you for examination.

You may expect to hear from me soon.

Sincerely yours,

H. R. J—.

—:O:—

B—, N. Y., April 20, 1890.

PROF. NELSON SIZER—Dear Sir :—Have received my examination and am much pleased with it. It has settled a question I have long wished settled. I shall now proceed upon my life-work in the manner suggested, viz., to study shorthand, and enter a lawyer's office, and, ultimately, become a lawyer.

I, as well as my mother and brother, had for some time decided that I was adapted or the law. The decision was the re-

sult of reading Phrenology. My examination was the truest to nature of any I have yet seen. All the leading traits, I think, but one—Cautiousness—were nicely pictured; Continuity is my smallest organ in development—I have noticed it for some time, there being quite a depression in my skull at that point. I have also noticed its manifestations in every-day life—mostly to my inconvenience. I shall now endeavor to cultivate it, and my other faculties as well.

Is there a greater supply of stenographers than there is demand for? I saw an article in a leading newspaper to that effect. But there's always room at the top.

Enclosed find 25 cents, for which please send me, "How to Succeed as a Stenographer or Typewriter," by Arthur M. Baker.

Hoping to hear from you soon, I remain. Your obedient servant,

H. L. N.

—:O:—

ADDRESS OF R. C. J. MEYER. CLASS OF '88.

TEACHERS AND CLASSMATES.—The final day has come for us to say farewell. As some of you have said much regarding this science of the human mind, or mental philosophy, I shall only heartily endorse your statements, and add, that I was raked in by a single lecture on Phrenology about four years ago, and have studied it ever since. If I was saved by a single lecture, how many others may be saved by several, and thus become healthy, wealthy, wise, and happy, as all men, women, and children should be, by being trained what to do, and why, and who may and who may not marry, and why!

I would heartily advise every one to come to the American Institute of Phrenology, and take a course of instruction. It would enable them to read their fellow-beings, and thus know whom to trust, and whom not; whom to employ; and how to place every one in his right position.

It is not necessary that every one should follow Phrenology as a profession because he has received instruction; but all would receive benefit, and feel thankful for the opportunity to learn its truths.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.—No. 8.

GEORGE COMBE.

GEORGE COMBE was born in Edinburgh, Scotland, October 21, 1788, and after a busy life of earnest endeavor to benefit humanity he closed his eyes in their final sleep on the 14th of August, 1858, at the ripe age of 69 years and 9 months. Few men have closed a life of seventy years of whom it could so truthfully be said, "Well done, good and faithful servant." He had made a glorious record in the world's history and left an influence that will never die, but will continue during the ages of time with undiminished benefits. He was said to have been a healthy babe, but his birth-place was far from being conducive to the bodily well being of those who remained there. His own description of the place and its environments, as given in his "Outline of my Life," pictures it as very undesirable for a residence; being "at Livingston's Yards, close under the southwest bank and rock of the castle of Edinburgh. The locality was low; to the east a Scotch acre of ground was a filthy swamp in winter, and covered with filth heaps in summer. All round, to the east and south, were tan-works and a magnesia-work, which poured their refuse into open ditches with small declivity. The public drain, charged with the soil of the Grass-market and Westport, two humble localities of Edinburgh, ran past the dwelling-house uncovered; and the house itself was attached to the brewery.

"The house consisted of two stories, with only two rooms, a kitchen, and a bed-closet on the lower, and three rooms and a very small bed-closet on the upper floor. About the year 1797 or 1798 an additional room and bed-closet were built. The family, about the year 1800, included our parents, thirteen children, and servants, all crowded into these few rooms of small dimensions, and the laws of health, depending on ventilation, ablution, and exercise, were wholly unknown. The mind was regarded as independent of the body, and every one acted on this hypothesis.

"These details may appear uninteresting

to many persons, but they describe the causes of many ailments in the family, and of much bad health in those who survived, and of a degree of feebleness in my own constitution, which, although not congenital, occasioned considerable suffering, and was with difficulty only partially removed when the laws of health were discovered and obeyed.

"My father was George Combe. He was 6 feet 2 inches in stature, and proportionally well formed in the trunk and limbs. His temperament was bilious, nervous, and sanguine, and his head was large. He was in his forty-third year when I was born.

"My mother was a short, well-formed woman, with a highly nervous and bilious temperament, a dark, fine skin, dark eyes, and fine dark hair, and an energetic step. Her brain was of average dimensions and remarkably well proportioned, conscientiousness and firmness predominating among the sentiments. She had a quiet manner, combined with decision of character, and intuitive good sense. Her knowing organs were rather larger than the reflecting organs. She was in her thirty-first year when I was born."

From the foregoing we can see in part the "start in the world" with which George Combe's life began. If, with these surroundings, he could go through it and accomplish what he did, with what encouragement might other boys with better opportunities look forward to greater achievements. He was sent to Mr. Waugh's parish school at 6 or 7 years of age, but it was so crowded and so ill ventilated in the heat of the summer, that, although he could see to read from 9 to 12, in the afternoon he was so completely overcome by the bad air and the heat that he could not distinguish one letter from another, and was taken from school and put to sea-bathing.

His next school was Mr. Campbell's, where he learned

"to read and spell after the fashion of those days, *i. e.*, I spelled and pronounced the words with a broad Scotch accent, with no

regard to stops or intonation; *and without once dreaming that the words had a meaning.* The discovery that English words in a printed book were signs of feelings and ideas did not dawn upon me till several years afterwards. One reason of this was that the only significant speech I knew was broad Edinburgh Scotch; and it never occurred to any one to explain the meaning of English words to us children in this dialect.

live and speak in a sphere so far above my condition and comprehension that I never attempted to follow him, but at once retreated within my own consciousness and there made entertainment for myself; or fell asleep, the refreshment of which was the only solid advantage I derived from my church attendance in those days."

He was less than eight years old when these experiences of his life occurred,



Geo. Combe

An English book was as unintelligible to me after I could pronounce and spell the words of it as was a Latin book before I had learned the rudiments of that language.

"I was regularly taken to church in those days, but never understood one word of the sermon. This gave rise to a habit of inattention to spoken as well as to printed language. The preacher appeared to me to

and perhaps it was in those moments of solitary thoughtfulness and self communings in church that his mind took on the bias which made him the philosopher of later years. Incidents and a few words from servants were never forgotten by him, and influenced and gave tone to some of his books. One day one

of his mother's servants said to him, "O, laddie, you should never marry." Young as he was he seemed to comprehend her meaning, in a measure, and subsequent studies enforced the idea conveyed, and doubtless was a "foundation stone" to the structure entitled "Constitution of Man."

In the introduction to "Science and Religion" he thus refers to another incident:

"An event so common and trivial as almost to appear ludicrous when introduced into a grave discourse, but which is *real*, gave rise to the train of thought which is developed in this work. When a child of six or seven years of age, I got from some benevolent friend a lump of sugar candy. The nursery maid desired me to give a share of it to my younger brothers and sisters, and I presented it to her to be disposed of as she recommended. She gave each of them a portion, and when she returned the remainder to me she said, 'That's a good boy; God will reward you for this.' These words were uttered by her as a mere form of pious speech, proper to be addressed to a child; but they conveyed to my mind an idea. They suggested intelligibly and practically, for the first time, the conception of a divine reward for a kind action, and I instantly put the question to her, 'How will God reward me?' 'He will send you everything that is good.' 'What do you mean by 'good'?—will he send me more sugar-candy?' 'Yes, certainly he will if you are a good boy.' 'Will he make this piece of sugar-candy grow bigger?' 'Yes, God always rewards those who are kind hearted.' I could not rest contented with words, but at once proceeded to the verification of the assurance by experiment and observation. I forthwith examined minutely all the edges of the remaining portion of sugar-candy; took an account of its dimensions, and then, wrapping it carefully in paper, put it into a drawer and waited with anxiety for its increase. I left it in the drawer all night, and next morning examined it with eager curiosity. I could discover no trace of alteration in its size, either of increase or decrease. I was greatly disappointed; my faith in the reward of virtue by the ruler of

the world received its first shock, and I feared that God did not govern the world in the manner which the nursery maid represented."

He gives other simple incidents and perplexities of his boyhood, all of which he says gave intensity to his subsequent desires to assist in introducing a better state of things.

The parents of George Combe were not educated in book knowledge, and feeling keenly the lack thereof they resolved to give their sons the advantages of which they had been deprived, and sent them to various masters for the benefit to be derived in different studies, but George's mental needs and peculiarities, and his physical capabilities were not understood by his teachers, and his progress was very slow. At last, however, accident put him in the right situation, and in 1804, at the age of sixteen, he entered the office of Higgins and Dallas, where he began the study of the legal profession, to which he devoted six years, and at twenty-two, in 1810, commenced the practice of his profession on his own account. The following year, 1811, toward the end of it, he began to keep a diary, among the first entries in which he wrote:

"A desire for fame may be one mark of a mind that deserves it. I have taken the imagination that I have powers of mind sufficient to write some useful book on human nature, and especially on the education and intellectual state of the middle rank of society; but ever and anon I am troubled with misgivings, and make comparison of my own powers with those of others—my companions, who do not conceive such design, and authors who have executed such a purpose—and I feel the conclusion always against myself."

His biographer says of him: "Earnestness was the keynote of his character; life and its duties were always serious subjects to him. He was earnest in trifles as well as in matters of importance, for duty was to him a religion and a law. Whatever he ought to do, that he would do, no matter how much he

might sacrifice his own flesh or that of his friends." His own tastes were very simple; and he adopted a system of vegetable diet with benefit to his health. He took "porridge for breakfast; broth and bread, and an egg, or rice and milk for dinner; tea, and buttermilk and bread for supper." The thought of death was often in his mind; but the prospect of the immortality of the soul brightened the thought and relieved it of all terrors.

The philosophy of the mind was ever an interesting study to Mr. Combe and led him to read the writings of various authors, but he was not satisfied by their metaphysical views. At length, hoping to learn something of the mind by the study of the functions and structure of the body, he became a pupil to Dr. John Barclay, who explained anatomy and physiology with the uses of the different parts of the frame; all of which deeply interested the pupil, and although not satisfied, he still hoped for light when the dissection of the brain was reached; but after giving the keenest attention to the lecture for four hours, and saw one portion after another of the brain cut off and laid away after being named and exhibited to the listeners but no explanation of its *functions* given, he was disappointed. At its conclusion Dr. Barclay frankly acknowledged that it all amounted to nothing as far as the functions of the brain and the mind were concerned. Mr. Combe then abandoned the study of the mind in despair; supposing it to be too profound a mystery to be penetrated by any human philosophy.

About that time, 1815, the June No. of the *Edinburgh Review* contained a long article on the Doctrines of Gall and Spurzheim, ridiculing their philosophy, calling the authors modern peripatetics; and their teachings thorough quackery, and heaped upon them epithets, without stint or favor. The writer of the article, Dr. John Gordon, was a lecturer on anatomy and philosophy,

and editor of the *Review*, and had published a work on the Structure of the Brain a few years previously; and in the *Edinburgh Review* of April, 1803, he had an article ridiculing Dr. Gall's new theory of the brain as the immediate organ of the intellectual and moral faculties. This time he put on all his force to forever extinguish this "man of skulls" by the use of satire and coarse invectives, and, being well known in Edinburgh as a teacher and writer, his influence was very great, and George Combe, supposing he was a reliable leader, followed his lead and joined in the ridicule, and laughed at the jokes heaped upon the "pretenders."

Dr. Spurzheim was then lecturing in Dublin, and, as soon as he read the onslaught, hastened to Edinburgh to meet his censor, face to face, or at least to lecture on his enemy's ground.

Combe was so prejudiced against the claims of Gall and Spurzheim that he would not go to hear the lectures, and had not even seen the man when his first course of lectures had closed, when, coming out of the court of sessions one day he was accosted by a friend, a barrister, named Brownlee, who said: "Would you like to see Dr. Spurzheim dissect a brain?" His reply was: "Yes, very much." "Then come to my house at one o'clock." Combe went, and saw Dr. Spurzheim for the first time, and his faith in Dr. Gordon's *Review* was shaken when he saw Dr. Spurzheim *unfold* the brain by following its structure, not by slicing; demonstrated his anatomical views by beginning at the *medulla oblongata* and gradually unfolding the whole brain, and so completely refuting the assertions of the reviewer. From this time Combe was an interested listener when Dr. Spurzheim lectured, and followed the excellent advice there given, namely, that the conviction that different faculties of the mind were manifested by particular portions of the brain could be obtained solely by extensive personal observation.

This advice he put in practice by procuring from London casts of heads illustrative of the different organs.

Mr. Combe relates his experience with them as follows :

"When they arrived in two large sugar puncheons, were brought forth, and arranged on my drawing room floor, they looked all so white, and so exactly alike, that I felt ashamed of my own folly; and in the belief that the distinctions between them were too minute for my limited powers of observation even to discriminate, I would have hid them if I could. But the fact of their arrival had got abroad among my friends and they came in troops to see them. I was forced to tell them all I knew about the casts—and that at first was very little; but to my own surprise I discovered that each succeeding explanation which I attempted, the subject grew upon myself. I saw clear and obvious distinctions between casts, which on a hasty and impatient glance had appeared exactly to resemble each other; and by reading and conversation I acquired a greatly extended and much more accurate acquaintance with the mental talents and dispositions of the individuals, the casts of whose heads I had before me, than I previously possessed. I also examined the heads of many living persons whose characters I knew, and at the end of three years' study I became convinced that Phrenology was true.

In proportion to the increase of knowledge in my own mind was the interest of my expositions heightened, until at length the applications for an account of my casts became so numerous that I was forced to devote certain days and hours to gratify the public curiosity. Time rolled on, and my expectation that the general interest in the subject would cease, was never realized. On the contrary, I was entreated to announce public expositions of Phrenology as the only method of doing justice to the subject, to the inquirers after, and to myself. Thus became a phrenologist and a lecturer on Phrenology by a concatenation of circumstances which were not foreseen by myself, and the ultimate consequences of which I never contemplated when I began the study."

In 1817, in the April number of the *Scots Magazine*, Combe published his first article on Phrenology, entitled "An Explanation of the Physiognomical System of Drs. Gall and Spurzheim.

At the close of 1818 Combe had gained many new disciples, and to all inquirers he gave this leading precept which was given him by Dr. Spurzheim: "Observe nature for yourselves, and prove by your own repeated observations the truth or falsehood of Phrenology.

On account of the death of Combe's mother in May, 1819, he was obliged to abandon the idea of lecturing before November, or perhaps still later, but he collected his essays into a book and sent them to the press. In a letter to his brother Andrew, Nov. 4, 1819, he says:

"So great was the prejudice against the system and the book, that no bookseller here or in London, whom I tried, would purchase it even at prime cost; and when Bell & Bradfute, as is the custom of the trade, carried it around after publication to the booksellers, only one of them would attempt to sell it, and he took but two copies. It was advertised to be found in Bell & Bradfute's alone, and from the first the sale began fair, and is going gradually but steadily on."

The Essays created so great an interest that Bell & Bradfute offered to take one-third of the edition. Those booksellers who at first refused to have anything to do with the book at length called for copies, and its sale, though slow, was steady, and proved much more extensive than was expected by the author, and congratulations came even from many who had previously expressed their contempt for the system. They admired the man and his manner of treating both his subject or philosophy, and also its opponents. Thus his first book was launched upon the tide of acception and rejection while its author was fully convinced in his own mind that the system was true and that truth would ultimately prevail. On receipt of an early copy of the book Dr. Spurzheim wrote from Paris,

Oct. 29, 1819: "There is no doubt in my mind that your book is the most able defence of the doctrine in the British Empire. It must make a sensation in those who like *truth*. I am glad you have attacked the adversaries in front and on their own ground. They will be obliged to conceal themselves from view, to be silent, or they may think of a retreat. We have nothing to do but to *stand with nature* and to *proclaim her laws*." C. F. W.

(To be continued.)

BRIDAL TROUSSEAU.

IT may be all well enough for people who have only to order their bridal outfits from Worth, to have extensive ones, but for those who have to do the work themselves, to prepare elaborate outfits, so they can show and tell they have more and nicer than some one else within their set is utter foolishness; yea, it is worse, it is suicidal. We know one lady who said: "I have always had weak eyes since I did so much embroidery at night upon my bridal outfit. I would have as much and as nicely made as others; and consequently I expect to pay for it by not seeing well the rest of my life."

A relative told me that his wife for a week or more before her marriage did not undress entirely at night but would work as long as she could, and then throw herself upon a couch for a few hours. This lady to-day is a miserable invalid, while the beautiful garments she fashioned are lying away in bureau drawers probably to benefit another.

Plethoric bridal outfits will have their day, among a certain class, we expect, like the button string and stamp craze, yet we hope it will soon pass over and a more sensible type of young women come to the front to show that it is unnecessary to have a different costume for every day in the calendar. There are many reasons why a woman should enter the marriage state well poised, and

with strong nerve force, and most of these are so obvious, on reflection, that they need no mention.

One great cause for the many unhappy homes to-day is because of the exhausted nerve force of the wife. We do not assume that bridal outfits are the only cause of this by any means, but that in many cases they are an immediate cause, and that as such they should to a certain extent be limited.

We hold that a woman who is contemplating so serious a thing as marriage, should endeavor to enter it at her very best, physically, morally, and intellectually, and in order to do this she should not in any sense be overworked. Each of the parties entering the marriage relation has a right to expect the other to come to that state at their very best, and if they fail to do so they are defrauding another, as well as being miserable themselves.

MRS. S. R. SILL.

VIOLETS.

Twined by loving hands with a Silvery Hair.

Oh! show me the bed where these violets
grow;
I'll wake not the gold that may slumber below,
Nor the silver whose threads around them en-
twine;
I seek something richer than misers e'er mine

Love looks from those delicate violets' eyes,
A mixture of earthly and heavenly dyes;
The red of the heart-blood and blue of the
skies.

Their rootlets embosomed within the green
sod,
Drink fragrance divine; there cherubs have
trod,
From the City of Love where angels paint
flowers,
The sweetest love tokens in Paradise bowers.

And loan them to lovers their passion to tell,
Akin to the rapture of cherubs that dwell
In those blissful abodes beyond mortal ken,
But seen in the visions of all loving men.

Then show me the spot where these violets
grow,
That I may thereon in deep reverence bow,
As at an altar where heaven and earth meet,
And lovers in heaven the earth lovers greet.

Los Angeles, Cal.

O.

CHILD CULTURE.

ON BEING IN THE RIGHT.

BY JENNIE CHAPPELL, AUTHOR OF "AN AUNTIE'S NOTIONS ABOUT CHILDREN," ETC., ETC.

IN the realm of the invisible, in the domain of what we call Nature, instances of a comparatively worthless product closely resembling one of value, or of a noxious growth counterfeiting, as it were, the appearance of a harmless or beneficial species all well known to science, the oft-times fatal similarity between poisonous and edible fungi is, perhaps, the most ready example. But as it has been truly assented that every created object is the type of some corresponding fact in the spiritual world, the existence of true and false virtue, altogether apart from what is commonly known as hypocrisy, can scarcely be doubted.

It is here that those of us most genuinely desirous of fulfilling our duty purely, need to be scrupulously watchful against self-deception; and of all misleading illusions that wherein love of being in the right is mistaken for simple love of right is one of the most subtle.

Those persons in whom considerable conscientiousness is united to desire for approbation and great self-esteem are liable to fall into this error from early childhood, and the peculiar nature of the fault renders it extremely difficult of correction. The sentiments and conduct which are most generally approved almost infallibly take the place with them of absolute heart-chosen *right*, and they are soon quite unable to distinguish the moral difference. On the whole they will lead virtuous, reputable lives, because the contrary are universally condemned, but their motive is inferior and unreliable, and may betray them into serious wrongs. If we closely

observe even young children we can not but see that some of apparently the best, because the least troublesome of them are those whom pride and self-importance inspire with a desire to copy their elders. A dear little boy I once knew, who had an intense desire to accelerate the process of growing up, behaved on the occasion of his first attendance at a place of worship in a most exemplary manner.—kneeling at prayer, rising at hymn, and sitting motionless with folded arms throughout the sermon. This almost preternatural propriety was explained afterwards by his naive confession that he did it all "cause *the other men* did!" Exactly so. It was very pretty to see, and very convenient for the relative who had charge of him, but there was little or no *goodness*, properly so called, in it. The desire of being in the right, of being like "the other men" was at the bottom. We have all known older children whose manners were faultless from a decorous point of view, and yet were not wholly lovely, because obviously far more the outcome of an ambition to act unexceptionally according to the fashion of the adults with whom they mingled than of a naturally sweet disposition. Gently, but unfailingly should such be taught that a love of goodness because it is lovely is an infinitely better motive than this self-glorifying endeavor to be correct. Goodness is always of God: propriety is sometimes a disguise of Satan himself, and when practised consciously, and with a sense of self-elevation, can not fail to be akin to the most dangerous of all sins—spiritual pride. The fact that little people do so frequently base their

notions of what is proper upon the conduct of their elders, should make us grown up folks more constantly careful that in imitating us they shall really be right. An amusing, yet almost touching instance of childish admiration for even the defects of a grown-up person was afforded me by a lady, who related how, as a little girl, she was greatly attached to a teacher who happened to be afflicted with very bad front teeth, and actually remembers standing before a glass and stuffing bits of paper between her own pearly incisors to resemble the discolorations and deformities exhibited by those of her beloved model!

Conceit, which is only another name for the passion for being in the right, is so powerful a motive in human nature for the restraint of exhibitions of evil and the furtherance of, at least, the appearance of good, that the cynical La Rochefoucauld observes: "Virtue would not go far if vanity did not bear her company." But what has this virtue which is so closely allied to vanity to do with the goodness that alone is worth having,—that of the "kingdom of God and His righteousness"? Is it not more dangerous, because more insidious, than vice itself?

A good test for ourselves of whether we are tainted by this treacherous moral disease is the temper in which we take reproof. Love of right is thankful to to have its fault pointed out, that the ugly thing may be destroyed, and approach to its ideal thereby hastened. Love of being in the right is naturally most resentful of being shown in the wrong, and impatiently tries to preserve its coveted position of honor even at the expense of veracity—of right itself. One of our greatest Christian philosophers has said, "We are so stupid that confession seems to fix the wrong upon us instead of throwing it, as it does, into the depths of the sea." Few realize this. An estimable person once remarked that she thought one of the saddest things in the world was to hear anyone say he

was sorry! He who loves being in the right feels like that, and consequently rarely amends. If he does amend he hypocritically pretends that the altered opinion was entertained by him from the first, and flatly disowns his former views.

Love of being in the right pursues fashion: love of right is often, on principle, unfashionable. Love of being in the right courts popularity: love of right cleaves to the right even when it is most unpopular. Love of being in the right thirsts for praise,—or appreciation, as it is euphemistically termed—and can not exist without it, being reduced to the manners of self-approbation for support if the plaudits of others fail: love of right can endure even unrighteous condemnation, sustained by enthusiasm for the beauty, not of itself, but of its ideal. Love of right is humble and gentle, glad to learn from those more advanced than itself, knowing by experience how hard it is to come anywhere near perfection: love of being in the right prides itself on what it considers its own pre eminent rectitude, and with an air of conscious superiority embraces every opportunity of instructing and correcting others. Being right is a matter of conscience, and means harmony with Righteousness Incarnate: being in the right is generally a matter of external conformity to approved usage, and may even induce its devotee to "follow a multitude to do evil."

As love of right is essentially love of truth, and can not coexist with toleration of any form of falsity, so love of being in the right is the source of much of the insincerity in the world. Those who make it their life object either follow their chosen leader without the exercise of any individual judgment whatever, or just go with the stream; their leader, or the dictates of generally received opinion, determining what shall be the right for them. They would not dare to openly disagree from a widely regarded oracle, though his utterances

may contradict their own private views; neither would they under any circumstances have the courage to adhere to one whose teachings, were they those of a St. Paul himself, ran counter to the decision of the majority. Whether the subject of discussion be a picture or a play, an orator, a social custom, or a theological tenet, they must at all hazards be in "in the right." If popularly approved, they must needs profess the greatest admiration, the warmest alle-

giance; if condemned by the multitude, justly or otherwise, is immaterial; they must join their voices to the chorus of disapproval.

While those who wholly yearn for right, even at the expense of having to forfeit fellowships of acknowledged worth, the commendations of some who are called wise, or the favorable opinions of others whom they earnestly admire, will, by proving all things, find and hold fast that which is good.

NATURAL TRAINING.

A WRITER on Kindergarten methods says:

It is not yet generally recognized that the younger a child is, the more important is the training which he receives. Froebel realized this fully, and wisely applied himself to working out in detail a good system of training for very young children. In our time a system of wholesome training for children between seven and fourteen is still urgently needed. It is beyond the scope of the present paper to enter into detail as to what this training must or must not be. But some points may be mentioned. (1) There must be the regular performance of some kind of useful work suited to the age and capacity of the child. (2) Book-learning must be given up in the case of any child to whom it cannot be made pleasurable. (3) Prizes must not be given for success in school-work, nor punishment for failure. (4) The natural love that children have for games must be taken advantage of, so as to cause a healthy development of the moral nature, the physical powers, the imagination, etc. (5) The energies of the child must be fully as well as harmoniously developed, and the child's growth must not be stunted by too easy work. (6) A love of nature and of all forms of beauty must be stimulated and encouraged.

The difficulty of establishing a natural system of education is much increased by the anxiety on the part of parents to

see at every point evidence of their children's progress. This natural but inconvenient wish has prevented the *kindergarten* system from coming more generally into use, and unless parents can be induced to place more confidence in the capacity and judgment of teachers, it is to be feared that it will also prevent the introduction of improved systems of training for older children. In inspecting schools for young children an examiner should make it his business to find out whether they are being taught in the right way, not whether they have reached a high standard of book knowledge. The latter is of little or no importance, the former is all-important. We should not hear so many protests against examinations if examiners knew how to do their work rightly. At present examiners think it is their business to find out what the children know, and so long as that is the case examinations will not be satisfactory. Are the children's minds in a healthy state and are their faculties being drawn out in the right way? These are the questions that need attention. An examination should be so conducted as to avoid developing self-consciousness and other morbid tendencies. More freedom is needed both for teachers and children. Perhaps it may not be thought safe to grant the freedom; that has often been the case in history, and yet the grant of freedom has been generally justified by its results.

CHILDREN OF ARABIA.

THE children of all lands are interesting. To one who makes human nature something of a study the young people of the old races always invite attention and comparison with the "rising" generation of the new and western nations. We are all children of

great and powerful, having a civilization that gave many a valuable bequest to the science and art of later times, and in the organization and physiognomy of the young people of the desert and hills we can trace much of the ancient spirit and mental capacity. As a type



A GROUP OF ARABIAN CHILDREN.

the old, yet western civilization has imparted a special character to the very young of modern Teutonic and Celtic. Arabian children have characteristics that impress travelers in the Orient. They are descendants of a people once

of nervous organization the Arabian is high, being prompt in discernment and more responsive to intellectual culture than other Oriental races.

The little group shows the Arab boys as they are at home, in their simple cos-

tume of blue gowns and the ever worn turban. Of the poorer class, they are allowed to lead a very careless life. But the Arabian children of high rank lead quite a different existence; they are usually brought up according to all the ancient customs of their race. The lady who tells her own story in the "Memoirs of an Arabian Princess," says that a royal baby's first toilet in Arabia consists in winding a bandage about its body, after it has been bathed and perfumed. The little creature is then placed on its back, its arms and feet are straightened, and the entire body is swathed to the shoulders.

In this position it remains motionless for forty days, but the bandage is removed twice a day that the child may have a bath. The Arabs believe that this process will make the body straight for life. Under such circumstances it seems fortunate that babyhood is not a period which can be remembered in after years, for no one would choose to suffer such days of misery again, even in recollection. If the child be a girl, on the seventh day after her birth holes, usually six in number, are pricked in her ears, and when she is two months old heavy gold rings are attached to them, to be worn throughout her lifetime, except during periods of mourning

for relatives. On the fortieth day the baby's head is shaved, a ceremony which could scarcely be performed in our own country where thick hair is usually of a later growth. This operation is considered a very important one, and thirty or forty persons are witnesses of it, for the performance of certain rites. The disposal of the first hair is regarded as a very weighty matter; it must not be burned or carelessly thrown away, but buried, thrown into the sea, or hidden in some crevice of a wall.

The fortieth day marks a turning point in the child's life. Heretofore it has only been seen by its parents, the slaves on duty, and a few intimate friends of the family; now, however, it may be seen by anybody, and is regarded as fairly launched on the tide of existence.

Several charms are attached to its body for protection against the "evil eye," boys wearing them to a certain age, and girls still longer. The favorite charm consists of a gold or silver locket worn on a chain.

The small children among the well-to-do Arabians are strongly perfumed; everything they use, from their clothing to articles of the toilet, is covered at night with jessamine, and before it is used fumigated with amber and musk, and sprinkled with attar of roses.

EDUCATION AS AN INVESTMENT.

A WRITER in the *Christian Union* a while ago thus spoke of the wisdom shown by parents in giving their children good educational advantages:

"The best provision a father can make for himself or wife in old age is a good education given to his children. He who has three or four children well equipped in mind, strong in will, rich in love, has the best annuity and the best life insurance. The father who has sown bountifully will reap bountifully. Give, and it shall be given unto you; good measure, pressed down and shaken together and running over, shall your children

give into your bosom. The father in his maturity is the natural support of the child in his youth; the child in his maturity is the natural support of the father in his old age. The man whose savings-bank is in his own children is the thriftiest of men. Tuition bills pay better interest on the capital invested than any other investment. The parent is not his child's best teacher. Few parents have the time, the knowledge, the skill. Division of labor is the law of the century; it is the condition of progress. Tolstoi writes novels well, but he cobbles shoes badly. We employ a

gardener for our flowers, a groom for our horses; why not a teacher for our children? He who is Jack-at-all-trade is master of none; and the well-educated child is educated by a master, not by a Jack. Even the professional teacher does well to intrust his children to some other teacher, as a professional physician his children, when sick, to another physician. The father and mother ought to know what their children are studying; ought to share their intellectual life with them; but ought not to attempt to furnish it. Your child will get education from you unconsciously; send him to some one else for his purposeful studies. John Stuart Mill would have been a broader man if he had been edu-

cated away from home. Home is a good place for study; interruptions come too easily. Even the minister and the writer find it difficult to study systematically at home.

It is too much to expect systematic study of a child. Three other things remain to be said, with emphasis, but without elaboration. The best school is the cheapest school; we can not afford to stint in providing for our children's education. The school that builds the best character is the school that gives the best education; for education is character building. No school gives a good education unless it is pervaded by a spirit of deep, earnest, and practical religion."

LITTLE STOMACHS.

LITTLE children are not like pigs, ready to eat anything and everything regardless of their tastes. I suffered a good deal in childhood from this very thought, or thoughtlessness I should say.

A little tot was once sitting in her high chair at the table; she was a beautiful child of three years; her clothing was finely wrought, a glad smile was on her face, but you should have seen that joy suddenly fade, as she beheld on her dainty plate a mess of tripe! Now, Lulu didn't love tripe. Her features were a study as she cast those blue eyes around the table, as if to see how "the rest liked the horrid stuff." But she saw the rest partake, and then with a little sigh, turned her attention to her plate, and eating the preparation thereon took an early and cruel lesson in self-denial! Do not set a child in sight of an array of dainties and then forbid him to eat anything but a cracker! I have seen this wicked performance, and it reminded me of poor Tantalus, whom they placed beside the silver lake of clear crystal water, but chained him so that he could not get one drop between his parched and fevered lips. How mothers can thus treat their darlings is a mys-

tery to me. Having decided that a little one shall not partake of your abundant table, let nurse or some one take her and her hard cracker on the lawn until you have quite disposed of the meal.

Now, I am not a foolish old grandma that believes in feeding a child on cake and sweetmeats. It is not so much *what* the little ones eat as *the quantity* that they take. Here lies the mischief—this constant denial of children in the food line makes them lean, nervous, and ill, often. I have reared five, and my way was to gratify the little taste by just a crumb, and then divert the child's mind. A little one was really tortured once at a nice tea party. Her mother loved her, dressed her beautifully, but denied her many simple requests of appetite. Children have minds as well as their parents, and these minds are greatly improved or retarded as the children enjoy the various and to them beautiful presentations of life.

My heart used to ache for the children of *the poor*, but now it aches often for the children of *the rich*! We demand of them sacrifices that, even in our mature years, we would find it hard to make.

MRS. L. DE W.



CONDITIONS OF LONGEVITY.

MUCH has been written at various times concerning the subject of longevity, but little of this has real value. Not every one is born into the world fitted for a long life and perfect health. Indeed, this fitness depends very largely on a rich endowment of certain characteristics of body and mind and surroundings of which Nature at the present time is not very lavish to her children. Whether in the near or distant future children will be so born and environed as to be capable of living to old age, is a question which no one can answer.

It is my purpose in this paper to set forth some of the conditions of longevity. In the first place it is important that the person have a constitution richly endowed with living matter. Some one, however, may ask the question, "what is living matter?" To which the answer is given that living matter is that part of the body which is alive; that part which acts, which feels, moves, thinks. The muscles, for instance, are mainly composed of living matter. The nerve and brain cells are living matter. The glands, or organs of secretion or excretion, are mainly living matter. I use the term living matter here because it is better understood, but a more general name for it would be protoplasm. We study it best in any living organism, but in the *Amœba* we find it

in a simple and interesting form, and the summer and autumn are good seasons of the year to study it. Of course it requires a microscope with about 500 magnifying power and good powers of observation. Go to any stagnant pool in which grasses and weeds grow, and pull up some of them, squeezing the water from their sides into a dish. In this way collect a pint or more. Let it settle and pour off the upper part, reserving the settlings for observations; or, with a long glass tube you can draw up the bottom layer without pouring off any of it. Place a drop of this water on the slide of your microscope and hunt for a minute mass of living matter, slowly moving about by projecting portions of itself in any or all directions in a most irregular way. It has neither limbs nor organs of any kind. There will be seen a nucleus in or near the center. Sometimes the mass will be highly and beautifully colored; at other times not. This may be called the unit of animal life before any of it has been differentiated, or before there has been any division of labor in its parts. Every portion digests, moves, is sensitive, and does any and all kinds of work that it may be required to do. The vital properties or functions of this little speck of living matter are contractility, irritability, automatism, the power to receive and assimilate food, secretion, excretion,

respiration, and most important of all, reproduction by division.

Not all parts of the body are, strictly speaking, living. The mineral matter of the bones is not. The connective tissue is not, or if so is only slightly endowed. The fat is not. Fat is not alive. The water is not. Neither is the hair, except in its root; nor the nails; nor is the external layer of the skin, the epidermis.

As I said before, the secret of longevity lies in great part in a rich endowment of this living matter as a basis. If a man has a great abundance of it he is very much alive, very full of energy. Healthy children manifest it in a high degree; you can not keep them still. They want to be on the go all the day long. The living matter of their bodies demands movement, activity. In adult life it takes the form of enterprise, energy and work.

All men with powerful or enduring constitutions are abundantly supplied with this material. It is difficult to kill them. They live through dangerous diseases when others would die. They are millionaires of the living principle. There are some animals richly endowed with it. The elephant, the tiger, the cat, the grizzly bear, are examples. It is hard to kill them. Others have little. The rabbit is one such. It dies with a slight blow. As age advances the living matter of the body diminishes and finally almost disappears. Life stops when there is not enough left to carry on its operations, whether the person is young or old. Usually after the fortieth year, often earlier, except in persons with the best constitutions, the living matter is worn out faster than replaced, and this constitutes the first beginning of old age. This deficiency of living matter may be observed by studying the blood, the epithelia that are shed off from the various organs and parts, or the bronchi, the kidneys, the bladder, and better still by observing the pus corpuscles in pus formed on any inflamed surface, as in a cold, or in any ulceration, as in an abscess or

boil. If there is little living matter, the pus corpuscles look pale, watery and deficient in protoplasm. If there is much of it, they will look bright, plump, and full, and as handsome as a silver dollar just from the mint. I remember once examining by the aid of a microscope a patient whom I found to have Bright's disease of the kidneys, or nephritis, but the pus corpuscles were full of protoplasm, and I told him he would live on for years, perhaps recover. He is alive to-day, and I remember another, not much worse than this one except the living matter was very scanty, and I predicted an early death, which indeed took place in a month.

Not only does the living matter of the body gradually waste away, but as age advances it becomes clogged up with the broken down debris of the system. The excretory force of the body is not able to remove all of it. A little remains in the form of minute specks and lodges in the protoplasm, there to stay till death comes. People who smoke much retain a little of the minute particles of the carbon in the lungs, and it gives the parts a black color. In persons who have lived long in malarious regions and had for months or years malaria and finally died, I have seen the liver cells pigmented and dark colored from the matter lodged in them. After a certain age the brain cells grow dark by the accumulation of a pigment-like matter, and as a result the brain activity is diminished. It is also diminished by the loss of protoplasm, which takes place as age advances. From both causes combined we have the explanation of the less vigorous memory, and the inability of the old to think as quickly and as easily as in early life.

There is also no doubt a difference in the quality of the living matter in different persons. Some of it is solid, hard, and resists more than others the influences which go to wear it out. The protoplasm in those with soft, tender flesh, is less tenacious of life than that

in those with solid, hard flesh. Slender, tough, wiry men have good living matter; fat, lymphatic ones, the reverse; they seem to have no staying qualities.

The relations of these facts to longevity is evident. If a man so conducts his life as to avoid extremes, lives moderately well, but is not excessively nourished, and escapes dangerous diseases, his living matter lasts longer and is more perfectly repaired, and it remains longer free from those deposits of debris or broken down, waste material than if he is a spendthrift of his bodily wealth, lives fast, and abuses himself in every possible way. The result is, that he will probably live longer, he will retain his youth more perfectly, and his health and happiness will be augmented.

This is the common belief of thoughtful people and science confirms it.

Now and then a person whose endowments of living matter are only moderate, so husbands his resources as to live much longer than those more richly endowed, and this may seem to be an argument against what has been stated, but it is not. As the possessor of a fortune can, by riotous living, quickly spend it, and as a very moderate income may be made to go a longer way, so a large supply of living matter may be quickly dissipated, and a small amount, by care and wise living, can be even increased.

Sometimes we meet persons so richly endowed that notwithstanding great abuse they live to old age. These persons have herculean constitutions, and possess within themselves great power of producing living matter. They are our millionaires in vital force, examples of what all should be. Their bodily income is enormous, and they can hardly spend it as fast as it is produced. Only a great age is able to reduce them to physical bankruptcy.

The pathway of medical science or non-science is strewn with the wrecks of numberless discoveries which it was confidently hoped would be of great

service in curing disease and prolonging life; so it will ever be. The human mind, buoyed by hope and desire, can not help grasping after the greatest and the best that it can conceive. We would be more successful if we could establish on a firm basis sanitation and personal hygiene, the true promoters of longevity. Already that almost new science has accomplished much. We have abundant evidence of this in what has been done by sanitation during the past 200 years. So long ago as that the death rate in London, then a small city, was 80 per 1,000, yearly. This rate would have depopulated the city in about ten years had there been no additions. Now the death rate is 23 per 1,000, though it contains over 4,000,000 people.

During the reign of Queen Victoria, the average length of life in England has been increased about nine years, and that, too, mainly by sanitation.

Now an epidemic of any kind can be stamped out there with less than one-fourth the loss of life it could have been half a century ago. In France there has been nearly as great progress, and in the United States we find also greatly improved life expectancy as sanitary science becomes better established and a part of the life of the people.

This journal and a few others may well be proud that it has been an earnest advocate of sanitary reform since this science has taken its place among the sciences.

In conclusion, let me repeat that the best way to retain youth and strength for a long time and longevity is by rational living, by an orderly, well-regulated life; by such a knowledge and use of hygienic laws as are known to be beneficial, and by the avoidance of such agencies as are known to be evil. Even with the best of care age and its infirmities and death will come at last. But those who have lived reasonably, used their talents rightly, loved God and their fellow men, will not find them so unwelcome, but will be ready finally to go

on to that life which the hopes of the grander and better.
best of all races of men believe to be

M. L. HOLBROOK, M. D.

NOW AND THEN.

JUST across the street, in full view from the window at which I am writing, stands a physician's "turn out," a fine coupe with a fine pair of horses caparisoned in rich gold trimmed harness, all in charge of a driver in livery, and attracting the attention of passers. The physician is making a professional call at the house in front of which his carriage is standing; this in one of the cities adjacent to New York.

There is a little country town in the Connecticut river valley to which I often betake myself when the dog star rages, for rest and recreation. It is one of the oldest in the State, and there one who is to such things inclined, can revel among the relics of the past stored in vast garrets, and feel almost as if he had come in direct communion with other times and other peoples. During a late visit, while exploring the long-neglected corners of one of these repositories of things ancient, I found a manuscript that seemed to me quite a curiosity, and which the sight of the equipage above mentioned recalled to memory. It was a statement of account rendered by the village doctor to one of the leading families of the place (father, mother and four children) for medical attendance, medicine, etc., for five years. An examination of the items may serve to show in some degree the difference between now and then. Item first:

April 15, 1826.—One Emetic. Cal. and Rhei, 3 ch. and pills for son50

April 26.—To Eye Water..... .06

These are all the items for that year. Fifty-six cents a year for medicines can not be considered a large sum. Very likely there were some other expenditures for common household remedies usually kept on hand, but doubtless most that were administered were the ever ready roots and herbs always kept

in store by every family, but there was no other family in the town, as I am told, the patronage was undivided. This was before the days of the "pathies," and also before malaria and a host of other ills that flesh is now heir to were so well known, or at least so much talked about. The next year there is but a single item:

April 2, 1827.—To 2 visits and 1 emetic for wife..... .50

As the regular charge for visits was 25 cents, we may infer that the emetic was "thrown in" as well as thrown up.

The science of dentistry in those days had not attained its present position, and the country doctor was expected to do all that was to be done in that line, which was mainly confined to the removal of aching molars and an occasional cleaning of the teeth, *i. e.*, removing the accumulation of tartar. The account for 1822 read as follows:

March 7.—Extracting 2 teeth for Betsy... .17

April 1.—To Epsom Salts, 1 oz..... .10

May 22.—To Rhei, 1 oz..... .10

June 8.—To Laudanum, 1 oz..... .20

July 4.—To Sal. Epsom, 1 oz..... .10

The charge of seventeen cents for extracting teeth looks something like the absurd prices made now in many stores, but many will know this was the value of the old New England shilling or, to be exact, it was 16 2-3 cents—one sixth of a dollar. In comparison Epsom salts, a favorite remedy, sold high in those days

In 1823 there was but one medicinal item:

July 11.—To Sal. Saturni, 1 oz..... .12

This is what is now generally known as sugar of lead, and we can hardly suppose an ounce of it was used as a medicine. More likely it was used as a wash for a poison like that of poison ivy.

It was apparently a healthy time in the village, for after attending to the duties of his profession it seems that our doctor had time that he could otherwise employ, for the next item in the account is :

Nov. 13.—To 4 1-2 days work at well ;
 \$1.00 per day for 2 1-2 days and \$1.50
 for 2 days.....\$5.00

Why this difference in price for the different days we do not understand—whether as the depth increased the labor of digging was more tiresome and unpleasant, or whether part of the time was employed in digging and the rest in laying the stone. We can certify the work was well done, for it has lasted until the present time. It furnishes the best water in the neighborhood, and often has the writer quaffed it from the old oaken bucket, poised on the curb.

In 1824 there were no items. Then follows :

June 8, 1825.—To Rhei..... .08
 June 20.—To Emetic..... .10
 July 1.—To Sal. Epsom. 1 oz., Jalap
 and Cal. Rhei and 1 visit and emetic
 for Decatur..... .42
 July 19 to 28 —Services and Medicines. 5.40
 “ 30.—To services for Betsy..... .50
 Aug. 9.—To occasional call for Betsy
 and Griffith's Mixture..... .50
 Aug. 20.—To Ess. p.mint, 1 oz..... .06
 “ 23.—To Griffith's Mixture, 12 oz. .17
 Nov. 2 to 17.—17 visits and Medicine
 for Tryphena..... 4.00

Nov 19.—2 visits for Mrs. R., 1 emetic
 and 11 pills—pill camph. and pill
 Rhei, 12..... .50
 Nov. 20.—To 1 Visit..... .25

The account closes thus :

Feb 5, 1826.—To Obstet. Services 2.00

Not an exorbitant charge, even in those days, for assisting at the advent of a fellow creature. In this charge the writer has perhaps more interest than others, for it serves to fix the date of his appearance in this life, and to show that if he has never amounted to much he cost but little.

We can gather a small idea of the opinions possessed by this old-time physician from the remedies he used. He evidently believed in clearing out the system; hence his emetics and gentle purgatives of Epsom salts and rhubarb—with an occasional dose of calomel. This done, nature was to do the rest. Griffith's mixture, a preparation of iron, was a favorite tonic.

In fact his line of practice was almost as safe as that of another old-time practitioner in an adjoining town, whose usual prescription was said to be, “Take a little bitter orange peel, and little Peruvian bark, and steep them together in a half a pint of water. Take a tablespoonful before going to bed, and if it does you any good you will feel better in the morning.”

L. A. R.

“APPLES AS MEDICINE.”

WE do not know why a common fruit like apples, or indeed any fruit should be talked of as medicine any more than bread and butter, unless it is the fact that people have not been in the habit eating enough fruit to meet the want of the digestive function for natural or organic acids. That apples contain elements that also enter into leading drugs is true.

Chemically the apple is composed of vegetable fiber, albumen, sugar, gum,

chlorophyll, malic acid, gallic acid, lime, and much water. Furthermore, the German analysts say that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. This phosphorus is admirably adapted for renewing the essential nervous matter, lethicin, of the brain and spinal cord. It is, perhaps, for the same reason, rudely understood that old Scandinavian traditions represent the apple as the food of the gods, who, when they

felt themselves to be growing feeble and infirm, resorted to this fruit for renewing their powers of mind and body.

The acids of the apple are of use for men of sedentary habits whose lives are sluggish in action; these acids serving to eliminate from the body noxious matters which, if retained, would make the brains heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. Some such an experience must have led to our custom of making apple-sauce with roast pork, rich goose, and like dishes. The malic acid of ripe apples, either raw or cooked, will neutralize any excess of chalky matter generated by eating too much meat. It is also the fact that such fresh fruit as the apple, the pear, and the plum, when taken ripe and without sugar, diminish the acidity in the stomach rather than provoke it. Their vegetable salts and juices are converted into alkaline carbonates, which tend to counteract acidity. A good ripe, raw apple is one of the easiest of vegetable substances for the stomach to deal with, the

whole process of its digestion being completed in eighty-five minutes.

Gerard found that the "pulp of roasted apples mixed in a wine-quart of faire water, and labored together until it comes to be as apple and ale—which we call lambewool—never faileth in certain diseases of the raines, which myself hath often proved, and gained thereby both crownes and credit." "The paring of an apple, cut somewhat thick, and the inside thereby is laid to hot, burning, or running eyes at night, when the party goes to bed; and is tied, or bound to the same, doth help the trouble very speedily, and contrary to expectation—an excellent secret." A poultice made of rotten apples is of very common use in Lincolnshire for the cure of weak or rheumatic eyes. Likewise, in the Hotel des Invalides, at Paris, an apple poultice is commonly used for inflamed eyes, the apple being roasted and its pulp applied over the eyes without an intervening substance. A modern maxim teaches that—To eat an apple going to bed, the doctor then will beg his bread.

AN UNSAVORY SKETCH.

FOR sanitary reasons the Children of Israel were commanded never to eat swine's flesh. The hog was unclean by ritual law, and was an object of abhorrence to them. The prodigal's occupation in a far country implies the most abject degradation; and it would seem even the hog's very appearance was proof of its unworthiness of admission into polite society, and quite sufficient reason for barring it from our tables but we who pride ourselves on refinement and learning never hesitate to devour it, even while reading of sudden and tragic deaths from trichinosis. It is a well remembered fact, that not long since the German and Austrian markets were closed to American pork, and that of the twenty million dollars' worth of hogs in the United States in 1877, 59 per cent. died. The remaining

41 per cent. oh,—that was eaten up. It was diseased, doubtless, and caused thousands of cases of erysipelas, diphtheria, consumption, scrofula: but then it suited the people's taste. The Israelites would not eat hog when it was sound, but we will give thanks for it if we can barely manage to have it killed before it succumbs to the ravages of hog fever or cholera. It is said that Dr. Adam Clark, when called upon to say grace at a barbacue, bowed his head reverently and uttered these words: "Oh Lord, if Thou canst bless under the gospel what Thou didst curse under the law, do Thou bless this pig."

The hog is omnivorous; by nature and practice he is a scavenger. It is a plain case that his mission is, not to be eaten, but to eat up all that better, cleaner creatures scorn to touch.

Two years ago this very "hog-killing time," I happened to be in Western Maryland. An enterprising farmer there butchered his hogs earlier than he intended because thirty one of his herd of seventy had died. As they were still dying he proposed to kill and sell the sick. I was requested by his wife to diagnose the case of some livers. They were covered with ulcers, and I told her that "they were one conglomeration of parasites and trichinæ, and the animals could not have lived many days." I begged that the livers, which were the quintessence of disease and death in process of elimination, should be buried deep to prevent the pet dog from finding them. Those livers were salted and cooked for the children, who were soon made too sick to attend school. Their throats and stomachs were swollen, and they suffered intensely. The young doctor made forty-five dollars—and, oh, yes—the little dog who had been generously fed was so swollen, and suffered so much that for three weeks his life was despaired of.

This quadruped, whose characteristics I am discussing, even when in health possesses too many bad qualities ever to be brought on the table, and yet there is scarcely a family where hog is not eaten—head, feet, brains, and liver. Little thought is paid to the *cause* of so many glandular and eruptive diseases from impure blood directly traceable to to the diet of swine's flesh. One can find authority for moderate wine drinking in the Bible, also for total abstinence, and for believing in witch-craft; but there is no authority for eating hog. I might ask, "can any one eat it and believe in the Bible?" If he can, he must have Hudibras' metaphysical scissors that could "sever a hair from west to northwest side." Of course when we endeavor to settle an argument by Scripture we generally find ourselves in a boundless field, lost in a fog with no prospect of getting out. Even Satan tempted Christ by quoting Scripture.

What we need in an argument is a firm basis on the world and the times as they are, in the light of the nineteenth century.

We want something just as satisfactory to the Mohammedan as to the Christian, to the Jew as to the Gentile; and as convincing to the skeptic as to the devout churchman. We should not refrain from eating hog-meat because the Hebrews did, but because it is unhygienic diet. It is better to follow reason and judgment, founded on experience and observation, than to be lead around by the nose by the mere letter of the law. The horizon of a country woman's observation is not necessarily extremely restricted, and this is what I have seen and am seeing continually: people who have become reconciled to their lack of health, who have made up their minds that it was *intended* for them to "enjoy poor health," when it was very plain that sanitary living would cause them to be perfectly well. I see housekeepers selling chickens, butter, and eggs to buy cured bacon, and farmers selling decent, clean-feeding mutton to purchase fat hog meat. When all the family are sick with sore throats, ague, and fever, and coughs, they buy bitters and pills, and with the coolest audacity transfer every particle of the blame for these spells to "Providence." "An All-wise Father saw fit to afflict my son with a cough, he can not recover. The Lord's will be done!" It is to be hoped that people will not always permit the hog to play so important a part in their every pie and loaf, and will not forever suffer many things of the salt ham where-withall they feel depressed and utterly good for nothing. Indeed, with us, hog meat is not so generally used in the quantities it once was, but truly, as it retreats into shadowy insignificance, it leaves innumerable Parthian stings and tortures in the lungs and livers of the present age.

PATTY SPARKLE.



NEW YORK,

June, 1890.

GROUNDWORK OF DEVELOPMENT.

IT is said by a writer of things mystical, that Apollonius of Tyana, the philosopher, when he visited India and conferred with the famous Brahmin sages, asked them if they knew themselves and was answered, "We do. We know all things simply because we first know ourselves. This is the first and elementary knowledge, without which no one can be admitted into our circle." Thus the wise Greek, who recognized the importance of self-knowledge, found that the Indian sages held common ground with him. Can we say that with all our modern progress we have advanced beyond this conception of what constitutes the foundation of human intelligence? First, we must know ourselves, and then we can make sure of our knowledge concerning things external. A man who would buy a coat or pair of shoes without knowing the size of his chest or the length of his feet, would be ridiculed for his folly, yet such conduct is no more absurd than his who attempts to do something intellectual or industrial without having previously learned his mental and physical capacity. We can presume that when Carlyle made the fa-

mous assertion that the millions of the British people were mostly fools, he had this thought in mind: that their self-knowledge was limited. That severe satirist probably had no better opinion of other peoples.

Most of the mistakes made by any of us are due to self forgetfulness or want of self-knowledge, and in the analysis of conduct its different phases and expressions show whether or not a man has that masterful hold upon his thought and feeling that comes of a systematic examination of self-organization.

WOMAN AS AN ADVERTISING FACTOR.

THE advertising devices of the day are often of a preposterous complexion. But what matters it to the advertiser how absurd or pointless the scheme he exploits may be, if it attracts attention and brings to his till numerous shekels of current value. One of the latest outcomes of this sort of enterprise is the sending of two young women on a flying trip around the world—one of these young women being backed by a New York newspaper, the other by a magazine. We doubt not that five hundred young women would have jumped at the chance to swing around the terrestrial circle as fast as steam engines could take them, whatever might be the purpose, for what will not the American woman of to-day dare attempt? If we were going on an expedition that would require boldness and fortitude, we think that we could easily find a body guard of women who would be every way equal to the demands of the service.

The achievements of Lady Wortley Montague, or Alexandrina Tinne, or more lately of Madam Le Ray, would be creditable to any man, especially as the two first mentioned traveled in the East and in Africa when there were few of the aids to transportation known to-day and the dangers were far greater. We should not forget in this connection the many devoted women who have braved every risk in remote lands and among strange races as Christian missionaries. Some of these have stories to tell as thrilling as any of Stanley's, although without the sanguinary hue of certain of his adventures. The woman missionary does not carry a gun into her work of benevolence. The days of heroism are not past, and what there is of noble, self-sacrificing endeavor in this era, is shared largely by women. For our part we are glad to give them due credit for what they accomplish, although we must protest against the action of some who are lowering their womanhood by lending themselves to schemes of claptrap and cheap novelty, thinking, doubtless, they will obtain thereby an easy distinction, besides good pay in the national currency.

THE DEATH PENALTY OUTGROWN

HOWEVER the legislature of the State of New York may be constituted the recent action of its Assembly, in passing by a vote of 74 to 30 the bill to abolish capital punishment, is significant of the growth of public opinion with regard to the death penalty. The discussions of the past two years on making electricity a substitute for the gallows have no doubt hastened the conviction in the

minds of many public officials that killing a man for murder does not attain the object for which it was anciently ordered—the suppression of the crime of murder, and therefore it is an inexpedient, inoperative procedure. In most of the European countries the death penalty is practically a dead letter, and in some of the United States it has been abrogated, and the reasons that determined their special governments in this departure from the spirit of a code deemed of divine authority, because sanctioned by the old Levitical law, are substantially the same as those presented in the New York Assembly.

In late years the utility of capital punishment has been made a subject of study by penologists. They have viewed it from the standpoints of expediency, economy and sentiment. Especially have they considered its failure in certainty of application, the prime factor in the efficiency of any measure that concerns human interests. Indeed, if we examine a little the records of criminal courts we find that to-day there is no law-breaker who is more likely to escape punishment than the murderer. The statistics of murders in the United States from 1884 to 1889—six years—show this remarkable result, that the number of legal executions is not four per cent. of the number. If we take the years 1888 and 1889, with their number of murders respectively, 2184 and 3567, the death penalty was judicially carried out in but 87 and 98 times for those years particularly, or about four per cent. in 1888 and less than three per cent. in 1889. Excluding a large proportion of these cases as homicides for which the gallows should not have been the penalty we

have, nevertheless, a very forcible showing of the inability of the State authorities to meet the requisitions of the criminal courts.

The most obstinate advocate of capital punishment knows to his disgust how many technical and impertinent obstructions are put in the way of the execution of a sentence, after it has been most slowly extorted from jury and judge. In England the situation is very much the same as with us, as a distinguished crown officer has said, "there is nothing more difficult than to obtain a verdict of guilty from a jury where the charge is murder." Frequently, as he said further, when an English jury finds that it can not ease its conscience by bringing in a verdict of manslaughter, it lets the prisoner go free. On the other hand, and as explanatory of the reluctance of the jury, we have the conclusion of Sir James Mackintosh, a cool and careful observer, that, "taking a long period of time one innocent man is hanged in every three years." The late Chief Baron Kelly figured up that from 1802 to 1840 no fewer than 22 innocent men were sentenced to death, and 7 of the number actually executed."

Commenting on these facts the New York *Sun* aptly remarks:

"The reason of the uncertainty of the application of capital punishment is therefore not hard to find. It lies in the human nature of juries; and because of it the chances of convicting murderers become so much less than in cases of other crimes. Even in England, whither we are told to look for more certain and swifter justice, there are only 49 convictions out of 100 committals for murder, and of the 49 about 14, on an average, are found to be insane. In cases of crime other than capital the proportionate number of convictions is 76."

The fear of some that to cancel the death penalty will stimulate crime is not sustained by recent statistics from the judicial records of those States that have abrogated it. Indeed, its very existence upon the statute books appear to have stimulated to murder, "because of the uncertainty and inequality of its execution." An all around view of the matter seems to us to approve that legislative action as wise that annuls a provision for which the people have no respect.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

ALWAYS write your full name and address plain.

ly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

CLAIRVOYANCE.—S. V. L.—We should not consider your experiences as narrated as belonging to clairvoyance. We all have impressions regarding occurrences of an every day character; they are but the natural expression of mental habits and memories, constantly exercised. As for your dreams, they may be explained by revivals of impressions made upon the mind at some time, and which appear when you are in that half-awake state that occurs just before full sleep. Our most vivid dreams usually occur in the morning when the mind is in a transition state between sleep and awake, and mostly owe their occurrence to a simple suggestion—a noise or call in the street, a passing wagon, a bell, a knock on the door, etc., etc. Then, too, in this half-awake state, the eye may get strange impressions from familiar objects. Students of psychology tell remarkable stories of the visions seen by people when under the influence of narcotics, or when the mind is excited by fever, or depressed by exhaustion.

SOUL AND REASON.—T. M. D.—Most of the writers associate soul with reason, thus making it to enter into the intellectual as well as into the moral faculties of man. Shakespeare appears to distinguish between these clearly and ascribes *soul* to the moral and emotional feelings merely. He says, for instance,

"Hear my soul speak :
The very instant that
I saw you, did
My heart fly to your
service."

Other writers designate the soul as the vital principle. This appears in the writings of St. Paul, where he speaks of body, soul, and spirit. We are of opinion that the soul has this vitalizing, animating character, and so enters into the general action of the brain and mind. It is not the intellect *per se*, nor yet the affections, sentiments, emotions, but an underlying element, stimulating, inspiring them all. To say that the soul is the mind is to divide it into numerous faculties, and give it a similar office with mind. You will find by reference to the physiological treatises on mind that the intellectual faculties are assigned to the anterior or frontal lobes of the brain. Reason, therefore, as an intellectual product must be related to the function of the anterior lobes.

INTELLECTUAL FACTORS NOT DEPENDENT ON EYESIGHT.—I. M.—Some physiologists assert that the centers of memory are in the occipital lobes of the brain, and found their opinion on certain experiments having re-

ference to the relations of the optic nerve. We should discriminate between the center of optic innervation and the centers of ideation, or where the images formed on the retina are collated into a psychic idea or objective thought. A person who is blind can form ideas of size, form, color, number, etc., according to the activity of the organic center that functions such ideas. In Laura Bridgman capacity to recognize the qualities of objects was astonishing, and the development of the forehead was superior to the average. Vidal, the blind sculptor of Paris, is another remarkable instance of the activity of intellectual functions that many philosophers think are dependent upon sight. To be a sculptor it is generally supposed that one must have the "mechanical eye" and the artist's taste and perspicuity. The latter faculties Vidal has to an exceptional degree—even more acute, he believes, than if the former were not lost to him forever. By slowly pressing his hands over an object, he notes its external proportions, and imitates them in clay in a manner which strikes the beholder dumb with surprise. A dog, horse, human face, or anything alive or dead, he models with as much ease as any of the dozens of Parisian sculptors who still retain the faculty of sight. We may suppose that the impression that a blind person obtains of the color, for instance, of objects, differs from that of a person who can see, yet, as in Laura Bridgman's case, the distinction of one from another may be even more accurately made by the blind merely by touch. So, too, in Vidal's case he appears to realize more vividly than his seeing brother sculptor's differences of form and proportion. Does not this show the independence of the intellectual centers so far as eyesight is concerned?

PROOF READER.—F. K.—To be a good proof reader one should not only be well acquainted with the technicology of the printing office but also possess a general knowledge of affairs, since he is not only expected to correct errors of spelling and grammar, but even to point out errors of statement. Hence the proof reader should have a good intellect and good eyesight. A skilful man draws fair pay—better, as a rule, than the typesetter. The duties are severe and confining where one has much to do, as in a large office, especially that of a morning newspaper.

ENGLISH HYGIENIC HOTEL.—S.—At No. 40 Strand, London, you will find a vegetarian hotel which seems to be liberally patronized. Shall give a sample of its menu soon.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

A Law-Abiding Man.—The valuable opinion entitled "Sexual Incontinence" contained in your May No. p. 246, should be reprinted in every number with the largest types. Instead of venturing an apology for such excellent advice, such instruction should be made a prominent issue. Nine-tenths of our marriage failures are based solely upon "legalized" marital abuse, from which as big a percentage of our women to-day suffer all sorts of female troubles, and fill early graves. In every pulpit, upon every rostrum, our public teachers should unceasingly instruct the public with the law governing sexual relations in order to *improve* the human family. Our ministers should also present in scientific, clear, and proper language the divine laws implanted in the human system, and urge their obedience, which will promote our earthly happiness. The writer, who has endeavored to obey strictly these laws, enjoys to-day the fruits of the practice of self-control, in having *no* use for medicine, and certainly not for physicians.

LEWIS J. K.—

Instinct.—The term "INSTINCT" is the name given to designate a natural aptitude or faculty by which animals are directed to do whatever is necessary for their preservation. It may be of a very low type, like the action of the oyster in opening and shutting its shell; or of a higher type, like the work of the bee; or the still higher type of intelligence as shown by the beaver; or the intelligent and varied order of the crow. So far as we are able to see, this faculty has no power to analyze itself. The power to critically survey its own acts and the acts of other creatures is peculiar to the highest type or man.

The lower orders of creation, even the lower grades of man, act independently of any ability to survey their own actions, and are indifferent to such powers on the part of others. It is only the higher types of civilized man who seem to be interested in the problems of life, and who become students of observation in this department.

Probably in no way can we so well under-

stand the comparative grades of life as by a mathematical scale or basis, letting the lowest forms of life be represented by one point or part, while we represent the highest types of moral and intellectual manhood by, say a million points or parts. Such a scale, if represented by a diagram, will be much like the outline showing the topography of the earth's surface, from the plain at sea-level to the summit of the highest mountain. The lowest forms of life would be represented by slight elevations; the highest grade of animals, the dog and horse, for example, would be represented by more prominent elevations, yet far below that of man. As we approach the lower grades of man the line would abruptly shoot up to a much higher level, but would not reach its maximum until we attain the highest types of manhood represented by the million mark.

Animals, which we term the instinct class or order, have a very contracted sphere of action. What they can do they do very nicely, as bees in the process of making honey. But these lower types can not act independently or foreign to this faculty or law implanted within them; it is their only sphere of action. They can not depart from it; nor can any of them rise above their actions and survey them from an external view. They may use considerable ingenuity in their special branch of labor in order to exist, but after all it is only in one line, and toward one point. The higher the grade of animal the more it will depart from this narrow sphere. Among the lower orders there is probably no class of animals that have such adaptability to circumstances as the crow. Nothing so marks his superiority as the ability to take advantage of his surroundings, and to vary his actions in accordance with the necessity of the case. Other bird species have certain instincts which they follow, and apparently do not depart from. The eagle, the hawk, the buzzard, for example, each follow their own line of getting a living. But while the crow has a preference for grain he is not at all confined to it as his food. When the grain fields are not sufficiently abundant to supply him, he seeks the shores, or bays, and rivers, and gets a good living on shell-fish, even oysters. In his manner of attack he

is as ingenious as man himself. Indeed, under his conditions, man could not be more ingenious. Yet this faculty in the crow, directed to whatever is necessary for his preservation, is called *instinct*. It would seem that the crow should be graded higher. The manner in which he reaches and obtains the oyster and other shell-fish is most ingenious. He will manage to pick one up and fly with it fifty feet or more in the air, and let it drop on some hard place, stones, if there be any. This, of course, breaks the shell, and the crow, at his leisure, devours the wounded animal within. At other times he will attack an oyster in quite another way, fully as ingenious. He will pick up a pebble with his bill, fly to where the oyster is, catch him when feeding with his shell open, and drop the pebble into the open shell. The oyster is caught by stratagem; he can not close his shell on the crow's bill. So Mr. Crow, at his leisure, devours the oyster.

When one field no longer produces a supply for him the crow does not starve, or even emigrate, but holds his ground against all others. If carrion is plenty he will partake with the buzzard of his feast. If grain, shell-fish, and carrion are unable to be obtained he is ready to become a bird of prey, and rival the hen-hawk, or the fish-hawk, as most convenient. It is amusing to see him circling in the air, in company with the seagulls, and with them diving for, and catching fish in the same manner. Most animals have an instinct for a certain kind of food, whether animal or cereal, and they confine themselves to the class of food which nature seems to have ordained for them; but the crow was not organized on a narrow plan. He is not particular, except as to having something; and he will not starve, nor even emigrate if food of any kind is to be obtained within his region. In the spring he moves northward, possibly on account of the temperature; but wherever he is he is evidently a creature of a higher order than the types that are near in the scale to him. So while what we term *instinct* is of a low type, it is not always confined to a narrow range. In some of the lower types we see beautiful and instructive work, but it is all after one pattern. The lower the type the more mechanical or

stereotyped it is; while the higher the animal, or type, the more this primary faculty is varied, and the more does it resemble the higher intellect of man.

We frequently hear the common work of the lower orders of creation spoken of as something wonderful, and as though it required talent superior even to man to accomplish it. People who make such remarks don't seem to comprehend the works of the Great Creator of the Universe, or the powers that he has given to each creature. Man has no need to compete with the lower animals. His powers are far more varied; and herein is the rule of creation. The lower the type the more confined it is to one channel the more stereotyped in its nature; while the higher the grade the more varied the natural powers. Man may be surpassed by some very low order of creation in some one branch, as the superior man may be surpassed in some physical or even mental branch by some inferior person. But this is all the little inferior animals or persons can do, while the superior man can, if necessary, even compete with the lower animal in his own little sphere, and not only compete with one of them, but with all of them; enlarge their contrivances to a mammoth scale, and do such works as all the combined animals together could not think of imitating. The lower animal has, as it were, one talent, and often times this one talent is a superior one, but he can go no further. His one talent descends from generation to generation; the variety is ever the same as the original type itself. They are like a machine built upon one plan, to turn off just such work, and no other. No variety can be introduced. There is no demand; their lines are within a narrow compass; and there is no need for a variety. What they do they do well; it absorbs all their time and talent, and all declare the glory of their Creator. The highest type of Creation, man, even though he has power as an imitator, has no power over creation itself; and if man has no power in this respect much less has the lower creations which are governed by instinct. By this low grade power they work out their salvation. Let us not think that there is no plan or object in this, and that the creatures of this lower power have no

influence for good upon the destiny of creation. They are, each and every one, making their little contributions toward the perfection of the whole; and while the grand purpose of creation itself is an unknown power, it would seem, nevertheless, to be within our sphere to grasp the spirit of it, and to see wherein all these minor works of the inferior orders, governed by what we term instinct, are valuable in their relation to the general welfare of the world.

In the plan of creation the primary conditions were evidently rude; perhaps they could have been ordered after a higher type at first; but such does not seem to have been the fact. Had it been, there would have been no such opportunity for growth and development. Instinct was necessarily a primary faculty and factor. It has been a wonderful power in the wonderful handiwork of creation, and has led up to higher things; being as it were a necessary foundation on which more important things could rest.

ISAAC P. NOYES.

Washington, D. C.

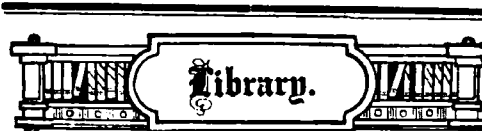
The Summer School of Christian Philosophy.—That excellent scheme which the Rev. Dr. C. H. Deems, of New York, inaugurated several years ago, of holding a summer school under the auspices of the American Institute of Christian Philosophy will be repeated this year, for the fourteenth time. Avon-by-the-Sea, on the charming ocean bank of New Jersey, will be the place of assembly—the date of opening, August 8, and the service will continue eight days. Several leading writers and preachers have been engaged to conduct the discussions occurring from day to day. For information with regard to the matter, address Mr. C. M. Davis, Secretary, 4 Winthrop Place N. Y. City; or the Editor of *Christian Thought*, New York.

PERSONAL.

MRS. HATTIE GREEN, of Brooklyn, who is reported to be worth about \$50,000,000, and of whom we have heard it said that she was a niggard in personal expenditure, has certainly a good record for benevolence, having endowed over one hundred churches and established fifty schools. Benevolent objects absorb a large portion of her income.

CHARLES LOWELL HANCOCK, who died at the City Hospital, Boston, Mass., April 22, was a grandson of John Hancock of revolution fame. He lived in Chicago, Ill., and was over eighty years of age. Charles L. Hancock was born in Boston, and was graduated at Harvard College in 1829, his classmates including Oliver Wendell Holmes, the Rev. Samuel F. Smith, the author of *America*; the Rev. Samuel May, the Rev. James Freeman Clarke, Judge George T. Bigelow, Judge Benjamin R. Curtis, and George T. Davis. Of the fifty-nine members of his class, only nine are now living.

BRUNO GANSEL, of Chicago, has the sleigh in which Napoleon made his flight from Russia in 1812. It is an ancient and worm-eaten affair, little care having been bestowed on it of late years, and attached to it are three little silver bells. Napoleon rode in this vehicle to a little Silesian town, where he exchanged it with Gansel's father for a light traveling coach. Gansel has documents attesting the genuineness of the sleigh.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

LIBRARY.

HUMAN LIFE; or, "The Course of Time," as seen in the Open Light. By Caleb S. Weeks. 16mo, pp. 359. New York: Samuel C. W. Byington, & Co.

It is not common in this era of rapid evolutions for even the lover of literary art to set for himself a task that is likely to consume years, hence we rarely have a work of the epic form or ethical form such as the best verse writers of a hundred years or more ago were ambitious to bequeath to posterity. It is matter for surprise, then, to take up a considerable volume like this under our hand and to find its 350 pages devoted to a single purpose, a newer reading of human history, to show the formative laws in their relation to our race and how they unfold humanity into

C. F. WELLS, NELSON SIZER, H. S. DRAYTON, ALBERT TURNER,
President. Vice-President. Secretary. Treas. and Bus. Manager.

FOWLER & WELLS CO.

On February 29, 1884, the FOWLER & WELLS CO. was incorporated under the laws of the State of New York as a Joint Stock Company, for the prosecution of the business heretofore carried on by the firm of FOWLER & WELLS.

The change of name involves no change in the nature and object of the business, or in its general management. All remittances should be made payable to the order of
FOWLER & WELLS CO.

The Subscription Price of the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH is \$1.50 a year, payable in advance, or \$1.65 when premiums offered are sent to subscribers.

Money, when sent by mail, should be in the form of Money Orders, Postal Notes, Express Money Orders, Drafts on New York, or Registered Letters. All Postmasters are required to Register letters whenever requested to do so.

Silver or other coin should not be sent by mail, as it is almost sure to wear a hole in the envelope and be lost.

Postage-Stamps will be received for fractional parts of a dollar. The larger stamps are preferred; they should never be stuck to the letters, and should always be sent in sheets; that is, not torn apart.

Change of post-office address can be made by giving the old as well as the new address, but not without this information. Notice should be received the first of the preceding month.

Letters of Inquiry requesting an answer should inclose stamp for return postage, and be sure and give name and full address every time you write.

All Letters should be addressed to Fowler & Wells Co., and not to any person connected with the office. In this way only can prompt and careful attention be secured.

Any Book, Periodical, Chart, etc., may be ordered from this office at Publishers' prices.

Agents Wanted for the PHRENOLOGICAL JOURNAL and our Book Publications, to whom liberal terms will be given.

Our premium List, giving complete descriptions of the Premiums offered to subscribers, sent on application.

Our Descriptive Catalogues or our new List of "Books for Women" will be sent to any address on receipt of stamps for postage.

OUR REDUCED TERMS.

We have decided on a reduction in the price of the PHRENOLOGICAL JOURNAL from \$2.00 to \$1.50 a year, in consideration of the fact that it is our desire to secure as large a circulation of it as possible, and also of the fact that the larger the number printed the less is the cost for each. In doing this the size of the JOURNAL will not be materially changed, and it is our purpose to improve the quality in every way possible. The new price should certainly place it within the reach of all who would like to read it, and we will be disappointed if this change does not result in a largely increased subscription list. We shall continue the offer of the Bust or Chart premium to new subscribers as before, that is, to all who will send 15 cents extra with each subscription for boxing and packing the large bust, which is sent by express at the expense of the subscriber, or for postage on the chart or small bust, which is sent prepaid.

A Call For Help.—We feel justified in calling upon the friends of Phrenology and friends of the PHRENOLOGICAL JOURNAL to render us a little assistance at the present time. We have reduced the price of the JOURNAL for the purpose of increasing its circulation, and in this way a knowledge of Phrenology. We can not of course present the JOURNAL and its claims to every one; we shall advertise it largely and send out a great many specimen copies, but this is not likely to be sufficient to accomplish our purpose fully, and for this reason we take the liberty of calling upon our friends for their co-operation. At \$1 a year—and this is our club rate—we believe a club can be made up in every neighborhood by a person sufficiently interested to introduce the JOURNAL, and in towns and cities, of course many clubs could be made, one by almost every person who would try, and will not our friends make a timely effort and give the JOURNAL a new start?

A Choice of Occupation.—There is probably no subject of greater importance than that of Choosing an Occupation for life. Much, indeed, we might almost say everything depends on this. We have a number of publications relating to the subject, to which we wish to call attention. "The Choice of Pursuits, or What to Do, and Why," by Prof. Sizer, [Price, \$2.00] is a large, handsomely illustrated volume, setting forth the requirements demanded by more than 75 trades and professions, showing what temperaments and talents will succeed best in a given pursuit. Then we have "Ready For Business," or Choosing an Occupation, by Geo. J. Manson, presenting the same subject, but in a different way. In this the author shows to the young man what is required in order to achieve success in any given line, how much of an education, where and how it can be obtained, and what are the probable chances for remuneration, in the leading trades and professions, etc. Price of this is 75 cents. "Choice of Occupation, or, My Right Place in Life, and How to Find It," by Prof. Sizer, is No. 4 of Human-Nature Library, price, only 10 cents. This will be found suggestive and useful, and should be read by every young man and woman, as well as by parents.

Believing that if properly understood, Phrenology would be consulted even more generally than it is, we have published two handsomely printed pamphlets, showing the advantages to be obtained in this way, one for parents, "That Boy of Mine, and What to Do With Him," the other, "My Cow Boy Brother, and What He Led us Into," designed for the young themselves to read. Wishing to call the attention of our readers to the subject, we will send this free to any one who may be interested or benefited by reading it. We would like to receive from our readers the names of young men and women who are undecided as to the choice of occupation, also the parents of young children to whom we can mail these pamphlets.

The Man Wonderful Manikin.—For class use by Teachers, or for home study, or for Office use by Physicians, there has been nothing made that will compare at all favorably in the matter of price or convenience to this. The large Manikins costing from \$25 to \$50 each, are so unwieldy as to be to a certain extent quite useless, except in a large lecture room, for which they are intended. The price of our Manikin is but \$5.00, placing it within the reach of all, and to those who send 50 cents extra, we send with it prepaid, the book "Man Wonderful in the House Beautiful," the best work on Physiology as a premium; or for \$6.00, we will send the PHRENOLOGICAL JOURNAL to 4 subscribers and the Manikin as a premium; or we will send the JOURNAL for 4 years with the Manikin. Let parents obtain this that their children may become more interested in the subject of the Laws of Life and Health, and Teachers should certainly have it. Of course we do not need to call the attention of Physicians to the desirability of something of this kind as an office adjunct.

The Human-Nature Library.—There has been some delay in the publication of recent numbers of this series, but numbers 12 and 13 are now ready, and will be mailed to subscribers. Some of the numbers have met with extended sales, and have done much to attract attention to the subject.

No. 1 on SELF-RELIANCE or SELF-ESTEEM as an element of human character would set many a man or woman in much better relations with themselves and to society than they now are. While it is true there are men and women who over-estimate their own talents, there are a large number whose efforts are greatly lessened by the lack of a proper appreciation of what they are able to do, and the reading of this will help to a better understanding of the subjects.

No. 2. PHRENOLOGY, ITS PRINCIPLES and PROGRESS, is a brief statement of the subject, and is especially valuable to place in the hands of those who have not time or are not inclined to read larger works.

No. 3. PHYSICAL FACTORS in CHARACTER, or the Influence of Temperament, by Dr. H. S. Drayton, is practical and will give a good understanding in a brief way of this important subject.

No. 4. CHOICE of OCCUPATION, by Prof. Sizer; this number has already been distributed to the extent of nearly 100,000 copies, and still there are thousands more who should read it.

No. 5. The SERVANT QUESTION, the reading of this would help many housekeepers to establish better relations between themselves and their employees by knowing them better, and therefore how to manage them. All who employ servants should read this.

No. 6. INVENTIVE GENIUS, or Constructiveness the basis of Civilization and Progress, by Prof. Sizer, gives a proper estimate of the great importance of the active manifestation of this faculty.

No. 7. INTEGRITY or Conscientiousness should be read especially by clergymen, teachers, and parents, and all who would attain to perfection of character.

No. 8. WHO SHOULD MARRY, is popular, and in great demand, but not too much so. Let the young people have their attention called to proper marriage relations before it is too late.

No. 9. A DEBATE AMONG the MENTAL FACULTIES will help to a much clearer understanding of the principles of Phrenology in a pleasant and attractive manner.

No. 10. THE WILL, its NATURE and EDUCATION, by John W. Shull, is a thoughtful consideration of the subject, which will be read with interest by thoughtful people.

No. 11. AMBITION or APPROBATIVENESS, is an interesting number in which the influence of the desire to please is considered in its relation to nearly every other phase of character.

No. 12. THE COMPLETE MAN, by Dr. H. S. Drayton, is another of these valuable papers which should be read especially by those who are interested in the education, either of themselves or others.

No. 13, contains the closing ADDRESSES at the last

session of the AMERICAN INSTITUTE of Phrenology, with other information relating to the Institute, and should be read by all interested in the study of Phrenology, whether contemplating attending the Institute or not.

The price of this series of numbers is but 10 cents each, or any 4 will be sent for 30 cents. We have no doubt but that each of our readers will be interested in some of these numbers.

Like an Old Violin.—Please do not think because I am a little late that I have deserted the good old PHRENOLOGICAL JOURNAL, almost any number of which is worth the entire price of a year's subscription. Your last number is especially good. The JOURNAL is like a choice old Violin the older it grows the better it gets. Inclosed find \$1.50, for which please send another year. The practical application of its principles in my stock breeding is of great value, not to mention its great benefits as applied to man. Wishing you all the success that your efforts in behalf of humanity entitles you, and that you may long continue to prosecute the good work. I am, yours for progression,
A. P. R.

The Illustrated American.—This is the name of a new weekly magazine, the first number of which reaches us on Washington's birthday. It is a large quarto the size of the Illustrated newspapers, and if the merits of the first number are sustained, it will certainly achieve great success. The illustrations are made by the new process, being produced direct from the photograph without engraving. We note one feature that commends it strongly to our favor, that is, that the advertising pages will not only be limited in number, but all patent medicines and other objectionable advertisements will be excluded. The subscription price is \$10.00 per annum, or 25 cents a copy. Address Morris M. Minturn, general manager, Bible House. New York.

Kansas City.—We have received from Fred. W. Perkins, a graduate of the last session of the American Institute of Phrenology, and Vice-President of the Winner Investment Co., Kansas City, Mo., a copy of the Kansas City Globe, of Feb. 10th, being an anniversary souvenir number consisting of 32 newspaper pages with a handsome illuminated cover, setting forth the growth and advantages of this city as a place of residence and a point for business enterprise. It contains a number of portraits and is the manifestation of a great deal of enterprise.

This number is published at 15 cents, and is well worth a careful examination by those interested in the West, either with a view of locating or as to its growth and enterprise. The Winner Investment Co., with which Mr. Perkins is connected, is a great corporation for the investment of money and the purchasing and holding of real estate and building improvements. Among other enterprises is that of building a great Bridge and Terminal Railway. Parties interested in such enterprises, will obtain pamphlets and information by addressing Fred. W. Perkins, 718 Delaware street, Kansas City, Mo.

It is not too late now to subscribe to the PHRENOLOGICAL JOURNAL for the present year. We can still furnish the back numbers to the first of January, and the back numbers are sent to all subscribers unless otherwise ordered. We therefore hope that our friends who have been interested in making up clubs for the JOURNAL, will continue their efforts and send on additional names. It is believed that before the year closes it will have a largely increased list of subscribers.

House Warming.—The question of how it is best to warm our dwelling houses, is a very important one, whether considered from the standpoint of cost, or of health and convenience. For many years large buildings have been heated with steam, but it is comparatively recently that an apparatus has been manufactured for the economical heating of ordinary dwelling houses in this way, but this is now done very successfully, and at reasonable cost. There is an entire absence of dust which is found from the use of stoves or hot-air furnaces. The heat can be carried readily over every part of the house, and the advantages of properly warmed air that is not burned out in passing through the hot-air chamber of a furnace is secured. We wish to call the attention to an advertisement in this number of the JOURNAL, of the DUPLEX STEAM-HEATER Co., an apparatus we have had occasion to test, and find it possesses very many advantages, especially in its simplicity, and we could recommend our readers to read the advertisement and write to the manufacturers for illustrated catalogues, which are sent free.

"For Girls."—This grand work is having a continued and steady sale which has now reached 25,000 copies, which certainly speaks well for the merits of the book and the interest the people have in the subject. It is safe to say that no young woman should be without it, and mothers and married women would find much in it that might be read with profit. The price has been made low that it may be within the reach of all, and it is sent by mail postpaid for only \$1.00.

Heads and Faces.—We are now going to press with another edition of HEADS AND FACES, making 80,000 in all, the demand for it steadily increasing. These books are being sold wherever the English language is spoken. Large numbers are sent to Mr. L. N. Fowler, our London agent, and a good demand is found for it in Australia, India, and other parts of the world. It certainly may be taken as an evidence that the subject is receiving attention.

Brain and Mind.—We frequently have inquiries as to the best text-book on Phrenology, and we reply that for a careful, systematic study in its modern phases, including the questions relating to Physiology of the Brain, we recommend Brain and Mind. This book is useful and practical, and should be read especially by those who are seeking to know what is claimed for Phrenology. Price, \$1.50.

The Health Food Co.—The untiring manager of this Company is as zealous as ever in his efforts to prepare food for the use of those who suffer from various diseases as well as for those who wish to live to be well. There are many kinds of food prepared and put on the market by merchants who simply have an idea of trade before them, and often times simply give a name which might imply a special virtue or value of some kind, while in fact it is only in name. Any of our readers who will either call upon or place themselves in correspondence with the Health Food Co., will find intelligence as well as business in this concern. Our readers should write for their descriptive matter which will be sent to any address free, by sending to No. 74 Fourth avenue.

Our New Portraits.—We wish to call the attention again to the fine new list of lithographic portraits which we are offering for sale. A number of lecturers have ordered from this list and are delighted with the pictures. One of them (Prof. Morris) says he would be glad to pay us \$1,000 for 1,000 different portraits as good as these. Not only should every lecturer have them, but some of these should be in every home. The portraits of Washington, Franklin, and Garfield, and others that might be named, should certainly prove an inspiration to the best of efforts;

Fickett's Adjustable Head-Rest.—In the last number of the JOURNAL we published an advertisement and description of this article which should be found in every home where there are invalids. It is simple, convenient, and valuable, and wherever it has been used it has been appreciated.

Our Phrenological Cabinet.—We wish to extend an invitation to our readers and friends to visit our office and inspect our large collection of casts, busts, portraits, and sketches, whenever an opportunity presents itself. Our rooms are always open and free to visitors, and we will cordially answer any and all questions that may be asked in relation to the subject.

Fowler's Self-Instructor in Phrenology.—So large a number of copies of this book have been published, that the plates became worn out, and it was absolutely necessary that a new edition be made. This was taken up before the last edition was exhausted, and we hoped to have had it ready by the time the new books were needed but the many delays incident to getting out a new book prevented this, and when the book was ready, by a mistake on the part of the printer the work was not satisfactorily done, except for the filling of orders of long standing, we were not willing to send it out. We have now printed the book a second time, and have an edition of which we are justly proud. It is on fine paper, the new illustrations were especially prepared for the book, and they are well printed. As the book has been increased in size, we have found it necessary to increase the price, and this will now be \$1.00 in cloth binding. The paper edition remains the same, 50 cents.

A New Illustrated and Descriptive Catalogue. In this number of the JOURNAL will be found a sample page of a new Illustrative and Descriptive catalogue we have in preparation. In it will be given portraits of Drs. Gall Spurzheim, Combe, O. S. & L. N. Fowler, Samuel R. Wells, Mrs. Wells, Prof. Sizer, Dr. Drayton, Dr. Trail, Sylvester Graham, Rev. Dr. Alkman, and others, with fac-simile engravings showing styles of binding of many of the books. This will be by far the most complete and the handsomest catalogue we have ever published. It will be printed on fine paper, and will be sent to any of our readers on receipt of 6 cents in stamps.

How to Keep Store.—There are some men who never learn except from their own experience, or from their own failures as it were; others are ready and anxious to learn from the experience of others, and for this class we publish *How to Keep Store*, setting forth the experience of more than 30 years of merchandising by a practical store-keeper. It considers almost every question that can possibly arise with a store-keeper relating to the purchase and sale of goods; the employment of clerks; the location of a business; how to establish and how to dispose of it; if for sale. It is worth many times its price, \$1.50, to every one interested in the subject.

A Phrenological Farmer.—Mr. H. S. Bartholomew, one of the graduates of the Institute, is President of the Elkhart Co. Farmers' Institute, and at a recent session discussed the Qualifications for the Successful Farmer, no doubt to the advantage of his fellow members.

The Cosmopolitan for February sustains the reputation of this bright magazine. Among the attractive features is an illustrated article on Horace Greeley by Murat Halstead. It will be remembered that this magazine is published at \$2.40 a year, and clubbed with the JOURNAL a year at \$2.75. Address this office.

About Pearline.—Every one knows about Pearline, almost every one uses Pearline, but we wonder if all the housekeepers who use it know half that can be done with it. We wonder if they all know what some of the bright ones have discovered, that those mountains of dishwashing—the greasy pan and kettle—may be reduced to mole-hills of the smallest size by the judicious use of Pearline. Fill the roasting-pan, as soon as the gravy is poured from it, with cold water, shake in a little Pearline and set on the stove. By the time the rest of the dishes are washed, all the grease is dissolved and the pan can be washed as easily as a plate. Treat the kettle in which anything greasy has been boiled in the same way, and beside clean utensils you will have a clean sink. the use of the Pearline rendering it safe to pour such dishwater into it. Sinks regularly treated to a bath of Pearline and scalding water will seldom need the services of a plumber.—From *Watchman*, Boston.

Carpet Sweepers.—On another page in this number of the JOURNAL will be found a special offer of Carpet Sweepers which will certainly attract the attention of our readers. A Sweeper has now come to be an almost indispensable article in the housekeeper's outfit, desirable in every way. With the latest improvements they are a great saving on carpets, in fact a broom and dust-pan combined, and so inclosed that no dust is raised to settle again on the carpet or furniture. The Grand Rapids is the best Sweeper made; it could not be improved except by plating with gold or silver, or finished in some extravagant or ornamental way.

It is said that the manufacturers spent nearly \$10,000 in experimenting in making the brush alone which is used in this sweeper. For those wishing to procure something less costly, but serviceable, we can recommend the improved Crown Jewel. Read our advertisements and note our special offers.

A Chance for Girls.—The *Ladies' Home Journal* of Philadelphia proposes to give to the girl of 16 years and over, who will send between now and Jan. 1st, 1891, the largest number of yearly subscribers to that journal, a complete education at Vassar or any other American College she may select, including every branch of study and all expenses. This is certainly a generous offer, and it will probably stimulate an interest which will largely increase their list of subscribers.

* **A. B. Keith**, of the class of '77, has sold out his Iowa newspaper interest and has located at Helena, Mont., where he is planning to establish the publication of a weekly family paper, in which he proposes to have a phrenological department. Mr. Keith is a stirring man, and there is no doubt of his success in the enterprise.

"The Home Journal."—This publication, now in its 45th year, comes out in a new dress. The size of the pages are reduced and increased in number, making it much more convenient for reading and preserving. It is published at \$2 a year or 5 cents a copy, by Morris Phillips, 240 Broadway, New York.

The Galaxy of Music. We have received the February number of the *Galaxy of Music*, and will say of this that it is one of the best of music Journals that come to this office. In the last number, "Winsome Grace" is a beautiful Schottisch, by one of Boston's well-known teachers, Prof. Howe. It is published at 10 cents a number or \$1.00 a year. Published by F. Trifet, 408 Washington St., Boston, Mass.

Phrenological Examinations by Mail.—We are frequently asked as to whether we can make Phrenological Examinations by mail, and in reply would say that this is done very successfully, when we have the properly taken pictures and the proper measurements given. For full particulars in regard to this, send for "Mirror of the Mind."

BUSINESS CARDS.

The Hammam, a Family Hotel, with Turkish Baths, 81 and 83 Columbia Heights, Brooklyn, N. Y. Three minutes' walk from Fulton Ferry.

Susanna W. Dodds, M.D., and Mary Dodds, M.D., Hygienic Physicians, 2226 Washington Ave., St. Louis, Mo. All diseases, acute and chronic treated without medicine. Send for circular.

The New York Medical College and Hospital FOR WOMEN, and Homeopathic Dispensary for Women and Children. 213 West 54th Street, New York.

Mrs. J. T. Campbell, M.D., 153 W. 128th St., New York.

OUR HEALTHFUL HOME is pleasantly located on Reading Heights. Send ten cents in stamps, for our Book Circular, with Portrait. Address, A. Smith, M.D., Reading, Pa.

ADVERTISEMENTS.

SPECIAL NOTICE.—Readers will oblige the Publishers if they will state, when writing to any of our advertisers, that the advertisement was seen in the PHRENOLOGICAL JOURNAL.

READY FOR BUSINESS, a book for Boys and Young Men, on choosing an occupation, describes the trades and professions, price 75 cents. Free to you the story of "My Cow-Boy Brother, and what he led us into." To fathers free, "That Boy of Mine," what to do with him. Send address on a postal to Fowler & Wells Co., 775 Broadway, New York.

THE WOMANS' NEWS.

A Weekly Independent Newspaper. Devoted to News, Work and Interests of Women. Containing Special Features, Serial Stories, Fashions, Fancy Work, Family Physician, Children's Department, S. S. Lessons, etc. Subscription Price, \$1 00 Per Year. Send for Sample Copy. Free to any Address. **FRANCES E. WHITE**, Manager, 58 South Mechanic St., Springfield, Ohio.

PIERRE

is the coming large city of the Upper Missouri Valley.

Who are the wealthy men of Kansas City, Omaha, and Sioux City, to-day? They are the men who went to those cities a few years ago, when they were young and just starting, as Pierre is to-day.

Fortunes can be made from small investments. Splendid openings for all kinds of business.

If you are ambitious come to Pierre. For any information desired write to

CHAS. L. HYDE,
Investment Broker,
PIERRE SOUTH DAKOTA.

Our Cabinet.—All visitors to our city are anxious to see the curiosities, art treasures, mammoth buildings, monuments, wonderful machinery, and grand institutions of learning and charity, as well as to hear our great preachers, singers, and actors. They endeavor to crowd into their visit a glimpse of everything that is worth seeing and worth remembering. This sight-seeing is not complete until the visitor has inspected the Phrenological Cabinet, at 775 Broadway, New York, where casts of renowned people of all ages, nations and lands; artists, authors, inventors, teachers, reformers, orators, and poets, stand side by side, shelf-full on shelf-full, until they number up into the hundreds.

Abnormal mentality is represented by casts of idiots, maniacs, murderers, pirates, and all grades of the guilds of crime. Portraits in oil, crayon, and outline pencil sketches; skulls of animals and men; in fact every facility for the accurate study of Human Nature is there offered. Many items of interest may be gathered during the brief stay of a casual visitor, as an accomplished and courteous guide is in constant attendance, to answer questions and explain the exhibits. Fowler & Wells Co. "keep open house." Visitors are welcome at all hours, of the week days, from 8 A. M. to 6 P. M., welcome to remain as long as they please, studying and comparing the heads in this wonderful collection.

Practical Typewriting.—W. N. Ferris, of the Ferris Industrial School of Penmanship and Typewriting, says: "I have examined Bates Torrey's Typewriting Manual with interest; it is a gem. If the book could be brought to the notice of learners, typewriting would be revolutionized. I have on hand several copies of other manuals, and I shall be a little while in getting to use the book regularly."

The Chautauquan.—This Monthly Magazine in its new form must prove very attractive to all the members of this great Society, and it certainly is of interest to the casual reader: is published at the low price of \$2.00 a year, single copies 20 cents. Address Dr. Flood, Meadville, Pa.

A Correction.—In the article by Mrs. Wells in the February number of the PHRENOLOGICAL JOURNAL, by a typographical error, the birth of Dr. Gall is given as March 7th; it should have been March 9th. As some of our readers have noted an inconsistency between this and other biographies we wish to call attention to the matter in this way.

"Memory."—We have received a letter from a teacher who had procured Fowler on "Memory and Intellectual Improvement," in which he says, "Your book is a gem and should be in the hands of every teacher in the country, and parent, too." There is no doubt but that the work of the training of children would be very greatly increased in its effectiveness if those who had to do it had a more general knowledge of the subject and what constitutes intellectual improvement.

The Back Numbers.—We can still furnish the back numbers of the JOURNAL to the first of January, and all subscriptions are dated from this number unless we receive instructions to the contrary; in this way the volumes are complete and the readers have the numbers containing the serial articles of this year.

The Manikin.—In the last number of the JOURNAL was published a large illustration of the "Man Wonderful Manikin," to which we would call the attention of our readers, and remind them this is offered with the PHRENOLOGICAL JOURNAL for only \$5.50, or for this sum the Manikin and the Man Wonderful in the House Beautiful will be sent.

Pierre.—By a mistake on the part of the printers the advertisement headed Pierre was omitted from the April number of the JOURNAL. It will be found by referring to our advertising column in this number.

BUSINESS CARDS.

The Hammam, a Family Hotel, with Turkish Baths, 81 and 83 Columbia Heights, Brooklyn, N. Y. Three minutes' walk from Fulton Ferry.

Susanna W. Dodds, M.D., and Mary Dodds, M.D., Hygienic Physicians, 2236 Washington Ave., St. Louis, Mo. All diseases, acute and chronic treated without medicine. Send for circular.

The New York Medical College and Hospital for Women, and Homeopathic Dispensary for Women and Children. 215 West 54th Street, New York.

Mrs. J. T. Campbell, M.D., 158 W. 128th St., New York.

OUR HEALTHFUL HOME. Invalids wishing real home comforts and superior methods of treatment, should visit our sanitarium. For circulars address, A. Smith, M. D., West Reading, Pa.

ADVERTISEMENTS.

SPECIAL NOTICE.—Readers will oblige the Publishers if they will state, when writing to any of our advertisers, that the advertisement was seen in the PHRENOLOGICAL JOURNAL.

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CHAS. L. HYDE,
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C. F. WELLS, NELSON SIZER, H. S. DRAYTON, ALBERT TURNER,
President. Vice-President. Secretary. Treas. and Bus. Manager.

FOWLER & WELLS CO.

On February 29, 1884, the FOWLER & WELLS CO. was incorporated under the laws of the State of New York as a Joint Stock Company, for the prosecution of the business heretofore carried on by the firm of FOWLER & WELLS.

The change of name involves no change in the nature and object of the business, or in its general management. All remittances should be made payable to the order of
FOWLER & WELLS CO.

The Subscription Price of the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH is \$1.50 a year, payable in advance, or \$1.65 when premiums offered are sent to subscribers.

Money, when sent by mail, should be in the form of Money Orders, Postal Notes, Express Money Orders, Drafts on New York, or Registered Letters. All Postmasters are required to Register letters whenever requested to do so.

Silver or other coin should not be sent by mail, as it is almost sure to wear a hole in the envelope and be lost.

Postage-Stamps will be received for fractional parts of a dollar. The larger stamps are preferred; they should never be stuck to the letters, and should always be sent in sheets; that is, not torn apart.

Change of post-office address can be made by giving the old as well as the new address, but not without this information. Notice should be received the first of the preceding month.

Letters of Inquiry requesting an answer should inclose stamp for return postage, and be sure and give name and full address every time you write.

All Letters should be addressed to Fowler & Wells Co., and not to any person connected with the office. In this way only can prompt and careful attention be secured.

Any Book, Periodical, Chart, etc., may be ordered from this office at Publishers' prices.

Agents Wanted for the PHRENOLOGICAL JOURNAL and our Book Publications, to whom liberal terms will be given.

Our premium List, giving complete descriptions of the Premiums offered to subscribers, sent on application.

Our Descriptive Catalogues or our new List of "Books for Women" will be sent to any address on receipt of stamps for postage.

A Good Time.—The present is always a good time to do a good thing so that now is a good time to subscribe for the PHRENOLOGICAL JOURNAL if you are not already a reader of it. Some times are better than others for some things, and this perhaps is the best time to take up the work of canvassing for our Publications, therefore we ask for agents who will take subscriptions for the PHRENOLOGICAL JOURNAL and push the sale of "NEW PHYSIOGNOMY," "COWAN'S SCIENCE OF A NEW LIFE," "THE EMPHATIC DIAGNOT," "CHOICE OF PURSUITS," "HEADS AND FACES," "FOR GIRLS," in fact all of our Publications are available, some agents do well with one, and some with another book, but there can always be found something for everyone to sell to advantage, and the employment may be made "pleasant and profitable," and liberal terms will be made known on application. In every neighborhood somebody can sell some books to advantage, and we want to extend our agencies until the whole field is covered.

CURRENT EXCHANGES.

Phrenological Magazine. Monthly. Journal promotive of Scientific Education and Self-Culture. L. N. Nowler, London, Eng.

Canada Educational Monthly, and *School Magazine*. Archibald MacMurchy, Editor. Toronto.

Boston Musical Herald. Monthly. Devoted to the Art Universal. New England Conservatory. Boston.

Popular Science Monthly. May. Has a graphic sketch of the late editor, Dr. E. L. Youmans, by Prof. John Fiske, besides a good list of other papers. "The Strength of Spiders and their Webs" is illustrated; "Scenes on the planet Mercury," "Wallace on 'Darwinism,'" "Cats and their Friendships," a biographical account of Henry R. Schoolcraft, are specimens. J. Appleton & Company, New York.

The Eclectic Magazine of Foreign Literature, Science and Art. Well selected contents. Monthly. New York.

La Gazette Medicale de Montreal. Monthly. A medical eclectic for French physicians in America. Montreal.

North American Practitioner. Journal of the Post-Graduate Medical School of Chicago. Monthly.

Popular Science News. Monthly. James R. Nichols. Boston.

Book Talk. Contains notes and extracts on recent publications, etc. Monthly. St. Paul, Minn.

Harper's Magazine. May. Some Modern French Painters, Old New York Taverns, Through Bush and Fern, English Lyrics under the First Charles, furnish the writers and artists with good subjects. Aime Morat's painting, "Charge of the Culrassiers at the Battle of Reymville," is very spiritedly represented by E. S. King's engraving that forms the frontispiece. Some good hits occur in the "Drawer." Harper & Brothers, New York.

The Century for May opens with an article on Washington's portraits, and following is a continuation of the interest in "Some New Washington Relics," and "Original Portraits of Washington," "Ten Views of Marie Bachkirtseff, Chickens for Use and Beauty, The Fighting Parson," "Blocked Out," another censorious comment on Russian policy, in the Kennan style; Methinks we've had enough of it; the Women of the French Salons; Theodore O'Hara, the poet; Travis and Major Jonathan Wilby. For the most part quite an "American" number. Century Co., New York.

The Therapeutic Analyst. Monthly. Draws its reports from every source, and is an exponent of the world's progress in Therapeutics. Edward P. Brewer, M. D., Editor. Norwich, Conn.

America. Devoted to Honest Politics and Good Literature. Weekly. Sisson, Thompson & Co., Chicago.

Brooklyn Medical Journal. Monthly. Medical Society of County of Kings. Brooklyn.

Kindergarten. For Teachers and Parents. Monthly. Alice B. Stockham & Co. Chicago.

North Carolina University Magazine. Published by Students of the University. Chapel Hill, N. C. A creditable publication for this old institution.

Journal of Hygieio-Therapy. Devoted to Scientific Methods of Treating the Sick Without the Use of Drugs. T. V. Gifford & Co. Kokomo, Ind.

Herald of Health. Monthly. New York. Old and useful pioneer in hygienic medication, M. L. Holbrook, Editor.

Fruits and How to Use Them.—This new and practical household Manual is receiving warm words of commendation from the press and the people. The work is certainly very unique, being the only one of the kind published, and it should have its place in every household library. We publish below a few of the many favorable notices that have been given the work by the press.

It interferes with the field of no other book; but what the author has not gathered about the preparation of all kinds of fruits is not worth the mention. The book is exhaustive, and leaves little to be wished for, and is an indispensable companion to the common cook-book. It is surprising how many rare and appetizing dishes may be made from the common fruits. If the diet of Americans was more largely of the fruits, of which there is such an abundance, there would be less need of medicines and a far higher average of health and length of life.—*Progressive Thinker*.

A practical manual which we can cordially commend to housekeepers.—*New York Sun*.

A book that promises to do more for the happiness of mankind than anything written in recent years. It comes nearer to the want of humanity than any other treatise we have yet seen. Every young wife should have one, if she truly values her husband's health.—*News, Passaic, N. J.*

This differs from the ordinary cook-book, in that it deals exclusively with fruits and utilizes each fruit known to our modern civilization in a most pleasing manner. The book is one to be highly valued by all housekeepers.—*Ploughman, Boston, Mass.*

That altogether too little fruit is used in the family, admits of no doubt, whatever. Every physician and other person who has studied the subject concurs in this conclusion. The use of fruit promotes health. This being so, the more varied and appetizing the preparations of fruit are, the more of them will be eaten, and the pleasure in the eating will be enhanced—both of which objects it is very desirable to accomplish. This volume, therefore, steps directly into this useful domain of cookery—a domain to which no other book is exclusively devoted, and gathers from every cuisine at home and abroad, hundreds of the best methods of presenting fruits of all kinds at the table—the apple, the most valuable of all fruits, having not less than a hundred different ways of preparing it. As we have already stated, amid the swarm of cook-books, this is the only one devoted exclusively to the preparation of fruits. It should be in every household.—*Eastern Argus, Portland, Me.*

The book is a mighty convenience to such cooks as have fruit to prepare, and one can merely by reading the receipts, after a little while rise up from their perusal with a feeling akin to that he experienced when a boy after a raid upon a peach orchard.—*Tribune, Salt Lake City*.

We hardly feel capable of noticing this book, but the wife, who is an adept in the matter of fruits and their uses, has looked it over and says it is just the thing, and supplies a much needed want.

It is not a cookery book in the ordinary sense. In fact it is just what it says it is, a book on fruits and their uses.—*Ill. Christ. Weekly.*

In few households is there command of an adequate variety of modes of preparing fruit for the table, though the supply itself may be, as the author points out, superabundant.—*Evening Post New York.*

The use of fruits for health, which is being urged more and more by sanitarians, demands just such a large and varied collection of receipts to show the many appetizing forms in which fruits may be prepared.—*Boston Globe.*

We cheerfully commend the work to general attention.—*Cultivator and Country Gentleman.*

It will prove a valuable acquisition to the housewife's library.—*Englewood Times.*

The Health Food Company that has been located for many years in our neighborhood, 74 4th avenue, have moved into fine new quarters at 61 E. 13th street, cor. 5th avenue, where they occupy a very fine set of offices with full appointments for testing and selling the best of their food preparations. With these increased facilities they will undoubtedly largely increase their business, in which they have our best wishes. We presume there are many of our readers who have not tested all their food products, many of which we are glad to commend specially, and we might refer to their Wheatena, which is the best breakfast food known, also to their Peeled Wheat Flour, and the Peeled Wheat Crackers; these at least should be found in every well regulated household. For descriptive circulars and price list address as above.

Our Catalogue.—The Printers and Artists are still at work on our Catalogue, which is becoming much more elaborate than we at first proposed. We regret the delay in sending to the persons who have remitted 6 cents in stamps for it, but these orders will be filled as soon as possible.

Ex-Postmaster Gen. James, after examining a copy of "Ready for Business," says to the author:

"My Dear Sir—I am in receipt of your letter of the 25th ult., and have since received a copy of the work published by Fowler & Wells Co., entitled 'Ready for Business, or Choosing an Occupation.' It is a good, healthy book, brimful of information and sound sense, and presented in a most attractive form. It can be read not only by boys, but older heads, with pleasure and profit.

Sincerely yours,

THOMAS L. JAMES."

That Boy of Mine and My Cow-Boy Brother.—These two Pamphlets issued for the purpose of explaining the benefits to be derived from Phrenological Examinations, are being very greatly prized by those to whom they have been sent, and we wish simply to say that wherever there are boys or girls to train, the suggestions given will be found of great service. A copy of either or both will be sent on application.

A Special Offer.—There have been for a number of years large life-size Manikins of the human body made, selling from \$25.00 to \$50.00 each. A short time ago we prepared and published a small Manikin about one-third life size, a capital work and one which has proved popular, but still there is a demand for something between this small size and the full size, and also for something more comprehensive in plan and detail as well as size. The need of this has led to the designing and publishing of the **NEW MODEL ANATOMICAL MANIKIN**. This contains some features not found even in those higher priced, and in Anatomical detail it is undoubtedly the most accurate that has ever been made at any price, having been prepared by a skillful artist and anatomist, from the most reliable sources, who is thoroughly competent to do this class of work, having been engaged in it for us for twenty years or more. On another page we publish a brief, condensed description. We make a special offer to the readers of the **PHRENOLOGICAL JOURNAL** who order it in advance of publication. The price has been put at \$12.00, and it will be sent to those ordering before August 1st for \$8.00. Persons not now subscribers to the **JOURNAL** can take advantage of this offer by sending the subscription price for the **JOURNAL** with the order as above.

All this is True.—The *Sunday Tribune* of Minneapolis says: "Practical Typewriting, by Bates Torrey, is one of the most, if not the only, sensible and practical manual of instruction for the typewriter yet published, containing all that is necessary to perfect the learner in the use of the machine, and at the same time eliminating all useless information. The 'all-finger' method taught by Mr. Torrey is that used by F. E. McGurkin, who has made such an extraordinary record for typewriting speed. The method is presented in a lucid manner, and attention is called to a few of the more natural and important developments from it. The book contains a great deal of valuable general advice, expedients and information relating to allied subjects, including a dozen pages of fac-simile forms and curious ornamental combinations of typewriter characters. Mr. Torrey is an expert in the use of the writing machine, and his book gives the learner the benefit of years of experience."

Good Summer Books.—While we do not publish a long list of novels and light literature, we do have many books in our Catalogue that will be found pleasant and profitable reading for the summer months. There is no better opportunity for the study of Human Nature in its various phases than is presented to a person away from home and on a summer vacation, or wherever people gather, and therefore you should procure a copy of **HEADS AND FACES** and some of our other books, and so be prepared to observe and study people intelligently. We would also commend to the attention of our readers our valuable list of books on Health, a matter which should certainly claim the attention of the people in the summer time.

The Dry Steam Bath.—The virtues and utility of bathing with apparatus fitly applied need no commendation to-day. The world is becoming well informed on the subject and accepts eagerly every fresh improvement in methods designed to meet the wants of the invalid or healthy man. With the advent of the Turkish Bath and the Russian Bath, many forms of apparatus have been devised so that people in their homes can enjoy the luxury and hygienic effects of them.

One of the latest and best outcomes of invention in this line is the Dry Steam Bath or Oxygen Bath, which for convenience in the home has no superior. The apparatus consists, as shown by the illustration, of a cabinet or box, in which the bather places himself or herself, and remains as long as may be thought sufficient for the desired effect.

The special features of this Cabinet are its simplicity of arrangement, its lightness and adjustability. After the bath has been taken it can be folded together and set aside in a corner so that it is quite out of the way. The size of the Cabinet is three feet by two, and folds to four inches by three feet. Another feature is the Generator, a well made vessel of copper, nickel-plated, having a valve, also a cup at the top into which solutions may be placed if the vapor is to be medicated. This generator can be used with gas or alcohol, a proper stand being supplied for the purpose. It is set outside the Cabinet, as shown, not inside. The unpleasant effects of the heating vessel, which is usually set within a box used for ordinary domestic purposes, are thus avoided, and a soft, mellow heat is obtained which is perfectly agreeable to the patient and produces perspiration in a few minutes after the generator is in full operation.

A ventilating shaft is let into the interior so that there is a constant movement of the atmosphere within the Cabinet and its full ventilation is maintained. This in itself stimulates the skin and is productive of excellent results. The extreme heat of both the Turkish and Russian Bath are avoided. The head of the bather being out of the Cabinet, his respiration of course is not affected by the heat of the interior. The arrows in the illustration show the direction of the current of vaporized air, and one whose skin is loaded with impurities may be made sensible of it by a whiff of the current, as the action of the bath relaxes and stimulates the glands and skin.

One can adjust the bath for himself, and enjoy its luxury and healthful properties in private.

For lung troubles, catarrh, bronchitis, threatening pneumonia, this treatment is excellent. We know of nothing better to prevent or abort colds. Such a steaming as this Cabinet will afford is far better than the ordinary hot bath, lacking as it is in the effect of the shock which sensitive people especially sustain by such treatment unless great care is exercised.

For all sanitariums and hospitals; whether of a general or special character, for electricians and massage operators, this Cabinet is recommended as a part of their equipment, which has only to be known to be considered indispensable.

The Generator is fitted with a vaporized medi-

cator, and an inhaler, so that it will serve other purposes than those of a Vapor Bath merely. The Cabinet is covered with maroon water-proof cloth finished with oak trimmings, nickel-plated screws, rubber joints, etc., and though light, it is strong and durable.

We have thoroughly investigated the merits of this new Bathing Apparatus, and have arranged for the exclusive agency of it, and will send it by Express carefully boxed for shipment to any address, on receipt of price \$40.00. Liberal commissions are allowed to agents who will take hold of it. It should be sold to every family. For any additional information, Address: Fowler & Wells Company, 775 Broadway, New York.

Enchantment as a Premium.—This is the name of a new out-door and lawn game which has many attractive features about it. The playing of it is very graceful, and gives good exercise and can be entered into by children or adults, and always with interest. The illustration on another page will give an idea of how it is played, and having tested this, and appreciating its elements of popularity, we have arranged for offering it as a premium to the subscribers of the *PHRENOLOGICAL JOURNAL* on the most favorable terms. We will send it for two subscribers at \$1.50 each, or to any of our subscribers on receipt of \$2.00. To those not now subscribers both will be sent for \$3.00. This is much less than the manufacturer's price of the game, and it is believed in this way a large number will be sent out. We offer it as a special summer premium, and we certainly trust that many of our readers will take advantage of the liberal offers we have made.

About Pearline.—Every one knows about Pearline, almost every one uses Pearline, but we wonder if all the housekeepers who use it know half that can be done with it. We wonder if they all know what some of the bright ones have discovered, that those mountains of dishwashing—the greasy pan and kettle—may be reduced to mole hills of the smallest size by the judicious use of Pearline. Fill the roasting pan, as soon as the gravy is poured from it, with cold water, shake in a little Pearline, and set on the stove. By the time the rest of the dishes are washed, all the grease is dissolved and the pan can be washed as easily as a plate. Treat the kettle in which anything greasy has been boiled in the same way, and beside clean utensils you will have a clean sink, the use of the Pearline rendering it safe to pour such dishwater into. Sinks regularly treated to such a bath of Pearline and scalding water will seldom need the services of a plumber.—From *Watchman*, Boston, Mass.

"NERVOUSNESS."—We have just issued a new edition of Dr. Drayton's excellent work on "Nervousness, its Nature, Causes, Symptoms, and Treatment," which was out of print for a few weeks. It is a practical work, and the reading of it will prevent much suffering by indicating methods of relief. Price, only 25 cents.

Appreciative.—The Rev. J. W. D. Anderson in a review of *HEADS AND FACES* in *The Fireside, Factory, and Farm*, says:

"Probably no two men in the United States are better qualified to speak upon the subject of Phrenology and physiognomy than the joint authors of this work. Mr. Sizer is president of the American Institute of Phrenology, and has written half-a-dozen strong works covering different parts of his chosen field, and to say that Dr. Drayton is editor of the *PHRENOLOGICAL JOURNAL* is to acknowledge the eminence in his profession to which he has attained. To any one who is interested in the subjects discussed, "*HEADS AND FACES*" will come as a welcome supporter of his views, and we do not see how any unprejudiced person could carefully study these pages and not become convinced of the practicality of scientific character reading, and the great benefit to be attained thereby. We give a few of the points discussed: The Face, The Head, Outlines of Phrenology, Bumpology Explained and Exploded (showing that Phrenology is not based, as is commonly supposed, upon the size of the "bumps," but upon the length of the brain fibers from the medulla oblongata to the surface where the organ is located), Brain and Mind, Plurality of the Mental Faculties, Partial Idiocy, Insanity Cured by Phrenology, Brain Substance, Brain Growth and Weight, How the Faculties Combine, Adaptation in Marriage. The work is embellished by 245 cuts, extremely valuable because of their illustration of physiognomy. Several years' practical experience in the school-room and a personal knowledge of the benefits attained from Phrenology, convince the editor that all who attempt to be teachers should make themselves familiar with its principles. If a copy of "*HEADS AND FACES*" were placed in the hands of every school teacher in the country, and if, at the end of six months he were required to pass an examination upon it, the benefit to our school system would be incalculable."

This work well sustains the above good opinion; that this opinion is shared by many others is shown by the many copies that are being sold. We are now selling out the 40th thousand, and it is likely will have to print a new edition soon. By mail, on receipt of price, 40 cents; in paper; \$1.00 for the extra edition in cloth. Address this office.

A teacher in renewing his subscription to the *PHRENOLOGICAL JOURNAL* says: "I receive quite a number of educational papers, but I get more practical information from the *PHRENOLOGICAL JOURNAL* than from any other, and it is by far the best. I wish you had one million subscribers. I think Phrenology taught by the right kind of men is the greatest power for good in the world. God speed the day when it shall be universally used and practiced. S. A. R."

Wide Awake for May contains a portrait of Miss C. M. Young, the author of the "*Heir of Red-Clyffe*." This closes the 30th volume of this well gotten up magazine for young people, published by D. Lothrop & Co., Boston.

To Teachers.—We would like to call the attention of teachers who desire employment during the summer months to the opportunities for making money by taking an agency for our publications. Especially do we want the services of agents in the introduction and sale of our "*NEW MODEL ANATOMICAL MANIKIN*" described on another page. Full particulars as to our special terms to agents will be sent on application.

The Man Wonderful Manikin.—This continues to attract attention and to prove satisfactory to teachers, parents, and others who are interested in teaching and studying the subject of Physiology. A correspondent acknowledges the receipt of one sent her as follows:

"All received in good condition, and I must say I am very much pleased with all, and the Manikin exceeds my expectation. I would not take \$20.00 for it, if I could not procure another like it. Many thanks for the premium Bust sent. M. O. A."

Every-Day Biography.—To those who have not taken this book up and studied it, we wish to commend it as one of special interest. There is a certain kind of fascination in reading brief biographies of people born the same day of the year, and in this book are grouped for each day four or five people who have become noted or notorious. The book will be found of special service to teachers, and it should be in every family where there are young people. Agents are wanted to introduce this, to whom liberal terms will be given.

Practical Typewriting.—This book, undoubtedly the best ever published on Typewriting, is increasing in popularity from the general commendation which it receives, and large sales are being made. The author, Bates Torrey, whose home is in Portland, Me., called on us on his return from an extended Western trip. He is enthusiastic in his faith in the All-Finger method and writing by touch. In cities where there are a number of typewriters employed, agents can do well in the introduction of this.

BUSINESS CARDS.

The Hammam, a Family Hotel with Turkish Baths, 81 and 83 Columbia Heights, Brooklyn, N. Y. Three minutes' walk from Fulton Ferry.

The New York Medical College and Hospital for Women, and Homeopathic Dispensary for Women and Children. 213 West 54th Street, New York.

Mrs. J. T. Campbell, M.D., 153 W. 128th St., New York.

OUR HEALTHFUL HOME. Invalids wishing real home comforts and superior methods of treatment, should visit our sanitarium. For circulars address, A. Smith, M. D., West Reading, Pa.

ADVERTISEMENTS.

SPECIAL NOTICE.—Readers will oblige the Publishers if they will state, when writing to any of our advertisers, that the advertisement was seen in the *PHRENOLOGICAL JOURNAL*.

GRANŪLA.

AN INCOMPARABLE FOOD.

Originated over 30 years ago by James Jackson, M. D.

Prepared from the famous Genesee-Valley Winter Wheat, containing all the phosphates and nutritious elements of that grain, and is the best food for invalids and children. It is a TWICE-COOKED FOOD, ready for IMMEDIATE TABLE USE, and yet will keep in a dry place for years unaltered in quality.

Especially adapted to cases of failing nutrition, with involvement of nervous structures.

Many people are sick and die nowadays because of *starved nerves*, for the reason that they do not get sufficient nourishment out of the *ordinary* preparations of grains and vegetables, or because, in trying to make up this loss, they resort to forms of food and drink which are more *stimulating* than nourishing and so, by over-excitation, still further impair nervous force.

A necessity exists, therefore, for a food which, while it is a *concentrated* preparation of all the best elements needful for nutrition, and especially adapted to building up nervous structures, shall at the same time possess body enough to act as a natural aperient. *Granula* is this food, thoroughly tested by its inventor, a physician of large experience, for years before it was offered to the public. Bear in mind, *Granula* is not a chemically made preparation, but a *concentration*, by natural means, of *all the elements* of the best WHITE WINTER WHEAT.

AS A FOOD FOR CHILDREN IT IS UNSURPASSED.

TRIAL BOX, by mail, 36 cents. For FREE pamphlet, address

OUR HOME GRANŪLA COMPANY, *Sole Manufacturers*, DANSVILLE, N. Y.
(Mention this Journal when you write.)

Where is the Man that does not like Good Things To Eat?

He likes to have that which comes to the table attractive to the eye, and he wants it to be pleasant to the taste. He should wish it to be healthful as well as palatable; but if it is attractive and tastes good he may eat things that are not best for him. The object of a good cook is to prepare GOOD THINGS so that people will desire to eat them, find pleasure in so doing, and have comfort after the repast.

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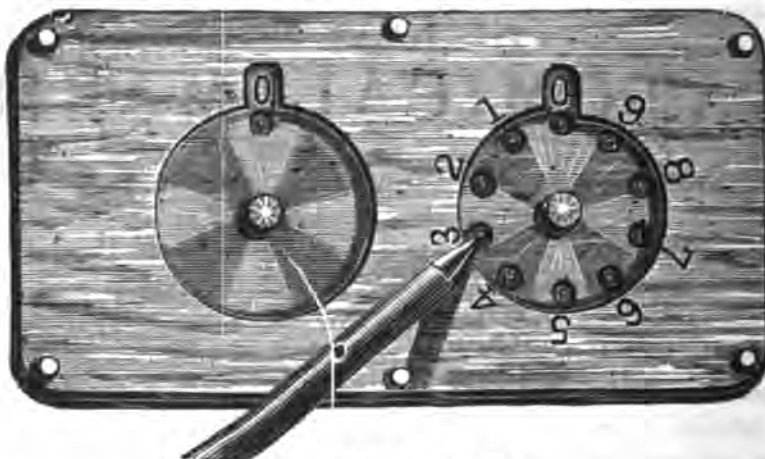
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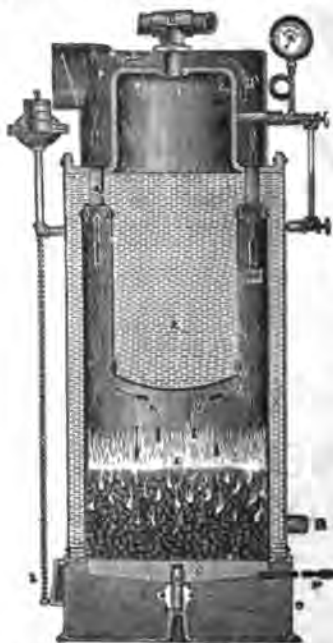
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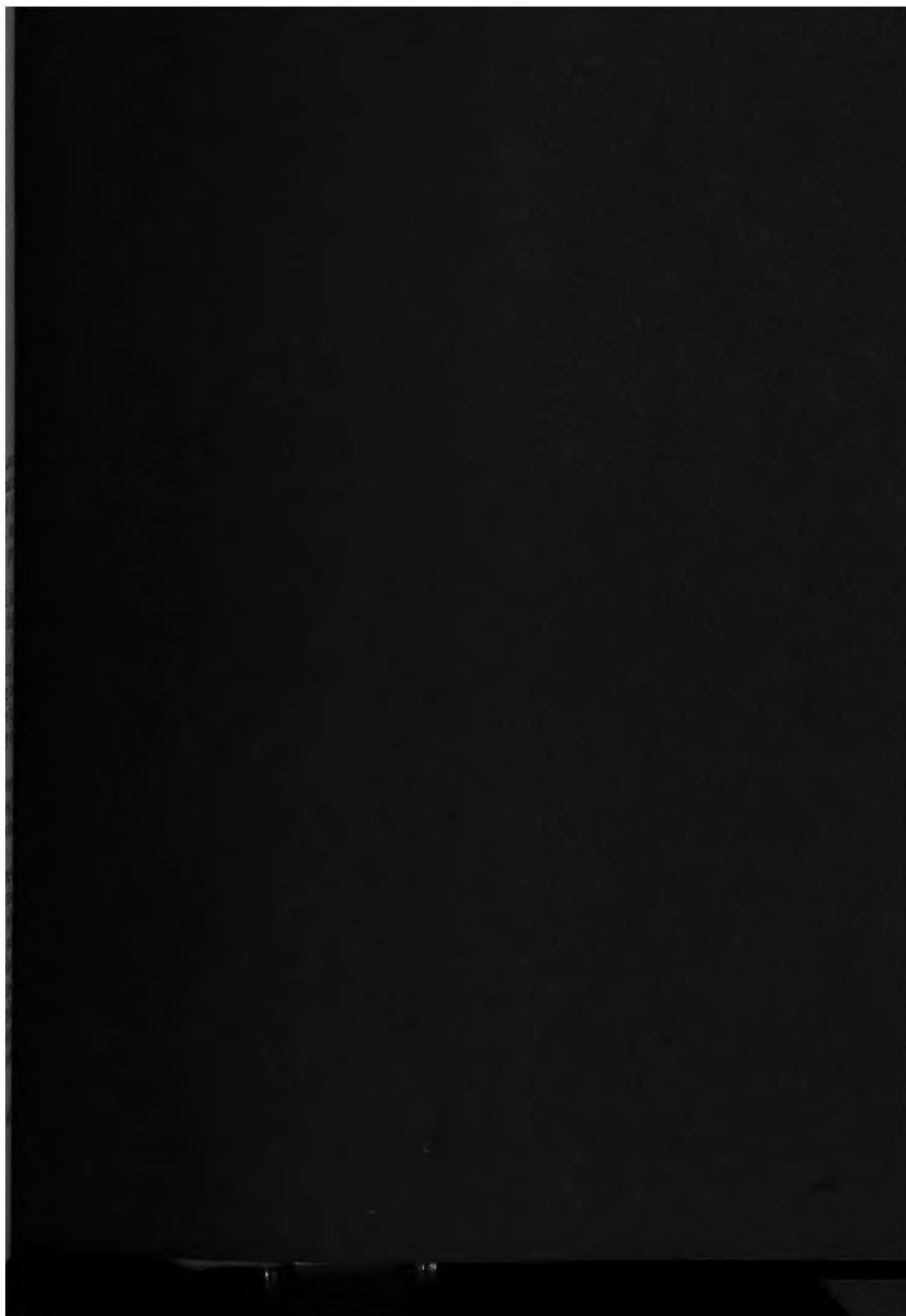
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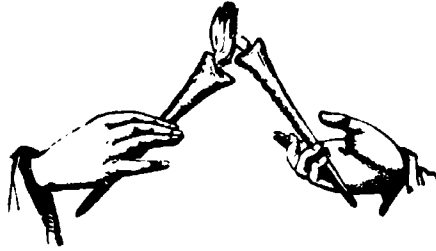
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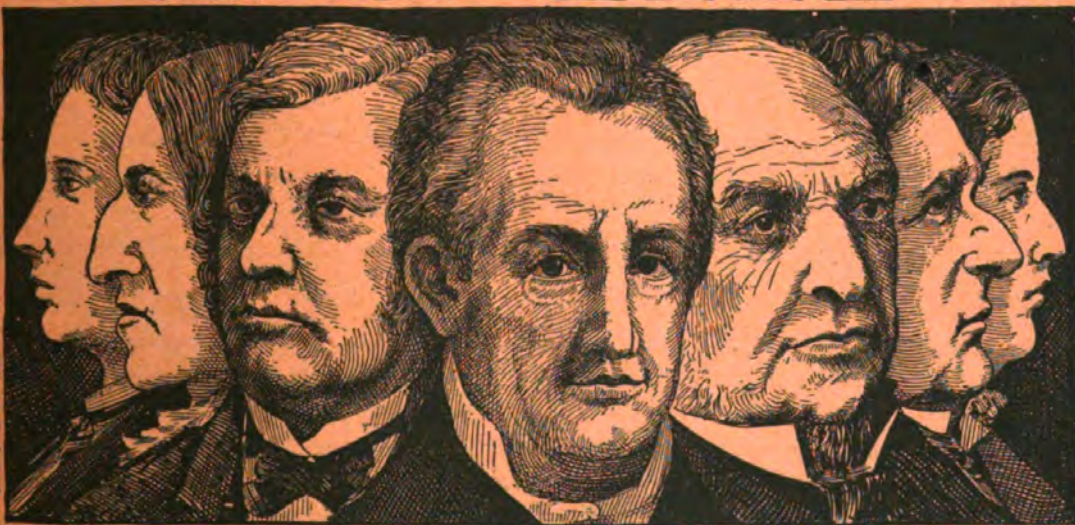
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Number 1.

Volume 90

THE

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E. Daeche

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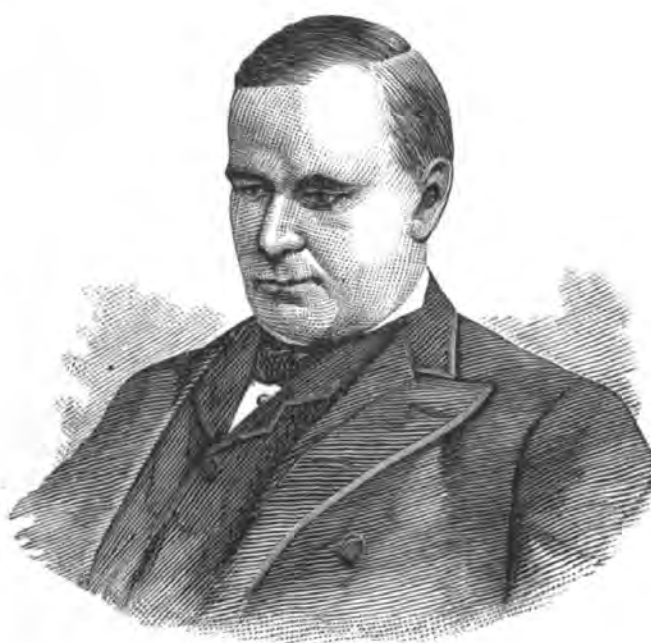
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THE
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AND
SCIENCE OF HEALTH.

NUMBER 1.]

JULY, 1890.

[WHOLE NO. 619



WILLIAM MCKINLEY, JR.
Member of Congress from Ohio.

WILLIAM McKINLEY, JR.

THE man who has become recently one of the most conspicuous figures in our national politics is William McKinley, of Ohio, Chairman of the Committee of Ways and Means in the House of Representatives. For many months, as the reader doubtless knows, this committee had been engaged in a course of investigations with reference to the effect of the existing system of



MR. MCKINLEY ADDRESSING HOUSE OF REPRESENTATIVES.

taxing imports, and all who are interested in the industrial enterprises of the nation have been waiting with more or less eagerness for the result. This result materialized on the 7th of May in the report presented by the chairman in a speech that occupied nearly two hours. Mr. or "Major" McKinley as he is commonly designated, has for years commanded the respectful attention of pub-

lic men as a speaker of more than common ability, and on this occasion he more than met the expectations of his political friends, as witnessed by the frequent applause that marked the course of his remarks, and the wholesale congratulations that were showered upon him at his close. The report that it became the chairman's duty to introduce in this way did not by any means carry with it the unanimous approval of the committee, for a few members, among them Mr. Mills, who has been in Congress for eighteen years, offered the protest of the minority against the findings of the report which favors the continuance of the "protective" policy, Mr. McKinley and those on his side declared that a revision of the tariff was demanded by the people, and that their revision should be along the line, and in full recognition of the principle and purposes, of protection. People had spoken and asked this Congress to register their will and embody their verdict into public law. The bill presented by the Committee on Ways and Means to the House was a thorough answer to that demand. It was in full recognition of the principle and policy of the protective tariff. The bill has not abolished the Internal Revenue tax, as the Republican party had pledged itself to do in case that abolition was necessary to preserve the protective system; because the committee had found the abolition of the one was not necessary to the preservation of the other.

The bill, in brief, recommends the abolition of all special taxes, and the reduction of the tax on tobacco and snuff; and it removed the restrictions upon the growers of tobacco. With these exceptions, the Internal Revenue law should stand as at present. If these recommendations were agreed to, internal taxation would be reduced to little over \$10,000,000. It was also recommended that a provision be made requiring all

imported articles to bear a stamp or mark indicating the country in which such articles are manufactured, for the reason that it had become common among some countries to copy some of our best known brands and sell them in competition with our home-made products.

From views taken by Mr. Hamilton for *Leslie's Illustrated Weekly*, showing the attitude and manner of the orator



MR. MCKINLEY ADDRESSING HOUSE OF REPRESENTATIVES.

at different stages of his speech, we have adapted two that give excellent views of Mr. McKinley's head and physique.

From the picture before us, having never seen the original, we infer that Mr. McKinley is a solid, well-built, rather hardy and enduring man. He has a broad, deep chest and ample abdominal development which indicate vital power of a very high degree, sufficient

to maintain his bodily strength and to support his large brain not for a single effort merely or the labor of a day, but for a long stretch of effort and in trying emergencies. The base of the brain is large enough to preside over the organs in general that have to do with the manufacture of vital force, and, at the same time, it shows a demand on the part of the nervous economy for a large amount of nutrition.

Such an organization is adapted to the superintendence of large affairs; it adapts him to the management of men in large numbers, as in manufacturing, and extensive business enterprises, etc. Combativeness and Destructiveness, which lie just upward and backward of the ear, seem to be ample in development; evidently, too, there is large Constructiveness which plans for the guidance of his forces. The lower part of the forehead, in which reside the practical elements of the forehead, is well developed, showing that he is good in the appreciation of details and can comprehend a business that involves much variety. He can gather knowledge of every sort that shall be an aid in the formation of sound judgment. As a lawyer his mind would be full of cases and precedents; he would not be satisfied with a moderate fund of information, facts, etc., when it was his purpose to sustain some important view or proposition. His forehead in the upper part is massive, showing capacity for the solid and for logical principles. He should be able to master truth in its broad relations. In a large railroad or in commercial matters or anything that may be complicated he would be a master spirit. He would be able to understand the reports that would be made by agents and factors; he has, indeed, a judicial mind, that can gather material, and so discriminate and work out its meaning and application.

The height of his head, which seems considerable, indicates firmness and determination, dignity, self-reliance and

ambition. He has power to lead and guide, and also to please people at large. We should say that Veneration and Benevolence were large, and Spirituality rather strong, giving him a high sense of moral obligation. Take the head as a whole it is uncommonly large, not only in its circumference, but in length and depth as well as height. Measuring it from one ear opening to the other, over the top of the head, it would show a length very unusual, and it is of good breadth. He appears to have the logical strength of Webster, with much of the practical talent of Clay; the breadth and massiveness of the head and strength of firmness shown in the features remind us of Douglas.

He seems to have the courage of his convictions, and is naturally inclined to discussion and controversy. His faculties generally are masterful in their action. He looks as if he could move among men of might and be the peer of any, and commanding the respect of all. His face in repose indicates social characteristics; we should not wonder if he were a man of a really wonderful social magnetism, at once inviting the cordial respect of all with whom he comes in contact, whether in political or social life. There are evidences of much critical acumen in the face. He understands character, and so should be capable of controlling others by the power of his adaptation. He

shows much facility in introducing illustrations with his statements, and so can make his points clear, and clinch his arguments. Wherever he may be, he should be known for force and power, a readiness to understand and to master not only the current relations of his position, but also the contingent and unexpected.

Mr. McKinley is a comparatively young man, having been born Feb. 26, 1844. He was but seventeen when the war opened, and soon after enlisted as a private soldier in the Twenty-third Regiment of Ohio Volunteers. He remained in the army until September, 1865, having passed through several grades of official rank, in his old regiment, until mustered out as captain, and brevet major. Taking up law he found ready acceptance, and a few years later was elected Prosecuting Attorney for Stark County. His growing capacity as a speaker gained for him wide notice and led him to take an active part in political affairs, on the side of the Republican party. Here his advancement was rapid, and while scarcely thirty he received the nomination of his district as Representative to the Forty-fifth Congress and was elected. Three times successively he was re-elected, but lost his seat in the election for the Forty-ninth; to recover it, however in the election for the present term, when he received two thousand votes more than his opponent.

THE GENESIS OF HUMANITY.

THE Mosaic account of the Creation is a marvelous one to the merely literary, scientific, and Christian student. The more the antiquity of the record is examined, the more does the earth, from its buried mounds, where flourishing cities once stood, and old stone records are exhumed, confirm it. It is in keeping with astronomical science, the facts of botany, zoology, and ethnology, as well as with the cosmogony

of all nations as far as they come to us through a genuine tradition. The order of the Creation is found remarkably accordant with the best researches of science, and is the last that would come to us from a rude people reveling in the mere conjectures of a primitive and lively fancy.

The material creation, with all the outcomes of vegetable and animal life, is declared to be the result of a Sov-

foreign mind ; the earth brings forth because the creative voice commands, "*Let the earth bring forth grass, the herb yielding seed—whose seed is in itself.*" "*Let the waters bring forth abundantly.*" "*Let the earth bring forth abundantly, the living creature after his kind, cattle and creeping things and beasts of the earth after his kind.*" The earth is made germinative only through the fact of the creative spirit. Matter is seen to have no mind ; nothing comes from nothing ; earth is the result of earth, and mind only originates with mind ; just as life can only spring from life. The law of development works here, but only as under Divine control.

So far we have only the record of an earth-producing power beneath an Almighty energy. Only animal life is thus far apparent. Next we come to the human and mental. A vast chasm has to be passed from the mere material to the intellectual. New forces must now be brought into operation. A seeming consultation is held in the palace of Omnipotence. "And God said let us make man in our image, after our likeness." What the earth could only produce according to God's will ; now the Creator must begin to work as with his own hands. Mere animal natures must have an animal origin, but not thus with a mental and spiritual being. So God creates the *physical* of man from the dust of the ground, and the *spiritual* being, the inner man, from his own nature. The words are remarkable, "Make man in our image and likeness ;" make him a being of divine aspirations ; a creature of reason, hope, accountability, and immortality. The Divine essence is breathed into him and he becomes "a living soul," never to know annihilation or mental death. There is not the shade of an idea that God took an ape or a gorilla, and, improving his shape or cranial developments, gave to the world an improved simious quadrumana, saying, "Behold a man !" If any choose to believe this

dogma, and call that science which never has or can be proved, let him take what intellectualism he can out of it ; for ourselves we get neither reason nor stimulus from it.

Another thought presents itself ; this creation of the masculine was in the outside world, not in the inside Eden. Adam's eyes were not opened upon Paradise, but in the large world of his subsequent wanderings. Soon after Eden is planted and the man is put into it, what follows reads as very natural. He is *alone* in his garden of beauty. We need not read the statement with surprise. A garden-solitude would soon become a Siberian-desert to social, human nature. Adam was then with but half his being ; one half of a first humanity. He might have talked to the trees, the streams, the hills, the animals, but he could get no intelligent reply. A mildly pleasing solitude of unbroken continuance would in turn become a peopled latitude of sighs and complaining echoes. Hence the Lord, to teach a moral lesson to all the race, said, "It is not good that man should be alone ; I will make him a helpmeet for him." Now woman appears in the scene.

"Earth was a wilderness, the garden was a wild. And man, the hermit, sighed till woman smiled." Here we have a lesson of development worth consideration. Woman was made in Eden, man in the outside world. There was to be a fitting place for her coming, and that was a God-planted garden. It was to serve as a symbol of woman's responsibility to make home and the family the paradise attraction of all time. Made in the Eden of the new made world, it is her office to make the sociables of existence the means of improvement and happiness. The two oldest institutions of time are, the Sabbath first, and marriage next ; and the one may be always depended upon to sustain the other. Home is to be the sanctuary of the affections ; the mother the maker of home, and the wife the

enter of its attraction. There is another thought in this genesis of humanity which has been generally overlooked. The gift of woman required not only a better location for her reception, but an improved order for her formation. Man, as we have seen, was created in the outside world ; woman in Eden ; man was fashioned from the soil he trod upon, woman was made out of man ; made out of flesh and blood ; made from sympathetic nature to feel tenderly for the sufferings of her race. The feminine was, for many reasons, designed to be an improvement upon the masculine. Man may excel in reason, but woman is his superior in conscience ; he may claim supremacy in the *intellectual*, but she will generally be the uppermost in the *moral* and devotional, the merciful and the forgiving. The Scotch poet says of Nature, " Her prentice hand she tried on man, and then she made the lasses ;" and he was not erroneous in his ideal. It is not a prejudice to affirm that women should be more moral and religious than men. The Bible narrative of her formation would lead us to confidently expect it. It would be strangely disappointing if we did not find more women in our churches than men. Strange indeed, if the woman's seed is to bruise the serpent's head, if she, the original, were not the patroness of piety. If wisdom and valor make the dignity of manhood, then should goodness and devotion be the crown of womanhood. There have been martyrs for the truth, but not more grandly than have been women.

" First, that which is *natural* then that which is *spiritual*." Women are the last and the better outcome of men ; and we believe that in the coming future, she that was " last at the cross and earliest at the tomb," has, under the leadership of Him who sitteth on the throne to make all things new, a vaster work to do for the redemption of the world than we have as yet seen. Where we have had one Deborah, we have got

to see a hundred ; Where one Huldah, time will present to us a thousand ; where one Dorcas has been a minister of Mercy, ten thousand are waiting to come in ; and where four daughters of Phillip have prophesied, great is the multitude of the female preachers of righteousness already at the door. If woman, as we have seen, is of Eden make, and the outcome of the better part of man ; and if there have been different dispensations for the reformation of the world, who shall deny that another is now opening in answer to the Divine prophesy—" And it shall come to pass in the last days that I will pour out my spirit upon all flesh, and on my hand-maidens I will pour out of my spirit, and they shall prophesy." God himself is the interpreter of His word, and He is now giving the prophesy a practical fulfillment of its meaning. Women are entering into all the professions, of medicine, law, and theology. If they give proof of their ability to honor them, who shall say they shall not labor in them ? If a woman can plead for Morality, Temperance, and Religion, who shall dare to forbid her ? If she multiplies converts to holiness, who shall have the temerity to withstand the Master who sent her, and whose indorsement her work exhibits to the world ? It is within the memory of this generation that Miss Fanny Wright filled our largest halls and theatres to hear her eloquent outpourings against revealed religion ; and who shall forbid the educated women of Christianity, with better heads, hearts, tongues, and more enlarged culture than the last age could give, on grander platforms than Miss Wright ever had, to inspire the people with the living thoughts of God ? The curriculums have measurably had their day, and the time has come when the theories of men must give way to the order of Nature and God. It was a legend of the Dark Ages, that when an image of the Virgin saluted Bernard as he entered the church, " Good morning, Bernard ;" he

replied, "Your ladyship has forgotten herself. It is not lawful for women to speak in the church." Yet in this the saint was just where many, in these more enlightened times, who should have learned better, are not ashamed to utter their folly. Truth has no sex in which it is under obligation to make known its essential teachings. "In Jesus Christ," who is embodied Reality, "there is neither male nor female." Wherever there is a human being who

has anything to communicate for the salvation of a suffering world, he is under the highest obligation, believing, to make it known. What he has seen and heard in this great temple of the universe, needful to be known, he would be apostate to righteousness to keep under lock and key in the sanctuary of his soul. If it were not so, the genesis of humanity would have been differently ordered.

JOHN WAUGH.

NOTABLE PEOPLE OF THE DAY.—No. 33.

GEN. OLIVER O. HOWARD.

IT is not often that one hears the voice of a prominent military officer in meetings devoted to religious and reformatory affairs. But when such a voice is heard and we know that it comes from a man whose interest is not prompted by passing sentiment, but based upon earnest conviction and desire to do his part, we can not wonder at the respectful attention that he receives. General Howard is sometimes mentioned as the Havelock of America because of his active Christian life, in the midst of a soldier's duties. Trained as he was in youth for the career of the soldier, he has shown with rare consistency that a man may be true to the Christian profession in so hard a vocation. Indeed, the army of every civilized nation needs to be well salted with sincere religious officers and men, for the life of the soldier in camp and field is most trying to moral integrity. Would there were many of the moral stamp of our subject and of Stonewall Jackson, the Confederate leader!

Oliver Otis Howard was born at Leeds, Maine, in 1830, and is now therefore sixty years of age. He is descended from an English family which settled at Bridgewater, Mass., where for several generations the name held an honored place. His great-grandfather, Seth Howard, fought in the Revolutionary War and attained the rank of Cap-

tain. Rowland B. Howard, the father of the General, married Eliza, daughter of Oliver Otis, of Scituate, Mass., from whom he derives his first names.

After acquiring the rudiments of education at the district school he was sent to the Academy at Hallowell, residing in the house of his uncle, the Hon. John Otis, then a member of Congress. Subsequently, he studied at Monmouth and Yarmouth Academies, until he was ready to enter Bowdoin College, from which he was graduated in 1850. Thence he went to West Point graduating from there in 1854.

Strong temperance principles characterized him in those days. In his first term he declined to join a companion on some festive occasion in a bottle of wine, and being reminded that great men had always had a liking for intoxicants, replied that if it were necessary to drink to be a great man, he would rather never be great. In those days it was deemed respectable to tip the glass, especially among military men. Hence he had no easy task in adhering to his temperance resolutions, yet he did so throughout his career at West Point.

His first position after leaving West Point was at Watervliet, N. Y. Shortly after attaining the rank of second lieutenant he secured a twenty days' leave of absence, and running down to Maine he was married to a lady whom he had

known in his boyhood. A year later the young husband and wife were separated by the call to military service. Mrs. Howard went home to her friends, and her husband went to Florida to serve against the Seminoles. During that conflict the gentleness and humanity which have distinguished his later years were first observed, and were united with daring and valor. At the close of the Seminole war he received

and the guests raised their bumpers of wine to drink it. The Colonel duly responded, but his glass was filled with water. "The true beverage of a soldier," he said, "is cold water, and in this I pledge you." Every glass was lowered and his health was drank in water. The regiment marched to Washington, and shortly afterward—in September, 1861, Colonel Howard received his star, and became Brigadier General



GEN. O. O. HOWARD.

the appointment of mathematical instructor at the military academy, and husband and wife were again united.

Shortly after the opening of the Civil War Howard received the appointment of Colonel to the Third Maine Regiment of volunteers, and resigned his commission in the regular army to accept it. At the dinner given at the Astor House, New York, to the officers of the regiment, the health of the Colonel was proposed,

of volunteers. He took part in the first battle of Bull Run, and after that disaster to the Union arms went into camp near Alexandria, Va., to drill and instruct his men.

At the battle of Fair Oaks he lost his right arm, it having been struck twice by the enemy's shot. He was with McClellan in the celebrated Peninsular Campaign, and occupied prominent places in that disastrous experience.

Later he was conspicuous at Gettysburg, and bore a worthy part before Chattanooga. He was placed in command of the Fourth Corps shortly afterward, and made the campaign from Chattanooga to Atlanta. As commander of the army of the Tennessee, he led the right wing of Sherman's army from Atlanta to Savannah, and thence northward in the march which terminated in the surrender of Johnson.

After the war he served as Commissioner of the Freedmen's Bureau, a place that involved large responsibilities and great labor. Since that time he has been in charge of operations in the West and on the Pacific Coast against the Indians. At present he is in charge of a post on the Atlantic border. Wherever he is, Gen. Howard's fervent religious spirit and interest in philanthropic works show themselves, and he is in frequent demand as a lecturer on topics relating to social morality and reform.

The engraving that is given resembles General Howard but does not convey the full expression of his kind face. Whoever has been in his society must have felt the genial and amiable spirit of the man, for there is nothing of the hauteur and severe reserve that most military men of high station indicate among strangers. He assumes nothing, but aims to be friendly and gentle toward all. In his relations with the world he is earnest and bold as regards one thing, the assertion of the need of Christian truth to all, and he is an undaunted champion of that truth in any circle that may challenge his utterance.

B. G. NORTHRUP, LL.D.

It is appropriate in these delightful days of advanced spring-time to have a word to say on topics that relate to rural life. The unfolded leaves, with their fresh green, speak to us of life's renewal and suggest to the townsman desires and yearnings that can have their realization only in the country, where na-

ture, not artifice, fills the land with simple, joyous beauty. We love the natural, and pity him who does not. We approve all endeavor to extend the influence of the natural, especially in its association with the beautiful. One of the movements that has done very much for the people is that called "village improvement." It has converted many a bare and dusty country town into a leafy, shady retreat that the chance visitor would pronounce charming. It has introduced new thoughts and employments into many a dull community, and so aroused into most agreeable activity elements of social sympathy that were not supposed to exist there. The name that stands at the head of this paragraph is recognized by many as entitled to much respect in this connection, as the man it designates has given so much of his talent and time to village improvement. Not only has he sought to make two blades of grass grow where before there was only one, but he has caused trees to be planted in districts where there were none, or some scraggy, misshapen wood growth emphasized the popular neglect of their surroundings.

Dr. Northrup was born and bred on a farm, and although beset with hardship and privation in youth, he never lost his love for the country. Determined to secure a good education, he worked his way along until Yale gave him a diploma and he was accepted as the pastor of a church in Massachusetts. Believing most heartily in free education, he gave of his time to the advocacy of that belief, and in a few years had drawn the attention of New England educators. The Massachusetts Board of Education appointed him Agent, and for ten years he served in that capacity. Then he was made Secretary of the Connecticut Board of Education. This position he held for sixteen years, during which, in the face of an opposition which would have daunted any less determined advocate, he was the leading agent in mak-

ing the schools of Connecticut by law free to all.

In 1867 the Massachusetts Board of Education expressed "much regret at his resignation of the office he has filled with great ability and acceptance, and their high appreciation of his fidelity and devotion to his duties, and the good he has accomplished for the schools of Massachusetts." Similarly, the Report of the Connecticut Board of Education, issued in January, 1883,

ment of town and district libraries, have been of great value to the State."

During the past five or six years Dr. Northrup's old love for the beautiful in nature has been mainly influential in his active life, and has made him well known in many of the States. He has traveled and lectured in behalf of "Village Improvement Societies" with unremitting earnestness, and hundreds of these practical sources of æsthetic development have been organized by him. The re-



DR. B. G. NORTHRUP.

contains a very complimentary review of his labors during the sixteen years of his administration, "which produced lasting and important results of great benefit to the entire State." One of the many forms in which this influence was exerted is shown by the following statement, also from the Report: "Mr. Northrup's efforts to suppress the sale of injurious reading, to disseminate information concerning good books, to arouse interest in wholesome and profitable literature, and to promote the establish-

sults so obtained could not but command general approval. The N. Y. *Evening Post* said: "There are very few men capable of working as Mr. Northrup has done for many years in a systematic effort to arouse enthusiasm for rural improvements, in which his apostleship has long been a beneficent influence."

His scheme for planting "Centennial Trees" in 1876, a suggestion then seconded by the press of Connecticut and transmitted across the continent; his offer of a dollar prize "to every boy and

girl who should plant or cause to be planted five Centennial trees" (an offer which met with an unexpected response over the State); the gift of 5,000 trees to the town of his residence, and numerous prizes in money to stimulate tree-planting, all betoken his regard for the timber interests of the country, the tremendous value of which to our people now and in the future is beyond question.

Such an organization as that shown by the portrait "speaks for itself." It is the head and face of the teacher, and combines also elements of the business manager. Dr. Northrup could not be

satisfied with a simple routine, a vocation that would restrict effort or thought. He has aggressive principles in his mental constitution that incline him to a broad field of action and to novel enterprises. He has much of philosophy in his way of considering things, but rarely loses sight of the practical side. Hence he should be excellent as an adviser. The law, we think, would have secured a rare jurist had he devoted himself to its pursuit; but in the line of his effort as it is the community has lost nothing, but rather gained much.

EDITOR.

SKETCHES IN PHRENOLOGICAL BIOGRAPHY.

GEORGE COMBE, 2.

Dr. Andrew Combe returned to Edinburgh the following December, when the brothers entered earnestly into the work of propagating Phrenology, and in February, 1820, they, with the Rev. David Welsh, Mr. Brownlee, advocate, Mr. William Waddell, W. S., and Mr. Lindsey Mackersey, accountant, established the Phrenological Society, which rapidly grew in members and influence, so that in December, 1823, the Edinburgh *Phrenological Journal* was started, soon after which several influential serial publications opened their columns to the discussion of the merits of Phrenology, and of Combe's Essays. One incident resulting from the publication of his essays gave him much pleasure. A lady wrote to him expressing, deep gratitude for the consolation afforded her by the reading of it. A brother to whom she was greatly attached had committed suicide and she was made very sad for fear his soul would be lost, and could find no relief from her misery. After suffering thus for five years she had the good fortune to read Combe's article on Cautiousness, which explained to her that her brother was a sufferer from disease which had caused him to commit that act; and her

grateful thanks to Mr. Combe for a book which explained this to her was a delight to him to think that Phrenology could thus relieve sorrow.

The more he studied the moral bearings of Phrenology, the more thoroughly did he become convinced that it might confer a great blessing on humanity by directing the education of individuals; and also reduce crime by the discovery of propensities that would naturally lead to it, but might be obviated by self-control, and the training of nobler faculties.

The Phrenological Society, which started with six members in February, 1820, increased to thirty-three members in 1821. They were admitted on payment of a guinea each. Many persons became willing to investigate the system and believe it if they found it based on scientific and philosophical principles. Dr. Chalmers called upon Combe to see the casts. He had but half an hour to spare, but spent an hour and a half, having read the Essays on Phrenology with pleasure; he became much interested, and discussed the new theories among his friends.

"It was Combe's persistent advocacy of its principles, and his insistence upon its

truth which, at length, on the appearance of his 'Essays' obtained for the system a patient and respectful hearing. Crowds gathered round him, and the demand for admission to see his Casts became so great that he was unable to accommodate all. A Mr. Neill established a shop for the sale of casts, and the demand for them was so great that it occupied his whole time to the exclusion of other business."

As was to be expected the opponents were not idle. In the Glasgow Medical Society Combe's Essays were excluded from the library. Ministers preached against Phrenology, claiming that it tended to materialism, and of course to infidelity. In the Edinburgh Medical Society a member read an essay in its favor, which led to a debate pursued with so much energy that it lasted till 2 o'clock in the morning, and the crowd was so great that Mr. Combe himself could not gain admittance.

And thus the excitement grew in various places and showed that the interest in the study of the mind, and the organs through which it is manifested, was not to be quenched. Even the "Turnip Hoax" failed to bring the reproach upon Mr. Combe as the leading British representative of Phrenology, which its perpetrators hoped and expected, although they attempted several years later to make the world believe the effort was successful. The story is too good not to be recorded here, and is as follows :

"In April, 1821, an attempt was made to play off a hoax on Combe, which, even if it had succeeded, would not have justified the observations made by Christopher North in the 'Noctes' two years afterward. There the hoax is represented as having been successful, and the phrenologists as utterly confounded and condemned out of their own mouths. But the following is the true story of the turnip hoax : A medical gentleman in Edinburgh (a relative of Dr. Gordon, the author of the *Edinburgh Review* article) with the help of a friend who was a painter, modeled a turnip into the shape of a human head. A cast was taken

from this model, and was forwarded to Combe with the request that he would favor the sender with his observations on the talents and dispositions indicated by the head. It was added that the cast was from the skull of a person of uncommon character. Combe instantly detected the trick, and got Abram—his brother—who had some reputation in his private circle as a verse maker, to write a parody on the 'Man of Thessaly,' which was pasted on the brow of the cast, and then it was returned.

'There was a man in Edinburgh,
And he was wondrous wise,
He went into a turnip field
And cast about his eyes.

And when he cast his eyes about,
He saw the turnips fine ;
'How many are there here,' he said,
'That likeness bear to mine.'

'So very like they are, indeed,
No sage I'm sure could know,
This turnip head which I have on
From those which here do grow !

He pulled a turnip from the ground ;
A cast from it was thrown :
He sent it to a Spurzheimite,
And passed it for his own.

And so, indeed, it truly was
His own in every sense :
For cast and joke alike were made,
All at his own expense.'

"The author of the hoax called on the following day and assured Mr. Combe that he meant no offense, and intended only a joke. Mr. Combe replied that he treated the matter entirely as such ; and that if the author of it was satisfied with his part of the wit, no feeling of uneasiness remained on the other side." Two years later, namely, May, 1823, *Blackwood's Magazine* contained the garbled or false statement of this occurrence.

In the following December Mr. Combe and others started the Quarterly called the *Edinburgh Phrenological Journal*, and Miscellany, and in the first number he gave the foregoing account, adding the following remarks :

"A human skull is an object which it is possible to imitate ; and if, in the instance in question, or in any other instance, the imi-

tation had been *perfect*, a cast from the *fac-simile* would have been just as completely indicative of natural talents and dispositions as a cast from the original skull itself, supposing Phrenology to have a foundation in nature. There was a lack, therefore, not only of wit, but of judgment in the very conception of the trick. If the imitation was complete, no difference could exist betwixt a cast from a turnip, and a cast from the skull which it was made exactly to resemble; if it was imperfect, the author of the joke, by its very departure from nature, encountered an evident risk of his design being detected, and becoming himself, the butt of the very ridicule which he meant to direct against the phrenologist. This has been the actual result. The imitation was execrably bad, and the cast smelt so strongly of turnip, that a cow could have discovered its origin. An experienced phrenologist was the last person on whom the deception could pass; but all heads are alike—all turnips are heads, and all heads are turnips on the very showing of the anti-phrenologists."

Thus we see that Mr Combe was able to turn their wit against themselves; and not only on this, but on several later occasions, notably the "Letter of the Emperor of China to Dr. Thomas Sewall on the merits of Phrenology," written by Mr. Combe, while he was in America in 1839.

The Medical Society of Edinburgh gave out the question, "Does Phrenology afford a satisfactory explanation of the moral and intellectual faculties of man?" as a subject of an essay by one of its members. The duty to write upon it was transferred by arrangement to Mr. Andrew Combe, and the evening of November 21, 1823, was fixed for hearing the paper, and discussing its merits. The paper was read by the president in the chair for the evening. At its conclusion the president invited the members to express their sentiments, and added a request that the *visitors* would consider themselves members for the evening. This debate was animated, and continued till two o'clock in the

morning,* when it was adjourned to seven o'clock of the evening of November 25, at which time the discussion re-commenced and continued without interruption till nearly four o'clock the next morning. The negative was supported chiefly by the members of the society, and the advocates of Phrenology were the visitors. The society refused to allow the *Phrenological Journal* to report the arguments, but the members afterward claimed to have "completely refuted Phrenology and put it down for ever," though there was no *vote* of the society on the question. The Editor of the *Phrenological Journal* was served with an application to the Court of Session for an injunction to restrain him from publishing the debate, copious notes of which he had obtained—until farther orders from Court. These legal steps being taken by the society created so great an inquiry, that it was in reality better for the cause than any report in the *Journal* could be, for their efforts at repression of the report could not repress the public curiosity thus aroused. It gave an unexpected impetus to investigation, and the editor's courtesy and honest endeavor to look at the opinions of opponents from *their* standpoint gained for him and the cause personal friends, while it turned the shafts of opposition from many who had previously classed themselves with those who were disbelievers.

Notwithstanding Mr. Combe's zeal and enthusiasm he was calm and systematic in his manner of teaching and of studying. His "Essays on Phrenology" sold better than he had expected, and in preparing for a new edition he caused the book to be bound in two volumes, with alternate blank leaves for emendations and additions, which enabled him to extend his Essays into a "System of Phrenology." He also gained admission for articles on the sub-

* Mr. Combe, without preparation, spoke for two hours in defense of the system.

ject into various magazines and newspapers, and his reputation extended from his native burgh even to France and America, from which directions he began to receive letters of thanks and congratulations and of inquiry.

Early in 1822 he became impressed with a desire to acquire the art of dissecting the brain according to the practice of Dr. Spurzheim in his lectures in Edinburgh and elsewhere, and in the course of little more than a year he had mastered the chief difficulties. When he was in America in 1838, 1839, and 1840 he could dissect the brain perfectly and gained the admiration of many prominent physicians.

In February, 1822, Combe announced his first course of lectures, to begin May 14 and end in July, to the Phrenological Society, in their hall in Clyde street, members to be admitted *gratis*, and non-members for two guineas for the course. He felt that he had a vocation to speak in public, and had regretted that fate had not placed him at the bar instead of at the desk. He was also very desirous to see the science stand so popularly before the public as to turn the tide against the malignity expressed by the attacks of Prof. Wilson and others.

Dr. Andrew Combe returned to Edinburgh in season to render important assistance to his brother in his first course of lectures, by dissecting the brain of an ox or animal of some kind at first, and later the human brain. These lectures were so well appreciated that Mr. Combe announced another course to begin in November, and added many new disciples to the ranks of Phrenology, and not only that but the friends of the science in London became so interested in them as to invite him there, to lecture, which invitation he declined on the ground that he did not consider himself qualified to present the subject in the metropolis, as he would wish it to be presented; for he felt the importance of it and would not

willingly do anything to bring it into disrepute. He wrote to Dr. Elliotson, who was one of those who had invited him, "I am by no means a popular lecturer here. This is my first public course, therefore do not deceive yourself as to what I am able to perform. No *vox populi* would accompany me to London to excite curiosity or command respect there. Therefore, consider that a failure would be truly a serious matter."

Mr. Combe was often solicited to examine the heads of men who afterward became celebrated for some peculiarity of talent, and being very careful in his delineations he seldom erred in his estimates. Of his ability in this direction he said :

"The chances of error are numerous, and my skill is positively small. Errors and every misconception are visited first on my head and then on the science, and no argument is listened to in explanation of the supposed mistake."

Mr. Combe and his co-adjutors felt the necessity of a medium through which to reply to the many misstatements and witticisms—so called—aimed against Phrenology, and gaining confidence from the success and sale of his books, and encouraged by followers who were as enthusiastic as himself, he obtained (in May, 1823,) estimates for the printing of a quarterly Phrenological Journal, the first number being issued the following December, in the Introductory Statement to which Mr. Combe took occasion to let opponents see how they would be exhibited for their false statements and ridicule—a course which he could not pursue while he had no journal through which he might defend himself and the science.

That was the first phrenological serial ever issued, and it was continued twenty years, costing much time and labor to those connected with it, for they all worked gratuitously, and the financial success was barely sufficient for its expenses. Mr. Combe did not expect to

make pounds, shillings and pence by the *Journal*, but "counted only upon its influence in diffusing a knowledge of the science which he believed to be of much importance to humanity, and he never expressed a regret for the time and money it cost." The responsibility and expense of the publication were shared with him by Dr. Combe, Dr. R. Poole, Mr. William Scott, W. S., and Mr. James Simpson, and later by Mr. Robert Cox, Mr. Combe's nephew. Dr. Poole was its editor the first year.

Combe's mind and pen did not cease their efforts with the closing of the *Journal*, however, but book succeeded book until he published "A System of Phrenology," "The Elements of Phrenology," "Outlines of Phrenology," "Moral Philosophy," "Notes on the United States of North America," "Phrenology Applied to Painting and Sculpture," "The Life and Correspondence of Andrew Combe," "The Principles of Criminal Legislation and Prison Discipline Investigated," "Lectures on Popular Education," "What Should Secular Education Embrace?" "Remarks on National Education," "On Capital Punishment," "The Constitution of Man," "An Answer to the Attack on the 'Constitution of Man,'" the "Relation Between Science and Religion," and many sketches and magazine articles in defence or descriptive of Phrenology and the benefits to be derived from its application in every-day life.

In 1824, although but thirty-six years old, his hair turned white and helped to make him look much older than he was. His Self-Esteem was large, and in his respect for himself he gained the respect of those with whom he came in contact.

In April of that year his professional duties called him to London, where, being obliged to wait a few days, he made himself acquainted with the standing of the science there, gave instructions in the examination of heads, and

delivered two lectures to the Phrenological Society and made very influential converts. He wrote to Spurzheim urging him to return to London and lecture, which he did in 1825.

In October, 1824, Combe, by invitation from influential citizens of Glasgow, made his first appearance there as a lecturer to a large audience, among whom were two private lecturers on anatomy, who soon began to teach the principles of Phrenology to their pupils.

Previous to his visit to Glasgow he delivered a popular course in Edinburgh to which ladies were invited, and the result was so satisfactory that he repeated the experiment the next winter with equal success.

His perseverance, patience under trying circumstances, gentlemanly conduct, wisdom, earnestness, and all those characteristics which at length win success, commanded the admiration of many who doubted the truth of the science, and also of such as hitherto had altogether repudiated it. This state of feeling toward Mr. Combe and his efforts toward popularizing the cause were so fully appreciated by the members of the Phrenological Society that they gave tangible expression thereof on Dec. 22, 1824, in the following manner :

"Mr. Combe was invited to dinner in Oman's Hotel, and there, Mr. Simpson, as chairman, presented him with a massive silver goblet bearing this inscription : 'From the Phrenological Society to George Combe, Esquire, its founder, as a mark of respect and gratitude.' In acknowledging the compliment paid to him Combe mentioned two facts of interest to the Society, viz., that the first suggestion of the institution proceeded from the Rev. David Welsh, then present, and that it was Mr. James Brownelee who had first introduced Combe to Spurzheim."

In 1825 the second edition of Combe's system of Phrenology was issued, and in making a mention of the fact the *Phrenological Journal* improves the opportunity thus afforded, to speak of some of his characteristics, and gave

him credit for being judicious, zealous, unostentatious, indefatigable; persevering in his endeavor to disseminate a knowledge of the doctrines of Gall and Spurzheim, and by adapting the application of those doctrines to the needs of those to be benefited he had succeeded beyond the warmest hopes and anticipations of its friends, and added, "the speedy prevalence of the science is now no longer a matter of doubt, the load of ridicule and abuse once heaped upon it is now removed, and we have the satisfaction of hearing even our enemies allow that the subject is one that deserves attention."

Mr. Combe was in 1825 revolving those thoughts that culminated in the production of the "Constitution of Man," an outcome in great part from those religious doubts that germinated in his childhood, and, by the aid of Phrenology, were wrought out, and in this manner he solved the problem to his own satisfaction of the reconciliation of Divine grace with the condition of man.

His first public declaration of his theories in this direction was given in an essay read to the Phrenological Society, Feb. 2, 1826, entitled, "Human Responsibility as affected by Phrenology." This essay was received with interest, and the author was requested to print it, but its discussion was postponed till the next meeting, two weeks later, when doubts regarding the principles advanced were expressed by some, and fears, bewilderment, horror and indignation took possession of some who evidently did not comprehend his philosophy, and feared lest it should prove subversive of both Phrenology and Christianity. In a letter written to Rev. Dr. Welsh he gives a little insight as to its conception and the process of its production. He says:

"Right or wrong, it was the spirit of inspiration that produced it, for it poured forth in torrents from the pen at the rate of four and a half of my close manuscript pages

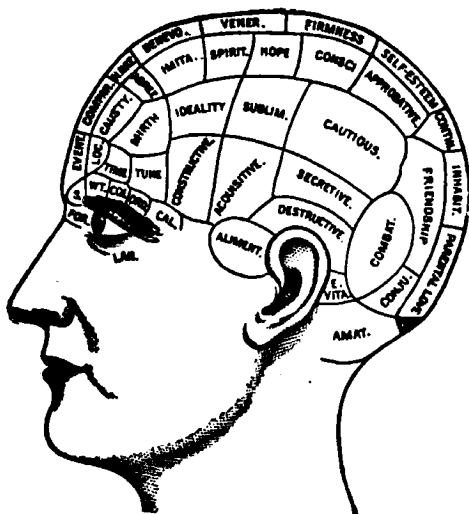
per hour, without premeditation, and almost without requiring a word of alteration in the style. I see an immense field of practical application of the principles before me, and feel convinced that my philosophic labors, if life and health remain, are only beginning; and now all fear and doubt and hesitation are removed. I have got a hold of the principle of the Divine administration, and most holy, perfect, and admirable it appears. Now I can say for the first time in my life that I love God with my whole heart and soul and mind, because now I see Him as an object altogether gratifying to Benevolence, Veneration, Hope, Ideality, Conscientiousness, Comparison, and Causality. * * * To you I write this because you like to know the workings of the inner man, and have kindred feelings."

Mr. Combe received such strenuous opposition from Mr. Scott, one of the assistant editors of the first five volumes of the PHRENOLOGICAL JOURNAL, and for whose opinion Mr. Combe had the profoundest respect, and who appealed for the withdrawal of the essay from circulation, that he agreed to withdraw it for six months, at the end of which time he would bring it out, expanded and applied, in his own name and on his own responsibility, unless more cogent objections appeared than had yet been brought forward. Other members of the Society, among whom were several clergymen, believed that the essay afforded strong testimony in favor of Christianity. Mr. Combe's convictions were unchanged, and the first draft of his "Essay on the Constitution of Man and its Relations to External Objects" formed the substance of the concluding lectures of the course he delivered in the winter of 1826-1827, and created still greater excitement than the previous one, inasmuch as it was elaborated into a system. He was urged on the one hand to publish his views because they were calculated to benefit society; and on the other hand to suppress them, because they were dangerous to the interests of society, to Phrenology, and to his own reputation. C. F. W.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF NELSON SIZER.]

PHRENOLOGICAL HEAD.



MENTAL MECHANISM. No. 11.

HOW FACULTIES WORK TOGETHER.

It is interesting to study the moral and religious nature of man. Veneration was called by one person the "Center" faculty. Those who manifest the qualities of the devotee in religion are likely to have Veneration larger than any other of the moral group. Located, as it is, in the center of the tophead, and surrounded by moral organs, there is a fitness in calling it the center faculty. Sometimes, when that is very active, it assumes supremacy over the co-ordinate faculties in that group. We have seen a likeness of Bishop Ives, of North Carolina, in which the organ of Veneration was enormously developed, and Benevolence, Spirituality, Hope, Conscientiousness, and Firmness seemed to be drawn up toward it like the abutresses around a church, as if they had a special errand in giving particular support to that organ; or like the swollen ele-

vation of the tide on the bosom of the ocean, under the influence of the moon, or of the sun and moon together. If one could imagine the top of the head covered with a tight India rubber cap, and there were a fastening where Veneration comes, and it were gently lifted up three-fourths of an inch, it would manifest the appearance of the head under consideration, and the parts around this center piece would be drawn up and serve as a support to the center, just as a small hill in the center of a rolling lawn may be graded off at the top a little and filled in around so as to make a handsome central knoll in the middle of the field. If Veneration be exceedingly active, and the other moral and religious organs are also active, such a development would be the most natural thing in the world, since honoring and worshipping the Deity is the highest function of the religious nature. It would be natural for the other faculties to supplement and sustain the center faculty, and the injunction, "Fear God and keep his commandments" would seem to be the fit and appropriate exercise of these faculties.

Benevolence in front of Veneration has the natural function of kindness, gentleness, and tenderness, whose office in the religious life is to look after the "lost sheep of the house of Israel," and bring the lambs, the weak and ignorant "little ones" toward duty and righteousness. The man of Samaria, who has left an immortal memory, without leaving his name, exercised Benevolence, perhaps without much thought of God or other duty than that which he owed to an afflicted stranger. Certainly

the priest and Levite, who "went by on the other side," and would not come in contact with the stranger who had fallen among thieves, might have had an active condition of Veneration, being a priest and a Levite, they doubtless were sacerdotal in their culture and duties. "These things they ought to have done and not left the other undone." Those that fear God and work righteousness, and manifest sympathy, Veneration and Benevolence work in harmony, that is to say, all the moral faculties work together.

Occasionally we find Spirituality working up toward Veneration, as in Bishop Ives, and then we conclude that the manifestation of the faculty is simply and purely religious. Occasionally Spirituality, or faith, seems to work outward, and co-operate with Ideality; then we consider that it has a leaning toward invention, and the discovery of the mysterious and hitherto unknown, while, as we have before said in these articles, Ideality that is inspired by faith works with Constructiveness and the intellect to develop the hitherto unknown.

Hope working toward Veneration gives a tendency toward religious hope, and leans toward that which is future, immortal, and invisible. Job showed wonderful veneration and trust in God, when in the depth of his trouble he cried out, "Though he slay me, yet will I trust in Him." The world would call him a fanatic in faith and hope, a fanatic in devotion and trust in God.

When Hope works outward toward Sublimity and Ideality, its function is of a less exalted sort. It works toward the prospect of secular benefit. Perhaps that class of brokers who are called bulls have that sort of Hope; at least, their Hope takes a secular turn, and they seek to lift, to buoy, and to boom the stocks they wish to have rise, and the newspaper artist sometimes depicts those brokers as a row of bulls tossing something on their horns. While those who would work upon the pessimistic side, or un-

hopeful, or fearful side, and would aim to pull stocks down are called bears, as if with their claws, they would reach up and pull that down which they wish to have depressed. The outward development of Hope seems to give its possessor a tendency to expect secular advantages and temporal benefit—"a good day tomorrow," when a journey is to be made or a picnic attended. While a man like Job, ignoring lands and cattle and possessions, trusts in the ever living and immortal verities, and says, "Though He slay me, yet will I trust in Him," manifests that religious, up-reaching Hope that takes hold of everlasting things.

We sometimes find men who are remarkable for their religious steadfastness, and who refer everything to Providence, and say, "I will reach home at the end of the month, God willing," or "I will raise a crop of corn, please God, on such a field," or "I will achieve such a result, God helping." Such a man's Firmness will be found developed toward Veneration, the anterior part of the organ. On the contrary, if we find Firmness working backward toward Self-esteem and Approbativeness, we will find a man who is resolute, headstrong, contrary, self-willed, and inclined to say, when he has secured success, "Mine own hand hath gotten me this." He does not say, with the blessing of God I have achieved fortune and fame. A man with anterior Firmness will show persistency, as if he followed the injunction which says, "Trust ye in the Lord, forever, for in the Lord Jehovah is everlasting strength." That kind of Firmness is persistent. Job probably had it as well as Hope. He took hold of God by Hope and by determination, as well as by faith.

The organ of Conscientiousness, bounded within by Firmness, forward by Hope, outward by Caution, backward by Approbativeness and Self-esteem, will work in every direction. When it works

toward Firmness, the organs seem to play together in pairs. Conscientiousness seeks to do and endure according to the right, and having done all that is righteous, to stand firmly.

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LETTERS, AND POST OFFICE PEOPLE.

LETTERS in their passage from writers to receivers have many queer incidents. Considering the carelessness and ignorance evinced by some writers in addressing letters, it appears marvelous how so many letters badly addressed ever get to their destination. Instead of complaining of the Postal Service it would seem that it deserved great praise for its tact, patience and skill in hunting out the owners of letters which are imperfectly addressed.

Before us is an envelope of a letter recently received by us addressed :

"To Mr.

No. 308 Broadway,
New York,
N. Y."

The writer was commendably careful to put the No., the street, the city and the State, but failed to give any name of person.

The postal service visited the street No., 308 Broadway, with the letter, and learned the name of the occupants since we left it in 1864, and finally indorsed on its face

"Try 775, care of Fowler & Wells."

On opening the letter we found it was addressed to us, ordering merchandise. But why did he send it to 308 Broadway? Because he had a book in his house with the imprint 308 Broadway, which was published some time during the ten years we occupied that store, between 1854 and 1864.

Another fact may help to explain it. This house has been doing business in New York for fifty-five years, some days receiving hundreds of letters, and sending out every month tons of mail matter in the shape of books, JOURNALS, and

sometimes more than a hundred letters in a day, and though there are many thousand firms in New York doing the same thing or fifty times as much, the letter carriers and clerks seem to know every name that receives much mail service. Besides, publishers of books, though they may move once in ten years, as we have done in following the changing relations of the book trade, have books all over the country bearing on the title page the name and location of the firm, wherever it might have resided. Correspondents who forget our removals, or are not aware of them, go to a book of ours they have in their library, and post their letters from that; hence, not long since, in one day we received a letter addressed "131 Nassau St.," another 308 Broadway, one or two 389 Broadway, one 737 Broadway, two or three 753 Broadway, and the balance 775 Broadway, and the officials managed among them to remember the facts in regard to our location, and where we had been located, and all the letters came to our hands, and not one of them appeared to have been hindered for a single day after it reached the city.

We therefore praise the tact, memory, patience and faithfulness of the Post Office department.

More than this, several persons who have been connected with our office as assistants for a dozen years, and may have received perhaps one letter a week addressed to our street number, occasionally receive a letter addressed "A— B—, New York," and the officials remember the name and its relation to our house and street number, and it comes indorsed "Try Fowler & Wells, 775 Broadway."

Some years ago a letter started from the Northwest addressed "Fowler & Wells, Milwaukee, Wis.," and some person connected with the mail service, thinking the address was a mistake, erased "Milwaukee, Wis.," and inserted "New York." It reached us; we

opened the letter and saw that it was in relation to the purchase of wheat and belonged to a firm, "Fowler & Wells," in Milwaukee; and we wrote an explanation and inclosed their letter. But our letter met with another man who knew that Fowler & Wells lived in New York, and he erased "Milwaukee" and inserted New York, and we were obliged to inclose it to the Post Master of Milwaukee with a note, and he knew the new firm in his town. And since then several letters came to us that belonged to them which we returned to the rightful owners.

One man wrote us from England, "Fowler & Wells, Broadway, America," and it lost no time in reaching us.

Another wrote from Europe, "Mr. Phrenologist, America," and its contents showed that it was for us.

If all letters could be properly addressed and in a clear and readable hand, postal work would then have enough of perplexity, but when the chirography is unreadable to the average eye, and the address is mixed and erroneous, it requires much sagacity and tact to read and find out the destination of many of the letters which are sent.

Of course there must be many letters which reach the dead letter office, since foreigners knowing nothing of our geography may write to a friend "A— B—, Stone Mason, Penn.," or "C— D—, Carpet Weaver, Mass.," or "E— F—, Waiter, Boston, America," or "G— H—, Miner, Colorado."

Every letter should be distinctly stamped where it is mailed, so that it can always be read, for the Post Master's stamp is often the only clew we have as to the State the letter came from, as there may be many post offices of the same name, and if that only appears in the letter, and hundreds forget to name the State or County, and if the stamp of the Post Master does not show the State, the receiver of the letter, with perhaps \$5 in it ordering goods, feels that he may

be considered a swindler if he cannot promptly respond.

We find by opening the Post Office Directory that there are in the United States, Post Offices named Jones 18, Jonesville 15, Joppa 6, Jordan 18, Junction 49, Junction City 8, Johnson 19, Johnson's 21, Jackson 4, Rome 24, Shady Grove 9, Pleasant Grove 17, Sidney 25, Smithville 25, Oakhill 21, Smyrna 20, and, to cap the climax, Summit 132.

We once wrote fifteen letters to a correspondent at "J——" (in as many different States), and finally found him. He wrote "J——," May 14, 1888, but put no name of State or County, and the Post Master's stamp was too faint to indicate the State. Sometimes we infer by the date of the mailing and reception, that it must come from a place within 500 miles, and then we hunt to see how many Jordans there are within such a radius.

Dear friends, please always head your letter with the full address and date before you proceed to tell us what you want, and at the close write your name so plainly that there can be no mistake in reading it. When none of our fifteen people can tell what a writer's name is we imitate the name as near as we can and hope his post master will recognize who is its owner.

—:O:—

PUBLIC EXAMINATION OF A SKULL.

EDITOR PHRENOLOGICAL JOURNAL.

DEAR SIR:—It was in the height of the influenza epidemic in January last that I had an engagement to lecture at Bethany, Ont., where, notwithstanding it is a small place with a population of not more than one thousand, I found the people above the average in general intelligence and very appreciative of lectures of a didactic nature, especially on Phrenology. The morning found me severely ill with the *grippe* at Lindsay, twenty miles distant by rail. Confident, however, of a large attendance,

I resolved to meet the people and show due respect to them and to my appointment, even if I should not be able to address them at any length. So taking my *grippe* with me, I boarded the train which carried me in due time to the village, and at the hour appointed I was in the lecture room. I found a large attendance. I had intended merely to apologize, but the eager interest noticeable in the countenances of so many caused me for the time to become insensible to my physical condition, and so I *apologized* during more than one hour and a half.

When I had finished, the leading physician of the town, Dr. Brereton, himself well read in Phrenology, presented for examination the skull of a person whom he had often seen in life and whose character he knew well. The skull was in two parts, divided by the saw near the line of the temporal ridge. It was so thick and heavy that it might readily be mistaken for a negro's, but certain signs known only, so far as I can ascertain, to Phrenologists of the American school, marked it as the cranium of a Caucasian but not of superior type. Though very strong and I might say masculine in appearance, yet a certain roundness and smoothness of the frontal bone together with a great fullness in the region of the social feelings led me to express the opinion that it was the skull of a woman. The frontal bone was nearly half an inch in average thickness, the anterior fossa short and narrow; the frontal lobes of the brain could not, therefore, have been largely developed. The basilar and occipital parts were relatively very large and the coronal region below the average. Firmness, Combativeness and Destructiveness were all large, and Benevolence, Ideality and Causality small. I had no hesitancy, therefore, in stating that the intellect had been obtuse and mental culture wanting, that impulse and passion had ruled and not judgment or moral sense. I described the disposition

as vindictive and pugnacious, yet affectionate, obstinate, wilful, etc.

The jaws were large, broad, regularly curved and symmetrical, the mental eminence prominent. All this indicated, of course, a large and well formed chin. Hence it was inferred that the thoracic region had been of ample capacity. I described the temperament as in a high degree Sanguine and Bilious, to use the old nomenclature.

Now, being of the same opinion that it was a Hibernian cranium, and having generally found coarse reddish-brown hair to be one of the usual marks of this particular temperamental combination, especially with the people of northern Europe, I ventured to describe the hair accordingly. The person was described as large and stout, for the osseous substance was evidently very abundant, and its dense, compact texture and the strong, firmly-set teeth indicated a vigorous nutritive system. The Vital Motive temperament has been greatly developed with very little of the Mental. The age at the time of death was approximately given as "Well up in years but not very old." The doctor gave the age, as near as I can recollect, at 65. I based my opinion on this point not on the condition of the teeth or the appearance of the lower jaw, but on certain marks about the base of the skull.

The doctor, in corroboration of what had been said, cited certain incidents in the life of the subject and testified to the correctness of the description in every particular.

Much interest was manifest on the part of the audience, and it was evident that few, if any, present were disposed to doubt the soundness of Phrenological doctrines or the ability of the Phrenologist to read character from the crania of the dead as well as the living head.

D. H. CAMPBELL, Lecturer.

The following letter from Dr. Brereton in verification will be read with interest.

BETHANY, ONT., Feb. 14, 1890.

EDITOR PHRENOLOGICAL JOURNAL.

DEAR SIR:—In justice to Phrenology, the scientific claims and practical value of which are disputed by some people who may be otherwise well informed, I think it proper to give through the JOURNAL to those who may be interested a brief report of a practical test of this science made on the occasion of one of Prof. Hugo Campbell's lectures, delivered in the Town Hall of this place on Monday evening, the 27th ult.

I have in my possession the skull of a person of peculiar organization, of whose character I had some knowledge, the person having lived in our neighborhood a number of years. On mentioning the matter to Prof. Campbell he expressed himself to the effect that he should be pleased at any time to give a Phrenological opinion of the character from an examination of the skull before a public audience, and desired me to give him no hint whatever that might assist him in the least to a successful delineation, as he preferred to try his skill unaided. This request was unnecessary, as I took care not to give him any information respecting the person, being myself much interested in the matter as a genuine test, and desirous to see to what extent a phrenologist of experience can read character from the osseous structure alone. Prof. Campbell proceeded at once to give the large audience present an account of the mental capacity, the general character, the early life and education, even the bodily constitution and sex of the subject, and ventured so far as to give his opinion as to the quality of the hair, what had likely been its color, the complexion, etc., to all of which I had much pleasure in testifying as correct. Having myself in the past given a little attention to Phrenology, and believing it to be a very useful science, I was much pleased to find the result in this test so very satisfactory.

Very respectfully yours,

CHAS. H. BRERETON, M. D.

TOKENS OF APPROVAL.

COLUMBUS, Ohio, May 11, 1890.

FOWLER & WELLS Co.,

GENTS: Please send me the circular called the "Mirror of the Mind." I am working at a trade that I am not entirely satisfied with, and still I can find none that suits me better. I also have ill health, brought on by my work. Some months ago I picked out of a rubbish pile two numbers of your journal. My wife and I became so interested in them that we have been buying regularly every month. I am beginning to think Phrenology is the thing. Most truly yours, C. S. E.

SAGINAW, Mich., Feb. 25, 1890.

FOWLER & WELLS Co.:

I RECEIVED the analysis of the photographs of myself I sent you in January, and I must say I was surprised at the accuracy with which you described my character. I could not have done so well myself. I intend to send you another set soon.

Yours respectfully, C. A. R.

NEW YORK, April 11, 1890.

FOWLER & WELLS Co.:

I HAVE just finished reading "Heads and Faces," and am delighted with it. Prof. Sizer examined my head and gave me a written chart of the same many years ago, and even to this day I cannot understand how he could tell so many things which I know to be true, and yet he never saw me before that day when he examined me.

Yours truly, R. D.

HOLLAND, Minn., June 2, 1890.

NELSON SIZER,

DEAR SIR: I received the phrenological description of my character from you some time ago, and must return you my heartfelt thanks for the good advice given me therein. I let a number of my friends see it, and they all say the description is entirely correct. Having followed your advice with regard to diet, etc., I find that my health has already much improved during the last month. Hoping that your institution may live to bless many thousands in years to come, I remain

Yours truly, B. H.

CHILD CULTURE.

HELEN KELLER TALKS.

MANY of our readers remember the very interesting sketch of the little girl, Helen Keller, in the *PHRENOLOGICAL JOURNAL* a year or two ago. We described her wonderful grasp of knowledge under improved methods of teaching, although deaf, dumb and blind, and the promise of a useful future despite physical defects once regarded insurmountable. Now it is announced that after a season of instruction at the Perkins institute, Boston, Helen is actually able to speak.

Knowing for a long time that speech is the common property of people, she had been most desirous to learn to talk herself, and appeared to think that she could overcome the obstacles that nature had put in her way. It came to her knowledge, too, that a child in Norway, who, like herself, was deaf, dumb, and blind, had learned to talk, and she felt sure that she could learn. She began to make sounds, but they were quite unpleasant, and did not really constitute talk. Miss Fuller, principal of the Horace Mann School, and Miss Annie M. Sullivan, who has been Helen's instructor the past few years, went to work to see if they could not help her to do it.

Miss Sullivan explained by the sign language how the little one should place her tongue so as to produce certain sounds which formed words. "Papa" and "mamma" were the first words she learned. She would place her hand over her teacher's mouth, and in that way became acquainted with the lip movements. Then she learned the words "is" and "it," and in those four words she had the sounds of m, p, a, i,

s, and t, which she could combine into a great many letters.

She was lately visited by a Boston *Journal* reporter, and for the first time in her life talked with a stranger. Her first question, addressed to her teacher, was: "Who is your company?" To be sure, the tone was a trifle guttural, and there was a slight pause after each word, but the tone was not especially disagreeable, and the enunciation was sufficiently distinct to be understood. "Where does he live?" was the next question, and this, too, was very intelligible. As the conversation progressed Helen seemed to speak with more ease and confidence. Occasionally, if she found difficulty in enunciating a word or syllable, she would touch her teacher's throat and lips with her fingers to get the motion, and then the difficulty would disappear. Some of the sentences which she uttered with surprising clearness were these: "I am learning to speak." "Can you understand me?" "My mother will be so surprised to hear me speak." "I am going to learn to make my voice sweet." "I am going home in June." "That will be very soon." "I shall talk to my dear little sister, and my parents and brothers and all."

The sample sentences coming from Helen Kellar's mouth are evidences of one of the greatest of modern miracles.

TO "CURE" A BOY. — You can't straighten a boy's moral nature by castigations. Find out the home life of the boy; discover if you can what has caused this twist in his nature, and seek for a remedy.

STRANGE INHABITANTS OF THE OCEAN WORLD.

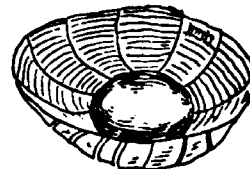
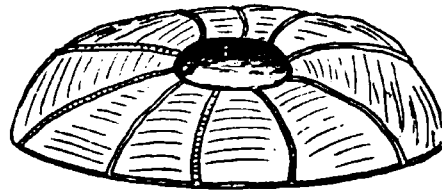
OUR knowledge of ocean life is very limited, yet we can see enough of its varied forms to enable us to understand clearly, that in the watery world is found the wonderland of creation. The fauna of the sea, its tributaries, coasts, and island bounds, reveal the fact that some of the loveliest of created forms, enshrine the lowest orders of animal life.

For a long time the Zoophytic tribes clung to rock and shell on the shores, or in their near vicinity, and were regarded as vegetable productions belonging to the drifting *Algæ*, or sea-weeds. As the lamp of Science penetrates farther into the watery realms, new revealments are continually made, and new lessons learned concerning the strange creatures hidden there. Often the rude oyster dredge will bring some of these marvels of Nature's handiwork to view, and again the ships which have rounded the far capes of the Eastern Continent will bear home strange creatures on their barnacle-laden keels. Parasitic creatures nestle in every conceivable ocean retreat, sometimes even finding a home on the flukes of the roving whale.

The polyzoa peering out from their twisted calcareous tubes, challenge the scientist to tell their story. These fairy-like creatures adorn some of the most wonderfully illustrated pages of nature, the text of which is untranslated, and perhaps will ever remain so. (Illustration No. 1.)

Evolution declares that in these flower-like creatures we grasp the connecting link between the two great kingdoms of animate and inanimate life, but rejecting the weird philosophy which ignores the Divine Author of all being, we look upon the beautiful zoophyte as a distinctive creation, and leaving the mysteries involved in the "when," and "why," will search along the coast line for some of its

living wonders. The rocks and stones, and often sea-weeds found on shores subject to tidal action, teem with strange life. Born on shell and pebble they often detach themselves from their rough foster-parent and drift along upon the moving tide. Living in such strange unsystematic ways, attaching themselves not only to rock and shell but also to the weeds and the unwary crustaceans, it is no marvel that these creatures were long regarded as vegetable parasites. Grotesque forms and vivid coloring are often distinguishing



SIMPLE ZOOPHYTE.

traits of these inhabitants of the watery world. (Illustration No. 2.)

Long study and close observation at length revealed the fact that a higher life than that of the vegetable was nurtured there. Yet they possess no nerve centers, and are reproduced by division,—a small piece of the creature soon developing into a perfect organism. The flower-like organs, or tentacles, gather up the oxygen of the water to nurture the simple life of the creature of which they form a part. Comparatively few human footsteps have penetrated even to the border land of the Zoophytic world.

The pearl fisher who makes his way

through "the coral grove, where the purple mullet and gold fish rove," has indeed told wonderful tales of sub-marine life, which have often been received as the result of a magnified im-

themselves in their ocean tomb, and many a verdant tropic isle, on a coralline foundation, forms a superstructure more beautiful and enduring than obelisk or pyramid.

Scientists declare that a vast continent once existed where now the Pacific Ocean bears only innumerable small islands on its wide expanse, and that these islands,—some of them containing lofty mountains and volcanoes, are the summits of mountain ranges of this submerged land of prehistoric time. About these islands are fertile fields for the coral polyp, as their slanting bases are foothills which this creature knows well how to climb.

The creature, itself a minute zoophyte, can only work a limited distance below the surface of the sea. It forms its cell from a calcareous secretion of its tiny body, which soon hardens and holds the builder in a tomb its own body supplied materials for. Compound in organization, little buds appearing on the parent and developing, and remaining permanently there, in process of time the beautiful branches of coral are formed. When the coral reef nears the surface, the annelid's work is done,



FUCUS NATANS—PARASITIC LUCERNARIA.

agination. But the life and home of this coral worker is stranger than any fiction woven of imaginary journeys under the sea.

Too far down in the ocean depths to be disturbed by surface influences, or even the deep footprints of the icebergs in their shoreless wanderings, these minute ocean toilers help to bear up the deep-laid cables which hold the nations in close companionship and present sympathy. The continents clasp hands over the graves of the coral workers, and the voice of many peoples sounds through the mausolea where they were enshrined in the long ago, and still these busy creatures continue to seal



CLUSTER OF SERPULAE.

and the foundation of the outer boundary of the lagoon around the ocean isle is laid, and often by these agencies the devastation of the dreaded tidal waves is averted.

The well-known sponge, a piece of which forms a part of the possessions of every school boy, and which is also the scavenger of surgery, besides performing innumerable other menial offices for mankind, is the home of a Zoophytic tribe. After the divers have secured their harvest the masses of sponge are subjected to a peculiar cleansing process, to entirely eliminate the tiny occupants before the sponge is marketable. The Mediterranean Sea is a favorite habitat of sponges and corals of many hues.

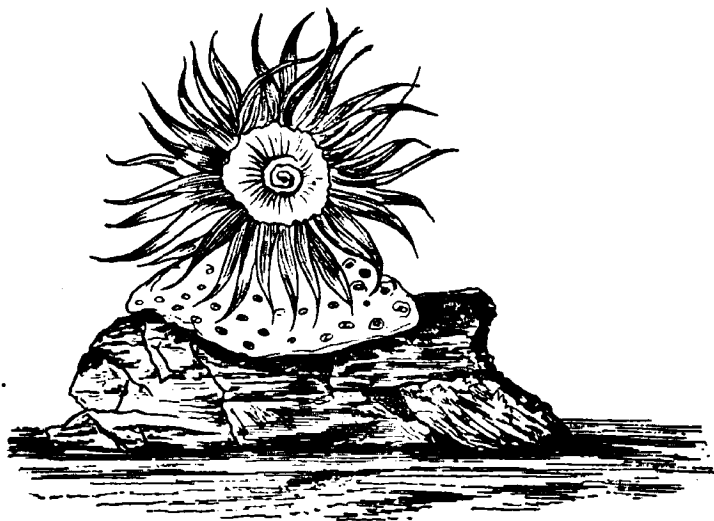
Sometimes a fisherman will bring up on his hook, or gather into his seine,

waters of both continents, and also far into the temperate zones. (Illustration No. 3.)

The Portuguese man-of-war, or nautilus, but not the "chambered nautilus in its fluted halls," is a brisk zoophyte which spreads a purple sail, and roves over all the warmer Atlantic, even occasionally venturing into New England waters, since the nearer trend of the Gulf Stream toward the coast has given to this section of the country milder winters, and hence modified the temperature of the waters. A delicate inflated membrane serves as a sail, and the thread like tentacles beneath guide and

help propel the living craft. They also capture prey, and gather up and carry water to sustain the creature, which by some unknown means is enabled to consume the oxygen and discharge the residuum.

From the microscopic diatom, piling embankments about the South Pole, to the huge Octopus, whose long and powerful arms carry down to its ocean retreat the island



ACTINIA—SEA ANEMONE.

a weed-laden clump of apparently no distinctive form or character, yet closer observation discloses an assemblage of twisted and contorted tubes. If carefully placed in sea-water beautiful flower-like laminæ soon expand from the openings of the tiny tubes,—the breathing apparatus of the little inhabitant. The creature is also furnished with a muscle the end of which can expand at will into a close-fitting cover to the mouth of the tube, into which the inhabitant retreats at the approach of danger, and with this expanded muscle securely shuts itself in. This zoophytic family is found in the

proa and its appalled occupants, the Zoophytic tribes make up a world of their own, replete with mystery. All the ordinary laws of being seem held in abeyance as regards these creatures, yet they live their lives and build monuments as enduring as the ocean-isle on their summits.

The Actinia, or sea-anemone is a fragile and unprotected inhabitant of this fairy world of wonders. The chosen habitat of the creature is in rock-crevices, where fresh water courses flow into bays and arms of the sea. Having no protection of shell, membrane, or even a borrowed covering, it seeks a

sheltered nook on rock or pebble, and basks in the warm, sun-lit water. From its rude shelter it throws out delicate flower-like laminae, and gathers for its nutriment the oxygen of the water. Though differing somewhat in form and coloring the habits of this family are essentially the same. (Illustration No. 4.)

In the equatorial seas, and on the coast lines of the warmer temperate zones, these creatures are found in the greatest

abundance and beauty. Devoid of the senses which produce pain or pleasure in the higher orders, they live their apparently useless lives. But we know that Creative Power is never exerted or expended in vain, and there is a niche in the completed universe for the Zoophyte to fill. It is enough that in unison with the suns and worlds of other realms the microscopic monads can exclaim,

"The Hand that made us is Divine."

ANNIE E. COLE.

SUGGESTIONS TO MOTHERS ON CHILD OCCUPATION.

AN observer of child life writes in an exchange, of simple ways to interest and train very young children.

As soon as a child begins to "take notice" we should try to find means of interesting it. A rattle, a rubber ring, or a tiny doll will do at first, but the baby soon tires of these. Just here is the place for a mother to exert her "inventive" ability. We have found a pencil and a piece of paper invaluable where children are concerned. At first they are willing to sit and scribble to their heart's content, making, perhaps, nothing but zigzag lines, but after a little while they will want to produce shape from the chaos. Then is the time for the mother to make little objects for the child to copy. Begin with something very simple. Make a few circles, a flight of steps, a tea box, or any other thing that will be readily grasped by the little one. Let it copy them; do not be discouraged if you find it slow work. Unless a child is unusually backward it will be interested and before long will be able to do fairly well. Name whatever object you make, and while learning to draw and hold the pencil correctly it will also learn the names of things. A slate may take the place of a paper, if you prefer, but the baby is apt to be more fond of rubbing things out than in trying to copy them correctly.

Another thing which always amuses

the tots is to make paper dolls for them. Take a piece of paper—bright colored paper is best, as children always like bright things; but not glazed paper, as it is likely to be poisonous; double it, and with the scissors cut out figures—men, women, girls, boys, or whatever you may fancy. By and bye the child will want to do likewise. Give it some paper and a dull pair of scissors and let it try. Encourage and help it; guide the little fingers. You will be surprised to find out how soon it will be able to make quite respectable imitations of your handiwork. This is beneficial as well as amusing, and it teaches the child to grasp shapes and measure distances. This amusement may last for months, perhaps years, for as the child grows older it may learn to draw figures of people, horses, cows, and the like, and then cut them out.

I know a mother in limited circumstances who has several little tots to care for, besides numerous household duties to attend to, and who succeeds with her tasks so well that it was always a constant source of wonderment to me. One day I made a morning call. I thought the babies must be asleep, as all was so still about the house, but when I entered the dining room in response to the "Come right out here," I found mamma cutting out some little garments for her darlings, while the three tots themselves sat or lounged on the

floor still as mice. They looked up to greet me, but turned back to their occupation at once. They each had a copy of a newspaper spread out on the floor before them, and I wondered what they could be doing, for I knew they were too young to read. Mamma noticing my puzzled look, said :

"They are helping me with my work."

"How?" queried I.

"By being good little girls and letting me have time to do it myself," laughed she.

"Yes," replied I, still wondering, "but what are they doing?"

"You see," she replied, "I have to invent all sorts of ways to keep them busy and out of mischief also, and I find this best of all. I give them each a newspaper and show them the letter A for instance, then give them each a pin. They are to stick a hole (or punch an eye out, as I tell them) in every A on the whole page. When they get through I go over it with them and see how many they have missed. It seems to have a great fascination for them, and then, besides, it keeps them quiet so that I can do my work and also teach them their letters, for we take a new letter each morning."

ONLY A CHILD.

"ONLY a child," "Only a baby," many will say as the funeral cortege passes, and from the hearse it is indicated that a child is being borne to its burial. But not so, not thus speaks the mother. Ah! the host of mothers, who have known what it is to see the little, blithesome, happy child, who made sunshine in the home, who brought joy and peace and comfort to all hearts, sicken and suffer, and die.

What desolation then takes possession of the mother's heart; oh, what a vacancy there is in the home! How the presence of the older children

seems as nothing compared to the absence of that one of which the mother is everywhere conscious. How their mirthful voices grate harshly on the mother's sensitive heart, and how soon all the world and its attractions seem to dwindle into utter insignificance, when the child of her love, which nestled in her bosom, which opened her laughing eyes in the cradle by her side to gladden every morning with their beams, whose merry laugh was music to her ear, the patter of whose tiny footsteps heralded a joyful welcome, has gone away from her forever.

THE BOY AND THE BIRD.

"Go weed in the garden till after ten," Rob's mother said, sharply. "I'll not speak again."

"Dear me," said Rob, sighing, "I wish I could be
The robin that's singing up there in the tree.

"Birds never weed gardens—they never bring wood.
They do as I'd like to, and would if I could.

"They've nothing to trouble them, only to sing,
And rock on the branch when they're not on the wing."

"See here, little boy," said the robin to Rob,
"Though you think I am idle I'm planning a job.

"Four nestlings to care for—such great, hungry things!
There isn't much rest for a father-bird's wings.

"The cats try to catch us—the boys are as bad.
Birds have work, wants and worries like others, my lad.

"Be content as God made us—as birds, boy, or man,
And do what needs doing the best way we can."



SOME VAGARIES OF MESMERISTS.

THAT an *aura* surrounds a mesmerist is, I believe, by many admitted. Some think that an influence emanates from him which controls and to a certain extent possesses a subject. Is not this explanation of a wonderful phenomenon startlingly suggestive of the *daemon* that among the Greeks and Romans controlled whom he "possessed"? And are we not as well reminded of that long-time exploded belief in witchcraft which greatly confused our New England ancestors, some of whom thought a witch could even cast a spell upon an absent enemy at will? Strangely out of order with our modern notions! Queer enough, if there should be such a mysterious power residing in a friend that innocently stroking the hand of a man he was chatting with could result after a little in paralyzing the arm and rendering the hand insensible to a pretty sharp prick of the point of a knife. Could this state of affairs have sprung from the unconscious influence of the friend? I have reason to know that he neither knew nor thought of anything in connection with the hand till the queer result was declared by the subject. Did the friend have much to do with the matter?

I am aware that some curious questions may be asked me: If it was not the friend who mesmerized the man, what power, then, was it? I am inclined

to think that it is not what is supposed—the unconscious influence of an unconscious agent. What a wretched situation would that be which would be open to such a power: well might an ignorant person cry Witch! But if not witchcraft, what is it?—an *aura*? a spell? a superior intellectual power? a stronger will? I believe neither. Once there may have been people who would think so, but inasmuch as we now do not hold that either intelligence or superior wisdom operates a current of electricity, why should we say that any exterior agent causes a man to be mesmerized, hypnotized, magnetized? put into a mesmeric trance? Would it not be better to ask what forces we know something about can do these marvelous things? I do not myself believe that I can by any means known to me *possess* a human body other than my own, driving out the soul of my friend by a series of "passes," so that presently he who stood before me in his own intelligent, well-known form, lies passive and still at my feet, spell-bound, unable to move hand or foot or to open his eyes. In a highly figurative sort of speech I have hypnotized him; he is entranced, in a mesmeric sleep. But it is putting the matter in a very medieval light to say that I have so hypnotized or entranced him, or that I have "cast a spell" over him. It looks so, truly, as if I have

done so. And while I do not distinctly understand everything relating to this beautiful phenomenon—while my friend lies still and helpless before me, apparently so from my gently stroking his body a few minutes—I will not attribute to myself a power to call away his soul and establish myself in its place in his body.

Do we often see in other lives such things done? If we should find a man lying by the way in a torpor or a dream, unconscious of things around him, would we not say on general principles that some force within him has co-operated with some force without him to bring about such a state? We do not say some one has "obsessed" him. No, we first ask whether he is not ill from a sunstroke, or paralyzed by a shock, or is drunk, or has been taking opium, or has fallen asleep from weariness. We do not say, as men might two hundred years ago have said, a wizard has meddled with him. It may be epilepsy or hysteria or apoplexy; it may be drunkenness or opium-narcosis—some state certainly partly accounted for by the man's own act or his functional activity. He has invited the condition, has met it half-way. And so it would be in a mesmeric sleep. Part, and I doubt not a large part, of such a sleep is the result of the man's own act, unconscious, involuntary, functional, or automatic. If I were to guess without knowing, I should guess first that he was the principal motor in the case.

I once saw a person prostrate from heat.* He was overcome in a place

where other men could work with comparative safety. He was predisposed to such attacks. It is very much so in the case of some "sensitives": they succumb when others do not to suggestions, and so enter into any state, capable of being assumed by them, when they entertain the idea in that direction.

Undoubtedly many things exist in the world—light, heat, and electricity, for example—of which we know almost nothing except what we see of their operation. We do not know much about the nature of fire; it is as mysterious an agent as the agency of mesmerism; but we do not invoke it as our ancestors may have done in the age of stone, nor do we believe whoever uses fire is possessed of extraordinary powers. We ascribe the result of fire to the fire itself. We do not now believe that Mesmer magnetized the sun, and, so doing, caused a mesmerizable person to be mesmerized by the sun through him. If any one, therefore, should say he thinks I can "magnetize" any one, this may be said, that perhaps I may seem to him, and to some others who do not really know much about the matter, to do something at the same time the magnetized person passes into a hypnotic state, which appears to cause such a result as he sees, but I am inclined to dispute any statement of his to the effect that by any powerful influence which I exercise I am capable of doing any such thing as he sees done. I think I do very little; that almost all the vital force that is active is the subject's own, and is of his impulse. What do I do?

* Curious to know whether as he said the surface of his body was hot and dry, I placed my open hand by the man's consent on his chest; when, to his apprehension as well as mine, the flesh at once felt cooler and more natural, and so it seemed whenever I laid my hand there. By this sign I understood that I was handling a "sensitive", who, presently restored, appeared very grateful for the result. This man, an out-of-door laborer, married, of evident Irish blood, apparently upward of 40 years old, tolerably well-built though not very muscular; since he proved to my own oution to be a "sensitive;" developed a suscepti-

bility to my own "aura," an ability to entertain my suggestion (which was true) that my hand applied to his flesh made him cooler—an example of suggestion of any kind made by me, and entertained by a subject.

Other cases (such as producing a warm spot over the region touched by the palm, causing contraction of muscles, curing a back-ache by a touch, and a score of kindred instances could be mentioned), but all may be no doubt referred to the same general principles, or something like them. There is no *hocus-pocus* in the matter, I am sure.

To illustrate may be better than to give an answer. Such phenomena as I am about to refer to have actually occurred, and in another instance even more distinctly.

A rather "nervous" though very intelligent young man is extremely hard of hearing. He hears with much difficulty when one shouts to him; hears with tolerable ease only by means of an ear-trumpet or in some instances through a long tube or pipe. By his consent (it was a second experiment in in this line) I induce a more easy hearing, so that we carry on conversation together in a tone on my part not extraordinary except a little more distinct and slower than usual, during something like half an hour. On a previous experiment made on the same subject just about two months before, after failing to elicit any sign of hypnotized condition, I suggest to him (as a test of the state) that I make him hear better than usual. He will not say that I spoke thereafter more distinctly or louder, but partly confesses that when he pays strict attention he occasionally hears more readily, and furthermore, admits that a humming noise heard constantly in his ears subsides for a time during the experiment. Afterward he lapses into his usual state.

Now I do not suppose any one will think I caused this man to hear. The explanation of the phenomenon need only go so far as to presume that all I could do was to suggest; he carried out. I do not for a moment suppose that I possessed a particle of control over him, through my handling him, or that he had delegated to me any prerogative whatever, for the time, by reason of my will being any way superior or in any way stronger than his. I do not now know that I then exercised any "will power," or that I had even a wish in the case. It was only a trial for results. He could not, as far as usual tests could show, be hypnotized, yet he might, after all, have been hypnotized very effectually

for the time he remained susceptible of hearing, as that susceptibility declared.

There are many evidences outside of actual experiment on this line which tend to indicate the principles I have hinted at. And among all the principles declared I think this one, that mesmerizers do not supply either will, force or miraculous impulses, can be shown as true; at the same time that they do not in any sense subtract either energy, will, force, or impulse from the patient, or in any sense "obsess" him and possess his own soul as well as theirs. That is, the soul of the patient is not gone out of his body and in the possession of the mesmerizer, nor does the soul of the mesmerizer go there.

Although we may not yet have arrived at a satisfactory explanation of some subtle phenomena which may declare everything, we may still, I think, begin to divest ourselves of medieval superstition. We may not say all we wish we could in answer to a hasty question, yet perhaps we may believe we see clearly enough to say that we will no longer be bewildered by floating vagaries. Aura influence, nevertheless there may be, for what after all except a suggestion from one whose opinion is venerated can so start a notion in the mind of a subject that what forces he owns may rush pell-mell to the place where attention is directed, and so (should the subject be a "sensitive,") bring on such wondrous phenomena as puzzle us by their mystery?

But I will not say willingly that I think "aura" is all. Let alone the entertaining of the idea suggested of the mesmerist in the mind of the mesmerized; then there is no action, no phenomenon; but let a welcome idea be entertained by a subject already in close contact with the mesmerizer, and we do not know what will be done by the marvelous functions of the mesmerized—I believe done all unconsciously to the mesmerized person in some instances, who is ready therefore—is he not? to

ascribe all his queer sensations and odd motions entirely to the superior will.

We have seen a "sensitive" who is wrought upon by the master-mind of a revered "mesmerist," made to believe things true which are false, and to act as if what was suggested to him was his own:—not suspending his own identity, but unconsciously acting out the thought of another—a thought willingly welcomed and heartily entertained. We ought, however, in this age to repudiate such ridiculous and exceptional notions as some enthusiastic mesmerizers have held with more pertinacity than common-sense. We are not dwelling now in the age of Savonarola, and have advanced a step beyond our witch-persecuting forefathers. Shall we stand on the ground we hold?

It may be useful to formulate a theory. Perhaps one person may be more sensitive than some others, which is to say that he is considerably more susceptible

to the influence of an opinion he deems trustworthy; while at the same time his peculiarly sensitive make-up renders what influence is brought to bear on him more active and marked in such lines as he is swayed into; he swings like a long pendulum—a good way. Then suppose some strong consideration be overpoweringly applied to such a man. Is it not evident that whatever he does will be emphasized? He swings a good way; by our simile.

Quick to catch, swift to act, precipitate, are perhaps characteristics of a make-up suited to strong hypnotic phenomena; a little analagous to the condition of a fine horse, a lawn of tender grass, or a delicate watch, in responsive character.

If things I have half explained have been heretofore bewildering, I am satisfied to have made them plainer and to have shown more distinctly what is easily understood.

HENRY CLARK.

FOOD ADULTERATION.

INVESTIGATIONS with regard to food preparations sold in packages and used extensively were made last year at the instance of the Board of Health of New Jersey, and resulted in showing a state of things that every housekeeper should know. The adulteration to which canned goods, especially fruits, are subject, is great, not only with respect to methods of cheapening, but also as concerns the use of materials that are very dangerous to health. An abstract of the report made by the committee having the matter in charge includes the following revelations.

One hundred and seven samples of imported canned goods were examined, of which 88 were found to be adulterated or not standard. These latter were 2 out of 4 samples of beans and 86 out of 96 samples of peas. The chief adulterant found in these articles was

copper, which was added to give a green color to the vegetables. No adulteration or harmful ingredient were found in American canned goods. This is encouraging in the fruit line, but the next article has quite a different complexion. Fifty samples of ground coffee were examined, of which ten were pure and forty adulterated. The adulterating materials were roasted and ground peas, beans, rye, wheat, bread, and chicory. These preparations are very widely sold in the city and town groceries, and bear the names of well-known manufacturers.

Eleven samples of teas were examined, all of which were pure.

Small wonder, considering the low price of tea. Yet we cannot on this account commend the use of tea to our nervous countrymen.

Six hundred and forty-nine samples of ground spices were examined, of

which 343 were standard or pure, and 306 were adulterated or not standard. The adulterants noticed were of the same character as outlined in former reports. It is to be remarked in this connection, that a ground spice may not contain any added material or adulterant, and yet be of such poor quality as to be as fraudulent as the sophisticated article. In many instances the spice has been packed for so long a time as to have lost all flavor. Such debased articles should be classed among those not standard.

Store honey was found to be grievously falsified. One hundred and eleven samples were examined, of which twenty-eight were pure and eighty-three were adulterated. The adulterant was either glucose or cane-sugar syrup.

Twenty-four samples of sugar were analyzed, of which twelve were pure and twelve adulterated with molasses or cane sugar. Sixty-four samples of molasses were analyzed, of which twenty-six were pure and thirty-eight adulterated. The chief adulterant was glucose. Some samples had been bleached by the use of sulphurous acid, and some contained tin. Thirty-seven samples of vinegar were examined, of which sixteen were equal to the standard of 4.50 per cent. acetic acid, and twenty-one were not up to the standard.

One hundred and ninety-two samples of fruit preserves were examined, of which thirty-three were pure and 159 adulterated. The preserves were either in the form of jelly or jam. The following table gives the names of the fruits and the number of samples examined :

	No. Examined	Pure.	Adulterated.
Raspberry.....	28	4	24
Red Currant.....	71	6	65
Quince.....	16	1	15
Apple.....	4	4	0
Orange.....	3	0	3
Strawberry.....	25	4	21
Apple Butter.....	3	2	1
Plum.....	8	2	6
Crab Apple.....	1	1	0
Pineapple.....	4	0	4

	No. Examined.	Pure.	Adulterated.
Peach.....	9	2	7
Blackberry.....	4	3	1
Cranberry.....	2	0	2
Cherry.....	9	2	7
Grape.....	1	1	0
Lemon.....	1	1	0
Unknown.....	3	0	3
Total.....	192	33	159

Many of the samples did not contain a particle of the fruit named, on the label, and in most cases the fraud was most easily detected. The articles used in the manufacture of adulterated fruit preserves are apple pomace, apple juice, starch, glue, gelatine, Japanese isinglass ; these to give substance.

Apple, inferior or spoiled fruit juice, artificial flavors and the compound ethers, acetic acid are used as flavors.

As coloring matter :—Aniline dyes, eosine, fuchsine, Bismarck brown, garnet red, ruby red, and various carmines.

Statements of this sort should be sufficient to put people on their guard, and suspect the causes of many cases of illness.

One of the most interesting features of deception that came under notice relates to the manufacture of bologna sausage. Twelve samples of bologna and smoked sausage having a suspicious character were examined with the result of showing that some dye, probably one of the anilines, was used to color the material, in order that some defect might be hidden or the article made to appear better than it really was ; also that some substance had been applied to the exterior of the sausage similar to varnish. Further analysis revealed the presence of Bismarck brown as a color for the meat. The skin or "casing" was coated with a varnish containing shellac. The sausage in question was found to be prepared in the following way : After the meat was chopped and put into the casings, the sausage was boiled in a bath containing the following coloring agent : Bismarck brown, 14 parts ; garnet red, 2 parts ; water 1 1-2 pints. This gave the sausage a brown color. When

this process was complete the sausages were coated with a varnish composed of shellac, resin, oil, and alcohol.

The Board of Health at once instituted measures to suppress the sale of this com-

position, and none too soon, we might say, for the bologna sausage in its best estate deserves the reprobation of every lover of proper food

D.

THE RULE OF SELF-DENIAL.

LIFE, life, life! Let us dwell on the words, penetrate their meaning, and digest the thought. Or, as we can not comprehend its meaning, let us find out what life means to each one of us. Taken in the individual sense, life, restricting our idea to this world, is the capacity to live long, to live well, and, we will assume, to live usefully. Grand opportunity! grand responsibility! And when we think that every deed of usefulness accomplished here will illuminate and enhance the value of our reward hereafter, we have our incentive to take up the trivial, menial task of domestic life, or the great effort of a public career, with zeal and enthusiasm, knowing that the burden, though heavy, is only for a time, while the fullness of the reward is for all eternity. To live long—that can be answered. To live well—that is not so easily answered, as it is interpreted differently by different minds. If to live well is to live to the satisfaction of the flesh and of the carnal mind, that is easily done; but if to live well is to accomplish the greatest good for body and mind, that is also easily done, IF—there is a desire on the part of the individual to do so. But what does this sort of living well demand? It demands the continual exercise of that corner-stone principle of all manly and God-serving character, Self-denial. What shall we say? Self-denial of mind and body is the only rule by which to square our lives to the requirements of living well in the true sense. In these days many around us are clamoring loudly that mind rules all physical conditions. "Think you are well, and you can not have disease," say they. "Flesh is senseless, spirit alone has life. Food

in quantity or quality is nothing." Verily, in one sense this is the doctrine, "Let us eat and drink, for to-morrow we die;" but if we take the man who is suffering from severe racking headache, or the pangs of dyspepsia, he will hardly subscribe to the whole of this impractical theory, which is not founded on common-sense. Let us turn from such strange reasoning to hear the testimony of Jesus, the son of Sirach, a Hebrew sage, who lived after the restoration from the Babylonian captivity. He says, "A cheerful and good heart will have a care of his meat and diet." What does that indicate? It means that such a man has been careful and moderate in his meats and drinks, and does not indulge unduly in pleasures of flesh and sense. "Envy and wrath," says the sage, again, "shorten the life;" so envy and wrath have no place in the character of a man of that cheerful and good heart. And one way to obtain and cultivate a cheerful and good heart is to let rich eating and stimulating drinking find no place in one's life. Remember the words of Jesus the son of Sirach, "If thou sit at a bountiful table, be not greedy upon it, and say not 'There is much meat on it.' A very little is sufficient for a man well nurtured, and he fetcheth not his wind short upon his bed. Sound sleep cometh of moderate eating; he riseth early and his wits are with him; but the pain of watching (or wakefulness) and choler and pangs of the belly are with an insatiable man. My son, hear me and despise me not, and at the last thou shalt find as I told thee." Modern hygiene is not more forcible in its maxims and teachings than is this sound and sensible lore of the

ancient wise man. The abstemious habits of the Eastern sages are proverbial. Simple food, and not an excess of it, prolonged their lives and preserved them from illness. And why should not we Americans who are anxious to get the greatest possible value and usefulness out of our lives, extend by precept and practice the golden maxims of hygienic living for the benefit of our own and future generations. Nine persons out of ten who suffer from annoying indispositions arising from dyspepsia, in varied forms, would be sound and vigorous if they understood a few simple principles of how to establish and maintain good health. But wrong habits, persevered in for years, induce at last an attack of acute illness which in five cases out of ten result in a chronic invalidism, if the patient does not die. And why? Principally because of the medicine taken when the acute attack sets in, which relieves the distressing symptoms but does not cure the disease, thus

thwarting the effort of nature to cleanse and purify the body and laying up trouble for many years to come; and secondly, because the old habits are returned to and persevered in as soon as the acute attack has subsided. With the co-operation of rest, careful diet, and a little fasting, Nature in most cases would bring her patient through with more skill and success than many physicians could do, especially those who practice with drug treatment. But the secret of good health for all persons of average constitution is, Deny thyself those pleasures and satisfactions which dissipate the strength and power of body and mind, and thou shalt have health, which is wealth, and be strong for all the burdens of life and strong to enjoy all its legitimate pleasures, and gain that "cheerful and good heart" which is the testimony of a clear conscience before God and man, and the evidence of a peaceful and healthful condition of mind and body.

M. A. JACOT.

ANCIENT FEET.

A NOTICEABLE thing, remarks a writer in the *Shoe and Leather Reporter*, about the statues found in our museums of art, and supposed to represent the perfect figures of ancient men and women, is the apparently disproportionate size of their feet. We moderns are apt to pronounce them too large, particularly those of the women. It will be found, however, that for symmetrical perfection these feet could not be better. A Greek sculptor would not think of such a thing as putting a nine-inch foot on a five and one-half foot woman. Their types for these classical marble figures were taken from the best forms of living persons. Unquestionably the human foot, as represented by these old sculptors, was larger than the modern one, and, in fact, the primitive foot of all people of whom we have any record, either in painting or statuary, is larger than the restricted foot of modern

times. The masculine foot, forming an approximate average of four different countries, was about twelve inches long. This would require at least a No. 12 or 12½ shoe to cover it comfortably. The average masculine foot to-day is easily fitted with a No. 8½ shoe, and is, therefore, not above ten and seven-sixteenths of an inch. Now, by the old scriptural rule of proportion, a man five feet nine inches in height should have a foot eleven and one-half inches long, or one-sixth his height. It was of no great consequence what size sandals he wore, but he would require to have a modern shoe of at least 10½ for a minimum fit or a No. 11 for real comfort. For women, allowing for the difference in the relative size of the two sexes, which was about the same then as now, a woman of five feet three inches in height would have had a foot ten inches long requiring a modern shoe—it ought to be spoken only

in a whisper—No. 6 as the most comfortable for that foot, or a No. 5½ as the limit of torture. The reason for the differ-

ence between the old classical foot and the modern one is obvious. Restriction is what has done it.

DRUGS FOR SLEEP.

WE are having great discussions over new drugs that are prescribed for what seems to be becoming a bane of modern life, insomnia. There are chloral, cocaine, caffeine, phenacetine, sulphonal, chloralamide, etc. etc., and as each new composition comes out it has a flock of advocates. But however lauded a hypnotic is at first, we soon find that it has bad points; it is productive of injury in some way. A prominent physician aptly says in this regard:

I have recently met with several cases of insomnia due to over-taxation of the American nervous system, and have been requested to prescribe some drug that would be effective to procure sleep, and be at the same time harmless. No such drug exists. There is no medicine

capable of quieting to sleep voluntary life that has been working ten hours at high pressure, except it be more or less poisonous. Consumption of chloral, bromide in some form, or opium, has increased in this country to an incredible extent, is still growing, and a large number of Americans go to bed every night more or less under the influence of poison. Sleep thus obtained is not restful or restorative, and nature sternly exacts her penalties for violated law, more severely in these cases than in most others. Digestion suffers first; one is rarely hungry for breakfast, and loss of morning appetite is a certain sign of ill health. Increasing nervousness follows until days become burdens, and poisoned nights the only comfortable parts of life.

A VEGETARIAN BILL OF FARE.

THE following menu comes to us from the Charing Cross Vegetarian Restaurant, London. As a sample of what may be supplied to those who are inclined to change from a flesh diet, it will certainly compare well in variety with the menus of our better American restaurants, with their array of steaks and chops. The reader need not be reminded that an English penny is worth about two cents in American money:

SOUPS.—Consomme a la Gardiniere, Lentil Soup, Rice, Milk: 8d. (Bread extra.)

PORRIDGES.—Oatmeal, Wheaten, Maize Mush, Anglo-Scotch (with Sugar or Syrup): 3d., each.

SAVORIES.—Lentil Cutlet and Tomato Sauce, Macaroni au Gratin, Forcemeat Omelette, Haricot Pie and Apple Sauce, Mushroom Pudding, Stewed Celery, Curried Eggs, Onions a la Banville, Tomato Farcies: 4d., each.

EXTRA VEGETABLES.—Cauliflower, Spinach, Artichokes, Parsnips, Potatoes Baked, Potatoes Mashed, Potatoes Plain, Haricots, Tomatoes, Macaroni, Rice: 2d., each.

SWEET PUDDINGS.—Plum Pudding, Baked Fig Pudding, Rice Pudding, Boiled Jam Roll, Apple Pudding, Bread and Butter Pudding, Swiss Cocoanut Pudding: 3d., each.

STEWED FRUITS.—Figs, Dates, French Plums, Apples, Pears, Damsons, Gooseberries, Rhubarb, Apricots: 8d., each.

PASTRY.—Apple Tart, Apricot Tart, Rhubarb Tart, Gooseberry Tart, Damson Tart: 3d., each.

SUNDRIES.—Tea (fresh made for each person), Chocolate, Cocoa, Coffee, Mineral Waters, Soda and Milk: 8d. Milk, Cheese, Cake: 2d. Serviette: 1d., each

Thus a hungry man in London can obtain a good meal of nourishing food at very moderate cost.

NOTES IN SCIENCE AND INDUSTRY.

An Ancient Greek Race.—A correspondent of one of the Pittsburgh newspapers writes:

"In the little essays sent to the State Department, the Consuls of the United States occasionally leave the beaten track of commercial statistics and give us a little ethnical study. Consul Jewett, in discussing the Turkish province of Trebizond, refers to the existence of a peculiar colony of people residing in this region who have a claim upon the attention of every student of the classics. He says: Some forty miles south of Trebizond there is a community which is highly interesting to the student of history and of sociology. When the 'Ten Thousand,' on the famous retreat by Xenophon, passed through this country, a portion of the army was cut off from the main body and left behind. They were well treated by the surrounding tribes, intermarried with them, and settled down permanently in a community of their own. The people now living in the district referred to, included in some nine villages, claim to be the direct descendants of those soldiers of Xenophon. Their language is Greek and they profess the Christian religion, though under the pressure of the Moslem conquest they nominally adopted Mohammedanism. Thirty years ago they formally declared themselves Christians, but, on the other hand, many of them bear Mohammedan names and in every village there is a mosque. As Christian subjects in the Ottoman empire they are exempt from military service, paying a head tax instead, and the anomalous position these people hold frequently causes difficulties with the authorities. Their local customs, dialects, traditions, and mixed religion offer an interesting field for investigation and study."

Fastening the Safety Valve.—*Power and Steam* is reasonably severe on the engineer who would walk up to a boiler which is discharging steam through its safety valve, and deliberately close that only avenue through which the surplus steam might escape to prevent a dangerous over-pressure. And yet this thing is done with a fre-

quency which is alarming. We lately learned from an inspector that he had found a battery of boilers, every safety valve upon which was wedged down by a pine plug, "to keep them from leaking;" and now come the particulars of an explosion in this State, reciting that one Arthur Leavitt, annoyed because the escaping steam from the safety valve of his boiler made his horses restless, fastened the valve down with a heavy weight. The natural consequence ensued, and, although swift retribution was meted out to the offender, he carried into eternity another and innocent man, while as a result of his criminal act two men are suffering serious injuries, a pair of valuable horses and a large factory are destroyed, and a prosperous business seriously interrupted.

The man who will deliberately tamper with a safety valve of a steam boiler is a first-class rascal, and he should be placed in the same category as the man who would put a fuse to a powder magazine or lay the train to start a conflagration.

Why they Do It.—Every one, who knows anything of town life, must have noticed that builders, as soon as they put in the glass, especially in the lower story of a large structure, daub a quantity of whitening upon the inner side of the glass. By most observers the act is no doubt regarded as a very silly thing, but such is not the case.

A Chicago reporter recently interviewed a contractor on this point and received the following explanation: "We have to mark them that way or they'd be smashed in no time. You see, the workmen around a new building get in the habit of shoving lumber, etc., through the open sash before the glass is put in. They would continue to do it even after the glass is in if we didn't do something to attract their attention. That's the reason you always see new windows daubed with glaring white marks. Even if a careless workman does start to shove a stick of timber through a costly plate of glass, he will stop short when his eye catches the danger sign."

Subsidizing Brain.—We believe in a community taking care of its citizens who show high powers for intellectual research. A writer in the *New York Nation* says, in pleading for "the endowment of private research," that no one can doubt that "mental power is a great endowment. Huxley has well said that any country would find it greatly to its profit to spend a hundred thousand dollars in first finding a Faraday, and then putting him in a position in which he could do the greatest possible amount of work. A man of genius is so valuable a product that he ought to be secured at all cost; to be kept like a queen-bee in a hot house, fed upon happiness and stimulated in every way to the greatest possible activity. To expose him to the same harsh treatment which is good for the hod carrier and the bricklayer is to indulge in a reckless waste of the means of a country's greatness." Again he says, "The waste of water-power at Niagara is as nothing compared with the waste of brain-power, which results from compelling a man of exceptional qualifications to earn his own living."

The "Star of Bethlehem."—The story is current in some channels that "the star of Bethlehem is to be visible this year, being its seventh appearance since the birth of Christ. Prof. Pickering, of Harvard University, says:

"I can scarcely believe that this story emanated from the astronomers at Vienna, for had there been the slightest intimation of the appearance of this star it would have been cabled to us at once, as is always done in the case of astronomical news gathered in Europe. The report is probably the unauthorized revival of an old rumor that this star, erroneously called the 'star of Bethlehem,' was to make its appearance, but as this statement has been made several times since 1884, when the star was looked for by some astronomers, there is doubtless nothing in it. The star referred to was the one discovered by Tycho Brahe in 1572 and was named for him. It appeared quite suddenly in the constellation of Cassiopeia, and had a brilliancy greater than that of any of the planets so much so that it was visible in the day time for certain seconds. It was believed by some that this star had ap-

peared in the same position 812 years before or in 1260, and, assuming this interval of appearance to be correct, it would have been visible about the time of the Christian era, and it was thus termed the star of Bethlehem.

"If its return was after 812 years, the time of its reappearance would have been in 1884, but nothing has yet been seen of it, although many observers watched for it at that time. Such a phenomenon at the present day would have the highest value to astronomical science, for by the use of modern instruments observations could be taken and information gathered that would be of the greatest assistance in a series of experiments now in progress. There is, however, so much doubt in the matter that it is of but little use to surmise as to the star's reappearance."

An African "Pigmy" Race.—Henry M. Stanley says that one of his most interesting experiences was his meeting with the dwarf tribe of the forest, which is the oldest known aristocracy, with institutions dating back fifty centuries. Their Queen was very kind to the explorer, and consented to accompany him to Europe, but became so exhausted by the hardships of the journey that she had to be sent back. These dwarfs are olive-hued, very intelligent, fine craftsmen in iron and ivory, and probably the only African race that does not practice polygamy.

The Erectness of Man as Compared with Apes.—Professor Cunningham, in speaking recently before the British Association on "The Proportion of Bone to Cartilage in the Lumbar Section of the Vertebral Column in the Apes and Different Races of Men," said he desired to point out some modifications which showed the result of the erect posture of man, and in looking at the vertical column, because it was in that he especially looked for these modifications, and there was no other part in which they would expect to find such modifications more marked than in the lumbar region—the region of the loins—because it was upon this a great part of the weight of the limbs and trunk fell. If they examined the bodies of the lumbar vertebræ in a number of animals, they found that in quadrupeds these bodies were long, narrow, and rod-like,

placed one in front of the other, whereas in man they found that the bodies were short, broad, and disk-like, so as to widen the pillar of support. But the point of interest in this was that the gradations between these rod-like vertebræ and the disk-like body of vertebræ could be traced step by step as they passed up through the apes. After considering these facts, he began to think it possible that similar distinctions might be denoted in some of the lower races.

The Slot Machine in Egypt.—The saying that "there is nothing new under the sun" receives fresh confirmation in

the recent discovery that a "nickel and slot" machine was in use in the ancient Egyptian temples. There "holy water" was offered to the faithful, but it was not free to all, but was kept in a closed vessel. When the sum of five drachmæ was dropped into the top a valve opened and allowed a small quantity of the sacred liquid to flow out, after which it automatically closed to await the arrival of the next customer. This device was first referred to in the "Spiritualia" of Hiero, published in the seventeenth century, and there is no doubt that such an apparatus was actually used in ancient times.



NEW YORK,
July, 1890.

A RECENT CRITICISM REVIEWED.

IN a late number of the *National Review* Mr. W. L. Courtenay discusses the question "Can there be a Science of Character?" The spirit of the essay is at once negative and speculative, with the manner of the metaphysician, not the physiologist. A page or two of space is given to a rather curt examination of the claims of Phrenology in relation to the subject of the article, in the course of which he pronounces the Spurzheim classification of the mental faculties and their connection with special organic centres as a way of regarding mental phenomena that moves in "a most fanciful and shadowy region." He tells his readers that the phrenologist has "a dislike of the one soul and

spirit which was supposed to direct the various propensities of man," and substitutes for that one soul "a multiplicity of spectral souls," and so "peoples the whole brain with spectres."

This is an interpretation of phrenological doctrine that is no more warranted by the *Review's* reasoning on good writers who accept the Gallian system than it is by the statements of the leading modern psychologists who go as far in recognizing the independency of faculties in the domains of intellect, emotion, and sentiment as phrenologists do.

Witness the definitions of Stewart, Bain, McCosh, Mahan, Calderwood, Parker, etc.

Mr. Courtenay seems to take it for granted that the mere symbolism that a writer of Phrenology has here and there indulged in, to render his illustration of the activity or function of a faculty more distinct, implies a personification of that faculty—which is far from the truth. Yet such a specimen of analyzing a simple mental procedure as he gives, if accepted as phrenological, is certainly to be regarded as effective in showing how different faculties partici-

pate in the consideration of every-day incidents.

But he goes too far in saying that "each organ is practically supposed to think, feel, will, and act for itself," because this is not claimed by any. Furthermore, "bad bumps" or "bad" organs are not recognized by any educated phrenologist, as entering into the brain congeries; the "badness" comes from a perversion of faculty and its abusive exercise in the economy of character.

Granting, as this writer does, that the brain is the organ of the mind and then claiming that in any phase of thinking its entirety is exercised, because the mind acts as a whole, he challenges the related questions—Why the variations, deficiencies, and differences of mental expression shown by different persons, and by the same person? Why does not a man show the same power in the action of his different faculties? Why is he strong even to excess and abuse in one, and deficient even to its entire apparent absence in another? Again, if he be supposed to reply that a man may be deficient in respect to a faculty by nature—and we grant the *fact*—then there must be some incompleteness of mind, and the mind's organ, the brain, is correspondingly defective somehow.

But a little further on this *Review* writer evidently forgets the point he has attempted to make in denying localization of organs in correspondence to faculty, for he says in these very words, "As a rule it may be observed that energetic people have a considerable breadth of head and brain, especially in the posterior part on each side of the crown, though of course"—here he

seems to perceive the bearing of his statement and to apologize for it!—"of course such an observation is purely empirical." He goes on, however, to discuss this type of head development as possessing a direct relation to certain mental characteristics, and is, for the most part, correct in his remarks. But here he has quite "given himself away," for he is discussing a special type of development that is also one set forth by the phrenologists, as the reader knows well, and can only be explained on the principles of localization. It will not answer Mr. Courtenay to hedge in this matter and betake yourself to "temperaments" to find a groundwork for character differentiations. The *locus* of controversy may be changed somewhat, but the principle remains of the *dependence* of mental expression upon organism. Given a type of temperament and you at once discover a special constitution of brain that is as peculiar to it as form of body.

The fact that one brain is wider than another, or that it has a distinctive enlargement that may involve the structure of the temporal convolutions only, or the lower convolutions of the parietal lobe, and the lateral convolutions of the anterior lobe, and that this special constitution has a relation to the known character of the possessor of the brain, logically stamps the part or parts of the brain so enlarged with a peculiar functional property. Calling the inference "empirical" does not affect its practical and reasonable application to the doctrines of localization.

Mr. Courtenay reasons in the manner of the older metaphysicians, and we do not find him inclined to that liberality

that such psychologists as Calderwood, Bain, and Ladd exhibit in their discussions of mental functions. He may not be acquainted with the great advance of modern physiology in its special connection with brain function. We think ourselves warranted in so thinking, because he makes no reference to this advance. If he be acquainted with it, then he must ignore its overwhelming testimony on the side of centres or organs in the brain structure. Of course, to quote a single prominent observer in this line would be to impair his strong assertion of *oneness* for the brain as agent for the *whole-acting* mind.

His views of the temperaments are derived from the old books rather than the new, and we might, were there room enough, show that the system of temperaments he has taken up is not the best, because of its pathological nature, for modern speculative observation.

Mr. Courtenay has quoted Prof. Bain, and before passing to another point in this criticism of his essay, we will also quote the psychologist of Aberdeen, who has made a declaration on this very subject of the essay in these words :

"All theorists previous to Phrenology could not prove their principles by appeals to observed facts ; they could not show a relationship existing between cerebral organs and the functions of the elementary powers they had analyzed in their own consciousness. Phrenology not only showed herself capable of doing this, but she became the first and only science of character."—"*Study of Character.*"

We might offer this statement, coming as it does from an authority of the highest eminence, as an answer to the in-

quiry that forms the title of the essay and rest the case, but a very recent edition of the London *Saturday Review*, viz., that of April 26 last, has an article with the heading, "The Revival of Phrenology," which in itself would prove a fitting reply to Mr. Courtenay. A paragraph or two of this article must serve our purpose at this time. The writer says :

"It is now finally agreed that all mind manifestations are dependent on brain matter ; that the various elements of the mind have distinct seats in the brain, a few of which have been actually determined ; and that recent researches in psychology and pathology have in many cases established the physiological correlative of psychological actions. Thus the most intense centres for movements of the facial muscles have been proved to be the brain area, in which Gall located his organ of mimicry or *imitation* ; the gustatory centre in the same region as the so-called *gustativeness* of the phrenologists. The motor area for the concentration of attention, as assumed by some physiologists, is found to correspond with the localization of *concentrativeness* ; and Dr. Voisin's theory of exaltation is in harmony with George Combe's speculations. Mr. Herbert Spencer, once a defender of Phrenology, made an apparently successful localization of a supposed faculty of reviviscence, for which there is much pathological evidence ; and the so-called centre for psychical blindness as localized by Munk corresponds with Gall's observations.

"All that Phrenology asserts is that, with the assistance of certain known elements—such as physical tempera-

ment, education and surroundings—positive conclusions as to psychical character can be drawn from the configuration of the skull; and in the light of the present condition of physiological science this claim can surely be considered neither illogical nor extravagant. The theory itself presents such varied interest, and promises, if properly utilized, to be of such immense value to education, that it must be admitted that it is at least well worth the effort of serious investigation."

With such strong and comprehensive language as this, coming, as it appears, from a scientific source, and admitted to a prominent place in a very respectable publication of a critical class, we are quite content to leave the case to the judgment of our candid readers.

CAPACITY AND PUBLIC ACCEPTANCE.

WHEN a man shows to the world that he knows what he professes to teach, he commands its respect. He may announce principles and practices that the learned and scientific regard askance or even ridicule, yet if he is prepared to sustain his views by evidence and candid argument the world is not likely to permit him to be crushed under a wall of contumely and disgrace, especially if what he offers has in it much of solace and help to men and women burdened with care and sadness.

There are impostors, charlatans and quacks in every calling known to society, and according to the essential usefulness of a calling seems to be the number of impostors. So a profession that appears *per se* to confer respectability upon its followers has almost ev-

erywhere a considerable number of wily, mendacious tricksters who practice under a show of authority legally or fraudulently obtained.

The fact, as we have generally stated it, has been recognized by society for generations, and now and then measures have been taken by a community here and there for the protection of the people against imposture: but as a rule with indifferent success. It may be offered as one reason that the lack of success in such cases is due to the hostility of class prejudice and conservatism toward new doctrines and new methods, which often defeats the object of a good measure by its excessive expression—the people at large being meanwhile prompted by humane sentiment to take the part of the men against whom the class hostility is directed.

We note the operation of popular sentiment in the state legislatures with reference to the practice of medicine, whenever such legislation would make a discrimination between classes or schools of therapeutics, or accord to certain classes special privileges. The need of state or county protection against imposture and quackery is recognized by all reasonable persons, and if such protection could be obtained in a manner that will be fair and equable in its effect upon all honest and intelligent physicians the community would rejoice in being freed from the thousand rascally manipulators and venders of pills and extracts.

A few months ago we published a report of a trial forced upon a lecturer while pursuing his vocation in a Southern state, the outcome being a judicial vindication of the truth and majesty of

science against enmity and detraction. The lecturer being a gentleman of education and well versed by study and practice in the subject of his lectures, speedily won the respect of the people, and in the proceedings of the court room soon convinced court and jury that he was far from being the pretender and charlatan his envious accusers alleged.

So it has been in the case of every educated and trained phrenologist whose work has been interrupted by persons blind to its virtue and benefit, during the twenty years that the writer has been able to survey the field of phrenological practice in this country. We are confident that the times are brightening for earnest and capable lecturers, and that the demand for them will steadily increase with the growth of public intelligence concerning the functions of the nervous system.

AN EXAMPLE.

THE Synod of the Reformed Presbyterian Church, recently sitting in New York, has put itself on record in a way that must commend it in the estimation of all advocates of decency and purity. How? By voting with a good majority a report condemning the use of intoxicating drinks and tobacco. Heretofore the larger bodies of the Christian ministry have shown fear or lukewarmness in attempted discussions of the drink and tobacco habits of society. So many indeed of American clergymen are given to these habits that they are minded to oppose in the start any measure that would tend to divorce them from their darling sins. The Synod's language is

plain in its characterization of the two great evils, and in its censure of all persons, and especially of "those high officials who aid and abet" these destructive agents.

In the recent National Temperance Congress, that followed the Synod, certain speakers referred in emphatic terms to the coolness of the church at large toward the saloon question.

Certainly it is high time that men who claim to be leaders in Christian work, men who by their very position are teachers and examples of the higher moralities, ceased to be lukewarm toward the most destructive "institutions" of the people. This very lukewarmness—translated, as it may reasonably be, into indifference, has been a very powerful aid to the growth of intemperance among us, and the resultant crime that disgraces our civilization. There are upward of 100,000 ministers and missionaries in the country, each one pledged to do his part in teaching men how to live honestly, decently, purely, and nobly. If thirty thousand of these "devoted" men lived well up to their pledge, what a change would be brought about in the drinking and smoking habits of the people! What a crusade there would be against the vice and crime of society! Not only would each clergyman or missionary cast away the dangerous stimulant and filthy narcotic, but every lay member of the Church Christian would be ashamed to touch either.

We await the effect of this most commendable movement of the Reformed Presbyterian, in the hope that other churches will show a like courage in denouncing the arch enemies of religious and moral development.

Our Mentor Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

"MY NICHE IN LIFE."—MRS. J. L. R.—Your pleasant letter is of the sort that an editor likes to receive. A few of our readers can say like yourself that they read the PHRENOLOGICAL forty years ago. But you were then a mere child, it seems, and must have been one of the reading kind. Why have you not found your "niche in life?" Has not the sphere of home revealed many a useful part that you could "act well," and have you not done for family and friends many things that helped them in mind, body and estate? Or have you indulged ambitions that seemed to be hindered and nullified by necessities that you endure only in common with thousands of the best women of the land. Perhaps you know not that you are filling a noble sphere, and doing a grand work. Hundreds are in this situation and do not realize it. Just where you are opportunities are not few to serve humanity, and in serving humanity according to the occasion that offers, no matter how humble the performance, you are serving the God and Father of humanity. No service is small that is done kindly and willingly for others.

VEGETARIAN DIET.—*Question.*—If we give up "meat," what shall we eat? P. B.

Answer.—It seems to be the notion of many people brought up on and accustomed to a flesh diet, that if they attempt to give up their beef, mutton, veal, etc., with the sauces and trimmings, they will find themselves in danger of starvation. A most unwarranted idea, that a little thought bestowed upon the reserves of Mother Nature will dissipate. In the Science of Health department you will find a bill of fare such as is supplied in a well known London restaurant, changes being made, however, according to the season and markets. Certainly there is no fear of starvation in such a list of palatable and wholesome foods.

SUDDEN STARTS, JERKS, ETC., WHILE ASLEEP.—F. W. C.—Sleep restores vigor and tone to the brain and nervous system, and while one is asleep the muscles and tissues become relaxed. The spasmodic movements are due to nervous reaction for the most part. It is sympathetic sensations for the most part that cause the jumps and jerks that awaken when the person is just falling into slumber. Often external causes, a noise, a touch, the pressure of the bed-clothing will produce such effects through the sympathetic nerves. Generally people whose nerves are very active during the day experience these not always pleasant sensations. They receive impressions, consciously or unconsciously, that somehow may revive in the early stage of slumber, and the sleeper catches a glimpse of a dream, in which he seems to be falling or exposed to vague danger, and an instinctive impulse to save himself is expressed in the jump or jerk that arouses to full consciousness.

PHRENOLOGY AND IMMORTALITY.—B. Q.—You are right in your inference that phrenological science does not "teach" a doctrine of human immortality, but it differs from other sciences in its recognition of brain centres or organs that have a fore-looking quality in their functions. For instance, the faculties of Veneration, Hope, and Faith not only have an application to the

experiences of every-day life, but there is a decided spiritual application that every man with a well-developed moral constitution recognizes clearly. In discussing the higher exercise of the moral faculties in "Heads and Faces," we have said:

"It is Veneration that recognizes self-consecration to God, and stimulates reverence. It is Conscientiousness that impresses one with the feeling of duty, indebtedness, obligation for benefits received. It is Faith or Spirituality that opens the inner vision to the appreciation of a power supernatural. It is Hope that reaches beyond the present to a joyful existence after this mortal sphere has passed. The intellect enters into the expression of worship; it may, by its conclusions born of reason, strengthen the sense of right and duty, confirming one's impression that sacrifice, prayer and praise to the Creator are consistent and proper."

This exalted action of the moral faculties forms the religious side of human character, and gives a certain kind of evidence that cannot be reasonably ignored. Still it does not prove man to be immortal by nature. It is the work of religion to show whether or not man will pass after death into a new state of life, and how he can attain unto it.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred

From a Student.—On my return from the Phrenological Institute (Class of '89) I entered "Shenandoah Institute, Dayton, Va., and becoming a member of the "Platonic Literary Society," I was invited to give three public lectures on Phrenology for the benefit of said society. I accepted the invitation cheerfully. After the first lecture about five of the students proposed that a class be organized. In a short time there were twelve of the boys ready to study Phrenology.

I supplied them with copies of "How to Read Character" as a text book. The students express delight in its study and are much interested.

Our venerable Professors, J. N. Fries and G. P. Holt, throw themselves open to conviction to every thing that they deem beneficial to mankind. Hence, they have given due respect to the science of Phrenology, and really advocate it.

I must confess I was bountifully rewarded in attending the New York Institute, and heartily recommend its advantages to all who desire the most that is attainable in life. In my opinion no education is complete without a knowledge of Phrenology, and I heartily wish the JOURNAL and all related to the science of mind much success.

E. Y. HILDEBRAND.

The Mastery of a Soul.—There is nothing, it seems to us, so intensely interesting as the struggling of a human soul against passion and pride, vain ambition and appetite, maliciousness or crime, and all the baser inclinations, and with all its latent energies aroused to their full extent determined to gain the mastery over its baser nature, and rise to a higher plane of rational life. What pain, what anguish, what struggling, what hope, what despair, what deep misery, what bright rays of joy in alternation, exhilarate the soul with radiant bliss, or tear it with the deep fangs of bitter grief and oft-repeated disappointment! And to see it emerge at last from all this furious fight, this storm and calm, this sunshine, this watchfulness, and surprise, into the clear sunlight and gloaming shadows of a heavenly calm, with a perennial and exhilarating joy ebbing and flowing through the soul, is a wonder, a charm, a fascination, superior to anything that fiction can ever devise, in its palmiest hours. The reality adds an intensity to the charm, and gives substantial food and hope for other struggling souls. See the soul now, in the calm serenity of a celestial atmosphere, standing with its feet crushing passion, pride, vain ambition, low lust, and appetite, love of gain, malignity, and every baser passion, with its pure hand on the helm, its intelligent eye on the goal, making all the wheels of human nature turn subservient to a nobler life, looking down the fearful chasm from which it has escaped, this is a wonderful picture! Look at the frightful form then as it emerged from the sullied pool of generation, and now at the radiant figure in its day of triumph! What can add to the picture, or enhance the charm? Dull, indeed, is the soul that finds nothing here to admire, nothing to emulate.

IVAN VON ZESTONE.

PERSONAL.

DOM PEDRO'S HOSPITAL.—Dr. Stellwag, of Vienna, tells the story that Dom Pedro desiring to establish a hospital in Brazil several years ago, offered to ennoble any citizen who would contribute a certain sum to the hospital fund. Half of Rio Janeiro was found to desire a title, and money poured in. When the hospital was finished, the Emperor ordered to be sculptured above its gates, "*Vanitas Humana Miseriæ Humanæ*" (Human vanity to human misery).

GEORGE PEABODY, the rich banker and philanthropist, set apart £2,500,000 for buying wretched tenements in the London slums, clearing them off, and building in their stead pleasant and healthy homes for the poor. The trustees of the fund have performed their duties wisely and faithfully. They now, after twenty-five years, have eighteen groups of houses scattered over the city, which shelter 20,874 people, and before long they will be able to buy land and build another group. The fund on December 31. amounted to £994,789, and up to that time £1,233,845 had been expended for land and buildings.

MR. RICHARD VAUX, of Philadelphia, successor in Congress of the late Samuel J. Randall, is a handsome old gentleman. Summer and winter he wears ruffled shirts, low patent leather shoes, and silk stockings. In 1838 he was for a little time a brilliant young *attache* of the American Legation in London. The story goes that he fell in love with the pretty girl Queen, who smiled so graciously upon him that Lord Melbourne requested his recall.

WISDOM.

"Thou must be true thyself,
If thou the truth would teach."

THE gentleman is solid mahogany; the fashionable man is only veneer.—*J. G. Holland.*

LET prayer be the key of the morning and the bolt in the evening.—*Matthew Henry.*

SILENCE as to a man and his deeds will do more to extinguish him than columns of abuse.

HE who cures a disease may be the skillfullest, but he that prevents it is the safest physician.—*T. Fuller.*

What men call luck

Is the prerogative of valiant souls.
The fealty life pays its rightful kings.

—*James Russell Lowell.*

AGE makes us more fondly hug and retain the good things of this life, when we have the least prospect of enjoying them.—*Atterbury.*

KEEP up hope in bad times. We have the same sun and sky and stars; the same God and heaven and truth; the same duties and the same helpers. Hope thou in God.—*Dr. Goodell.*

Conscience is like a sun dial. If you let truth shine upon it, it will point you right, but you may cover it over so that no truth can fall upon it, and then it will lead you astray if you follow its guidance.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

"We say mouse, and we say mice. Now, why isn't the plural of spouse spice?"

City Girl (pointing to the starry sky)—
"That cluster of stars is the dipper." Country Cousin—"Is that so? Which cluster is the pail?"

"You press the trigger and we do the rest," as the revolver said to the fool who "didn't know it was loaded."

"WELL, Misther M'Phelim, how'd ye schlape last night?"

"Ah, bhad, Denny, bhad! Unconscious a good dale av the toime."—*Harper's Bazar.*

"WHY do you call the phonograph 'she'?" asked the horse editor of a Western paper of the snake editor. "For two reasons," was the reply—"first, it talks back; second, it always has the last word."

A LEGAL PERSECUTION.—Witlow—"I hear Jones has been arrested for keeping a cow." Bitso—"For keeping a cow? What an outrage!" "Yes, she belonged to another man."

PHYSICIAN (reflectively)—"H'm! The case is one, I think, that will yield to a mild stimulant. Let me see your tongue, madam, if you please." Husband of patient (hastily)—"Doctor, her tongue doesn't need any stimulating."



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

TALKS AT THE CLUB. Reported by Amos K. Fiske. 16mo, vellum cloth, gilt top. New York. Fords, Howard & Hulbert, publishers.

This is a neat little volume, comprising a series of papers contributed to the *New York Times*, and they are well worthy of reproduction in permanent form; for the matter and the manner are decidedly superior to the average of newspaper writing. The conversations purport to have been held in a quiet room of the Orphodel Club, Saturday night, by a party of four, and considerable pains are taken to preserve as far as possible the characteristic peculiarities of each member of the little party. The topics are of an elevating character; and there is no want of sprightliness and wit. There is very little of the cheap, second-hand, sketchy anecdote discoverable, but the matter as a whole is treated in a decidedly fresh and original style. The topics themselves show, as topics may, the spirit of the author; for instance: *The Shepherd's Lost Sheep*; *The Irish American*; *More about Ancient Scripture*; *On the Power of Personality*; *Words of Comfort*. A really good book.

THE LIFE OF GEO. H. STUART, written by himself and edited by Robt. Ellis Thompson, D. D. 12mo, pp. 388. Cloth. J. M. Stoddart & Co., Publishers, Philadelphia.

When a man sets about writing his own life it is supposed that the product of his pen will be in every sense authentic, albeit he is intelligent and cultured enough to write with a ready pen. No one will question Mr. Stuart's capacity in this regard, and it is but small praise to say that the work has a superior claim to consideration

viewed as an autobiography. The life of Mr. Stuart was one of much more than passing interest. If one reason that occurs to mind be given, which will be accepted at once by the reader as quite sufficient, that reason is that Mr. Stuart had been related socially, and we may say professionally, to some of the most distinguished men of the past generation. During the late war he had occasion to come in close contact with those great men who were concerned in the administration of our government. Letters that were written to him by President Lincoln, Gen. Burnside and Gen. Grant, reproduced in *fac-simile*, are given among the illustrations. Some exceedingly fine portraits also appear. Mr. Stuart was prominent in affairs of general philanthropy. It will be remembered by the reader who is at all familiar with the history of the war, that he contributed much toward the organization of the Christian Commission, and also toward other serviceable philanthropic enterprises that came in vogue for the benefit of the soldier in the camp and in the field. A most worthy and noble life is this, and its conclusion, written by his son in three brief pages, describes his recent death at the sanitarium of Clifton Springs.

PUBLICATIONS RECEIVED.

CAISSA'S GHOST.—A choice selection of 100 chess problems by the best composers, arranged by G. A. W. Cumming.

A little pamphlet published by the Graphic Printing Co., of Kirksville, Mo., at 85 cts., which shows that in the West there is a growing interest in this noble game.

ORIGINAL PACKAGES.—Decision of the Supreme Court of the United States, together with dissenting opinions.

The National Temperance Society has issued this pamphlet for the purpose of showing the spirit that pervades our national judiciary with regard to the sale of intoxicating liquors. We think that the dissenting opinions show more clearly the spirit of western sentiment than the ruling opinion. It seems to us that our court of highest resort has made a mistake in thus intruding into what is usually considered a special province of the States, and its decision, we think, will force a larger discussion of temperance questions than has ever been the case before. That the States have a special jurisdiction must be admitted with regard to matters that affect the moral and physical condition of their population, and when one has de-

cided upon any course for the improvement of its internal affairs for the United States Government in any way to interfere, and as it were to cancel the obligations of the people toward their own State-administration, is a departure fraught with serious results. Price, 10 cents. A. N. Stearns, agent, New York.

**46TH ANNUAL REPORT OF THE PROTESTANT
EPISCOPAL CHURCH MISSIONARY SOCIETY
FOR SEAMEN.**

We are glad to know that there is so much active work going on for the instruction of sailors who come to the New York ports. This mission is certainly a worthy one. The Corresponding Secretary of the Society is Mr. Henry Royers.

NASSAU LITERARY MAGAZINE, conducted by the Senior Class of Princeton College.

An old publication, now in its 46th volume. Few college magazines can boast of such a career as this.

SULLA EFFICACIA TERAPEUTICA, della catramina Bertelli Nelle Tuberculosi Locali ed esplicitazi Morbose Affini osservazioni cliniche del cav. Uff. Dott. Fernando Franzolin, Milano. Tip Stefani, corso Porta Romano 836.

THE INFLUENCE OF SEWERAGE AND WATER POLLUTION on the Prevalence and Severity of Diphtheria.

ANTISEPTIC OBSTETRICS. Reprinted from the Transactions of the State Medical Society of Illinois.

CIRRHOSIS OF THE PANCREAS; OR, Pancreatic Anæmia.

INFANT FEEDING. Reprinted from the Journal of the American Medical Association, August 4, 1888.

The above papers are by Dr. Chas. Warrington Earle, Professor in the College of Physicians and Surgeons, Chicago. They

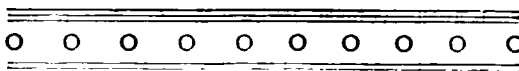
contain suggestions of practical value to the practitioner.

THE BROOKLYN HEALTH EXHIBITION. A catalogue of the apparatus, foods, processes, etc., etc., on view at the meeting of the Am. Public Health Association in October last. Reprinted from the *Sanitarian*.

A PERFECT MEMORY: How to Attain It, is the title of a small, compact volume of about fifty pages just published by Mr. John A. Shedd, the author of "Shedd's Natural Memory Method." The book is a new edition, with such modifications as shall adapt it to American readers of the monograph published in England by Charles Hartley. It contains what people who are interested in memory improvement usually wish to know, viz.: Something of the history and growth of mnemonic systems, and also supplies hints of positive value for strengthening the memory. As Mr. Shedd has devoted some years to this line of study, his comments and additions are a material addition to the work of Hartley, and while not intended to furnish a "system" of mnemonics, it does supply information that is essential to be known by any teacher, viz., that concerning the fundamental principles, physical and mental, of memory. Price, in cloth, 30 cents.

READY REFERENCE MANUAL OF THE STATUTE LAWS OF THE STATES AND TERRITORIES in the United States, and the Provinces of Canada. Compiled by E. E. Knott, Burlington, Vt.

An octavo volume of nearly 400 pages. This is a brief, clear synopsis of the laws in common use; those things of which everyday people should be acquainted with. For instance, we find in it substance of laws relating to the collection of debts, exemption, and limitation, commercial paper, arrest and imprisonment for debt, naturalization, partnership, marriage, wills, etc. The Constitution of the United States is one of its annexes, and there is a series of biographies of the presidents. Published by the International Pub. Company, Burlington, Vt.

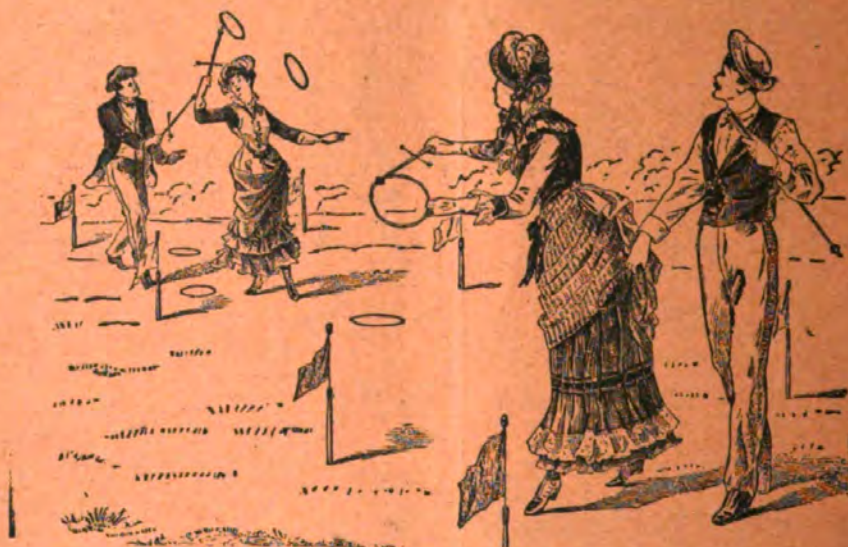


PEARS



"AND A NICE LITTLE BOY
HAD A NICE CAKE OF SOAP
WORTHY OF WASHING THE HANDS OF THE POPE."
INGOLDSBY LEGENDS.

A NEW SUMMER PREMIUM



ENCHANTMENT.

This is the appropriate name of a new and most fascinating Lawn Game. The illustration above gives something of an idea of what it is, the tossing and catching of rings with wands. Can be played by two, three, or four or more persons, on any piece of ground, say fifteen feet by forty feet, or even less, and it requires no special preparation, but grass lawn is preferable.

It affords constant opportunity for the active exercise of all the muscles of the body and yet is so devoid of any boisterous element that a lady in full dress may participate in it with perfect comfort. In Croquet the positions and movements of the players are exceedingly awkward; while in Enchantment the acts of casting and catching the hoops develop the most graceful movements and positions of the figure, giving healthful exercise to the arms and chest and thereby developing and strengthening the lungs.

The implements of this game consist of eight light plaited hoops of bright colors, four guarded wands, eight boundary posts with eight colored flags to be inserted in the tops of the posts; the whole packed in a neat box.

Having tried this and appreciating its merits, we have arranged for offering it on most favorable terms as a premium in connection with the PHRENOLOGICAL JOURNAL. It will be sent to any person who will send us two subscribers at \$1.50 each, or to those who are subscribers we will send it for \$2.00. To those who are not subscribers we will send it and the JOURNAL a year, \$3.00. It is manufactured at a very low price and we are offering it at much less than the regular price. The games are all sent by express direct from the manufacturers at Springfield, Mass. The offer is only for a limited number and orders should be sent soon, and addressed to

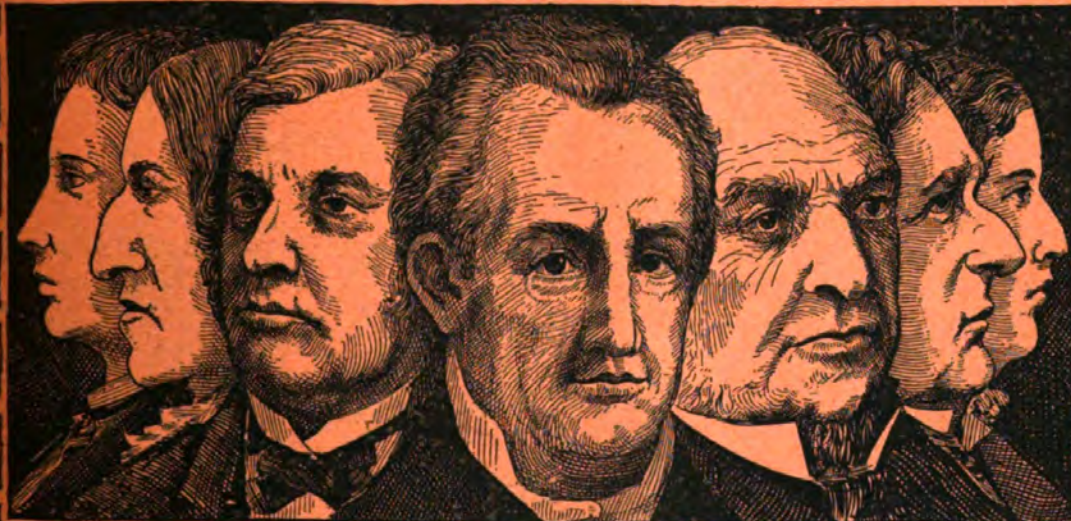
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THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

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AUGUST, 1890.

[WHOLE NO. 617



SIMEON PEASE CHENEY.

SIMEON PEASE CHENEY.

"WHY, Mr. Cheney's vigorous style as a writer gave me the impression that he was a young man!" Thus exclaimed a lady on learning that the subject of this sketch had attained the venerable age of three score and ten when his papers on Bird Music were written. These appeared last year in the *Century Magazine*, and as they attracted much attention both in this country and in England, some information concerning their author may be of interest to the many who read them.

The writer had the privilege and pleasure of meeting Professor Cheney last summer at Lexington, Mass., and of hearing him lecture before the Normal Music School then in session there.

Mr. Cheney was tall, erect, and of majestic bearing. Indeed, time had been wonderfully lenient with him; for although his abundant hair and long beard were snowy white there were but few lines on his fresh countenance, and no quavers in his strong, resonant voice.

A broad, full forehead, overhanging brows, piercing blue eyes and an aquiline nose indicated the strength and power of his nature. Yet that the sternness which seemed to dominate in his features was equalled by a vein of sympathy deep and tender was evident from the enthusiasm and indignation with which he espoused the cause of the birds. In truth it was partly from a desire to arouse an interest in nature's frail, sweet musicians which might be a means of preventing their wholesale slaughter, that his papers on their songs were written.

Professor Cheney was born in Meredith, New Hampshire, in 1818. His birthplace was close by that beautiful lake Winnipisauke. He had a right to his stalwart physique and strong character, having come from genuine old New England stock. He was a lineal descendant of Hannah Dunstan, that heroic woman famous in history for hav-

ing killed and scalped the ten Indians who had captured her and her baby two-weeks old, murdering the latter at her own door.

His father, Elder Moses Cheney, a Baptist minister, was a prominent and popular preacher in New Hampshire, Vermont and Massachusetts for half a century. He was throughout his life noted equally for his rare natural gifts as an orator, and his fine tenor voice. His wife was also a sweet singer, and every one of their nine children sang almost from the cradle. Mr. Cheney says: "My father and mother with their five boys and four girls formed a sublime choir, such as I have never heard since."

Four of the brothers and one sister became teachers of music. In the fall of 1845 they appeared in the City of New York as the "Cheney Family" of concert singers. The four brothers formed an admirable quartette, of which Simeon was the leader. He and his sister while preparing in New York for concert singing twice sustained important parts in oratorio. The "Cheney Family" traveled through New York State and New England, and wherever they appeared were well received. At the end of a year, however they disbanded and returned to music teaching.

Within the next two years, while conducting singing schools in Western New York, Mr. Cheney met the lady who afterwards became his wife. In 1847 they went to Vermont and settled in Bennington County.

In 1860 Mrs. Cheney died, leaving her husband with two sons—John Vance and Albert Baker. The former is now Librarian of the Free Public Library of San Francisco. He is a popular verse writer and has published two volumes of poems—"Thistle Drift" and "Wood Blossoms." Albert Baker Cheney is a popular and successful teacher of the voice and pianoforte in Rutland, Vt.

Dr. C. W. Emerson, President of the Monroe College of Oratory, who is considered high authority in such matters, boldly declares him to be "without an equal in this country as a vocal teacher."

"My life," said the subject of this paper, "has been that of a country singing master." He taught singing schools forty-eight years, the greater part of the time in Vermont and New Hampshire, although he spent several years in Western New York and three in California. In the last mentioned State he taught classes in twenty different towns, in every one of which he found one, and in some places two or three of his Eastern pupils. He also taught one year in Milwaukee and other towns in Wisconsin.

While in California Mr. Cheney became impressed that the time had come for him to make a singing book. He had a vision, as it were, of the style and form of it, which he immediately set about materializing. He never relaxed his labors day nor night until his book was completed, when it was published by White, Smith & Co., of Boston.

Besides being an admirable collection of songs, quartettes and choruses, sacred and secular, it contains more biographical matter and general information upon the rise and progress of sacred music in America than all other singing books published. Some of its musical numbers are compositions by Mr. Cheney, which entitle him to no mean rank among our native composers.

Although always interested in bird music Mr. Cheney did not begin to make it a special study until five or six years ago. He found the subject so interesting that he conceived the idea of copying the songs of all the New England singing birds, an idea which he was able to carry successfully out. The fruits of his labors in this field, in which he is the pioneer, will soon be given to the public in a small volume treating of the music of nature and making a specialty

of bird-singing. This unique work will undoubtedly receive a cordial welcome from all lovers of birds and their music, while it is likely to awaken an interest in many who have heretofore paid little or no attention to the subject. That it will treat the matter in an attractive manner those who have read Prof. Cheney's papers or have heard him lecture are assured, as his style of imparting information is crisp, terse, original and attractive.

Few men of Mr. Cheney's years would have attempted this arduous undertaking, even with the assistance of so able and patient co laborer as the present Mrs. Cheney has proved herself to be. The difficulties attending it were numerous and perplexing. In the first place our bird-singing season is brief. In May and June it is at its height. In July the music begins to dwindle and in August is almost unheard. Then, too, in no one locality are all the singers to be found; and when one long sought for is discovered it may not sing, or may the next moment fly from sight and hearing. Even if he warble his song, many repetitions of it may be required to produce accuracy, for if the songster be heard again to-morrow his lay may differ widely from the one he sang before.

Mr. Cheney said that in all his toil he received no assistance from ornithologists. So far as he knew, none of them, except the late Wilson Flagg, while treating of birds otherwise with thoroughness and accuracy, touch upon this important point. Even able critics, he continues, are in doubt as to what stuff bird-music is made of; while the Rev. H. R. Haweis, M. A., of England, in his book, "Music and Morals," says, "There is no music in nature, neither melody nor harmony." "If," affirms Mr. Cheney, "melody is a succession of sounds differing in pitch and length," and harmony is a combination of melodies, *bird songs* must be *music*, or where shall we find it? They are condensed, boiled down melodies, but hold all we

know of melody, and more, too, in the most exquisite forms. Mice, frogs, and toads sing, and the grass is full of little musicians. So far from there being no music in nature, "its songs never cease." Dr. Emerson says, "'Music is the central idea of creation.'" Prof. Cheney, to quote from his lecture, held that "all animated beings have some ability, vocal or instrumental, for making sounds,"

of all the monsters of both land and water, the voices of all animated beings, and inanimate things, forced them through her grand music crucible, and gave the essence to the birds."

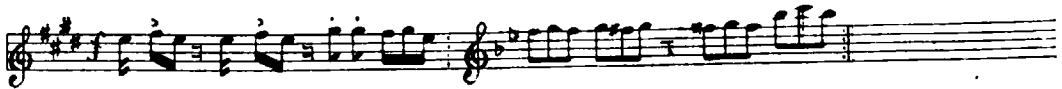
After great research and extensive observation Prof. Cheney concluded that "bird-music is very largely a matter of education, and it is by no means certain that it has yet reached its perfect-



SONG OF BLUE BIRD.



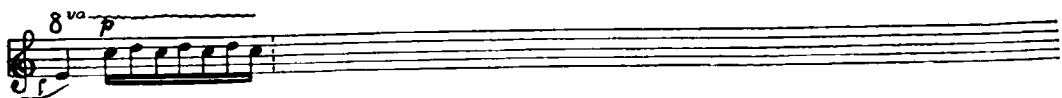
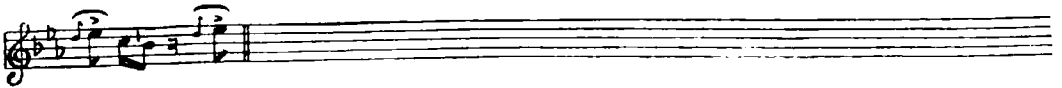
ROBIN'S MORNING SONG.



ROBIN'S SONG BEFORE RAIN. AT EVENING.



ORMOLE.



CHEWINK'S USUAL SONG.



IMPROVISATION OF CHEWINK RESEMBLING "ROCK OF AGES."

He believed that "birds were evolved, being first immense uncouth bodies, perched on two long, striding legs, with voices to match those of many waters, or the roar of tempests;" that "they were supposed to have had different notes, and to have learned from one another; that "nature, it would seem, finally gathered all of the hoarse thunders of the elements, the bellowing

tion." Bird-songs, he asserted, are not, as generally supposed, stereotyped, and cites the songs of various birds as proof. "Who," asked Mr. Cheney, and with truth, "can listen to any singing bird half a minute without hearing something inimitable and indescribable? Who would dare attempt a description of those delicate tremors that occur in the song of the meadow lark and some

other birds, the graceful slidings, shadings, and tremblings of the tones of the thrushes? But these are not the sum and substance of bird-music. These truly superhuman ornaments are not in the way of our comprehending what they do sing that is common with our own music.

The songs of many of the birds may be detected by a quick ear as readily as the melodies of Ortonville or Rock of Ages."

Mr. Cheney was convinced that "all the intervals of the musical scales now in vogue are to be found in the bird music." As his theories and conclusions are the result of close investigation, they would seem to be worthy of serious attention. He certainly proved the fact that he set out to establish; namely, "that birds, which are acknowledged to be the most wonderful creatures of nature, are *more* wonderful as musicians than in any other sense, and that their music is made

up of the same intervals that we use of both major and minor scales."

It is to be hoped that the interesting, nay, fascinating vein of knowledge discovered by Mr. Cheney will not soon be abandoned.

Copies of a few bird songs, kindly furnished by Professor Cheney, are given to illustrate the character of his study.

* * * *

Shortly after the above was written the author received the sad intelligence of Prof. Cheney's death. "My dear husband," writes Mrs. Cheney, "passed from this life May 10, after a short illness. The purest and best of men, he died very peacefully at last."

"His MS. for his book on Bird-Music is in the hands of the publisher, and will be published soon with illustrations. I am glad that this work, to which he has given so much of his heart and brain, is to be given to the world."

MARIE MERRICK.

A LEAF OF PERSONAL HISTORY.

WHEN I was a lad of about 14 or 15, a travelling phrenologist made his appearance in the neighborhood and lectured in the rural school-house nights, while by day he "felt" the people's heads at his lodgings for so much *per caput*. Unlike many itinerants of those days, this man was of genuine quality, being thoroughly versed in mental science, so far as it was then practically a science, expert in discerning and delineating character, and well read in cognate subjects.

For a country boy on a farm the writer was a studious and thoughtful specimen; but being naturally skeptical he took no stock in the phrenologist's system, then commonly termed, "bumpology." So, while the rest of the family went to hear the lecture, and maybe get their "heads felt," he stayed at home to keep the house. But they returned full of interest and even enthusiasm, es-

pecially my mother, who, by the way, was a woman of breadth and strength of mind, and a natural physiognomist, having a rare insight into human nature in general and individual character in particular. The phrenologist had examined publicly the heads of neighbors well known to her, and described their peculiarities and prominent traits so accurately as to carry conviction and establish his ability either as a "fortune-teller" or "bumpologist," just as the average countryman looked at the matter. At any rate the verdict of our folks was that there was *truth* in that new science, and as I had the fullest confidence in my mother's judgment I found my incredulity giving way before such facts and testimony. I decided, however, to investigate for myself, and, accordingly, proceeded to interview the phrenologist. Of course, like nearly everybody else, I knew myself "like a

book," and naturally thought if his science was true and the claims made for him well founded, he, too, would read me like a book.

Well, he did read me, even to the "true inwardness", and I came away from his presence a wiser (not man, but) boy, and profoundly impressed with the fact that there were indeed more things in heaven and earth than had ever been dreamed of in my juvenile philosophy. I was convinced of one wonderful fact, viz.: that either by science or some occult power this man was able to divine human parts and expose both the weakness and strength of the subject before him.

That day was, perhaps, the most important of my life. It was an epoch—a turning point—young as I was. With a mental-motive temperament, and a constitution not strong, there was a constant tendency to overdo and exhaust the nervous and vital energies; and the consequence was a very unsatisfactory development of health and strength. My good friend, the phrenologist, perceived all this and fortunately supplemented his remarkably accurate delineation—both physical and mental—with certain invaluable advice, to which I to day probably owe my health, strength, and even life. Among other things he said: "You are so much inclined to use up your strength and vitality faster than the vital system can supply it, except under very favorable conditions, that you will probably never reach adult age, unless you live hygienically, follow an outdoor occupation, and generally obey the laws of health."

I thank fortune—or fate—or whatever governs the world, that I had sense enough to take that advice, and resolution enough to follow it. My first question was, "What course shall I take to that end." In reply to this he wrote on the back of the chart, or summary, he had given me, the titles of a few books and said "Get these and read them, and then you will know for yourself what to do." Two of those books were,

George Combe's "Constitution of Man," and Dr. Andrew Combe's "Principles of Physiology." I sought the books in vain here, but finally obtained them by sending to the store of Fowler & Wells, New York.

I read these books carefully, and subsequently went through Graham, Trall and others. I altered my habits of life all through, where the conditions of health required it, and got myself as nearly as possible in accord with the inexorable requirements of Nature. But I must confess this was up hill work. Some of my so-called "notions" were laughed at, and the neighbors said I was surely "a little off" in my mind. But there was evidently a "method in the madness," for I very soon began to improve in health and grow in strength. Even at home I had opposition to the "new fangled notions," but my good mother was on my side, and she was a tower of moral strength to me. My brothers all died prematurely, and I alone survived, though inferior in constitution or vital stamina to most of them.

By the knowledge thus gained in youth, I have, in the face of constitutional predispositions, managed to preserve and maintain uniformly good health up to the present period of life, with the exception of illness on two occasions brought on by over work and deficient sleep. In these—one of which was very serious—I was my own physician, or rather Nature, kindly assisted, was my physician, and I fully recovered without a particle of medicine which I have let entirely and severely alone for upward of 30 years. For the past 25 years I have taken but two meals per day without nibbling, or lunches of any kind between them. While I would not advise everybody to adopt the two meal system, I do think that a large number of people—especially those of sedentary and indoor occupations—would be much better off physically and mentally on two meals than three or more. Bad eat-

ing, both in quantity and quality, is the cause of very much sickness and misery—of very much mental weakness and moral perversity.

This is an age of agitation, of unrest, of reforms—projected and actual—moral reforms and social reforms. But they are mostly worked from the wrong end, and hence the failures. True and successful reformation must begin with the individual. It has its roots in the eating, and drinking, and dressing, and sleeping, and working, of every-day life. Teach the embryo citizen *how to live*

aright and then you have rightly begun the great work of moral and social reformation and regeneration.

First, "know thyself." Then know the conditions of physical health, of mental and moral health, and adjust yourself as well as may be to that environment of nature and circumstances with which you find yourself surrounded. This knowledge, and this action of adjustment on the part of the individual, are at the root of all genuine reform—of all enduring progress.

Selby, Ont.

ALLEN PRINGLE.

NOTABLE PEOPLE OF THE DAY.—No. 84.

ABDUL HAMID—SULTAN OF TURKEY.

A LITTLE talk about matters Oriental comes easy in warm weather, and we are not aware that our interest, however lively it may be, renders the action of the sudiparous glands any more liberal than common. The psychologist will probably say that when our attention is fully occupied by an interesting subject we are not likely to notice so simple a cutaneous state as a little additional perspiration which the collateral suggestion of a warmer climate might have induced. At any rate, it is not out of place to glance across the ocean and across Europe to that country which for so many years has held the key of the Eastern question.

If we were to believe half that is told of Abdul Hamid, Sultan of Turkey, we should figure to ourselves a man of remarkable virtues and an exceptional mind. A very model, indeed, fit for the imitation of most Christian sovereigns and rulers. We are told by one writer that his life has little or nothing of that romantic setting we are so fond of attributing to the Oriental prince, and doubtless when most of us come to consider it in detail we will confess to disappointment and really regret that the cold civilization of Western Europe has made such changes with social and political affairs in the East. Abdul has

only four legal wives, "to none of whom does he show special favor." He is bound, however, by the law and custom of his race to take care of 300 other wives, each of whom has four eunuchs and six female servants to wait upon her, besides a full establishment of horses, carriages and grooms. We are told that if the Sultan were to cashier his whole female establishment he would certainly be deposed or murdered. He has to keep on marrying in order to save his life. Six thousand persons are fed daily at the Dolma Bagtche Palace, twenty men are kept constantly buying fish for the Palace, and forty others have to carry in the fish that are bought. Ten tons of fish a week are eaten, and nearly nine tons of bread a day, one ton of rice, 600 pounds of sugar and other things in proportion. Think of such a "domestic" establishment!

Abdul Hamid gets up early. His toilet does not detain him long; indeed, it might detain him longer according to European codes. When dressed he at once devotes himself to recite the prescribed prayers, after which he drinks a cup of black coffee, and soon after that begins to smoke cigarettes, a pastime that he continues all day almost without intermission, for he is an ardent smoker. Breakfast ended, he arranges

family affairs when these require his attention, as is almost always the case with so large a family, and of such varied ages and needs. This done he quits the harem and goes into the selamlık. Here he receives the reports concerning Court affairs. Toward ten o'clock his Court secretary and chief dignitaries appear, bearing the day's despatches and reports. These handed in, the Sultan seats himself on a sofa

or some high dignitary. After taking two hours exercise in the air he returns to his sitting-rooms, where he holds an open reception, or else presides over some committee meeting. An hour or two before sunset he once more goes out to walk. His dinner is as simple as his lunch. His favorite food is *pillaffe*, sweets, and a very little meat. He never touches spirituous liquors, in due obedience to the commands of the Prophet,



with these documents on his right, on his left a pile of Turkish newspapers and extracts from the European press, translated into Turkish for his benefit by a translation bureau specially appointed to that end. His lunch, which follows the despatch of this business, is most simple—a little meat, a fair amount of vegetables. The meal ended, he takes a walk in the park or rows in a little boat upon one of the lakes it incloses, always accompanied by a chamberlain

but he drinks large quantities of sherbet and eats a great deal of ice cream. Dinner and digestion over he receives company in the selamlık, or he retires into the harem, where his daughters play and sing to him. He himself on these occasions will often seat himself at the piano, an instrument he plays fairly well. For painting—for the fine arts in general, he has no taste. His women, too, find him very cold, but he is devoted to his children, and also much at-

tached to all the members of his family. Thus we see that for a Sultan, Abdul's life "breaks the record" completely of his long ancestral line, and were it not for the cigarettes would indeed be quite commendable. There is much of the racial type of mentality shown in the face and form. He looks a little apathetic, probably because of the narcotic effect of the tobacco he is almost constantly burning. The perceptive intellect is marked, and he should be known for good capacity in observation, and good practical judgment. The fullness apparent in the centre of the forehead shows power of attention and memory of details. His constitutional vigor does not appear to be of a high grade, as there are suggestions of digestive weakness, and incompetent oxidation of the blood. We should not wonder if there were symptoms of heart disturbance pointing to his inveterate tobacco habit as a leading cause.

In appearance he is of medium height, well proportioned. His beard, cut into a slight point, is black, so are his hair and eyes. The latter are tender in expression, but also penetrating, and he looks his visitors full in the face with a scrutiny that seems to read their thoughts. What destroys the pleasant first impression made by these eyes is the constant look of uneasiness in them, and the fact is the Sultan experiences the truth of the old proverb, "Uneasy lies the head that wears the crown."

EDITOR.

WHILE WE ONLY SEEK FOR FLOWERS.

WE'LL find no fruits substantial while we only
seek for flowers,
This truth did struggle to me long ago in
youthful hours,
When I thoughtlessly would wander o'er the
fields of joy and light,
Only taking blossoms with me when return-
ing home at night.
Fruits substantial hung above me, just beyond
my careless hand,
But the strength required to pluck them I
could never quite command,

But I'd turn my head in rapture to the flowers
that lay below,
Handfuls of them would I gather, and away
would laughing go.
Fruits of knowledge, such as grammar, I would
never strive to win.
Toiling up to mathematics I would ne'er the
task begin;
Fruits of history and language grew upon a
tree too high,
I'd admire them from a distance, but to reach
them wouldn't try.
Others I would see uptoiling, —smiling, happy
as they went;
Oft it grieved me that I lingered in a sluggard's
base content.
Then I'd turn to dreams and fancies that
would lead me far away
Through the fields of joy and laughter, fields
of never ending play;
Till the passing years informed me, with a
crushing pain for once,
That I slept within the regions of the pitied,
hopeless dunce.
Then this truth came strong upon me, and
aroused my sleeping powers:
We will find no fruits substantial while we
only seek for flowers.

JAMES NOEL JOHNSON.

NEW LEADERS are rising still in art, science and medicine everywhere. A brilliant and popular editor sits in his chair sending forth to the masses, the thought of to-day and the thought of yesterday; pages that every evening sees die, and every morning sees revive. Fire, wind, and water multiply and spread them abroad—from town to town, from kingdom to kingdom. So far may shine one man's soul, beaming in one man's face; with his own torch everywhere rekindled he may lead to revolution in censorship, custom houses, prisons, and police, and outreach the majesty and power of royalty itself. The world wants to see the pictured faces of its great men, and everywhere we buy them and borrow them, and treasure them, and frame them, and how far we go to see the real living, noble face. How often we bend over the casket to look upon its sublimity in death.

M.

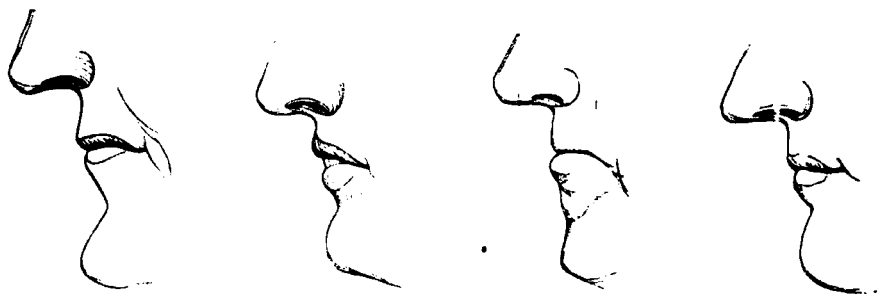
STUDIES FROM LAVATER.

THE MOUTH AND CHIN.

THE mouth most and best expresses the emotions of the mind. "How full of character is the mouth," says Lavater, "whether at rest or speaking, by its infinite motions! Who can express its eloquence even when silent? The forehead shows what a man is by nature or what he may become, but when you wish to know what a man actually is, look at the motionless closed mouth." Most that makes one man's face nobler or uglier than another, is expression, and most of the expressional muscles centre or concentre in the mouth. The Risorius, or laughing muscle, opens and wreathes the lips with mirth. The Orbicularis muscle firmly or gently closes the lips, its tracing

nose, but character, care and culture will change and improve the mouth and give it beauty and expression. Every mouth is a history.

A noble life will reveal itself in the mouth. A worthless life will show itself in the truth-telling lines and curves of the never to be mistaken lips. We all can and do change the expression of the mouth. How much the silent mouth can say. It can cheer, inspire, repress, depress, dishearten. The mouth keeps pace with the mind growth. Year by year of toils, struggles, triumphs, gives added firmness, dignity and sweetness to the mouth. More than every other feature, I think, the mouth expresses serenity, endurance and the



TYPES OF MOUTH AND CHIN. HIGHER FORMS.

fibres surrounding the mouth and giving delicate fullness or sensual grossness to this most expressive feature of the face. The Triangularis and Levator, the Quadratus and Buccinator, with the other wonderfully working muscles of the mouth give to the lips their curving and caressing, their pouting and pursing, their primming and pretending, their praying and pleading, their questioning and quivering.

The mouth is the chief seat of courage and cowardice, strength and weakness, magnanimity and meanness. Here first are seen triumph and tribulation, terror and temptation. We can not change the form or curve of eye or

most beautiful of all traits—resignation.

Years of devotion to others' happiness will give the mouth a growing beauty and nobility of expression. I have seen in a face outlasting nearly a century of time with a brow seamed with sorrow and eyes faded with tears, a still beautiful and expressive mouth. No face can be beautiful or agreeable with an ugly mouth; no face can be very plain with a beautiful or well-proportioned mouth. We associate some idea of beauty with the face of every eloquent man who has spoken to us words of cheer or inspiration.

"The wisest and best men," says Lavater, "have well-proportioned under

and upper lips evenly developed and full. Every eloquent man has lips at least moderately full. Large mouths indicate more character than small ones, but very large lips always denote a gross, sensual, and sometimes a stupid or wicked person. A calm, uncontracted, unconstrained mouth with well proportioned lips, with a mild, tender, easily movable, finely lined, not too sharply pointed forehead, should be revered as sacred. A mild, overhanging upper lip generally signifies goodness. Well-defined, large and proportionate lips, the middle line of which is equally serpentine on both sides and easy to be drawn, are never seen in a bad or common countenance."

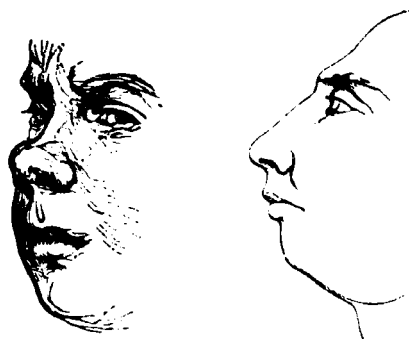
There are many good persons with projecting under lips, but they have more of a cold fidelity to goodness than an ardent love for it. A naturally closed mouth, not sharpened, nor affected, denotes courage and fortitude. The open mouth always closes where courage is indispensable. "In moments when great determination is required, how firmly we see the lips close. A mouth slightly open shows a frank, outspoken nature." We see this in some very noble, lovable faces, like that of Queen Victoria. "A straight middle line of the mouth is a sign of strength and hardness. Lips very thin, a little more than a line, show coldness and quiet, yet industry, precision and order. These very thin lips drawn upward at the end show vanity, pretension, affectation, and often deliberate malice."

"When the ends of the lips sink conspicuously and obliquely downward there is little love in the heart and no reverence on the lips. In every scornful, contemptuous glance, we notice the oblique depressions of the ends of the lips. When the under lip and teeth project horizontally, we find stupidity, rudeness, malignity or avarice, always one of the traits, often all."

Perhaps, unconsciously, we judge of character more by the mouth than all of

the other features—but eyes and mouth in harmonious faces match each other and sometimes make a very plain or peculiar nose appear very well. The eye smiles above it, the mouth smiles beneath it. How many faces we see and admire with beautiful eyes and mouth, and a rugged nose between, whose quaint individuality we really like in its harmonious surroundings.

The courtesy and cordiality of greeting is shown first in the welcoming, genial, silent mouth. Before a word is spoken the soul rallies and centers there. When the tongue prevaricates, dissimulates, the silent lips, when unobserved, may tell the truth. "A collection of the motions of a single countenance, particularly the mouth," says Lavater, "would provide



VICIOUS.

IMBECILE.

a history of the human heart and demonstrate what an arrogant thing the unformed heart is, and the perfection it is capable of from the efforts of reason and experience." The portrait of one face taken every year from babyhood to mature age would be a gallery of most expressive pictures, showing the growth or determination of character most seen in the mouth.

Lips show refinement or coarseness of taste. "The sense of touch is represented in the human face chiefly by the lips. They touch the food before communicated by the teeth and tasted by the tongue. The mouth in inferior animals takes the place of our fingers and seems to be the sole organ of touch. We see little, and grown, people, too, smacking

the lips with great delight in the appreciation of some delicious morsel, some delicate flavor. The lips are the representatives of taste, perceiving the sweet or bitter, the rough or smooth, before the tongue touches or decides upon it. The French have a very sensitive and refined taste for delicacies, and they have very fine lips, many of them.

Physiognomists tell us that lips gently held in or drawn backward toward the angles give an expression of coolness, self-control, and precision. This shows correctness and precision of speech, manner, and business transactions. We



STEPHEN A. DOUGLAS.

see this in grammarians and lexicographers, often in teachers. "There are," says Dr. Redfield, "eight distinct signs of character in the breadth of the round muscles surrounding the mouth, and giving perpendicular length to the lips. The length of the white part of the upper lip in the centre shows concentration," and the power of observing minutely and persistently life's least little things. In Lavater's own face we see very plainly this sign of power; the length of the upper lip, on each side of this central white part shows comprehension, the power of taking broad

views of things. We find that great painters have a length of upper lip just below the opening of the nostrils; this shows a power of application, of patient and continuous labor. In the length or fullness of different parts of the lower lip we find the love of traveling, the love of home, the love of country, the love of man, or philanthropy. This last trait was seen in the fullness of the lower lip at the angle of the mouth in Washington's face.

There is a great deal of expression in the lower lip. In the faces of well-born, happy, bright children we often see mouths with faultless beauty—lines, curves, and expression perfect. A few mouths through life seem to keep this winning charm. They are almost as rare as a star in the storm.

"Certain faces," says Lavater, "have certain keys of voices, one principal tone by which the others are governed, and in which the man always speaks when unimpassioned; so we learn by comparing many voices and faces to find from the silent face, what its natural key or tone may be." Some voices sound as if they come up from some deep, dark dungeon, others as if they come down from some celestial height, others like a stream over rough, intercepting pebbles. And the key of the voice is in the face. Each man has his way of saying yes or no. Some say no, as if they would throw a stone at you, and another's regretful, courteous no is better than a harsh man's yes.

The voice will always acquire the good or bad properties of the character. A mouth with the curves slightly drawn down will say yes, with seriousness and gravity. We see this gravity in the mouth of Jefferson. When the corners of the mouth are depressed a little more, we have a gloomy, melancholy face, and a sad, joyless nature, and the yes will sound gloomily. Such mouths seem to say, "Well, it can't be helped. The world is full of trouble." We see in the upward curving of the corners of the

mouth in other faces the disposition to see the bright in everything, to find and to give all the pleasure in life, and to enjoy fun everywhere. "It will all come out right," the lips say. Our greatest humorists have these mouths. When highly amused every mouth for the time laughs into these upward curves; Cervantes, Rabelais, Sterne, and Joseph C. Neale have these signs of mirthful-



A SENSITIVE MOUTH.

ness. Lavater says, "that the character of benevolence is sometimes only visible in the form, position, and color of the teeth, that long teeth are certain signs of weakness and pusillanimity, that white, clean, well-arranged teeth, visible as soon as the mouth opens, but not projecting, nor always entirely seen, he has never met with in adults, except in good, honest, candid, faithful men. There are exceptions of good persons with uneven or ugly teeth in cases of sickness or some mental imperfection. "Persons whose gums show greatly in talking or laughing are usually very commonplace people and inclined to some form of scrofula." Whenever the upper gum is very visible at the first opening of the lips, the man is generally cold and phlegmatic.

THE CHEEKS.

Prominent cheek bones show an energetic, strongly-marked character; clearly curved cheeks, but not full or round, show intellectuality and culture.

In our bravest soldiers we see a square upper face, a prominence of the cheek bone under the outer angle of the eye, and a little higher yet in the lateral projection of the molar bone we see the sign of the ability to conquer difficulties, to attack enemies. Such a nature loves the storm of war, loves the din of battle and the roar of thunder. Great warriors not only, but great surgeons who carve their way through disease and deformity, have this form of the molar bone. The boy with it, is first at the fire or in the crowd; the man with it, likes to rule the storm on land or sea. In different conformation or projection of the cheek bone "you find the signs of the love of graceful motion, of watchfulness, or of the love of rest." Persons who have great perpendicular breadth or downward projection of the cheek bone like rocking chairs and lounges and cushions. Lavater says the presence or absence of strength in man is often signified by the chin. The projecting chin ever denotes something positive; the retreating, something negative. Sharp indentings in the middle of the chin are found only in men of good understand-



A TESTY FELLOW.

ing. The pointed chin is generally thought to be a sign of acuteness and craft, yet the best dramatic poets have often this sort of chin. The soft, fat, double chin generally points out the epicure.

The angular chin is found only with

discreet, well disposed men. Flatness of chin speaks the cold and dry; smallness, fear; and roundness with a dimple, benevolence. A long, broad, thick chin—I speak of the bony chin—is found in rude, harsh, proud, and violent persons.

Great length downward of the chin shows self-control, self-will. Length of the lower jaw downward back of the chin shows resolution, perseverance, executiveness, and the ability to control others. We see this in Caesar, Napo-

loving nature, often willing to love a plain, unattractive object. The broad, square chin shows a passionate, jealous, distrustful, violent love. The broad, round chin shows great ardor, patience, endurance, or affection.

"The length of the lower jaw shows great tenacity of purpose, stability, perseverance, and decision. A retreating chin shows the lack of all these. The undeveloped races of men have all narrow, retreating chins." Those with



AN ANARCHIST.

leon, Jackson. A large fullness under the chin, a double chin, as it is called, indicates economy. The affectional nature is very often determined with considerable accuracy by the form of the chin.

A pointed, narrow, round chin shows a character capable of congenial love. Persons with indented chins greatly prize love and admiration.

The narrow, square chin shows a very

wide, long chins are said to be conscientious and heroic. We see the nobility and beauty and decision of the chin in the face of Elizabeth Ney, the German sculptor. In the face of Anna Dickinson, also, we see in the long, well formed chin great decision and resolution and perseverance of character. We see this chin in the faces of most all of our great men. "The chin is the seat of heroic character."

I have never seen a face with a beautiful chin that I did not admire. With a dimpled chin you find a social, sunny, and loving nature. When one striking dimple is seen the tendency of the system is apt to partake of the same character.

Persons of a dimpled nature will be extremely musical in soul. You see the deep indentations in the beautiful chins of Mozart, Beethoven, Bach, Von Weber, Handel, and also a central fullness and graceful curving of the lips. There is a striking resemblance in all these faces

in the indentation above the center of the upper lip. By the form and mobility of the mouth we may measure the power of imitating sounds. "These powers of imitation are seated in and around the mouth." One might hide all the face but the mouth and chin in the pictures of great musicians the mouth especially would tell their musical story. Of all personal beauty I think a tender, thoughtful, resolute, noble mouth, with its almost always the accompanying harmonious chin, most desirable, most attractive.

LYDIA M. MILLARD.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

GEORGE COMBE, 3.

About that time also Sir William Hamilton came out as an opponent to Phrenology in an address delivered before the Royal Society of Edinburgh, in 1826, and repeated it in 1827 before the same Society, but the rules of the Society did not admit of a reply to his arguments, and therefore the phrenologists solicited a publication of the address, in order that they might have a fair opportunity to test it and reply, but were unsuccessful in every endeavor to meet Sir William. The discussion—chiefly by correspondence—was extensive and earnest, but can not be detailed here; and neither side acknowledged a conviction of error.

Combe's theories of nature made him tolerant of all human weaknesses. Apart from Phrenology, he was remarkably well balanced mentally; earnest, eager, to see the right and to do the right, and to secure happiness in this world and the next for his fellow creatures, fervently believing in an all-powerful and *benevolent* Creator, and fervently believing himself to be an humble apostle of Christianity at the time when he was most loudly accused of infidelity.

Owing to the controversy with Sir William Hamilton and the discussions regarding the natural laws of the Constitution of Man, Phrenology occupied a

more prominent position in Edinburgh than ever before, and it was about this time that Combe was presented with a pair of silver calipers by a number of ladies as a token of their appreciation of him as the first lecturer on a serious subject who had admitted women to his classes. He had a few staunch friends, but by others he was socially ostracised because of what were supposed to be his religious views. Their moral eyes were not like his, and therefore could not see the harmony between nature's laws and the laws of *their* God. Whatever humanitarian project was advocated by him was suspected of being a phrenological and therefore an infidel scheme, and of course to be avoided; hence if he desired its success he had to withhold his interest and let others accomplish the object. "The evangelical party regarded him as a dangerous infidel, and would not be associated with him in anything, however good the object." He did not even profess to assist his dear friend Dr. Welsh when he was called to Edinburgh, lest he might thereby be an injury instead of a benefit. It was in June, 1828, that 1500 copies of his "Essay on the Constitution of Man" were published by Anderson, of Edinburgh, and Longman, of London, Combe having omitted—in deference to the evangelical

party—portions on human responsibility and that relating to the lower animals, yet he could not understand how his ideas on those topics could in any way be opposed to a belief in eternity, and “asked those who called them heresy to tell him everything that he recommended them to do, which, according to their religious views, *ought not* to be done, and also to tell him what he had advised them not to do which they thought should be performed.” Mr. Combe considered that the fundamental principles of the doctrines presented by him were demonstrated by Jonathan Edwards and other eminent and orthodox philosophers and divines, and the objections of his opponents did not convince him that he was in error; therefore he did not swerve from the position he had assumed. Thus discussions went on, and of course everybody wanted to see the book about which so much was said *pro* and *con*, and thus its sale was enhanced.

Spurzheim resided in Great Britain at that time, lecturing in the larger towns of England, Scotland, and Ireland, before large audiences of intelligent and erudite persons. It was in August, the 22d, that Dr. Gall's fatal illness terminated. Immediately upon hearing of Gall's danger Spurzheim hastened from England to see him, for Gall had expressed a desire to see him; but he was too ill, on Spurzheim's arrival, to see any one except his physician, therefore the two coadjutors of the early days of Phrenology did not meet again in earth-life.

In April, 1829, Combe accepted the invitation of fifty inhabitants of Dublin and delivered sixteen lectures to audiences averaging one hundred and fifty in number, including clergymen, physicians, barristers, Fellows of Trinity, and ladies. He was gratified by the attention of his audiences, and his receptions, socially and publicly, which were most cordial. He visited the public institutions of Dublin, and put his science to test by examinations of heads of patients

whose peculiarities had previously been written down by their physician, and contrasted the two delineations. The agreement in twenty-three cases thus contrasted in the lunatic asylum was deemed very striking. One important result from this visit to Dublin was the establishment of a phrenological society there, numbering among its officers members of the legal, medical, and clerical professions. By his influence, also, Spurzheim was induced to lecture there the following spring, attracting large audiences and creating a still greater interest in the science, which became very popular.

In 1829 Combe was maturing the plan for his work on moral philosophy; but it was not till the winter of 1835-36 that he formulated his ideas on moral philosophy into a system, by a series of lectures to the working classes. He thought much on this subject, and made copious notes on the great problems of religion and life.

In 1828, when writing of Calvin and Socinus, he made this observation: “In my humble opinion, a new translation and a new interpretation of the Bible will take place in half a century, and it will then be received in reference to the actual nature of man in general, and not in reference to any individual, however great his talents.” His ideas of religion had now assumed definite form, but were not published till several years later, when they were more matured and he felt that what he wrote would be useful to mankind. He gave frequent expression to the thoughts evolved from his new philosophy, “proclaimed Phrenology to be the philosophy of Christianity, the true expositor of God's will and man's duty.” He said: “In point of fact I feel myself to be animated by a pure love of God and of truth, and to be pleading the cause of religion and of human nature against venerable error and mental bondage.”

In the winter of 1831-32 a lull took place in the public mind in Edinburgh

regarding Phrenology, and Combe did not give his annual course of lectures there, but in other directions the science flourished, and his pen was not idle. "It was in 1831 that he wrote an article for the PHRENOLOGICAL JOURNAL entitled 'On Human Capability of Improvement,' the theory of which was, that despite the teaching of ministers that man was all bad and incapable of good, he had been endowed with certain faculties by his Maker, which, if properly used, would result in benefit to himself and to his fellows." These ideas were too strong and new for some of his followers, and in his defense of them he said :

"I announce what appears to me to be truth of greatest value, yet by piecemeal and at long intervals; yet I can not, under a sense of moral duty, keep it all back from the world until they shall be disposed of their own accord to coincide with it. This would never be the case if nobody advanced new and unpopular ideas." . . . "Phrenology appears to me to be a stupendous discovery in relation to the moral world, and destined to be the fountain of a thousand blessings." "It is *impossible* that such a discovery can fail to be important in rectifying error and carrying mankind forward to unattained good, operating on ancient opinions and opening up new views." "I would rather die a martyr to bold truth than perish of timidity to announce it." "Other phrenologists have gone in the face of everything I proposed in the way of moral application of the science, and so far as they are concerned I am left without a guide; but the long day will settle all. I lately heard Sir William Hamilton say in company that he was now satisfied that 'Phrenology, if true, was the most important discovery that ever had been made since man was created.'

Would such a conviction have been produced if no views of its application, such as I have advocated, had been given?"

From the above extracts it is evident that Mr. Combe struggled against strong opposition to his deepest convictions. To Dr. Welsh he wrote on this point as follows :

"I refrain from stating many ideas that appear to me true and useful out of deference to evangelical opinions, although my conscience often upbraids me for doing so. My hands are restrained by my friends much more than by my own inclinations. I fear that when I come to die the forbearance which I practice on this subject will lie heavy on my conscience."

Having a clear and receptive mind, he saw the true philosophical bearings of the science, while but few besides him and his immediate family, especially his brother Andrew, were able to keep pace with him. Between them there was an understanding and similarity of ideas, and when, in 1831, Andrew expected to survive but a short time because of developed consumption of the lungs, George gave expression to intense regret at the prospect before them, saying, in a letter to Andrew : "You have been half of my intellect, and more than half of my affections, and I feel that without you I would not be a quarter of what I have been. Before this day twelve months I may be as you are now. Let us find resources in God, and in His laws, of which our philosophy is a transcript."

Notwithstanding the "lull" in the expressed interest in Phrenology in Edinburgh, the accounts with the JOURNAL showed that never before had its receipts exceeded its expenses for paper and printing, as there were "thirty shillings" over between the first of July, 1830, and the same date for 1831; but Andrew's condition had a depressing influence, and Mr. Combe said that he did not see how they could get along without him, but he yet firmly believed that the cause did not depend on either of them, or on any individual. Although Dr. Combe's health was so low that recovery seemed impossible, he gave implicit obedience to those laws of health which he in 1832 gave to the world in his "Principles of Physiology applied to the Preservation of Health," and thereby continued to improve in health from 1832 till 1841, after which it was not so good, but he

lived till August 9th, 1847, having aided his brother in diffusing a knowledge of Phrenology and Physiology in many ways by the writing of essays and books. As this is a sketch of George and not Andrew Combe, the above must suffice for the present, but only with the understanding that Phrenology owes much to the efforts of Dr. Andrew Combe.

The year 1832 was an important one to Mr. Combe. In that year his "Constitution of Man" was being translated into French, and completed in May of 1833. In April he, by request, gave six lectures on the treatment of the insane to the large class of Dr. Macintosh, a teacher of the theory and practice of medicine in Edinburgh. In May he began, by request, a course of lectures to shopkeepers, mechanics, and clerks, two evenings of each week, from May 7 to July 26. It was at these lectures that the trustees of the Henderson Bequest took the first active steps in fulfillment of their trust by supplying the students with two hundred copies of the "Constitution of Man" at a reduction of forty-five per cent. from its price.*

In 1831 Mr. Combe wrote for the *Scotsman* an appreciative review of Dr. Richard Whately's "Lectures on Political Economy," which led to an extended and very interesting correspondence between them, and finally to personal acquaintance. This was about the time that Dr. Whately was elevated to the archbishopric of Dublin.

Perhaps my readers will remember

* Mr. William Ramsay Henderson died May 29, 1832, leaving a bequest to the care of trustees for the more extensive diffusion and cultivation of phrenology and its practical application, "declaring that if I had less confidence in my trustees I would make it imperative on them to print and publish one or more editions of an 'Essay on the Constitution of Man Considered in Relation to Eternal Objects,' by George Combe"—in a cheap form, so as to be easily purchased by the more intelligent individuals of the poorer classes, and mechanical institutions, etc."

The trustees nominated in Mr. Henderson's deed of settlement were James L. Amy, George Combe and Andrew Combe, M. D., to which were added James Simpson and William Waddell.

that 1832, in November, Dr. Spurzheim passed to the next life, only four years later than Dr. Gall's transition. It was a great blow to Combe, for it was from Spurzheim that he learned the great truths of Phrenology, and to him he looked for assistance in his advancement. Now "Combe was left as the sole chief of Phrenology, or, as one might say, the last of its three first apostles. He now stood alone as a leader of the new philosophy, and as the chief discoverer of its application to the affairs of life."

Dr. Capen wrote to Mr. Combe announcing the death of Dr. Spurzheim, and his American friends urged him to come at once and continue the work so auspiciously begun in America by Spurzheim, but he declined, feeling that at that time it was impossible for him to accept, under the then state of his business affairs; and later he received other invitations from America, for his name was kept constantly before the American people by an increasing sale of his books, which were read extensively and exerting great influence.

On Nov. 6 he began lecturing in the afternoon, and repeated it in the evening to the same class to whom he lectured from May to July. Among his afternoon auditors was Miss Cecilia Siddons, a "daughter of the famous queen of the stage." To her Mr. Combe was married on the 25th of September, 1833. They had become acquainted in 1831. In 1830 Mr. Combe wrote a congratulatory

On the 15th of April, 1836, the trust affairs and accounts were examined by an expert who reported the residue of the funds after deducting specified legacies and the expenses of administration to be £5,645 0s. 9d., subject to annuities amounting to £135 per annum. The total amount of the funds used for the advancement of the science from 1832 to 1840 was £466 12s., leaving a balance of the amount applicable to the purpose of £196 17s. 7d. For supporting the PHRENOLOGICAL JOURNAL one year the sum of £50 was used, and for reducing the price of the Constitution of Man, £360 15s. 2½d. The remaining part of the funds were applied, mostly, to the support and increase of the Phrenological Museum of the Edinburgh Phrenological Society, which has an interesting history.

letter to his friend the Rev. Dr. Welsh, on his approaching marriage. In this letter occurred the following sentence. "I trust you have got a lady with a large coronal region. This is the grand element, in my estimation. A woman with large, moral sentiments, fine intellect, and big adhesiveness is a perfect treasure, and is a companion meet for the best of men."

From this we would infer that Mr. Combe would select one with such a shaped head for himself, and from what he writes of her to his friends, this appears to be the case. His biographer says, respecting this, "He had married a lady of whom he was able to say, 'Our feelings and perceptions are so truly in harmony that one would think we had been bred together during life. This is the result of similarity of combination of brain. The anterior lobe of hers is large; her benevolence, conscientiousness, firmness, self-esteem, and love of approbation are also amply developed; while veneration and wonder (or spirituality) are equally moderate with my own. I have a full conviction that our happiness will be permanent, and I reckon myself to have set a practical example of my philosophy in marrying such a woman.'"

In 1828 Mr. Combe obtained Dr. Spurzheim's advice in regard to marriage, which was to this effect: "Select one whose higher faculties will act with your own." In a letter to his brother Andrew—the doctor—he says: "Every step that I have advanced gives me increasing confidence and satisfaction. She possesses that admirable soundness both of judgment and feeling, that render her ever interesting to my faculties; also an excellent balance between intellect and sentiment."

Mrs. Combe had literary aspirations, wrote some, and was successful as a painter of portraits. As a writer "her cleverest performance was a conversational explanation of the principles of Phrenology, intended for the use of

children at home and in schools; but it was not completed." His great admiration of her, and their strong and unabated attachment continued through the twenty-five years of their happy life together.

Mr. and Mrs. Combe entered into minute details in regard to their domestic and financial arrangements. Her fortune, which consisted of £15,000, was so arranged by him that the whole sum was settled upon her, and its control rested in her hands.

One of his arrangements was of a character to strike those who did not know the man, with wonder. He desired that in the event of his wife surviving him; she would permit his skull to be given to the Phrenological Society, remarking that "It will do me justice hereafter, should any curiosity exist regarding my qualities."

In charities he gave all that he could afford to those in need, allotting ten per cent. of his income to charitable purposes, and sometimes exceeded that proportion when his judgment saw fit to do so.

This year of Mr. Combe's marriage, namely 1833, was one of the happiest of his life, aside from that circumstance, for Phrenology made rapid strides in the estimation of the public, not only in Great Britain, but also in France, Sweden, Germany, and America.

"The French consul had applied for information to enable him to report to his government as to its progress; and there was some prospect of a professorship of the science being established in the University of Paris; many of the private teachers of anatomy in Glasgow and Dublin, and several in Edinburgh, now introduced it into their courses as the true physiology of the brain."

The sale of Combe's chief work—"The Constitution of Man"—since its translations into those languages, indicated the large influence it was exerting.

In 1834 Mr. Combe had become so popular that from all parts of the kingdom he was requested to lecture.

In the Autumn of 1835 Combe lectured acceptably in New Castle-on-Tyne, for the New Castle Literary and Philosophical Society. The Society paid him \$500 for sixteen lectures of an hour and a half each, delivered on four evenings of the week, which was double the amount they had ever before paid, and they did not meet with a loss, and the society itself increased in numbers.

In the Winter of 1835-36 he gave his course of lectures on moral philosophy to large audiences in his native city, Edinburgh, in the large Waterloo Room. He was again requested to lecture in Glasgow, which he did with great acceptance in April, 1836 to an audience of about five hundred, and "for which he received in money as the clear profits, £258, the net drawings from fees for the course at ten shillings sixpence each, and payment at the doors having been £298."

In October of the same year he delivered an equally successful course in Aberdeen.

Among the numerous invitations to lecture received by Mr. Combe about this time was one from Manchester, England, written by Mr. Richard Cobden, who drew up a requisition, to which he obtained the signatures of a large number of professional men and merchants, asking for a course of lectures on phrenology, and invited Mr. and Mrs. Combe to be his guests during their visit to Manchester, and stated that the difficulty they would have to overcome would not be to induce people to attend the lectures, but to find accommodation for all who would come. The lectures were given in April, 1837. Mr. Cobden and Mr. Combe being equally desirous to benefit their fellow creatures, were animated by a similarity of principles, and thus were so drawn to each other that they formed a lifelong friendship. Before lecturing in Manchester Mr. Combe gave a course in Dr. Mackintosh's class room, Argyle Square, Edinburgh. Thus we see he

was fairly launched upon the lecture field, and at very remunerating terms.

Of his qualifications for this position he thus writes to Mr. Cobden :

"One other point it is proper to explain. I was not educated for lecturing or public speaking, and I have a very broad Scotch accent, with a total absence of grace and eloquence. My qualities are clearness (when my dialect is understood), force of reasoning, and earnestness; and I have hitherto found these overcome all the disadvantages of my defects (of which I am painfully sensible), and render my courses of lectures, on the whole, successful."

WORTHY OF IT.

I MAY not reach the heights I seek ;

My untried strength may fail me :

Or, half way up the mountain peak,

Fierce tempests may assail me.

But, though that place I never gain,

Herein lies comfort for my pain :

I will be worthy of it.

I may not triumph in success,

Despite my earnest labor ;

I may not grasp results that bless

The efforts of my neighbor.

But though my goal I never see,

This thought shall always dwell with me :

I will be worthy of it.

The golden glory of Love's light

May never fall on my way ;

My path may always lead through night,

Like some deserted byway.

But though Life's dearest joy I miss

There lies a nameless strength in this :

I will be worthy of it.

ELLA WHEELER.

A DROPPED STITCH.

One small life in God's great plan ;

How futile it seems as the ages roll,

Do what it may or strive what it can

To alter the sweep of the infinite whole.

A single stitch in an endless web,

A drop in the ocean's flow and ebb.

But the pattern is rent where the stitch is lost.

Or marred where the tangled threads have
crossed,

And each life that fails of the true intent

Mars the perfect plan that its Master meant.

SUSAN COOLIDGE.

then he would tell him what he wanted him to do in the town where he was going to send him. But Combaticiveness and Approbaticiveness backing up Firmness and Self-esteem, says, "I want to send you." The man that is quiet about it, and does not show off, sends him all the same, he obeys his will, he makes the journey, fulfills the work, as well, and at the same time, so that authority really is as efficient in the one case as in the other.

When conscience nestles up under the wing of Firmness, it gives a moral sanction to determination; it seems as it were, to stand at a man's elbow, and whisper, "That is right, that is the way, walk ye in it."

When Self-esteem works upward toward conscience and Firmness, it seems to give stability to dignity as well as integrity to it, and a man is silent; he stands straight and walks with his head up. He does not stop to notice frivolous affairs, does not deign to mingle with common talk among common men about common topics. If men were arguing and disputing, and he were to be passing where they were and one would politely ask his attention, he would listen with dignity and respond to the question as if what he said was "the end of the law for righteousness," but that he had no particular desire to enforce his opinions or to insist on their being adopted. If somebody began to clamor against his opinion, he would lift his hat, and say, "Gentlemen, you asked me for my opinion, you did not ask me to controvert the matter," and he would pass on.

If, however, Self-esteem is developed downward, if the lower half of it seems to be large, and the upper half less so, there is a tendency to coercive measures; a man gives orders instead of suggestions, he commands instead of quietly saying "I would like to have you do thus and so." A man with Self-esteem well developed, but downward, makes a good boss; he will go into a crowd of men who are working and make each

man attend to his duty promptly; will hurry the crowd, and insist, and be imperative, and perhaps rough. Such men, if they are in the military service, will snarl out their orders as if they had a special relish in showing their authority in a rough and tantalizing way. Such men, if they can have good sense, and enough Secretiveness and politeness, are the ones to take charge of a gang of men who are to be urged and pushed in the work, but if there is too much Combaticiveness and not much Benevolence, nor Friendship, the man's orders are like the snarling of an angry dog, or the outbursts of tyrannical power, and occasionally workmen finish such a boss when they can get the chance to do it without imminent danger to their own necks.

A man with Self-esteem developed toward the moral sentiments, will have men who will obey every motion of his hand and are willing to obey every word he utters and they stand by him through thick and thin, and avoid "striking" against such a boss, unless the working men are co-ordinated by some labor union so that they are obliged to "go out" when ordered, and then they will send a deputation to the employer, and say, "We do not strike because we want to, but we belong to the association, and it is insisted on, and therefore we must; we hope you will not remember it against us, we have nothing to object to in your treatment of us, or as to wages; we are satisfied." And so they have mutual good understandings, and as soon as the strike is over, the men come back like so many chickens to the coop, happy. Some men are natural tyrants, besides being rough and unjust. Some are natural masters, and people are willing to be dominated by them, because the government is fatherly and just, and honorable and kind. Some lack not only the governing powers but they lack self-government. They seek a master-guide and ruler, and have too little self-hood for their own use.

JACOB H. SCHNARRENBERGER.

GENIUS seems to take delight in bursting its fetters, and in spite of difficulties and limitations marching to the front, and easily leading the rest of mankind. Talent follows the lines of precedent and makes progress according to the rule. Genius, like the flight of the eagle, does not follow graded roads or respect the fences of precedent that guide and restrain ordinary

He seems to be the offspring of the old era of invention, and the recognized father of the new. The world will learn that its inventors are its great men, and most deserving its cordial recognition and honor. Ducal titles pale before the gifts which genius displays in the world of invention.

Jacob H. Schnarrenberger, of Springfield, Ohio, a long and difficult



candidates for fortune. Ericsson stepped into new and untried ground and revolutionized maritime commerce by the invention of the screw propeller, which is now the rule on every ocean, and marine warfare by the invention of the Monitor. The name of Edison reminds us of his numerous "revolutionary" inventions, and awakens the wonder what his next forty years may do for mankind.

name, is destined to become a household word, as unforgettable as the name "Philoprogenitiveness" in Phrenology is, which has made itself remembered by the public, when the other forty-one faculties are but partially remembered or mispronounced.

Some years ago we wrote out the character of Mr. Schnarrenberger, from photographs, in the line of our daily

business, but of course lost sight of the fact and forgot him, until recently a business correspondence brought him to our notice in the following pleasant way :

SPRINGFIELD, O., May 12, 1890.
FOWLER & WELLS Co.,

GENTLEMEN: Inclosed find \$1.65, for which please send me the PHRENOLOGICAL JOURNAL for one year, and the Chart Premium.

I have sent you \$21.65 for books, etc., and I must say it has been the very best investment of my life. I could not in one day tell half the good that your works have done for me. I can now draw the curtain aside and see things as they are in reality. I have but little education, but you have placed me on the right road, and it will only require a short time now to obtain the education I so much desire.

Outside of relatives, I consider Nelson Sizer, who wrote out my character from photos some years ago, the dearest friend I have on this earth. I will be in New York some time this summer and will call and see you.

I hand you time card of our road, and if you wish me to send any advertising matter to our agents or others living at the towns named on the card, I will be pleased to do so free of charge.

I will send copies of the JOURNAL or any advertising matter that you may send me to our agents and others on the line, and you can command me to do anything in my power for the good work of Phrenology.

If I can only do some poor soul half the good that you have done for me, I will consider myself well paid for anything that I can do. I don't want money. I want a few rich rewards like the many that I feel sure have been placed to your credit on the books kept in heaven.

Pardon me for writing you so much, but my soul is running over with thanks to you for what your good works have done for me.

Refer any one you choose to me or command me to do anything to help the good cause along.

Yours with kindest regards,
J. H. SCHNARRENBERGER.

May 17, 1890.

ALBERT TURNER, Treasurer Fowler & Wells Co.,

DEAR SIR: Your letter of the 15th inst. is before me. Of the printed matter I can use to a good advantage fifty each of the following: "That Boy of Mine" and "My Cowboy Brother." Should you send more, I assure you they will be used to the very best advantage.

I grant you permission, as you request, to use parts of my letter of May 12th about which you ask, with or without my name, as you may choose.

I see you are advertising an "Adding Machine." I send you a clipping from one of our Springfield, Ohio, daily papers giving you a description of the "Adding Machine" I invented recently.

Yours with kindest regards,
J. H. SCHNARRENBERGER.

J. H. SCHNARRENBERGER'S ADDING MACHINE.

"A wonderful invention, which manipulates figures like a lightning calculator. Such is the adding machine for which letters-patent were issued.

During the last half century invention has lightened, by at least one-half, the labor of those who work with their hands, while at the same time the production has been increased in a still greater ratio. The hours of labor have been shortened, products are cheaper, and there has thus been created a demand for the comforts and luxuries of life, with those by whom a bare subsistence was formerly all that could be hoped for. But not until the adding-machine came to enable the accountant to perform the tedious computations of the counting-room by the mere operation of keys, had anything of importance been devised to perform brain work by machinery. The adding-machine, patented by Springfield, Ohio's young inventor, is complete in every detail.

It performs addition, subtraction, multiplication, and division, not only in whole

and decimal numbers, but also in common fractions. It is therefore evident that all mathematical computations can be performed by its use. It is neat and compact, weighs eight pounds, is twelve inches in length, eight inches in width, and seven inches high, and is an ornament to any office. The machine is made of hard rubber and fine steel, and hardened at all points which are subject to wear, the greatest degree of durability being thus insured.

All the mechanical difficulties which have heretofore been considered insurmountable in the construction of a practical mathematical machine have been overcome in the adding-machine.

The adding-machine is the first and only machine ever invented which will perform multiplication, division, or square root by the simple operation of keys. With a little intelligent multiplication, the results which can be obtained from it are astonishing to those who have never seen the adding-machine operated by one who is familiar with its use. With it addition can be performed simply by touching a key bearing the number to be added and standing in the proper column or order, all the columns being added at one time. It is only necessary to observe the rapidity with which keys can be struck on the typewriter and notice that the keys on the adding-machine are so arranged that one can learn to operate it much easier and faster than the typewriter, for one to realize the time saved by its use in addition, to say nothing of the entire relief from mental strain, which is even more important than the speed, because it leaves the nerves relaxed and the mind clear to apply to other work. The methods of performing multiplication, division, and subtraction, and applying them to computations, such as interest, exchange, percentage, etc., though somewhat difficult to illustrate in type, are nevertheless very simple in connection with the machine. A few days' practice will enable one to perform the following examples by its use in the time indicated:

54782 multiplied by 493; eleven seconds.

17325 divided by 67; six seconds.

What is the value of a bill of \$463.23 which is discounted at 16 per cent.? Seven seconds. In fact, by its use a novice can

perform multiplication, division, discount, etc., quicker than an expert accountant can in the old way; and this, too, with entire relief from mental exertion.

For those who have never seen this marvel of mechanical genius used by a competent operator in practical work, it is difficult to realize its value to those whose vocation requires that they perform the tedious and mind-destroying work of computing numbers, which from long service destroys their nervous system and impairs their future business. The adding-machine never has the headache, never was known to have an 'off' day, or to get 'rattled' in drawing off a balance."

—:O:—

A LADY'S LETTER.

FOWLER & WELLS CO.:

IN 1865, in compliance with your circular, "Mirror of the Mind," I sent photographs and measurements of myself and also those of a young man, for phrenological investigation and comparison (relative to marriage). In 1868 I sent the pictures of another young man, to whom I was married near the close of that year. The charts were written by Nelson Sizer, and I may here say, after twenty-two years, that I prize the charts highly and have never regretted the union. We have two girls and two boys, who are a real blessing to us. Yours gratefully, — —.

May 20, 1890.

—:O:—

A SUBSCRIBER from Nebraska writes: "Please find inclosed the money for this year's subscription. I would rather go hungry than do without the JOURNAL. My highest ambition is to some day attend the Institute of Phrenology."

—:O:—

THE AMERICAN INSTITUTE OF PHRENOLOGY opens its usual annual session the first Tuesday in September, and all earnest and worthy persons who wish to learn Phrenology as a science and an art, may send for "Institute Extra" for terms and full particulars. Address, 775 Broadway, New York.

CHILD CULTURE.

TRAINING IN SELF CONTROL.

A THOUGHTFUL observer writes on this subject :

A child who is trained to self-control—as a child may be—is already a true man in his fitness for manly self-mastery. A man who was not trained in childhood, to self-control, is helplessly a child in his combat with himself, and he can never regain the vantage ground which his childhood gave to him, in the battle which then opened before him, and in the thick of which he still finds himself. It is in a child's earlier struggles with himself that help can easiest be given to him, and then it is of greatest value for his own developing of character. Yet at that time a child has no such sense of his need in this direction as is sure to be his in maturer years; hence it is that it rests with the parent to decide, while the child is still a child, whether the child shall be a slave to himself; whether his life, so far, shall be worthy or unworthy of his high possibilities of manhood.

A child's first struggles with himself ought to be in the direction of controlling his impulse to give full play to his lungs and his muscles at the prompting of his nerves. As soon as the nerves make themselves felt they prompt a child to cry, to thrash his arms, to kick and to twist his body on every side, at the slightest provocation—or at none. Unless this prompting be checked the child will exhaust himself in aimless exertion, and will increase his own discomfort by the very means of its exhibit. A control of himself at this point is possible to a child at an age while he is yet unable to speak, or to understand what is spoken to him. If a parent realized that the

child must be induced to control himself, and seeks in loving firmness to cause the child to realize that same truth, the child will feel the parent's conviction, and will yield to it, even though he cannot comprehend the meaning of his parent's words as words. To leave a child to himself is to put him at a sad disadvantage in all the future combats of his life's warfare: while to give him wise help in these earliest struggles is to give him help for all the following struggles.

As soon as a child is able to understand what is said to him he ought to be taught and trained to control his impulse to cry and writhe under the pressure of physical pain. When a child has fallen and hurt himself, or has cut his finger, or has burned his hand, or has been hit by an ill-directed missile, it is natural for him to shriek with pain and fright, and it is natural for his tender-hearted mother to shrink from blaming him just then for indulging in this; but the mother has an unmistakable duty of helping her child to gain a measure of control over himself, so as repress his cries, and to moderate his exhibit of disturbed feeling. A child can exercise self-control under such circumstances. His mother can enable him to do so. It is better for both child and mother that he should have her help accordingly. Because of the lack of help just here many a child is a sufferer through life in his inability to control himself under physical pain. And because of this inability many a person has actually lost his life at a time when calmness of mind was essential to that endurance of physical suffering which was the only hope of prolonged existence.

Coaxing and rewarding a child into quiet at such a time is not what is needed; but it is the encouraging a child into an intelligent control of himself that is to be aimed at by the wise parent. It is only a choice between evils that substitutes a candy-paid silence for a noisy indulgence of feeling on a child's part. A good illustration of the unwise way of inducing children to seem to have control of themselves is given in the familiar story of the little fellow throwing himself on the floor and kicking and yelling and then crying out, "Grandma, grandma, I want to be pacified. Where are your sugar plums?" Dr. Bushnell, protesting against this method of coaxing a child

out of a state of irritation, in a fit of ill-nature, by "dainties that please the taste," says, forcefully, "It must be a very dull child that will not cry and fret a great deal, when it is so pleasantly rewarded. Trained in this manner, to play ill-nature for sensation's sake, it will go on rapidly in the course of double attainment, and will be very soon perfected in the double character of an ill-natured, morbid sensualist, and a feigning cheat besides." By what methods or means can the great themes of God and religion get hold of a soul that has learned to be governed only by rewards of sensation, paid to affectations of grief and deliberate actings of ill nature?

BABY'S RIGHTS.

TO be well born is the right of every child, and for this let the heart of man plead until, in the court of justice and humanity, the good cause be won. Surely there is no subject which should be put before the public in plainer or more forcible words, and none, I sometimes think, which this same public would more utterly taboo. Much learning and wisdom is devoted to the improvement of all domestic animals, but *the baby*—"Oh, well, its coming belongs to Providence! Who shall dare meddle there?" Who shall not dare? I say. Does "Providence", even, work without the help of man? To-day I read "Providence is not divine until we have added a human factor," and following it was this great, true thought: "Not even God himself can make man's best without best men to help Him," and where can Humanity better work with God than for the good of the little ones? If we are watchful and careful about the lesser matter, shall we not be much more so about the greater one? Should there be such a thing as a "chance maternity?" Should this office that is so high and holy be thrust upon any one? Should any child be born "under protest" as so many children plainly are?

Chadwick, in a brave sermon on "Gifts for the Children," says: "There ought to be a special providence in the birth of a child, a special human providence, or foresight, of the place and room which the new life will have to grow in, and orb itself into full symmetry of use and joy"—to which let every heart say "Amen!" and every will, every intellect be trained to put it into practical use.

Is it any wonder the child is born with low, degrading instincts and passions when the mother's heart is in hot rebellion over its coming? Is it strange that they come to us weak and ailing, when all the waiting time is one long protest of the mother's outraged nature? Strange that they are oftentimes cross and deficient, unlovely in face and in disposition, when their pre-natal growth is only tolerated, because it must be? No choice, no love, no glad fulfilling of woman's most sacred right in the beginning of the new life—only a stumbling along in a blind, passionate way, and then—"suffering the consequences!" No thought of whether it be best that another child should come into the home, no choice of time or circumstances, no planning for the holy baptism of motherhood! Oh, is it right

that this should be? Can our children be "well born," can they come to the fullness of love and joy which should be the heritage of every child, until men and women arouse themselves to an earnest consideration of these high things, and see to it that there is a special providence, human and divine, in the birth of each little one? There are few women who, happily wedded, would choose to remain childless, but no one likes to have "honors thrust upon her," even of this kind. No one likes to be so burdened with children that she must miss the glory and joyousness of motherhood, as many do. To the wife whose rights are cherished and respected, enshrined in the unselfish love of her husband, motherhood comes as the crowning blessing of life. The months of waiting and preparation are a hallowed time in which she feels herself to be working with God in creating an immortal soul, and all that is best and purest within her awakens to meet the needs of her child. She lives as in the very presence of God, her whole being having entered into that "holy of holies," where the secrets of love are made known. She "thinks God's thoughts after Him," and every day brings a fresh baptism to her

soul. "For the joy that is set before her," she bears all pain and discomfort uncomplainingly, and when, at last, her babe lies in her arms, she sees Love's imprint upon its little face, she traces the clear shining of purity and peace there, and all her heart melts in thanksgiving that "unto me a child is born." And this, *this* is the right of every babe. How do we dare deny it to them? How do we dare call them into the world with less than this? Oh, let us have a world-wide reform in the way our children are born, and there will be less need of reform afterward. Let men and women be earnest and true here, and it shall greatly help the world to move to "higher levels" of thought and life. My soul stirs with "righteous indignation" when I think of the wrongs which are heaped upon the defenceless children at the very threshold of life, and I am constrained to cry out against it with all my might. Men, women, everywhere, will you not join me in this crusade for Baby's rights! A "noble few" are working in this line now, but it is a work in which *all* must join if we would have the victory complete, and I call upon you each one to "fall in" and do your part.

EARNEST.

MORAL IMPRESSIONS IN COMMON LIFE.

IN the *Union Signal* a practical writer speaks of the influence of surroundings on the young people, in such terms as the following:

The child does not, as a general thing hear the same anxiety expressed with regard to the truth of an idea as to the stylishness of an outfit, nor does it hear the wonders of scientific discovery spoken of as enthusiastically as are the wonders of a display of millinery. In the common conversation it is likely to hear eager discussions over fashion plates; a great deal of gossip and of unfriendly criticism. It will see far greater leniency shown to a neglect of the Golden Rule than to a neglect of the observances of

society, far greater leniency shown to a gossiping defamation of character than to the wearing of a dress or gloves different from what society prescribes for the occasion. It will observe that the thoughts of the family are centered chiefly, perhaps wholly, upon their own interests. In regard to outward distinctions the child will see that persons placed by social position above its own family, are, on account of that position, held in respect; that their example is copied; their notice desired and courted and boasted of; their opinions quoted. This would be particularly noticeable in case of relatives who had attained to such position, while relatives in corre-

spondingly inferior position would be regarded with indifference. If its own family is in genteel circumstances, the child learns to look down upon "working people," and to consider labor as in a measure disgraceful.

Beginning at the top of the social scale and proceeding downward we see that a child is likely to learn, in the family, that appearing is more than being, that money-worth is more than character-worth, that wealth and social position are the objects chiefly to be striven for, and that success in life means success in gaining these. The emphasis is put in the wrong place, in a great many wrong places, as if in reading an important

paragraph the small words were emphasized—the *ofs.* and *ands*, and *thes*, and *tos*. What, then, can we expect other than that the child's mature life will be based on these unworthy ideas of values which are causing blight and ruin, and which are inbreathed, as we may say, from the home atmosphere. This home atmosphere is what the young and forming character feeds upon and grows from. Every expression of opinion, every chance remark upon people, every subject talked about, every motive appealed to, refinement or its opposite as expressed in speech, and manner, every one of these, as well as each word, look and tone, does its work on character.

COURTESY NECESSARY.

I TREAT him as well as he treats me," said Hal.

His mother had just reproached him because he did not attempt to amuse or entertain a boy friend who had gone home.

"I often go in there, and he doesn't notice me," said Hal again.

"Do you enjoy that?"

"Oh, I don't mind! I don't stay long."

"I should call myself a very selfish person if friends came to see me and I should pay no attention to them."

"Well, that's different; you're grown up."

"Then, you really think politeness and courtesy are not needed among boys?"

Hal, thus pressed, said he didn't mean that; but his father, who had listened, now spoke:

"A boy or a man who measures his treatment of others by their treatment of him, has no character of his own. He will never be kind, or generous, or Christian. If he is ever to be a gentleman he will be so in spite of the boorishness of others. If he is to be noble, no other boy's meanness will change his nature." And very earnestly the father

added: "Remember this, my boy: you lower your own self every time you are guilty of an unworthy action because some one else is. Be true to your best self, and no boy can drag you down."

DREAMS OF CHILDHOOD.

OH, why am I gloomy to-night
While dreaming of days that are gone,
Of childhood so happy and bright
And joys that forever are flown?
I'm dreaming of hopes that are dead—
Hopes gone with the fast fleeting years;
And I pillow my weary head—
To weep bitter heart burning tears.

Dear mother, I'm thinking of thee
And those happy days without care,
As morning and eve at thy knee
I would offer my simple prayer.
They have laid her away to rest
Where the long weeping willows wave—
And my hopes and joys which were best
Lie buried within her lone grave.

The child is no longer a child,
Though the seasons seem still the same—
And to-night, with heart passion wild,
I yearn for my childhood again—
Then give me, oh, give me to-night,
If only a dream of those years—
Which promised a future so bright—
A future I find full of tears.



MEDICAL SCIENCE IN CHINA.

A PAPER READ BEFORE THE N. Y. ACADEMY OF ANTHROPOLOGY, APRIL, 1890.

THE aim of this paper is to give some of the Chinese ideas of the nature of disease and theory of treatment, rather than to sketch briefly the changes wrought in the past fifty years by the introduction of western medical and surgical science.

This empire has been fitly compared to Lot's wife, ever looking backward, wedded to the past. Confucius taught the nation that its work was not to create but to conserve and transmit. The usages of centuries have crystalized into unvarying forms. Life and thought move on through ancestral grooves, and that which is inquisitive, inventive, progressive, is viewed with suspicion, if not at once rebuked as seditious. In its exact, comprehensive sense, science has no existence here. Theories, speculations, traditions and superstitions abound, as seen in astrology, geomancy, and medicine; but that cautious, candid, thorough investigation of facts, which we call scientific study, does not find an ally in the Chinese mind. The people are, moreover, fettered by a language pronounced by Prof. Williams to be "the most meagre and tedious of all tongues." Though the most ancient, it is probably the most intractable of spoken languages, making the Chinese scholar indifferent to other tongues be-

cause it is impossible to study them through the medium of his own. All the terminology of chemistry, medicine, and natural history remains in Greek and Latin, but how to adapt technical western science to the genius of this language is not easy to decide. Prof. Williams also points out the indistinctness by which time is expressed; the confusion of common and proper names; the absence of punctuation, paragraphs, sentences, capital letters and other helpful signs of speech which native conceit forbids and ridicules. Prejudice and ignorance, however, are greater obstacles than linguistic difficulties to the spread of modern science. This will be seen as we turn to the subject of medicine.

The literature, such as it is, is very copious. During my residence in Canton Hospital I have had access not only to libraries, but to other sources of information as to native medicine. One is amazed at the patience and industry of Chinese scholars in collecting observations in various departments of research.

One work on *Materia Medica* and *Therapeutics* appears in 40 volumes, and 756 other authors are quoted on the same themes. Another work on the medical and agricultural uses of plants

is printed in 60 volumes with 1,715 engravings.

Dissection of the body being forbidden, the most absurd notions have prevailed as to anatomy and physiology. Food is supposed to pass from the spleen into the stomach. The larynx leads into the heart. The soul is in the liver, and the pit of the stomach the seat of breath, the source of joy—perhaps true in some cases! The skull is one bone. So is the arm and the pelvis. The right kidney is the gate of life. Each organ is related to one of the five “elements,” earth, air, metals, fire, water. Fire rules the heart, metals, the lungs, water, the kidney, and so on. There is not a square inch of the body which is nameless. Applications to each district are made according to the guiding dual theory, action and reaction of *yin* and *yang*. Heat and moisture are the vital principles. The blood and spirits are their vehicles. There are twelve channels of distribution. The study of the pulse is the most important part of the physical diagnosis of disease. In the Pekin Medical Museum you will see a copper model of a man pierced with many holes, and marked with the names of the pulse. There are three wrist points and 24 kinds of pulse at each point of each wrist, so that the native doctor has 144 pulses to study, by which the condition of body and even the sex of the unborn child are said to be determined. Of the 24 varieties there are the slow and rapid pulses, the rough, the soft, the strong, the weak, the vibrating, the hidden, and the impeded. If you find the latter at the first point of the left wrist you may expect sudden death. If at the second point of the right wrist, water in the stomach is indicated. Seven cautions are given to the practitioner as to his own quiet breathing and presence of mind as well as to manipulation. George Barrow, the traveler, was taken ill with cholera morbus. The Celestial Aesculapius was called. Solemn, as an undertaker, he fixed

his eyes on the ceiling. Beginning at the wrist he proceeded to the elbow, pressing hard with one finger, lightly with the other as one plays a viol. After ten minutes' fingering he pronounced the trouble to be gastric and caused by injudicious diet; a pretty good guess. In taking the temperature of the body I noticed that a native physician, whom I accompanied last week through the wards of his elegant hospital at Hong Kong, laid the back of his hand, as we do, on the cheek or carotid. He also showed me the method of preparing the decoctions used internally and externally. Every fire pot where the liquids simmer is marked, so also scores of wooden boxes, into which the dregs of the mixture are put for inspection, whether from the animal, mineral, or vegetable kingdom. In one standard work there are 78 from the former and 314 substances from the latter, mentioned. Mercury and arsenic are used in specific diseases. Ginseng is greatly prized. It is held as a governmental monopoly and gathered by detachments of soldiers. Opium, camphor-rhubarb, and other medicines used by us are found in the Chinese pharmacopœia. There are inert substances used. One author commends 132 kinds from metals and stone; 99 from reptiles, shell fish, and the like; of parts of the human body and its exuviae, a great number of things, the mention of which would be indelicate. The entire catalogue numbers 1,012. The land is overriden with quacks. The extravagant street signs show it, on which the adventurer announces himself as a “physician and surgeon by descent for several generations.” Necromancy and fortune telling are combined with medicine. I have seen many of these imposters sitting out doors at their divining tables and their credulous dupes around them. It is also believed that the spirits sniff the refuse grounds of the decoctions referred to, and so these are exposed in the street. Good food and fruit are also spread on tables indoors to appease the

same, and mirrors are set to frighten them away. Burnt charms are taken in tea for cardiac troubles, and in pure water for ulcers and all fevers. Prayer healing and casting lots in a bamboo tube with 100 sticks; rubbing the part of an idol corresponding to the part affected, and a multitude of other methods of treating disease can not here be described. At the hour of death, the Chinese, like the ancient Egyptians, believe that good and evil spirits seek the departing soul. I heard an attendant calling by the hour to a dying girl in a ward opposite my room in the hospital, a few weeks since, and was told that it represented the pathetic appeal to the departing spirit to come back. The beating of gongs is common in Chinese homes when death is near. So is it at fires. I have had evidence of this in two large conflagrations near us. The din was something fearful.

Anybody can be a doctor. If you read the books prescribed by the college at Pekin and follow the pulse points of their copper model you are "a regular." If not, you are an irregular practitioner and may be convicted of homicide if your patient dies. If you prolong or aggravate the disease to increase your fee, the law says that the money was stolen, and if you lose your patient you must also your head. I saw a pile of bloody heads on the execution grounds the other day, but did not identify any as belonging to doctors. Indeed the law is dead, and thousands of mischievous heads remain on medical shoulders. Stranger still, the Chinese race increases, in spite of irrational medicine, and the utter absence of those sanitary conditions on which we predicate health. The oldest nation on the earth shows no signs of physical decay.

As to surgery there is none. Acupuncture may be an exception and also the terrible emasculation practiced in Pekin, with fatal results, in connection with the imperial harem, described in the North China Asiatic Society. Sur-

gery is opposed by the superstitious notion that dismemberment or mutilation here will remain in the other life a permanent disfigurement. Furthermore, the rarity of drunkenness, the absence of railways and machinery diminish cases requiring surgery. That there is no national inability on the part of the Chinese to become first class surgeons is a fact shown by notable examples. Dr. Wong, a classmate of mine forty years ago, was the first Chinese on whom a foreign medical diploma had been conferred. He was a graduate in medicine at Edinburgh University, twenty years a successful practitioner, in charge of this hospital a part of the time, and died in 1878. Dr. Ato, a colleague, was the first Chinese at home to acquire a knowledge of western medicine. He performed, in 1847, in this hospital, the first operation with ether, and soon after, with wonderful dexterity and success, removed an enormous tumor, three feet in circumference from the back; also another tumor from the axilla which was as large as the patient's head. This involved careful dissection and the tying of three arteries. The whole was finished in a few minutes! He was ambidextrous, excelled as an oculist, acquired a large fortune, and was a man of commanding influence.

The changes wrought the past half century by western medical and surgical science are marvelous and constitute a powerful argument in behalf of medical missions. Dr. Peter Parker opened here in 1835 the first medical mission hospital in China. It has been remarked of him that "he opened the gates of China with a lancet when western cannon could not heave a single bar!" Thousands of patients flocked to him from seventeen provinces, some consuming months in the journey, and going home with the voice of gratitude uttering his praise. From the beggar in rags to the Emperor's household, these patients were found in all classes. The popularity of this institution was a guarantee

of its safety in time of war, so that a British consul said that he would regard himself securer in this house, where I am now writing, than on a gunboat on the river.

Dr. J. G. Kerr, now in charge of Canton hospital, has seen 35 years of toilsome service and stands at the head of the profession here. He instructs a medical class, male and female, who pay \$20 tuition annually, and study three years. The instruction is wholly in Chinese. He has published many original medical works and reprints of foreign authors. We are together working now for the establishment of an asylum for the insane, something unknown in China.

Dr. Swan and Dr. Mary Niles are physicians here, the latter serving over a thousand of her sex yearly. There is an unlimited field for women physicians, for Chinese females will endure prolonged sufferings rather than to be attended by men.

I have visited the medical school connected with the Alice Memorial Hospital, Hong Kong, and heard Dr. Thomson lecture in English. At Formosa there is another, where English is a condition on entrance. That has a four years' course. There is a great deal of dispensary work and has been ever since Drs. Robert Morrison and Livingstone opened in Macao seventy years ago a dispensary for the poor. Drs. Colledge and Bradford, of Philadelphia, should also be mentioned as pioneers, also Dr. Pearson, surgeon of the East India Company, at Canton, 1805, who introduced vaccination into the Empire, an unspeakable blessing in arresting here what had before been an annual epidemic of a most loathsome and fatal character. Asiatic cholera has been another fearful scourge, more than 100 deaths a day occurring in a single town, Amoy, for nearly two months in 1842. Thousands of lives have been saved by the missionaries. The expressions of gratitude to Christian doctors by their patients are novel and often pathetic.

Not only the *Kow Kow*, prostration and bumping the head on the earth, but other acts, as at Foochow, when Dr. Kate Woodhull, a successful operator for cataract, received some months ago a handsome memorial tablet, hung up amid the explosion of fire crackers. The inscription read, "She has given her whole heart." One of Dr. Parker's patients requested leave to send a painter to get a portrait that he might daily bow to it. His pecuniary gifts were liberal—for he was an official secretary—and he also composed an eloquent poem in praise of the medical missionary.

A sufferer from lupus at Kiangsi, who had spent her all on native doctors and Buddhist priests, seeing the disease spreading over face and neck, went to the temple and told them that they and their gods were a fraud. The priests appeared horrorstricken and frightened her into the payment of 10,000 cash, \$7.50 in gold, to get which she sold a few remaining personal effects. The failure of their incantations exhausted the last ounce of patience she had. She and her husband went to the temple and cursed the gods and the Buddhists to their heart's content. On their way home they fell in with a former patient of Dr. Douthwaite, whose body and soul had been saved by this kind physician. Three days by wheelbarrow brought them to Dr. D., who not only prayed and read the gospel to them, but gave iodide of potassium internally and iodine ointment outside. The disease was arrested, and in a month cured. They returned home, renounced idolatry and led many of their villagers to do the same. A Christian teacher was sent for; many threw away their idols; a church was organized; the true God daily worshipped, and they in turn became missionaries, sending out from their own membership an evangelist to preach the gospel which had done so much good for their own village, to regions beyond their borders.

There about 60 mission hospitals and 80

foreign physicians connected with them in this empire, besides clergymen and assistants, who have acquired a practical acquaintance with medicine after years of service in far-away isolated districts in the country, where a knowledge of simple remedies in sickness and emergencies will save many lives and invest a man with supernatural influence in the eyes of the priest-ridden and quack-deluded people.

Shanghai, which I hope to visit shortly, and many other large cities and towns have hospitals, and natives are being taught western science. Dr. Eldridge, under imperial patronage, has sent out over 30 Japanese practitioners, and said to me, when in Yokohama, that in nothing had the recent intellectual advance been more satisfactory than in medical science in Japan. The more conservative Chinese are slower to welcome us with our western ideas, but the heaven is surely working. Ever since Dr. Lockhart, who was a pioneer

of 1843, went with Her Majesty's legation to Peking, at the close of the second war, till now, princes of the palace and officers of highest rank have been applicants for relief at the hands of these "foreign devils"—as we have hitherto been regarded.

The Chinese Hippocrates of the second century, contemporary of Galen, gave medicine by the pound dose, and the system was so popular which he founded it continued one thousand years. I have ventured to give you an ounce dose, or less, this time, promising more at another time, in reference to the work specially on my hands, the establishment, if possible, of an asylum for the insane. No such institution is to be found in the empire. Such a humane and beneficent enterprise would fitly crown the history of western medical science which the last half century has made so illustrious in this vast empire of the Oriental world.

PROF. E. P. THWING, M. D.

EARLY RISING AND LONGEVITY.

PROFESSOR HUMPHREY'S recent Collective Investigation Report on Aged Persons contains some very positive evidence on a matter which has already engaged the attention of moralists as well as physicians. "The opportunity for nutrition to do its restorative work was in nearly all provided by the faculty of 'good sleeping,' to which was commonly added its appropriate attendant, the habit of 'early rising.'" Thus there is a relation between early rising and longevity. No doubt many people will hastily seize upon the sentence first quoted and employ it in edifying lectures or essays for the perusal of youth, or embody it in popular medical works. Important qualifications follow in Dr. Humphrey's report, but they are likely to be overlooked. Doubtless the habit of early rising is, in itself, healthy; most of all, it is a good sign of health when it evi-

dently signifies rapid recovery from fatigue. Again, it usually denotes a strong will, the gift, as a rule, of a good physical constitution, or at least the safeguard of average bodily strength. Late risers are generally either invalids or persons of bad habits, idlers who are never free from other vices besides idleness. The nervous exhaustion which keeps a man wakeful throughout the small hours produces sleep late in the morning. This exhaustion is invariably due to one of several life-shortening influences, especially anxiety or indiscretion in diet or drink. Early rising is thus rather one effect of certain favorable influences, another result of which is longevity, than a cause of longevity. To turn a weakly man out of bed every morning at seven o'clock will not prolong his life. It will be noted that by "good sleeping" Professor Humphrey signifies quick sleeping, "that is, the

reparative work which has to be done in sleep, is done briskly and well." Here, again, we have an effect of a cause; but preventing a weakly subject from sleeping more than four or five hours nightly would not cause him to live long, but would rather tend to shorten his life. Equally important are Professor Humphrey's observations which show that by "early" he does not entirely mean the time by the clock. The word "has a relative significance with reference to the time of going to bed. A person who retires to bed four hours after midnight and gets up at 10 A.M. may be strictly regarded as an 'early riser.'"

Thus early rising is synonymous

in long life histories with short 'sleeping, which means rapid recovery from fatigue, a sign of bodily strength. These scientific facts in no wise contradict the alleged value of early rising as a practice to be cultivated by all persons in good health. It is excellent as moral discipline, and eminently healthy as a matter of fact. Most persons will eat three meals daily. When a man gets up late those meals will probably follow each other at too short intervals to be wholesome. When he is an early riser it will probably be otherwise. He can enjoy a good breakfast, and by the time for his lunch or mid-day dinner he will have an honest appetite again.—*British Medical Journal*.

CATARRH AND MOUTH BREATHING.

THE structure of the human nose is by no means simple. Its openings considered as the natural channels of respiration have an adaptation to that purpose that can be fully understood only after much study. It were only necessary for nature to provide an inlet to the lungs ample enough, one might say, to admit all the air that is required for full circulation of the blood. If this were all, the mouth would be a sufficient opening both for the purposes of nutrition and respiration; but no, let a person make it a habit to breathe through the mouth and ere long he finds himself suffering from affections of the mouth and fauces that become more established the longer he persists in such breathing. The mucus membrane of the mouth differs in some quality from the membrane of the nose that precludes it from sustaining without injuring the movement of the air in and out, and its superficial distribution differs much in the two organs.

A glance at the interior of the nose reveals very irregular and tortuous passages, totally unlike the large free cavity of the mouth. Fig. 1 is a view of the general structure of both nose and

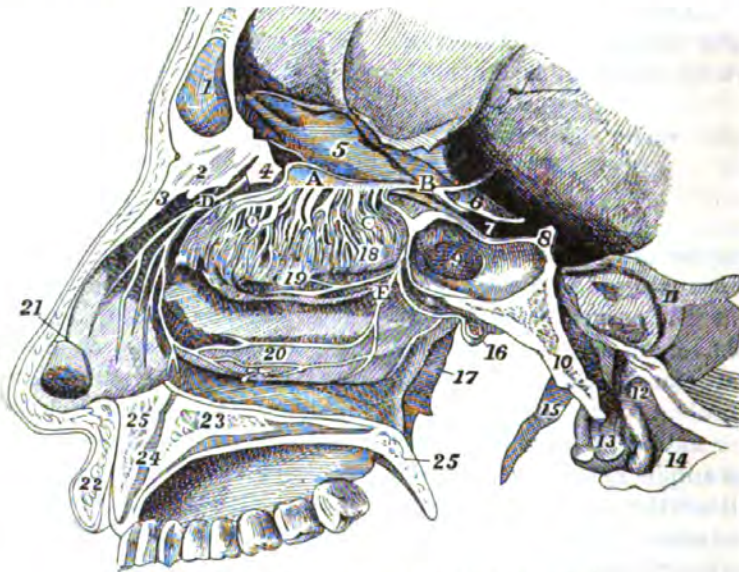
mouth as they appear by vertical section, the left side of each being thus exposed. The irregular folds of the nasal cavity are due to the projection of the turbinated bones from the exterior wall into the middle and posterior parts of the cavity, and to folds of membrane that envelop the cartilage anteriorly. Fig. 1 is a view of the left side of the nose showing somewhat more in detail the relations of its structure with particular reference to the distribution of the nasal nerve. The Schneiderian or pituitary membrane, as it is variously called, is closely adherent to the bones and cartilages, and thickest over the turbinated bones. In its relations to smell anatomists have found that only that region bounded by the superior turbinated bone receives the filaments of the olfactory nerve, which extend from the cribriform plate of the ethmoid bone down less than an inch. Hence, if plates of impermeable substance were inserted so as to cut off entirely the lower half or more of the nasal fossae from communication with the upper, and odorous substances be then introduced, no odor would be experienced. Thus it is that in affections of the nose attended with much accu-

mulation of excretion in the upper part of the cavity that the sense of smell is often lost for a time. In old cases of catarrh the nerve bearing membrane may be so altered as to destroy olfaction entirely.

Fig. 2 is a cross view of the nasal cavities at about the middle, and gives us an idea of their appearance as seen from the rear or throat end. The straight central partition is the thin blade of bone known as the *vomer*, which is continu-

hairs, in front, and farther back innumerable delicate filaments or *cilia*, all of which have an office in the process of respiration.

The air that enters the nose must pass through a very irregular channel on either side, as we have seen, a channel, too, much broken up by processes of bone and membrane. The hair and cilia filter and sweep it of dust and injurious substance, the warm membrane tempers it, and so fitted the better to



1. RIGHT CAVITY OF NOSE AND ITS RELATIONS.

Showing distribution of nerves. 1 frontal sinus; 2 nasal spine; 3 nasal bone; 4 crista galli; 5 roof of right orbit; 9 sphenoidal sinus; 11, 14, 15 parts of temporal bone; 10, 12, 13 parts of occipital bone; 16 opening eustachian tube; 16, 17 parts of sphenoid; 18, 19, 20 superior, middle and inferior turbinate bones; 21 cartilaginous section of nose; A bulb of olfactory nerve; n its three roots; cc distribution to mucous membrane; d branch of ophthalmic nerve; k sphenopalatine nerve.

ous with the cartilaginous partition that divides the nasal opening in front. The upper, middle, and inferior turbinated bones (the upper not being clearly shown in the illustration) divide the cavities into three parts, called respectively the superior, middle, and inferior *meatus* or opening. The cartilages, numbering five on each side, extend the nose (see fig. 1) from the nasal bones proper to the flexible tip, and so lengthen the passages greatly. Growing from the membrane and projecting in every direction are

meet the want of nature it enters the trachea and finally the lung cells, there to yield its oxygen to the blood.

In cold weather the amount of air going into the trachea *via* the nose receives many degrees of warmth before it reaches the sensitive lobules of the lungs, a very essential matter, as cold air admitted too freely, as by the mouth, rapidly lowers the temperature of the lung tissue, and by the consequent contraction of the vessels the economy of respiration is much embarrassed. So,

too, in circumstances of exposure to hot air nasal breathing is a protection in that it reduces the temperature of the air to a degree that nature may tolerate.

An old mouth breather usually suffers from a "dry catarrh;" you look at his throat and larynx and you find a state of chronic redness and inflammation, the glands of the vault of the pharynx are enlarged, and the Eustachian open-



2. CROSS SECTION MIDDLE PART OF NASAL CAVITIES.

Showing: 8 middle turbinate bones; 9 superior nasal cavities; 10 inferior turbinate; 11 vomer; 12 upper jaw; 13 middle meatus; 14 inferior meatus; 17 palate process of upper jaw; 18 roof of mouth, etc.

ings are contracted by the pressure, so that his hearing is somewhat impaired. The unused nasal canals are narrowed by overgrowth of mucous tissue. The follicles in the back wall of the throat are enlarged and rough. A degree of irritation is experienced all the time, so that there is a harsh, hacking cough that he can not control.

We meet with children who have this habit of mouth breathing, and they suffer in an analogous fashion to the old mouth breathers.

It is useless for physician or patient to hope for improvement in treating nasal or pharyngeal catarrh while such a habit is persisted in. Its relinquishment should be a preliminary condition.

If the nasal passages are obstructed by any growth or deformity, this must first be relieved by operation. The patient should endeavor to refrain from breathing through the mouth by day, and this, though not always easily done, can be accomplished by careful attention. During sleep the mouth in such cases will open involuntarily, and this tendency should be corrected by mechanical means. A bandage or strap is the common resource, but it is not by any means comfortable. Lately a friend of ours has introduced a simple method which he found serviceable in his own case. It is merely an ellipse-shaped piece of sheet celluloid, that may be cut to fit between the lips and teeth, thus closing the mouth effectually if the lips become separated. After wearing it in the mouth a few times the patient becomes accustomed to it, and having established the habit of nose breathing, the use of the instrument may be suspended.

H. S. D.

THE DANGER OF ANTIPYRINE.

THE new proprietary medicine, antipyrine had a thorough trial during the late influenza epidemic, and it was found in many instances a dangerous prescription. As a writer says in *The Doctor*:

Warnings against it had been frequent before the influenza, but the public had conceived a liking for it, it did relieve pain wonderfully in some cases, and when a popular craze is under headway nothing but a great calamity, or a large amount of ridicule can ever stop

it. It was getting into as common use with those who suffered from headaches as camphor or smelling salts. For this ailment it was regarded as a specific, and men and women prescribed it for themselves or their families as heedlessly as they would say, "take a little quinine."

An "antipyrine habit" was becoming recognized among the medical profession, and another brain destroyer and nerve-shatterer was added to that already long and disgraceful list that em-

braces every form of alcohol, or opium, and other narcotic poisons.

The worst of it was that the doctor was altogether too likely to say "it is perfectly harmless; as good as morphine, but with none of the bad effects of that drug;" so the poor patient sought relief from pain in antipyrine, and took his frequent doses of it with as little thought as if he were swallowing caramels.

In malarial regions the antipyrine pellet was ubiquitous, and robbed such places of half their terrors. For the man of convivial habits, antipyrine took the place of a Turkish bath, extra soda, a gin fizz, and bromide of potash,

and the idea was growing that it was possible to guzzle with impunity so long as the supply of antipyrine held out.

While cases were frequently coming to the doctor's notice in which death was produced by heart failure, due to the taking of antipyrine, the warnings had made no impression upon the public. It took the epidemic of influenza, during which the sales of antipyrine were enormous, to force everybody into a realization of the fact that trifling with antipyrine was like inexpert playing with a loaded pistol. Every once in a while the thing went off and somebody was killed.

AN INTERNATIONAL CONGRESS OF VEGETARIANS.

A FORMAL invitation to a general meeting of the advocates of vegetarianism has been received accompanied with the following letter:

June 27, 1890.

THE EDITOR "PHRENOLOGICAL JOURNAL," NEW YORK.

DEAR SIR:—I beg to inform you that an International Vegetarian Congress will be held on the 11th, 12th and 13th of September next, in the Memorial Hall as above, when it is hoped that a goodly gathering of leading vegetarians will be present from all parts of the world. Vegetarianism has now become one of the questions of the day, and it has been thought good that its representatives should meet together in conference as to the best mode of advancing the cause, etc.

I am instructed by the Council to invite the assistance and presence at the conference of all vegetarians and sympathizers with our cause, and I shall be pleased to send formal invitation cards, with programme of proceedings to anyone applying for the same. I am, yours faithfully,

R. E. O'CALLAGHAN, Hon. Sec'y.

The programme of exercises, etc., includes conferences in the Hall, a tour of London, excursions on the Thames, several lunches and dinners, of course in the most advanced styles of vegetarian cookery, and special entertainments fur-

nished by prominent members of the English Society. A very interesting and enticing array, indeed, of features will be enjoyed by the guests.

DEATHS UNDER FIVE YEARS.—The following facts, which we quote on good authority, certainly show the necessity for sanitary missionary work as a life saving means in the principal civilized nations of the globe: "In Norway the proportion of children dying under five years of age is 204.5 per 1,000 born; while in England it is 330 per 1,000, and in Italy it is 567 per 1,000. In fifty-one so called "healthy districts" of England and Wales, the mortality under five is 175 per 1,000 born, while in the Liverpool district, representing the most unfavorable sanitary conditions, it is 460 per 1,000. In the State of Vermont, which contains no large cities, the number of deaths under five, for the year 1883, was 23.8 per cent. of the whole number of deaths; in the State of Massachusetts, in which there are several large cities, for the twelve years ending in 1884, it was 34.74 per cent.; and in the City of New York alone, for the seven years ending in 1873, it was exactly 50 per cent. of the entire mortality.

NOTES IN SCIENCE AND INDUSTRY.

Electricity in Illumination.—According to the *Electric World*, the increase in the use of electric lights and electric motors is shown to be even greater during the past few years than most people probably imagine. The number of electric lighting companies in the United States and Canada operating central stations at the beginning of 1886 was 450. This number had increased at the beginning of 1887 to 750, at the beginning of 1889 to nearly 1,200, and at the beginning of 1890 to 1,277, including 25 in Mexico and Central America. Meantime 266 gas companies had engaged in electric lighting, so that the total number of companies engaged in electric lighting at present is 1,543. The number of isolated, or private, incandescent and arc light plants at the beginning of 1887 was about 1,000 each. Now there are 3,925 private plants in the United States, 175 in Canada, and 200 in Mexico and Central America, making 4,300 in all. The number of arc lamps in use in 1882 was 6,000. This number doubled each year for four years and has since grown rapidly until there are now 235,000 arc lamps in use. The number of incandescent lights has increased from 525,000 in November, 1886, to 3,000,000 at present. The number of electric motors now in operation in the country is estimated at 15,000, many of them from 15 to 50 horse power. There are nearly 200 electric railways in over 125 towns and cities, and these have in operation or under contract 1,884 cars on 1,260 miles of track. These motors find their greatest application in connection with electric light plants. Electricians, however, look for a great development of electric motors for railroads of all kinds during the next two years. Electric light and electric power for mining is a new development of considerable promise. The electric tramway and electric power for pumping, drilling, cutting, etc., have already been adopted to some extent with good results.

The Projected Siberian Railway.—The Russian *Gazette* states that the special commission has just drawn up its report on the most practicable way of con-

structing the great Siberian railway. According to this report the work should be accomplished step by step, but with the result that the whole line should be completed in 1900. The cost of construction would not exceed 250,000,000 roubles, spread over ten years, so that the treasury would have to advance but 25,000,000 roubles a year. Judicious economy would reduce this sum by 50,000,000 roubles, so that the cost per verst would not exceed from 25,000 to 28,000 roubles. The line would be as narrow as possible; conduits excepted, all the work would be in wood; and large stations would only be established at the most important points. At the beginning of the enterprise, also, there would be a minimum of rolling stock. For this reason engines of eight wheels would be employed, except in the steppes, where engines of six wheels might be adopted. Another suggestion is, that those sections most promising of revenue should be begun first.

Meteoric Matter Entering the Earth's Atmosphere.—Observations of falling stars have been used to determine roughly the average number of meteorites which attempt to pierce the earth's atmosphere during each twenty-four hours. Dr. Schmidt, of Athens, from observations made during seventeen years, found that the mean hourly number of luminous meteors visible on a clear moonless night by one observer was fourteen, taking the time of observation from midnight to 1 A. M.

It has been further experimentally shown that a large group of observers who might include the whole horizon in their observations would see about six times as many as are visible to one eye. Prof. H. A. Newton and others have calculated that making all proper corrections, the number which might be visible over the whole earth would be a little greater than 10,000 times as many as could be seen at one place. From this we gather that not less than 20,000,000 luminous meteors fall upon our planet daily, each of which in a dark clear night would present us with the well-known phenomenon of a shooting-star.

This number, however, by no means represents the total number of minute meteorites that enter our atmosphere, because many entirely invisible to the naked eye are often seen in telescopes. It has been calculated that the number of meteorites, if these were included, would be increased at least twenty-fold; this would give us 400,000,000 of meteorites falling in the earth's atmosphere daily.

A Lady Explorer.—One of the most intrepid explorers of the day is a Parisian lady, *Madam le Ray*, mother of the *Duc d' Abrantes*, who has been for several months engaged in Eastern travel. After having visited Babylon and Nineveh, she traversed the Persian deserts, amid terrible privations, in order to reach India. For five days and five nights her little caravan had to encamp in the wilds without meeting a living soul, or even discovering the slightest trace of a human being.

During all this time the cold was so intense that *Madame le Ray's* fingers were frostbitten, and her guides became seriously ill. She managed at last to reach the Persian Gulf, where she embarked for India. An account of her adventurous journey will be given by *M. Bonvalot* and *Prince Henri d' Orleans* on their return from Thibet.

Romance Figuratively Considered.—There is an English literary man who at the end of each year penetrates into the published fiction and extracts therefrom very often some exceedingly interesting figures. The results of his researches into last year's fiction are entertaining: Of the heroines portrayed in novels, he finds 372 were described as blondes, while 190 were brunettes. Of the 562 heroines, 437 were beautiful, 274 were married to the man of their choice, while 30 were unfortunate enough to be bound in wedlock to the wrong man. The heroines of fiction, this literary statistician claims, are greatly improving in health, and do not die as early as in previous years, although consumption is still in the lead among fatal maladies to which they succumb. Early marriages, however, are on the increase. The personal charms of the heroines included 980 "expressive eyes" and 792 "shell-like ears." Of the eyes, 543 had a dreamy look, 390

flashed fire, while the remainder had no special attributes. Eyes of brown and blue are in the ascendant. There was found to be a large increase in the number of heroines who possessed dimples. 502 were blessed with sisters, and 342 had brothers. In 47 cases, mothers figured as heroines, with 112 children between them. Of these, 71 children were rescued from watery graves. Eighteen of the husbands of these married heroines were discovered to be bigamists, while seven husbands had notes found in their pockets that exposed "everything." And thus is the romance of a year reduced to figures.

Africa Yet Much Unknown.—Sir Francis de Winton, late Governor of the Congo State, says in spite of the scores of explorers who have been traversing Africa in all directions since Livingstone began his travels, the larger part of the many millions of natives have never yet seen a white man. As we trace the routes of explorers on the map we see that their tracks make merely a network over Africa, and that there are enormous unvisited spaces between the lines. As yet we can only infer what large regions and the people who live in them are like from the reports of perhaps a single traveler who has hurriedly passed through the country.

Washington's Appearance in 1836.—William Burgess, who is laying the foundation of the Confederate monument to be erected at Alexandria, is one of the few men now living who has looked upon the face of General George Washington.

"It was in 1836," he says, "when I was an apprentice employed in building the new tomb now at Mount Vernon, which so many visitors now come to see. I was a lad then, and I remember this was about my first piece of work. When the vault was completed I assisted in moving the bodies from the old tomb to their present resting place. It was decided to open Washington's coffin, and when it had been conveyed to the tomb the lid was raised. A number of people were present and stood in breathless silence while the workmen extracted the rusty screws. When the top of the coffin had been lifted I looked in. The body was apparently perfectly preserved, the features of

the face were complete, and there was nothing to indicate the length of time which he had been dead. The exposure to the air, however, had its immediate effect. In a minute or two the body suddenly collapsed, and shrunk into an almost unrecognizable form. Other than this my recollections are very indistinct. I do not remember how the body was dressed or anything further about it. The features, as I recollect them, were like the pictures I have seen."

A Simple Incandescent Lamp.

—An ingenious contrivance for obtaining a light without matches, is in use by the

watchmen of Paris, in all magazines where explosive or inflammable materials are stored. They put a piece of phosphorus the size of a pea, into an oblong vial of clear glass, and pour some pure olive-oil, heated to the boiling point, upon it, leaving the bottle about one-third full; it is then corked tightly. To obtain the light they remove the cork, let the air enter, and then recork. The entire empty space in the bottle then becomes luminous, giving a strong, clear light. To increase the light if it grows dim, one has but to uncork the bottle for a moment and admit a fresh supply of air.



NEW YORK,
August, 1890.

ITS PERSONAL RETURN.

ONE who has given much attention to the study of the careers of men who have won high reputation in the field of phrenological teaching must have been struck by a common characteristic, viz., benevolence or philanthropy. Gall, Spurzheim, the Combes, Elliottson, Broussais, Fossati, Caldwell, Dean, Cubi di Soler, Bridges, and many others of Europe or America were not dominated by feelings of personal aggrandizement or selfishness. Like the old Scottish patriots, they "fought not for honor or profit" but for the good of their fellows. Their fondness for scientific investigation grew with attainment of knowledge concerning human nature, the most fascinating of studies, and with that growth merely personal affairs seemed to lose

hold upon their attention. Their interest was drawn [more and more to the consideration of the affairs of others, and to the need of the individual and of society for improvement.

That phrenological doctrines have nothing in common with fate and pessimistic notions is manifest in the open, cheerful conduct of eminent phrenological writers and lecturers. One and all they are ministers of optimism rather than pessimism. They are sanguine advocates of human improvement and progress, and ever loth to set any bounds to the betterment of mind and character.

A system that could so broaden the nature of its apostles, so soften the hard elements of selfhood that the man is led to forget his own concerns in his active consideration for others, must have very much of essential good in its constitution, much, indeed, of that divine gospel that leads its disciples to do for others what love and sympathy would inspire.

No man who has carefully studied the philosophy of the doctrines so earnestly maintained by George Combe against all the array that prejudice and conservatism in Church and State could muster, can wonder at the enthusiasm of

that gifted mind. The deeper his investigation of phrenological principles, the more he learned of their value in resolving what had been hitherto dark and mysterious in the operations of the human mind. Like the ancient philosopher he could not withhold a glad "Eureka" as truth after truth dawned clearly on his vision. As with Combe, so it has been with every honest seeker in the same rich field.

OUR SISTER IN THE DRUG STORE.

RECURRING to the subject of occupations for women, which has occupied occasional space in this part of the JOURNAL, we would say a word concerning a sphere that has somehow escaped attention. To put it squarely, we ask the question why will not woman make a good druggist? She has quickness of discernment, is skillful in the use of her fingers, and light in movement. These are important qualities to the analyst and compounder. In the many details of domestic service, especially in the kitchen, they come into play just as much as they do in the laboratory of the pharmacist. In fact, one who would be competent as a cook for a large family would, we think, be competent as a druggist.

It is suggested that a girl of the necessary intelligence and education is not willing to pass through the ordeal of preparation that every boy does who aims to be a dispensing pharmacist. She does not incline to the bottle washing, case polishing, and lamp cleaning features of the shop, but wants to be graduated at once into the higher branches of the profession. Perhaps this is the case

with many girls; it is also, we know, the case with some falsely ambitious young men, but we are sure that the young woman who is in earnest would be willing to work her way up the coarse steps of the business, knowing that such experience is useful.

But there are some drug stores managed by women, and successfully. This fact we know, and it settles the question of their competency for a line of usefulness that is likely to last many years longer. The common method of drug prescribing for illness may gradually decline, but the use of chemicals for sanitary purposes, anodynes, washes, lotions for local application, mineral spring waters, toilette articles, surgical appliances, bath conveniences, and a thousand other things, will always be needed in civilized society and make the pharmacy a permanent feature. We should advise the bright young woman who would be up and doing for herself, and who feels deterred from trying this or that because there are so many of her sex in it already, to try pharmacy. The good drug clerk is not "a *drug* in the market," but there are places always open, judging by the advertisements in every day's newspapers, for the industrious and capable woman as well as for the competent man.

BE CHEERFUL.

"HALF of the battle of life," says a writer, "consists in keeping up a cheerful spirit." How true! They who complain of ills and disappointments and assert that "life is not worth living," are lacking seriously in cheerfulness. They have not learned one of the most important lessons—that life has a char-

acter for good or ill, according to our habit of viewing it. Some years ago we attended a religious service on Sunday in a church near our residence but to which we rarely went. But the discourse that was delivered by the aged minister interested us deeply, from beginning to end. It was not a brilliant discourse, yet full of the thought and earnest comment that proceed from long experience. The subject was Thankfulness, the speaker dwelling upon the healthful, comforting influence of that cheerful habit of mind that sees something to inspire thankfulness in every event of life. A day or two later we learned that the aged minister had left the dying bed of a daughter that very morning to perform the duties of his ministry, and when the service was concluded, he hastened back to her side.

What help can a depressed, melancholy spirit afford? How unreasonable to expect anything at all beneficial from a tone of mind that is desponding, morbid and gloomy? The simplest, practical wisdom warns against the indulgence of such a temper. Admitted that circumstances are unfavorable even to the

degree of desperation, does it pay to cultivate misery by brooding upon them, and hugging, as it were, closely to our heart the horrid corpse of our misfortune? No, the wise course is to turn away from the ills and sorrows, and with an upward, cheerful face energetically address ourselves to the duties of our station. That dyspeptic, irascible old Scotsman, Carlyle, could appreciate the value of this princely virtue—for he says in his inimitable manner:

“Wondrous is the strength of cheerfulness: altogether past calculation is its power of endurance. Efforts to be permanently useful, must be uniformly joyous—a spirit all sunshine—graceful from very gladness, beautiful because bright.” Probably he had before his mind’s eye when he wrote this, his much tried, yet always calm, and good natured wife!

If the heart is kept cheerful and bright no experience of evil fortune can daunt its courage and its hope, and in time the clouds that seem to threaten overthrow and ruin break before it and disclose the sun of success and joy shining in the peaceful heaven.

Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF “GENERAL INTEREST” ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plain-

ly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

IMPRESSIONS COMPARATIVE.—Question.—If repetition of a thing deepens the impression on the mind, why is it that a child when sent on an errand, and told to repeat the name of the thing it is going for will often forget it when the time comes for it to ask for it ; is there a limit to the practical?

W. P. C.

Answer.—Impressions depend upon something besides mere repetition, especially attention. A child who is given an errand in which he has little or no personal interest, acts automatically. He may start out with a correct idea of his errand, but on the way his attention is drawn to this and that object, and fresh and strong impressions absorb his mental faculties, to the modification or utter rout of the formula that constituted his errand. Self control, so essential to mental poise and steadiness of purpose, is weak in the average child, and hence a matter that is not perfectly intelligible to him may be effaced or blurred in a short time by his consideration of things that excite his interest.

CLAIRVOYANCE.—S V. L.—We are not able to explain Clairvoyance on any other basis than that of a remarkable exaltation of the senses of a subject which enables him to absorb or obtain from the agent or person *en rapport* with him, or from others, by a peculiar mental telegraphy, impressions new or old that have been made upon their minds. Then, too, it has a subjective form in which the person who shows the clairvoyant power or state, sees or hears impressions that have been made in the course of his life upon his own mind. According to incident circumstances these impressions are unconsciously revived. They may have been forgotten in the ever onward course of human experience. What you may see in the half-awake condition of returning consciousness after a night's sleep, has its origin in old and probably quite forgotten impressions. We are of opinion this singular state of the mind can be cultivated, and made available to scientific observation.

MANAGING THE BABY.—P. C.—If the child is of naturally good organization, its illnesses are largely due to improper management. One of the most common elements of mismanagement is over-feeding, and this especially in the case of artificially fed in-

fants. "How we fed the baby" is a little book of much value to inexperienced mothers. In summer time many babies suffer much from intestinal pain, not due to actual inflammation, but rather to gaseous accumulation. Heat seems to afford more relief than any thing else that can be easily tried. A small rubber hot-water bag, filled with water, not too hot, and laid on the stomach is a good means of applying it. Putting the feet in hot water sometimes eases the pain. Two or three drops of essence of peppermint in hot water, with a little sugar, or a few teaspoonfuls of lightly sweetened hot water, will sometimes drive out the enemy. Never give a young baby soothing syrup or patent medicine of any description.

STRONG CHARACTER AND FACIAL EXPRESSION.—P. C.—As a general rule a man of force and power is not possessed of that harmonious, smooth and symmetrical outline of face that we call beautiful. One of strong feelings and high purpose, may have a grand face, an expression that wins notice and reverence. You may expect the good man to have a kind expression, and as the years go on this kind expression will deepen with the growth of the goodness in his character. An even, harmonious association of the organic centres of thought and feeling conduces to symmetry of feature and beauty, but in persons so constituted there is but a small degree of force associated with their amiability. They live quietly, passively, with an agreeable environment, pursuing a routine that calls for no display of energy, and makes no trying demand upon intellect or integrity. Discipline and trial develop greatness, and the face of such a one carries the marks of struggle.



Communications are invited on any topic of interest ; the writer's personal views and facts from his experience bearing on our subjects being preferred.

ON THE SYLLOGISM.—When first initiated into the mysteries of the syllogism we are irresistibly led to admire the wonderful simplicity and beauty of reasoning :

All M are P;
 All S are M;
Ergo, All S are P.

Admirable! How easy to discover truth! Newton, Locke, Aristotle, and all the rest, even Sir William Hamilton himself, could have done no better. We feel a thrill of confidence in our own genius, and impatiently look forward to future greatness, when it occurs to us to substitute some general notion for the above abstract symbols and renew the test.

Books are angels of provocation;

Eikon Basilike and Magnalia Christi are books;

And, *ergo*, angels of provocation.

Admirable again! Abundantly convincing to both Royalist and Puritan! Mather himself could not, in his calmest moments, have drawn a more logical conclusion, and we half marvel at the controversies of the learned. Why should Socrates drain the cup of hemlock? Why should Jesus suffer on Calvary? Why should Galilee kneel to abjure his opinion before the Council of Inquisitors? Why should Scotus and Aquinas exhaust their dialects in vexed theological questions? Why should all Europe waste her treasures and spill the blood of her kings and queens? All for differences of opinion, when all might so easily have been avoided had our Edenic primogenitor only applied the syllogism and come forth armed with all the sciences possible to man, each replete to the utmost with transcendent truths?

But our admiration for this department of logic receives a terrible shock in the next test.

Man is a featherless, apterous biped;

The anthropoid apes are featherless, apterous bipeds;

And, *ergo*, the anthropoids apes are men.

Syllogistic precision again! But the evolutionist assures us we are mistaken. There is a slight difference between them which amounts to an ordinal distinction, though science concedes a very near relation. Piqued at the result and confident of precision in inference we examine the major and minor, and lo, the error! Conducting the investigation with a rare discrimination the whole truth flashes upon us at once like an intuition.

The truth of the conclusion, even when justly drawn, depends upon the truth of the premises, and the real source of error and difference of opinion lies largely in the premises. These latter are generalizations from observed facts, whose formation require the most analytic and discriminating genius. A mere child, by being careful to observe a few precautions, ought to make inferences with precision, when premises are once formed; but formation of premises must be done by induction from facts, which is not child's play. We also see that the major premise must be greater than the minor.

We must have learned first that *all* books are angels of provocation before we can infer that any given book is. Knowledge of truth is not extended in the least. If man had known only the syllogism he would still be quite infantile in knowledge, and would find serious scientific rivals in the commonest barnyard fowl. It is worth simply nothing except in applying general principles to special cases. It makes no advance in the discovery of principles. Consequently the chief business of intellect lies outside of the syllogism.

Inductive logic is not a part of our subject, but, since false premises make false inferences, we must call attention to a few errors in induction which destroy whatever of value belongs to syllogistic deduction. Incomplete observation, imperfect analysis, and careless statement, are the chief faults in fair minds, but a greater defect is prejudice, which throws in a few false preconceptions as unquestioned facts. Whenever a conclusion, justly drawn from well-ascertained facts, seems to contradict a belief or opinion sanctioned by majorities or venerable with antiquity, most men immediately suspect error in their premises, and add a prejudice or two, until the conclusion is in harmony with their previous opinion.

In conclusion what is more appropriate than to ask, Who will wholly confide in the syllogism? Who will not attempt to be fair and discriminating in induction, and follow truth despite preconception and popularity?

JOHN W. SHULL.

A SOUND mind finds no pleasure in the weaknesses of others.—F. A. Kemble.

PERSONAL.

SIR RICHARD BURTON, whose explorations in Africa opened the way to followers like Stanley, is reported very dangerously ill, neglected and alone, in London lodgings. His romantic pilgrimage to Mecca and Elahedinah in the disguise of a Moslem devotee, his journey through Berberah to the Sacred City of Harah, where no other infidel foot has ever trodden, were but preliminaries to the great achievement of his life, the discovery of Lake Tanganyika. This discovery paved the way for all that has since been done in Central Africa, and but for the failure of his resources Capt. Burton would undoubtedly have reaped much of the honor which has gone to others.

MR. JOHN B. HERRESHOFF, of Bristol, Rhode Island, is the head of a large ship-building firm. He lost his sight when but fifteen years old, and for forty-five years has been an active business man despite his infirmity. He superintends hundreds of workmen, visits every corner of the shipyards, understands a model by feeling it, orders alterations and improvements in construction, and has built some famous American yachts.

THE longest-graduated college alumna in this country is Rev. Dr. Herman Halsey, of East Wilson, Niagara County, New York. He was graduated from Williams in 1811, and is ninety-seven years old.

MISS ALICE B. SANGER is the first woman ever employed as a clerk in the White House. She is an expert stenographer and type-writer. She is about twenty-two or twenty-three years old, and a blonde. She writes all the President's personal letters, and is secure in his confidence, having been his stenographer for over two years.

WISDOM.

"Thou must be true thyself,
If thou the truth would teach."

WHOEVER desires the good and takes sides with it, becomes a magnet to attract good.

WHEN one sees life as man makes it, there is nothing left to do but thank God for having made death.—*Dumas, fils, corrected.*

It is at our own will whether we see in

the despised stream the refuse of the street, or looking deep enough, the image of the sky.—*Ruskin.*

THE chief secret of comfort lies in not suffering trifles to vex us, and in prudently cultivating our undergrowth of small pleasures, since very few great ones are let on long leases.

TOLSTOI's new comedy is a criticism upon the childish pursuits of society, "Such as drumming on the piano all day, eating too much, and tight lacing."

WHAT is a gentleman? Is it not one
Honestly eating the bread he has won;
Walking in uprightness, fearing his God,
Leaving no stain on the path he has trod.
Caring not whether his coat may be old,
Prizing sincerity far above gold,
Recking not whether his hand may be hard,
Stretching it boldly to grasp its reward?

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

HE (despairingly)—"I wish I could find something to take up my mind." She (softly)—"Try blotting paper."

A GOOD many people are coming to look upon original sin and original packages as synonymous.

MODERN CHIVALRY.—Awkward Miss (with an umbrella)—"Beg pardon!" Polite gentleman—"Don't mention it. I have another eye left."

FIRST MESSENGER BOY—"I say, yer there, wat fur yer runnin' down the street just now?" Second Messenger Boy—"Ah, com-off. Some bloke guv me a push an' started me a runnin' an' I wuz too lazy to stop. See?"

PAT (who is being lowered into a well)—"Stop, will ye, Murphy! Oi want to coom up again."

MURPHY (still letting him down)—"Phat for?"

PAT—"Oi'll show ye. Af ye don't sthoph lettin' me doon Oi'll cut ther rope!"

EPITAPH ON A QUAOK.

He advertised to cure all ills
That make us blue;
Disease decamped before his pills,
And life went, too.

ANGER is the most impotent passion that accompanies the mind of man; it effects nothing it goes about, and hurts the man who is possessed by it more than any other against whom it is directed.—*Clarendon.*

SMALL BOY—"Papa, what does 'monotonous' mean? Father, wearily—"Wait till your mother begins to talk dress with your aunt, my boy; then you'll realize the full meaning of the word."

Mrs. H.—"Maggie, where do you suppose you will go if you tell such falsehoods?" Maggie—"Sure, ma'am, I don't care; I have friends in ayther place."

BROWN—"You don't look well lately, Robinson." Robinson—"No. I can't sleep well on account of lung trouble." Brown—"Nonsense! Your lungs are all right!" Robinson—"Yes, mine are; the trouble is with the baby's."

NO USE FOR THEM.—Countryman—"Can I sell you a wagon load of apples this morning?" Proprietor—"No, sir." Countryman—"Why, I supposed this was a cider factory." Proprietor (angrily)—"That's what it is. Jacobs, show this man out."

LOVELY DAUGHTER—"Papa, why do you object to Mr. De Poor? Is it not better to live in a cottage with one you love than to dwell in a palace with one you hate?" "Yes, my dear—very much better; but he hasn't the cottage."



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

WOMEN AND HEALTH: A Mother's Hygienic Hand Book, etc. By M. Augusta Fairchild, M. D. 8vo, pp. 384. Price in cloth, \$2.50. Published by the author, Quincy, Ill.

The spirit that pervades "For Girls" and "How to be Well," by the same author, appears in this larger work. The motive expressed in the statement inscribed in the title, "Guide to the Attainment of True Womanhood through Obedience to the Divine Laws of Woman Nature," evidently was the inspiration of the book. The plan adapted is that of a conversation between a young woman intelligent and eager to know more, named *Viola*, and a liberal, kindly, mannered *Doctor* who willingly answers every question asked as fully as his experience and observation permit.

The book is adapted to the study of young women, and it is in their hands it should come before marriage. To be sure, such a book can be a source of help unspeakable to a woman in wedlock, but its purpose is *prevention* rather than *cure* of troubles that are consequent on the common ignorance of physiology and hygiene that married folks show. "Every woman who acquaints herself with the truths founded in nature, who learns and lives the lesson of a high and beautiful life, becomes a divinely appointed teacher and liberator of the imprisoned and oppressed."

This sentiment from the preface we readily indorse, and are only too sorry that the number to which it applies of women in the more privileged ranks of society are so few.

ELECTRICITY IN THE DISEASES OF WOMEN.—

By G. Betton Massey, M. D., Physician to the Gynecological Department of Howard Hospital, etc. Second Edition. Revised and Enlarged. Illustrated, pp. 233. F. S. Davis, Publisher, Philadelphia and London.

The advancement made during the past five years in the application of electricity to the treatment of woman's diseases has broken down most of the opposition and prejudice that many eminent surgeons and physicians exhibited toward the galvanic electrode. Practical results show for themselves and when they are found to be of a beneficial nature the most obstinate opinion must yield. When, as cases reported in this book prove, relief and cure may be obtained without resort to the knife and its dreadful accompaniments, to say nothing of the manipulation and exposure, it is demonstrated that the electric battery is

boon to which the qualifying term *providential* many grateful women are ready to add.

Dr. Masson's book is an excellent compendium of the subject. Its explanations of the apparatus employed, the effects of weak and strong currents, the methods of treatment, etc., are condensed but clear, so that as a handbook for the busy practitioner it has no superior in print.

PUBLICATIONS RECEIVED.

THE NAKED TRUTH. By William Williams. New York. Pages 64.

A view of society, especially the life of the working members of it. Mr. Williams analyzes the causes of the vice and crime and discontent that are so conspicuous everywhere, and emphasizes the truth regarding popular greed, intemperance, extravagance, jealousy, ignorance and obstinacy. Being a workingman the author discusses the different questions that he takes up from a workingman's point of view, yet his statements are remarkably free from the prejudice and invidiousness that becloud the vision of the average mechanic. He is more earnest in his demand for honesty and upright dealing in all departments, than desirous of any privileges or "rights," and shows how the troubles of the laboring classes are largely due to their own indiscretions. Mr. Williams is no doctrinaire; his little book is a practical exhortation.

THE KEYNOTE OF THE TEMPERANCE REFORM. By T. Dewitt Talmage, D. D.

An address that should appeal to the *good* of every class. The "key note" seems to be united endeavor on the part of all our *best* people to suppress the use of the liquid poison that produces such wide-spread ruin in the land. It is moral suasion that must do the work, according to Dr. Talmage, backed by the best people. Yes, the main reason, as we have urged, a hundred times, for the prevalence of the drink evil is the indifference of our best people to its ravages. Price, 5 cents. J. N. Stearns, agent, New York.

MEDICAL DIRECTORY OF THE CITY OF NEW YORK. Published under the auspices of the Medical Society of the County of New York. No. 5.

Object to supply the profession and public with a complete list of the legally qualified physicians practicing in New York City;

besides other information relating to hospitals, medical regulations, medical colleges, etc., etc.

THE TWO INVITATIONS. A Temperance Concert Exercise. By Thos. K. Thompson.

"The Two Invitations" comprise "The Gospel" and "The Saloon," in 16 octavo pages, containing responsive readings, recitations, part pieces, and several selections of music, both words and notes being given. It is specially suited for Sunday-school or church service, and also for any temperance organization. Price 5 cents; 60 cents per dozen. J. N. Stearns, Agent, New York.

WHO MADE THE NEW TESTAMENT? The Rejected Books. The Council of Nice. The Canon of Scripture. By H. L. Hastings, Editor of *The Christian*, Boston. No. 9 Anti-Infidel Library.

A pamphlet of 31 pages, in which are summarized the leading points of Christian doctrine as relating specially to the three categories named in the title. The Anti-Infidel Library is designed to present Christian evidence in readable and inexpensive form adapted to the masses, and the numbers so far published have obtained wide circulation.

REMARKS ON HYPERTROPHY AND ATROPHY OF TISSUE. By G. Frank Lydston, M. D., Chicago.

A brief consideration of the physiological and pathological causes of these conditions. The author carefully defines these causes and is to be credited with differential clearness of exposition.

MRS. PARTINGTON'S NEW GRIP SACK. Filled with Fresh Things. By Mrs. Partington (B. P. Shillaber). No. 85 of the Red Cover Series. Published by J. S. Ogilvie, New York.

To read somewhat more of the wise or otherwise sayings of the long ago highly distinguished old lady, and to meet the frisky Ike again will be welcome to many who had the pleasure of an early acquaintance with the inseparable pair. The author gives us a view of the verbiferous old lady in the unexpected character of a traveler, and outdoes Marcus Twainus in the unique peculiarities of her humor. Aside, we wonder that we have not heard from this quaint author the past ten years. Does such humor easily exhaust the imagination?





SCRAMBLING FOR IT.

Here is a good-natured tussle for a cake of Pears' Soap, which only illustrates how necessary it becomes to all people who have once tried it and discovered its merits. Some who ask for it have to contend for it in a more serious way, and that too in drug stores, where all sorts of vile and inferior soaps, represented as "just as good," are urged upon them as substitutes. But there is nothing "just as good," and they can always get the genuine Pears' Soap if they will be as persistent as are these urchins.



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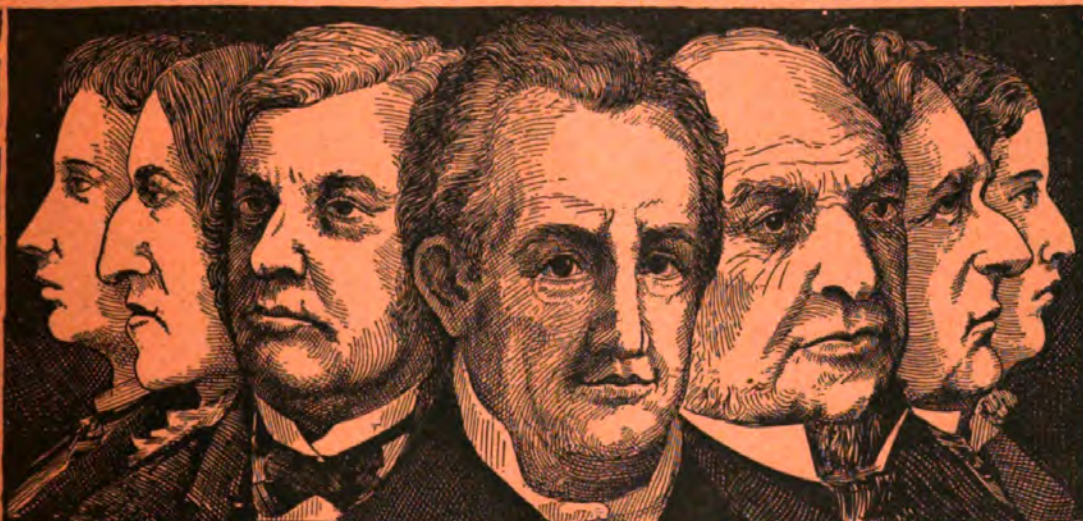
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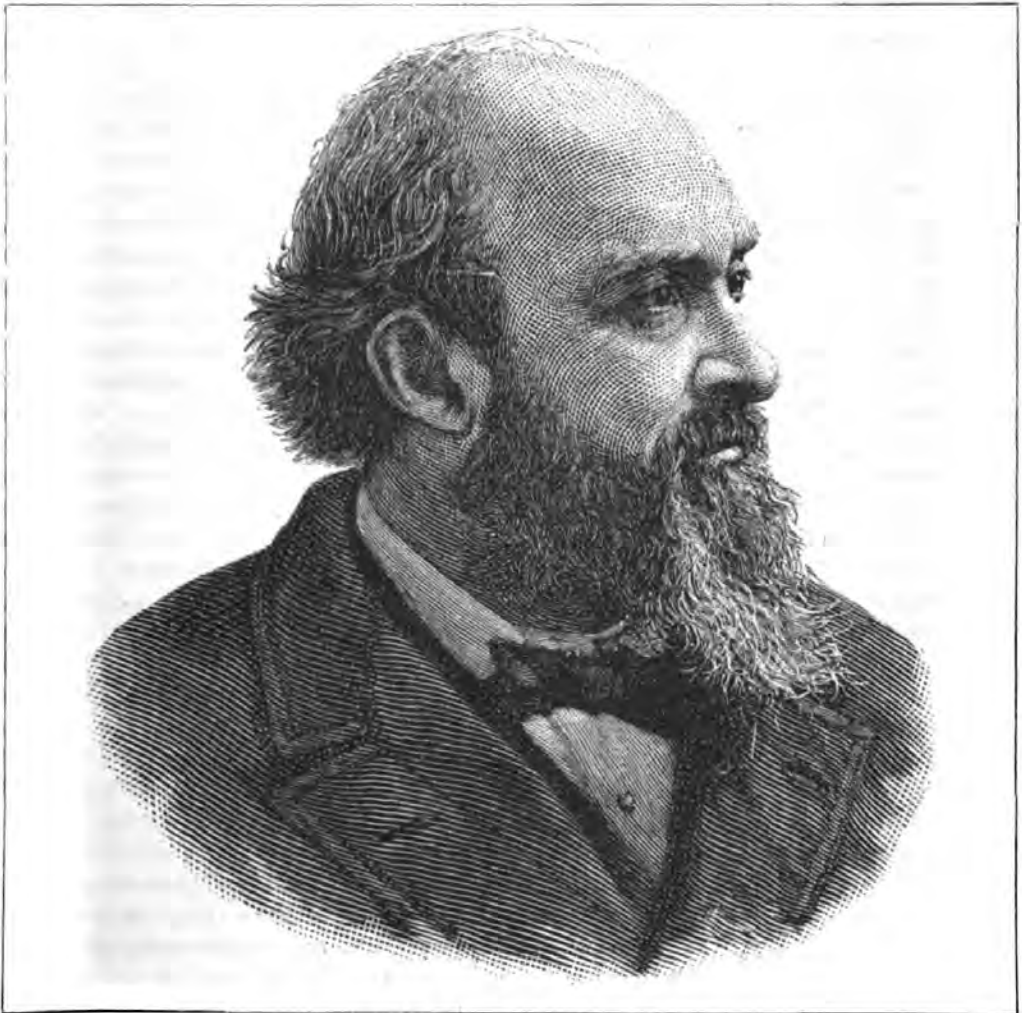
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THE
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NUMBER 3.]

SEPTEMBER, 1890.

[WHOLE No. 618.



GREEN B. RAUM.

NOTABLE PEOPLE OF THE DAY.—No. 35.

GREEN B. RAUM,

Commissioner of Pensions.

IN thousands of American houses General Raum is considered the personification of national generosity. The vast aggregate of money that has been appropriated by Congress toward the payment of pensions to men who served in the army of the Union at some period of the late war between North and South, has made the Commissioner of Pensions an object of marked prominence. In organization he is an observing man. His features, as indicated by the portrait, have in them the character of strength, and emphasis imparted by the motive temperament, while at the same time there is the evident influence of a fine inherited quality, probably derived from his mother's side of the family. The pose of the head and general expression show power of attention, capability to fix the mind upon a subject quickly, and to scrutinize it in detail. Few other men see as much of a thing in a given time as General Raum. When interested in any matter he is "all eyes and ears" for it. His practical ability should be very unusual, and adapt him to management and direction. Especially does this appear because associated with a practical intellect he has a very strong will and can stand calmly to his convictions of duty and expediency. His command of detail should be a generally recognized talent. He can carry in memory a large array of data, and it is easy for him to levy on his store of facts for what he may need to meet a given contingency.

He should be a clear, direct, convincing speaker, in argument promptly detecting incongruities of statement in the assertion of an opponent, and incompetence in his evidence.

We judge him to be critically true in his discrimination, as a good microscopist is in his reading of the minute object

under his glass, and to make mistakes even when his observation is but off-hand annoys him much. He aims to be accurate, and in planning work, takes into account not only the essential but many features that another of similar experience would omit as of little or no value. He appears to possess a large, well-developed physical constitution, which contributes balance to his active, irrepressible mental faculties, and enables him to feel at ease in the midst of a pressure of duties, and so to command the best service of his intellect.

Green B. Raum was born at Golconda, Pope County, Illinois, on the 3d of December, 1829. He attended the public school of his native home, studied law, and was admitted to the bar in 1853. Three years later he removed with his family to Kansas. It was in the midst of the great struggle on the part of the South for the extension of the rights of the slaveholder into the new territory of the West, and Raum's influence was at once thrown on the side of the Free State party. Such action was dangerous, and for his family's sake he moved back to Illinois in 1857, settling at Harrisburg. At this time, and until 1861, Mr. Raum professed himself a Democrat. But he was heartily for the Union, and when the war broke out he enlisted, and was appointed Major in the Fifty-sixth Illinois Regiment. In the campaign of 1862 he served under Gen. Rosecrans in Mississippi, and at the battle of Corinth distinguished himself by leading an effective charge. He was with General Grant during the siege of Vicksburg, and later on went to Chattanooga. At the battle of Mission Ridge he received a wound, but soon recovered sufficiently to continue in the service, and during the Atlanta campaign was intrusted with important commands, such as

keeping open the line of communication between Dalton and Rome, and defending Resaca against Hood's assault. When he resigned his commission he had risen from the post of Major to that of Brigadier-General.

In 1866 General Raum was elected to Congress, and served one term. In 1876, he was elected president of the State Republican Convention, and made a delegate to the National Convention that nominated Mr. Hayes. He was appointed Commissioner of Internal Revenue August 2, 1876, and served nearly seven years. He proved here an efficient officer, and did a great deal to break up the "moonshiners" in the South, and to simplify the work of his bureau. During his term of office \$850,000,000 were collected for the government, and \$30,000,000 disbursed. His official reports were regarded as models of their kind.

Since 1883 General Raum has been practicing law, principally in revenue cases, in Washington. He is the author of "The Existing Conflict between Republican Government and Southern Oligarchy," a book whose title sufficiently indicates his opinion on Southern question. He was appointed Commissioner of Pensions in the autumn of last year, succeeding James Tanner, whose management of the intricate business of the department became so unsatisfactory as to couple his name with undesirable mistrust, and render it necessary that he should withdraw.

It must be admitted that the Commissioner of Pensions occupies a place of great responsibility; and at the present time, when so wide a difference of opinion exists among the people with respect to the wisdom of the pension bills recently passed by Congress, and when there is so much of rival heat among pension agents it is to be expected that he will be especially subject to criticism and aspersions, however straightforward and conscientious his conduct.

One who is observant of affairs at the

Nation's Capital, says of General Raum, that "he has student-like, quietly gone to work and mastered the laws which he is required to administer; he is devoid of gush, but is uniformly just, and throws his official discretion, all things being equal, into the veteran's claim. Where the law, and not the king, is sovereign, no man dare infringe it, and obedience is the first duty of the soldier. He is desirous of taking up and adjudicating at once pending claims found complete in order to place old claimants on the rolls, who, once there, will have something to keep the wolf from the door, and increases and new claims must take a back seat, and can not outrank those in waiting for years."

JULES VERNE.

One glimpse at this portrait should satisfy the average observer of physiognomy that the original is a man of lively susceptibilities, intuitive and prompt. He is what people commonly term nervous, and shows it by a disposition to restlessness and impatience when his surroundings are disagreeable. He has the power of application—when in the pursuit of some end. One might say that his nose shows him to be persistent in following up a purpose. Yet few men dislike more whatever is monotonous or tedious. He has unusual ability in the understanding of character and in quickness of judgment. He concludes first and thinks it out afterward.

The temperament and side head contribute to fertility of imagination. Few men are so ready in plan and expedient as he. The fullness of the side head indicates a strong esthetic spirit. He is at home in the circle of art, and had he devoted himself to some branch of art work, would have shown superior capacity. He has much pride and independence, a marked sense of personal worth and capacity. His Approbativeness, however, is not weak—so that the good opinion of friends and the world is by no means lightly esteemed. Taken al-

together, M. Jules Verne is a gentleman of fine nervous grain, intense, critical, mettlesome, possessing that temperamental condition which renders his brain active, elastic, and alert; and in circumstances that stimulate there is a tendency to overaction.

The reader is familiar with those books that bear the titles "Around the World in Eighty Days" and "Twenty Thousand Leagues Under the Sea"—books that have circulated widely in this country,

true to-day or what will be a probable outcome of invention and discovery actively in the future.

Jules Verne was born at Nantes, France, February 8, 1828, and is the youngest of three brothers, the eldest of whom died a little over a year ago at the remarkable age of one hundred and ten. He was educated at his native town and at Paris, where he studied law. He first came before the public in 1850 as a dramatist, with a comedy in verse, "Broken



JULES VERNE.

and excited the wonder of many a youthful mind. The type of semi-scientific fiction which they exhibit has been M. Verne's specialty and won for him great popularity. His books suggest the old tales of wonderful adventure as illustrated by the voyages of Sinbad; but while he adopts a highly romantic vein, much of his science is not to be relegated to the sphere of the preposterous—but to be regarded as really teaching what is

Straws," but in 1863 struck his vein of literary production with "Five Weeks in a Balloon," which he has since pursued with great success. "Around the World in Eighty Days" was dramatized in 1874, and is, probably, the most popular of all his books.

Of his writings he says: "I am now at my seventy-fourth novel, and I hope to write as many more before I lay down my pen for the last time. I write two

novels every year, and have done so regularly for the last twenty seven years. I do so much every morning, never missing a day, and get through my yearly task with the greatest ease. I am very severe on myself, and in writing I correct and correct. The function of whetstone was never more rigorously performed by any author on his works than by me on mine. I will show you one of my manuscripts, and you will see that in every line there are numerous erasures. Then I copy and correct again, and then I re copy. I often copy six or seven times before sending my copy to the printer, and then when the proofs come in I always find a quantity more of corrections to be made. I don't believe in dashing off work, and I don't believe that work that is dashed off is ever worth very much."

His style intimates great facility, but

his own statement shows that behind the smoothness of the phrase is the methodical industry of the critical and solicitous author.

He is a steady reader of scientific literature, and until he received a severe injury to a leg, was accustomed to spend much time in travel.

His family is said to be of Polish origin, and his real name Olchewitz. For a pen-name he translated the initial syllables of his family name (which in English means "beech") into its French equivalent *Verné*. He has been decorated with the Legion of Honor.

Besides the two books mentioned, others that have obtained notice in America are "A Journey to the Centre of the Earth," "Hector Servadac," "From the Earth to the Moon," "The Mysterious Island," and "Michael Strogoff."

REMINISCENCES AND REFLECTIONS.

EVERYBODY knows that John Neal was a poet, an orator, and one of the handsomest of men. He was a Woman's Rights advocate before Lucretia Mott or any of the leaders, and made a convert of me in the early flush of womanhood. Mr. Neal had been for several years in England domesticated in the house of Jeremy Bentham, the founder of the philosophy of Utility, "the greatest good of the greatest number." Mr. Neal abhorred expletives—he had force enough in his diction to cover his ground by a paragraph. He was in one sense a dangerous man—dangerous to the lover of truth and the enthusiast for the good and the beautiful, which he so well represented, in spite of his hasty temper.

I went to school to his mother and sister when eight years old, and must have been a somewhat capable child, for I remember I went to Mrs. Neal with the stocking I was knitting, and asked her to "Please show me how to slip and bind off the heel" of it.

She was out of temper, for in a pot over the fire some turnips were boiling with an unsavory aroma, and my keen sense of smell had so rebelled, that I had rushed from the room in disgust, but returned with the unlucky heel of the stocking to be aided in its way to stock- ingdom. Taking my arm with some haste she exclaimed :

"Thee knows how to do it. Go to thee's seat and bind off that heel," and I did as she commanded, being to this day ignorant of how I did it ; it must have been an inspiration born of necessity, for I was not used to rough treatment, But I am far from my line of thought, if it be thinking.

I was talking with John Neal about some incident that had excited my indignation, when he suddenly drew me to a halt by saying, "Child, never trot out an elephant to crack a louse."

The illustration was significant, even in its revolting odiousness, and it often comes to my mind in reading the marvelous absorption of grandiloquent ad-

jectives in describing infinitesimal nouns in the journals of the day. It is a waste of republican English, and indicates poverty of imagination.

Margaret Fuller and Maria Mitchell could never be supposed to represent either grace or beauty, and accordingly, especially the former, treated those who did represent them with supreme contempt. I have seen pretty girls who were afraid of her; and Fanny Fern once flippantly turned her back upon Kate Fields, although backed by the wealth of her millionaire relatives.

I always read with interest the briefest word anent the Grand Old Man, Gladstone; would women accept such a term? Can they so divest themselves of conventional dullness and sexual vanity, as to be called now and then the grand old woman? It would be no misapplication of terms to call Elizabeth Peabody, the founder of kindergartens in this country and the friend of Allston, Emerson, Alcott and Parker, still bright and useful, the Grand Old Woman.

Another thing to be considered, it would help on the principle of equality and help on the non-sexual idea of Christianity and Democracy. Ann Lee, who was a grand old woman, struck at the pith of equality when she founded her Republic irrespective of sex, and rejected marriage, for the marriage relation at once interposes with, checks and hinders equality; and maternity, naturally in early life, creates a barrier not felt by the other sex. There is something sweet and decorous in the seclusion of this period in the social scale, and the battling of women for political

stakes or opinions while this period is rife in her experience has something monstrous about it.

When woman remains "in maiden meditation fancy free," or nears the dignity of fifty summers, the field in any human endeavor is, and should be open to her, involving as it does no detriment to the family relation. Gladstone's wife doubtless helped to make him the Grand Old Man that he is, and why should not a generous, appreciative husband help to establish his wife as the Grand Old Woman?

In the State of North Carolina no sooner is a man married than he is called the Old Man. I rather like this as leaving room for the young, and giving a dignity to the mature man. Lately our minister to Brazil, Mr. Jarvis, from North Carolina, in writing a pleasant letter to his constituents, remarks, "The old woman learns the language quicker than I do," which was sure to touch a soft spot in a North Carolina heart.

You will perceive by this that the good old State of North Carolina has nearly taken the initiative in the term which I recommend be given to some worthy of the honor, just as it is given to the Gladstone kind, whose efforts have been steadily devoted to a great purpose. Let, then, women have a like designation with its significance of power, utility and devotion to great objects; let us learn to call such when we speak of them in the way we speak of Gladstone, and call her the Grand Old Woman. I move that we call Susan B. Anthony the Grand Old Woman.

ELIZABETH OAKES SMITH.

THE ILLUMINATED SKULLS.

DURING life those who have been offended by any one sometimes feel at liberty to express their dislike in return, and to make it as effective as possible by pointing out, often with undisguised malice, the unpleasant and weak parts of the offender's character.

But when the object and cause of such expressed dislike is gathered to the great silent majority there are few who do not suspend the exhibition of their animosity, and, at least, keep silence, while others tell what good they know of the departed. In the presence of death malice re-

ceives a check which is usually lasting. However, as time passes on, the character of the deceased is very properly made a study by those who may wish to improve themselves; and it becomes no longer necessary to clothe the description of any bias of character in ambiguous terms for the purpose of avoiding the appearance of malice.



FIG. 1.

The historian may become so interested in a country or character as to write a book which is very plainly and decidedly biased; or he may do so from family reasons. But, when the actual "foot-prints on the sands of time" made by any person are brought and laid before the eye of one who has never before known him or his surroundings, then, if ever, is a person expected to be an impartial judge, certainly as far as it is possible with the composition of his own character. His analysis would be expected to be founded upon intellectual perception, which is imperative in all accurate scientific work, and not be a result of feeling which conduces to prejudice.

We have before us several human skulls, which, with others, came into the hands of the writer as specimens in which he could have no other interest than that of scientific illustrations, and to these let us now address ourselves.

There is a limit to the amount of blood which is supplied to any region in our bodies by the blood vessels, and when this limit is reached a continually increasing demand for nourishment, made by some special part, can only be met by depriving the surrounding parts of their share. In the head, where there is little flesh or muscle on which they



FIG. 2.

feed, if the nerves (brain) want an extra supply of nutrition, and it is not supplied by the vessels in sufficient quantities, they must rob the bone, which therefore becomes thin in the immediate neighborhood.

Figure 1 is from a photograph of the skull of a child having a fine mental temperament. Notice the small face and the delicacy of the lines around the features. Note the fine, chalky appearance of the whole skull, and the width of the head across the middle of the forehead, while it is comparatively narrow on a line crossing the centers of the eyes. The distance from the root of the nose to the top of the head is considerably greater than the distance from the same point to the roots of the front upper teeth and shows a proportionately high head.

In fig. 2 is shown the skull of a man having the motive temperament very strong. Why should this skull be

shaped so differently from the former? See how large the features are, and how coarse their outlines. The difference between these skulls must mean something more than accident. The bone is so hard and metallic as to have become

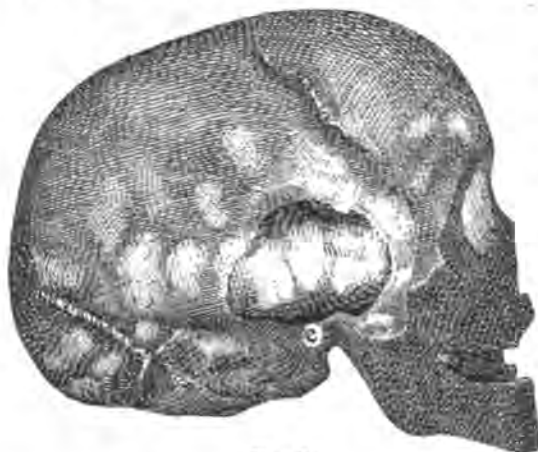


FIG. 3.

shiny. Its surface is rough, and looks as if in life it had been covered with leather rather than human flesh. The widest part of the head, just over the ears, is on a level with the eyes. This man did not die easily; he was like a cat, very wide between the ears, and had the endurance of "nine lives." The child's head was like the rabbit's, narrow between the ears, and it died young. Notice how comparatively narrow the head of fig. 2 is across the middle of the forehead. Measure it on paper and compare with figs. 1, and 5. The distance from the root of the nose to the top of the head is less than the distance to the roots of the teeth; and this is not found by holding the skull out of the horizontal position. This head is low, positively low, as seen in the full face; and the man's brain was also short in proportion to its width; small in proportion to his strong body. His body did not give out and he go to an insane asylum, because of nerve exhaustion. No; his physical state was rather the other extreme. He was killed with a rope around his

neck because he was a murderer. If he had a wider top head, like that of fig. 1, his strength and energy would, no doubt, have been directed to a better purpose. And if fig. 1 could have had the width between the ears which is shown in fig. 2 the child would have lived long enough to be of some use to the world.

Brains that are not adapted to their work are worse than useless in exact proportion to their misproportion, and brains that are very badly balanced either wear themselves out quickly as was the case with the brain of the child with its narrow base, or they contribute to harm, as did the brain housed in a skull like that of the murderer. Such a man, in ancient times, might have been a common soldier, if not altogether too insubordinate, and would have delighted in spending a whole day in fighting; and when the order came to plunder and destroy the vanquished city, it would have caused him to forget his fatigue and rush madly



FIG. 4.

on. Under the Spartan law the exposure of their infants to all the inclemencies of the weather would give a constitution like that of fig. 1 absolutely no chance for life.

It is impossible to produce by engrav-

ings an effect equal to the real skull when lighted from the inside. The best possible plates, especially prepared for



FIG. 5.

photographing yellow and red colors, were used in making the studies here reproduced; but even so, the gradations of light and shade are not fully what could be desired, as the color of some parts of the skull is that which is most difficult to photograph. However, the illustrations will show very well the difference most desired for the present purpose.

It is unnecessary to compare fig. 3 carefully with fig. 4, as such a contrast, even greater than that of the front faces, if such a thing were possible, would be noticed by the most superficial observer. The differences are even more forcibly impressed upon the beholder of the real skulls as they are illuminated, side by side. And when one is told that the same strength of light was used inside both skulls when photographed, the hearer would naturally

expect to find that these are extremes.

They probably are, in having so many dissimilar characteristics.

In fig. 4 by far the larger part appears so dark that little dynamical activity of the underlying brain could have been possible and yet leave enough material in the contiguous blood vessels to supply the thickness of bone shown. The only very light spot is near the forehead and is very small. The brain at this region must have been continually active, and the man probably did a great deal of whistling, or perhaps could hum but one tune and that to perfection. About half way between the ear (marked e) and this very light spot is seen a much larger irregular light place, not so light as the other, but still showing fair dynamical activity, and considerable strength of the instinct of acquisitiveness. Nearly over the ear, a little back, is seen a rather small triangular shaped light place. It is at the part of the brain called destructiveness, and is the widest part of this skull. Having, proportionally, so much physical energy or destructiveness, it would have given



FIG. 6.

this man much pleasure to exercise it, but the front view, as shown in fig. 2, discloses so narrow, pointed, and low a top head as renders him somewhat in-

different to good deeds, *per se*; the arm of justice hanged him before his destructiveness had acquired much dynamical perversion in killing. But justice could not restrain him from whistling, a disposition that was very active in him, especially as it did not require much exertion, and he could do it while lounging around and looking for an opportunity to steal something. The high place in the top of this man's head, firmness and self-esteem, as shown in fig. 2, and a little back of directly over the ear in fig. 4, gave him a supreme disregard for other people, and a desire to please himself, whatever the cost to them. All the meaning, except greatness, which it is possible to imply by the epithet "great bear," applies to such a man.

As a contrast, in almost every respect to the above, figure 3 is most extraordinary. This child's head was highest at the point slightly in front of a line drawn up from the ear and in exactly the same place where fig. 4 shows a marked depression. Respect and consideration for others were strong in the child and kept it continually active for their benefit, even when its strength was greatly overtaxed. This may be seen by the large extent of the very light places over the ear. These organs were small, yet kept in such a state of dynamical activity as to actually use up the child's strength.

The front view shows that portion of the top head which appears directly over the outermost part of the eye-sockets to be much better developed than in fig. 2. This is the locality assigned to the *perceptive* faculties and is invariably larger in civilized races, as a whole, than in savages. It is the deficiency here which makes the murderer's head appear wedge-shaped (fig. 2), and he was very deficient as far as regards faith, hope, and charity, all of which were very strong guiding stars for the child.

In fig. 3 notice the pronounced extension of the lower back head. The dis-

tance backward from the ear is disproportionately large, even for a child, and caused strong attachments to friends, dolls, or any other pets which might be at hand.

Figures 5 and 6 represent a skull which is very different in its proportions from the two former; and it is also greater in circumference. This head is much wider (nearly one-half of an inch) across the eyes (in the photograph it appears across the eyes, but in reality it is measured across the head just above the ears) than the murderer's, and there must have been much more inherent recuperative power, which was kept in a very high state of activity, as shown by the markings of the side view. The distance from the ear (marked e) to the top of the head is as great as in fig. 4, but here the resemblance ceases. There is no wedged-shaped appearance of the top head as seen from the front, nor does the forehead, as seen in the side view, slant off like a sand bank. The head is much more flat on top.

The middle lobe was large in this man, and almost the whole of the side head was very active. A circle surrounding all of the light parts of fig. 6 would inclose nearly half of the head. All that would be inclosed in this circle is not middle lobe, but the small parts of the anterior and posterior lobes which are included, so closely relate to the middle lobe as to act often with it for the personal benefit of the owner. It is the smallness of this part of the head which makes the child's skull look so much lower and longer from the face to the back of the head than does the skull now under consideration, which has the appearance in the side view of being massed or piled up over the middle. From these instances are we not warranted in thinking that by unearthing the skulls of the chief actors in the drama of past life the Phrenological historian would have at his command material aid of the most valuable nature?

R. I. BROWN.

FEMININE FACTS.

THE QUESTION OF THE DAY. WOMAN'S BEAUTY. STRONG-MINDED WOMEN OF THE PAST.

IN the first number of a leading "woman's organ" published not long ago in New York City, occurs this sentence:

"Heretofore woman was only welcome if the man wanted her, and if he no longer wanted her she was again cast out."

Is this affirmation true in the aggregate of all the women who have lived, and who—outside of the affections the kinship or the fellowship with man—have blessed, or proportionately afflicted, the human race? The annals of the world say not. From the fabulous days of antiquity to the beneficent changes which civilization and Christianity have wrought, history and tradition show that the inanity of woman's past is a mythical supposition. It has been too long an accepted dogma that woman's chief excellence was her physical beauty; from this has been deducted all the mawkish sentimentality of man's favoritism or his indifference, in the ratio as a woman's charms were more or less.

This sentiment was and is deftly cultivated by man, and it was, and still is, echoed by woman's mistaken vanity. *Mistaken* for that her personal attractions *are* greater, is a point which has been sometimes controverted. Beauty is a thing so apart from reason, that what pleases the eye is not looked into for greater excellence. Woman's softer virtues of kindness, of compassion, of adaptability to please, have affected the world more with a sense of her loveliness than her conformity to standard physical models.

Burke defines beauty "as some quality in bodies acting mechanically upon the human mind by the intervention of the senses." Hence the reason why woman's smallness, and smoothness, and delicacy have gained for her the credit of greater beauty. We do not

need the assertion of Darwin, that the male of every genus is more beautiful than the female.

The hart is more beautiful than the hind, the lion than the lioness, the male red bird, the cock, the gobbler, the peacock, are all more beautiful than their mates. Nor do we need that mediæval or modern artists should tell us that the Apollo Belvedere is more beautiful than the Venus de Medici, and that the perfect male form in the human species is more attractive than the perfect female form.

Why the reverse opinion should have obtained it is hard to say. Possibly because the Oriental idea concerning woman gained prevalence even outside of Oriental customs; the inceptive taint that woman was created only to be the ornamental adjunct of man; his toy, his doll, dearer perhaps than all his other pretty possessions, but without other, or innate personality. Upon higher grounds it may have been that the subtle refinement of woman's beauty was, and is, the beauty of the finer spirit; unconsciously absorbing from man's homage its own element, and endowing her in his eyes with a higher physical and mystical attraction. Whatever these corporal causations, certainly this delicacy of spiritual being has rendered woman peculiarly susceptible of refining, and especially of Christian influences.

It was the recognition of this diviner spiritual touch which haloed her with the specific and protecting friendship of Christ; when the great Teacher, going from city to village, from the coasts of Galilee to the plains about Jordan, gathered around him a band of women, and preaching the religion that rests on a philosophy of love, found its deepest truths rooted in the female heart. No evidence that we have more fully confirms woman's early status than her free-

dom to form religious opinions, and hold to their observances; and her consequent activity in the primal church. "These all continued in prayer and supplication with the women and Mary the mother of Jesus."

Signal mention is made of the women of the Bible by the same writers. It was Lydia of Thyatira—"If ye have judged me faithful"—that entertained Paul. The household of Chloe believed, and the "four daughters of Philip," at Cesarea; and Dorcas, and Priscilla, Tryphena, and Tryphosa, and Urbane, Euodias, and Claudia the "elect lady," and the "many honorable women" of Bera.

Reverentially be it said it was upon women the Christian Church rested then as it rests now, and there is not a page of religious history that is not a record of her vitalizing influence.

While in theory the old conception of woman's inherent inferiority to man is being rapidly repudiated, it has not been left solely for this age to point her individuality. From the time that Semiramis, the Assyrian slave woman, built Babylon in a single year, energetic and powerful women have asserted their supremacy. Even in the far East many notable women rose from the chaos of their degradation and became important factors in the quotient of its ancient greatness. As when Athalia reigned, and Cassandana, who "ruled Persia as she would"—when Dido founded Carthage and Noor Jehan, the "Light of the World," had her name stamped upon the coins of India.

A corruscation in the "midnight vestibule" of the dark ages is Kadijah, and of greater light is that other Mohammedan woman who was made Judge of the people, and to whom the Pasha commanded obedience should be rendered: "That what she required *must* be done, though it be through fire and water and stone."

Of more modern women the lives of Roland and Catherine and Isabella of Spain, and Elizabeth, and the many who

have ruled courts and kings, and swayed the destinies of empires—with and *without* the affiliations of man—contest with forceful proof the charge of woman's nihility. Men rule by strength—the strength of physical powers—the strength of mental achievements. But more dominant than all other passions, the supreme motive power of all his self-aggrandizement, is man's ambition. The "lust" which Otway says "is never quenched," and of which Milton avows, "To reign is worth ambition—though in hell."

Ambition, as a commendable impulse, has been often descried. Brutus charged it against Caesar as a crime that he was "ambitious;" and Woolsey says, "By that sin fell the angels!" Who can doubt that the restraining influence of woman has not been as the centripetal to the centrifugal of man's selfishness (that for which ambition is only another name), or that without her controlling moral force man, in pursuit of power, would not have flown off in a tangent of self-destruction.

Ethically it has been woman's province, whether "welcome" or otherwise, to save human society from disintegration. If, in this light, her co-existence would seem to have been only of negative force, she has also been the unrecognized inspirer of many great enterprises, and the practical executor of most of human benevolences. The world is said to stand at the threshold of several great changes. Most prominent, and daily assuming the most eminence is the coming question of woman's position. No one disputes the significant (one might almost say the aggressive), importance of this problem; but it will not detract from the laudableness of woman's equal rights or equal privileges to admit that she has enjoyed a few immunities heretofore. No thoughtful reflector on woman's history in the past can doubt her coalescence with many of its greatest events, or deny that she has often an invincible *staying*

power, whether "the man wanted her or not." That she has accomplished so much in the face of man's continual efforts to "throw her out," as the *Cycle* intimates—given the man's stronger ambition and a free road—seems prescient of fateful results for the

future. However that may be, it is a thought pregnant with grave interest, that while other changes may affect humanity in a political or an economic sense, this one that touches woman is moral—and of vital effect for weal or woe.

INDA BARTON HAYS.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

GEO. COMBE.—No. 4.

THE first edition of "The Constitution of Man," 1,500 copies of which were issued in June, 1828, sold slowly, but they were the John that prepared the way for future editions, so that the number sold between March, 1835, and April, 1836, exceeded 19,000. Mr. Robert Chambers became much interested in it, and published a "People's Edition" for less than forty cents a copy. One of the signs of its influence was the publication in London of a book called "The Art of Being Happy," which was a clear plagiarism of the Constitution, containing whole pages of the original without acknowledgment. Combe did not try to suppress the plagiarism; he only insisted that the source from which the book was compiled should be recognized in subsequent editions, which was done. In another work, his "Lectures on Popular Education" were paraphrased; thus showing that his writings were bearing fruit; and yet he had had but few outside of his own family to encourage him, to be his Aaron and Hur, to hold up his hands and speak to him words of kindness.

The year 1836 was filled with topics and occurrences of exciting interest to the Combe family. By the advice of Dr. (afterward Sir James) Clark, Dr. Andrew Combe was appointed resident physician to Leopold I., King of the Belgians. Prince Albert of Saxe-Coburg (the later Prince Consort) was under his care, and in various ways manifested appreciation of his skill. To George Combe the appointment afforded special pleasure, for it indicated that

phrenology, whether acknowledged or not as an important science, was at any rate no barrier to the highest honors to which a professional man could attain.

In April, 1836, the professor of logic in the Edinburgh University signified to the town council his desire for them to elect another to take his place, and Mr. Combe offered himself for election. He procured testimonials from all quarters of the globe, chiefly from doctors of medicine and clergymen in his favor, and of phrenology as the true science of mind. These testimonials he printed and circulated extensively. From the first it was evident that Sir William Hamilton would be the successful candidate, but since it afforded an opportunity to secure an intense discussion of phrenology, its chief representative, Mr. Combe, did not hesitate to throw himself into the crucible and be scathed from April to the 15th of July. Had he succeeded in being elected, it would have been a great thing for phrenology at that time, but financially a loss to Mr. Combe, for his business brought him more than the salary he could obtain from the professorship of logic.

In October of this year (1836) Mr. Combe was forty-eight years of age, and having been successful in the legal profession, and the sale of his books being greater than before, his lectures also being much more remunerative, he resolved to take the step he had so long desired and to which he had been urgently advised, namely, to put his business in the hands of a competent person and devote the rest of his life to the

promulgation of his beloved science. As one of the trustees of the Henderson bequest, Mr. Combe had devoted a part of his time this year, and there was in his estimation no valid reason why he should not follow his inclination. He consulted with his dearest friends and with his own family, and with their approval, having made all necessary arrangements he ceased to be a practitioner of the law at the close of the year 1836.

He thought that with care and obedience to nature's laws he might look forward to ten or fifteen more years of usefulness, being free from all ailments, happy, active, comparatively vigorous, and with the consciousness of having his foot more firmly planted on the green turf of life than at any previous time. He lived more than twenty years after he had left his law practice and devoted himself to phrenology.

The new year of 1837 brought a new era to Mr. Combe. Since the middle of April or early in May, 1804, he had been faithful and untiring in his calling. He was sixteen when as apprentice he entered the law office of Higgins & Dallas, writers to The Signet, and twenty-two when he left it, and now, after more than thirty years, and when nearly fifty, he left this steady occupation in a public capacity and applied himself to the study of anatomy, physiology, chemistry and the German language, hoping to fit himself for some higher sphere of usefulness than he had yet filled. In Edinburgh, his native city, he was denounced from the pulpit as the writer of a book which was a "direct emanation from Satan." These persecutions served to increase the sale of the "Constitution" to an enormous extent, for a book of its kind, and all his other books enjoyed such a degree of public favor as to assure him he had not written them against the common sense or morality of human nature. He received recognition and congratulations from men who labored for the advancement in educa-

tion and morals of the people. He was invited to lecture in Manchester, and did so in April with great acceptance. His stay in that city was a constant jubilee, and he won many zealous converts to the new science. The committee handed him as the proceeds of the course £264, after deducting all expenses, his hotel included.

In May, Mr. and Mrs. Combe went to Germany and spent three months visiting the principal towns and institutions and forming many acquaintances with persons of eminence for wealth and talent. While in Rotterdam he wrote his opinion of the reasons why phrenology was dead in Germany, and among them said :

"It appears to me never to have been alive there. Drs. Gall and Spurzheim delivered a few oral instructions at a time when the doctrine was very far from being matured. They made no practical pupils; that is, they taught nobody to observe. They published no works in German which could enable their disciples to advance in the doctrine, and the interest which they excited was merely temporary."

He thought of making himself sufficiently proficient in the German language to lecture, but the urgent solicitations, with promises of a satisfactory remuneration, from America finally decided him to visit this part of the world where so great a number of his books were read. The time fixed upon to sail for New York was in the autumn of 1838, and to remain in the United States till May, 1840. He accordingly wrote to his American publisher, Nahum Capen, of Boston, to Dr. Caldwell, of Kentucky, and others of his cis-atlantic correspondents, asking about halls and their expenses, etc., in various places, in order to arrange his course of action. In the mean while, having declined the invitation to lecture on phrenology before the Association for Popular Lectures in Edinburgh in the winter of 1837-38, he prepared a translation of Gall's work on the "Functions of the

Cerebellum," to which he added the views of Vimont and Broussais, and answers to the objections urged against phrenology by Drs. Boget, Rudolphi, Prichard and Tiedeman. In the physiological portions he was assisted by Dr. Andrew Combe, who wrote the replies to the above-named opponents. Mr. Combe also added to this work a translation by himself of Dr. Gall's petition against an order by Francis I., Emperor of Austria, prohibiting him from lecturing on the functions of the brain without special permission asked and obtained.

In March, 1838, Combe gave a double course of lectures in Bath, England, and in May and June he gave a course in Birmingham, for both of which he received great appreciation.

On July 3d, a few days after the coronation of Queen Victoria, Mr. and Mrs. Combe were at the opera in London and occupied a box almost directly opposite hers, which afforded him a good observation of her head, and upon which he made a long memorandum.

During July and August they made their final preparations for spending two years in the United States, notwithstanding Mrs. Combe's fears for their safety in New England, on which Dr. Channing remarked :

"I beg you to assure her there is not the slightest ground for her apprehensions. In truth I could not read them without a smile. We look on New England as the safest spot on earth. Our cities have hardly the show of a police, so much do we rely on the habits of order in the people. A city in Europe of the size of Boston, with no more force for its defense, would be in imminent peril."

Mr. and Mrs. Combe left Edinburgh Sept. 1, for Bristol, where they embarked on the steamer *Great Western*, for New York, on the 8th, and on the 25th arrived at the end of their voyage, after what was then considered a quick passage.

Members of the New York Phrenolog-

ical Society called without delay to give him a hearty welcome, assure him of complete success, and arrange for a course of lectures in November to be held in Clinton Hall. Mr. John J. Palmer, manager of the Merchants' Bank, took charge of his finances.

After spending three days in New York, they sailed up the Hudson to visit Mr. Combe's brother William, at Albany, where he was visited by Mayor Teunis Van Vechten, and other men of note, who knew him only through his works, and he became still more sure of success.

From Albany Mr. and Mrs. Combe traveled in a hired carriage to Worcester. Leaving Albany Tuesday morning, Oct. 2, they arrived at Worcester Saturday, the 6th, in season to take the railroad train at 4 P. M., and arrived at Boston at 7, taking five days from Albany instead of but a few hours, by rail, as now.

Comparing his description of what he saw of America, its cities, citizens, and their manners and customs then and now, it seems almost as if a century at least had passed instead of only half a century.

In Boston he found himself surrounded by men of bright minds, and of the attendance at his lectures he wrote :

"My eyes never rested on such a collection of excellent brains." "They are the biggest-headed, moral, intellectual, enlightened, civilized and energetic Pilgrims."

Here he saw the brain and skull of Spurzheim, and visited his grave at Mount Auburn Cemetery. He also formed life-long attachments with men of mental and moral influence, among whom were Rev. Dr. William Ellery Channing, Samuel George Howe, Manager of the Perkins Institution for the Blind, and the Hon. Horace Mann, Secretary to the State Board of Education, and President of the Senate of Massachusetts for two years.

Mr. Combe's first appearance in public in America was at the commencement of his lecture course in the Masonic Temple, Boston, Oct. 10, 1838.

This course consisted of sixteen lectures of two hours each. An intermission of five minutes was given at the end of the first hour, when the windows were opened for the admittance of fresh air, as well as to give opportunity for a change of position and rest for his listeners. His terms were \$5 for each ticket for the course. This plan was followed whenever he gave a full course of sixteen lectures, and closed the course Nov. 14. At home, in Britain, he had been accustomed to a greeting on entering the lecture-room; also at times during the discourse and at its close; while here he was treated with silence and profound attention. His lectures were given three evenings of each week, and also a series of practical lessons in the daytime, teaching how to distinguish the temperaments, and the mode of taking measurements.

At the close of his lecture on how we might successfully investigate the mental powers by means of the organization, he referred to the cry of materialism which had been raised against Phrenology, and had frightened many people who would otherwise be students of the science. He confessed himself unable to discover of what essence mind is composed; but said he knew there was no manifestation of mind without brains.

On Saturday, November 16, Mr. and Mrs. Combe arrived at New York. His first course of lectures began at Clinton Hall—then at the southwest corner of Beekman and Nassau streets—November 19, and concluded December 24. The average attendance throughout the course was 365 persons.

"In the presence of a number of medical men and others, Mr. Combe, by request, demonstrated the unfolding of the brain according to the method of Gall and Spurzheim; showed the fibrous character of the brain, the decussation of the fibers of the corpora pyramidalia, their passage through the pons varolii, and their ultimate expansion into the anterior and middle lobes. He traced the fibers which rise from the corpora olivaria and corpora restiformia to their respective expansions, traced the optic nerves to the anterior pair of the corpora quadrigemina, showed the various commissures of the brain, and the manner of unfolding its convolutions."

Dr. Boardman says, in his report of the dissection:

"There was a general expression of satisfaction and gratification; and an acknowledgment from all present, I believe, that they had seen some things which they had never before had the opportunity of witnessing."

Mr. Combe overtaxed his strength while lecturing three evenings each week, and each lecture two hours in length, beside his classes in the daytime from two to three hours each, visiting places of interest, and attending to many social visits and callers; but taking warning from the fate of Spurzheim, his teacher and friend, he gave himself a little more time for rest after concluding his lectures in New York before commencing them in Philadelphia than he did between those of Boston and New York.

He commenced his course of lectures in Philadelphia, January 4th, 1839. His average number of hearers in Boston had been 303; in New York, 365; while in Philadelphia it was 520. At the close of this course, Feb. 8, he was so earnestly importuned to repeat it that he consented; and after a respite of three weeks he opened the second course on the 2d of March, and had an average attendance of 357 persons, which he considered a large number at a second course. He had never before attempted to give a second so soon after a first course, and had been advised by Spurzheim not to attempt it, but nothing occurred to cause him to regret his effort.

The present writer was then living in Philadelphia with the family of her eldest brother—O. S. Fowler—and all of us attended both courses of lectures. Mr. Combe's broad Scotch accent was so difficult to be understood that it required

very close attention, and therefore was very interesting as well as fatiguing. Those who could not give their whole minds to the subject were not interested.

While in Philadelphia Mr. Combe met and saw many persons and occurrences that gave him valuable facts for future use ; among which, perhaps, none more so than a surgical case under the hands of Dr. George McClellan, father of Gen. George B. McClellan, probably the greatest surgeon that ever lived ; but his life was too brief to acquire for him the reputation which his deeds deserved. The case was the removal of a bony tumor from the head of Thomas Richardson, at the region occupied by Firmness, Self-esteem, Approbateness, and a part of Cautiousness on the left side. It was supposed by all the surgeons who had examined it previously to be merely external. After the scalp had been dissected from the tumor and the surrounding skull, with a long, narrow saw held in a tangent to that portion of the circumference of the cranium, the doctor cut off the entire tumor, apparently at its base. From the movements of the saw, the doctor suspected that it was not merely an exostosis. On examination it was found to be *spina ventosa* of the skull, which had been removed from the surface of the dura-mater beneath. The tumor extended inwardly much deeper below the inner table than its outer surface had risen above the external table of the skull. The whole mass of the tumor was circumscribed by the circular edge of a small Hays saw, and the mass pried out in successive fragments by an elevator, occasionally aided by the bone nippers and forceps. The whole morbid mass was finally removed, and exposed the dura-mater, which was found to be thin and livid in appearance at the bottom of a cavity, judged capable of holding four and a half ounces of water. Although the circulation was strong and full, there were no pulsations visible. Some small spicula of bone adhering to the dura-mater

were extracted by the aid of forceps. In extracting the last of these, which appeared to penetrate the dura-mater, a prodigious gush of venous blood issued, after which the patient fell into a convulsive syncope. The hemorrhage was supposed to proceed from the longitudinal sinus, and was arrested by graduated compresses and a bandage. The wound was also dressed and confined by bandages. On the twelfth day after the operation, the cavity below the bone was diminished, and every day after that it continued to decrease, until, in the fourth week, the surface of the brain, covered by the granulating dura-mater, had risen up to the level of the inner table. The natural pulsations did not appear until the cavity was nearly filled ; and in the mean time, forcible pressure could be made on the surface of the brain without exciting any stupor or inconvenience on the part of the patient. But as soon as the pulsations began, every kind of pressure proved irritating to the brain, and at the same time a remarkable change took place in the character and bearing of the patient. At the time of the operation, and until the pulsations of the exposed portion of the brain returned, he was remarkable for his resolution and firmness of mind. He sat upright in a chair without any confinement until the blood-vessel gave way at the close of the operation ; and during its performance he repeatedly asked of the bystanders if it was the brain that was coming out under the surgeon's efforts. Now he became exceedingly timid and irresolute. He could not even go down to the room where we took a cast of his head without a sense of faintness and sinking ; and this was after his complete recovery from the wounds. When he saw me approach to look at his healed head, he trembled all over and could hardly catch his breath ; and the taking of the cast of his head in plaster nearly prostrated all the functions of his mind and body. Instead of maintain-

ing his usual erect posture and bearing, he sunk his head and shoulders into an awkward stoop, and looked anxiously forward, as if fearful of striking his head against a door-post. After a year his former courage and firmness returned.

This surgical operation took place early in December, 1838, during Mr. Combe's first course of lectures, and one of the surgeons who witnessed it informed Mr. Combe that both the organs of Firmness had been lost or destroyed, and that the patient had maintained his mental vigor and erect posture.

Mr. Combe read the letter to his class, and explained to us that the tumor must have been posterior to the organ of Firmness. Phrenology was on trial in Philadelphia at that time, and people waited almost breathlessly for a decision from Mr. Combe, whose opinion was adverse to that of my brother, O. S. Fowler, who said *no brain* had been lost, but merely pressed upon by the tumor and misplaced, and that when the pressure was removed, the misplaced organs collapsed, comparing it to the removal of the band from the waist of the laborer. At length Mr. Combe came to say to my brother that he was convinced he had been mistaken in his former opinion and came to acknowledge it; for he had seen the young man in April, 1840, recovered and with nearly his former firmness. Mr. Combe was ever ready to acknowledge an error, and to give credit where it was due; and after he had been long enough in Philadelphia to learn more about him, also in what esteem Mr. Fowler was held by professional men and others there, he showed his good will by allowing us to make molds over his plaster casts, and allowed me to copy for my brother's use several of his drawings illustrative of various portions of the physical anatomy. While he was lecturing in New York he visited the phrenological office and cabinet of my brother, L. N. Fowler, and wrote to Edinburgh a description of some specimens he saw there, and also

a notice of the *American Phrenological Journal*, but being annoyed in some places he visited by itinerant phrenological quacks, he was careful not to give undeserved praise.

During the interval between his two courses of lectures in Philadelphia Mr. Combe visited Washington, D. C., taking with him a letter of introduction from Dr. McClellan—who was formerly not only an unbeliever in phrenology, but also lectured against it and ridiculed it to his medical college students—to Dr. Thomas Sewall, who had delivered and published two lectures against the science. Dr. Sewall treated Mr. Combe courteously, took him to the White House, and introduced him to the then President, Martin Van Buren, made a large party for him at his own house, to which were invited senators, members of the Legislature and other persons of note, and where he had much pleasant conversation. During the evening one of the gentlemen brought Mr. Combe and Dr. Sewall face to face, and said, "Now we have got phrenology and anti-phrenology fairly before us; let us hear you fight it out." Mr. Combe replied that there was really nothing between them to fight about; that if the views to which Dr. Sewall had given the name in his work were really phrenology, he would be altogether on his side; but that Dr. Sewall had, in truth, erected a phantom, called it phrenology, and then knocked it down, but that no phrenologist took any interest in such a feat. Dr. Sewall asked if Combe said this seriously, to which he replied in the affirmative. "Then," said Dr. Sewall, "I suppose I must revise my opinions, which are not unalterable, like the laws of the Medes and the Persians." Dr. Sewall's opposition to phrenology grew out of a personal pique against Dr. Charles Caldwell regarding a money transaction.* C.F.W.

(To be continued.)

* See *Phrenology, Proved, Illustrated and Applied*, p. 235, published in 1835; also the *AMERICAN PHRENOLOGICAL JOURNAL*, Vol. II.

of war or business wisely, but not have the power to carry them out. Some men with large heads and small bodies, having a fine temperament, will quietly plan business for other people to execute, and so secure success in life.

We remember one twenty-four inch head with a 125-pound body calling on us for an examination, and an hour later the same day a man came in that had a twenty-four and a quarter inch head, and he was as healthy and vigorous a man as we ever saw, and he weighed 305 pounds. He was by profession a lawyer, and we saw in him a Niagara of power, sufficient to carry his brain to the top of its capacity, and keep doing without exhaustion. We remarked to him that if he were a lawyer he would work a week on a case, struggling with six well-paid opponents, men of caliber and character, and when he came to his summing up, he would speak for three or four hours unflaggingly, ready by repartee to respond to interjected interruption from the other parties, and when he had mastered his effort and won his case he could go with his opponents to the dinner table, and be the central figure, and keep the table in a roar, and not be tired; and then he added "and go to the opera in the evening and enjoy it." The first man had as good a brain as the second, but he lacked the vitality, the vital power to give his brain ability to work continuously. Occasionally one of these large-headed persons, with a fine organization and slender health, will write immortal poems, will make wonderful inventions, will write books that command admiration and perpetual regard, and yet they write but little. Fitz-Greene Halleck, who wrote one of the best, if not the best American poem, "Marco Bozarris," was once criticised in a literary journal by an eminent man, by saying that the worst thing that could be said about Halleck as a poet was that he wrote too little.

The late Thomas H. Renton had not a very large head, but he had a wonder-

ful body, was the most solid and healthy and vigorous man of his age and time. His style of talent was statistical; he was a kind of cyclopedia of facts, and in the Senate, if Mr. Benton made a statement of fact, it was generally accepted. His logical power was not so great, but he was scholarly and critical. We have watched him in the Senate when he was pushing some cause, and he was fierce and earnest in his manner, and one of the bravest of men, and perhaps half a dozen Senators would be cross-questioning him, and he would turn from one to another, and give a vigorous and manly answer as to day and date and circumstances, and go on unweariedly to the end of his speech. He was thirty years in the Senate, and generally in some struggle, but his brain was admirably sustained by a strong, healthy body. In fact, if his head had been twenty-four inches instead of twenty-two and a half, his body would have sustained it amply, and then he would have been a great man.

Calhoun, on the contrary, had a large head and a susceptible temperament, but a slight body; he was tall but slim, and he spoke but seldom. The Senators with large bodies were the ones to be able to labor and struggle against opposition, and sustain a favorite measure.

When, however, there is a head under our hands, of a given measurement, and a body of such size and weight as to give adequate support to the brain, we say the man is well balanced between head and body, and then we have reached one point.

The next point to be considered is whether the head itself is well balanced; whether there is enough development in the forehead for such a sized brain; whether there is enough in the top head to give strong moral sentiments; whether the side head is equal to the other parts, and therefore energy and force may be predicted; whether the back head is full and well rounded, and equal in size to the other parts, and then we say the

head is well balanced in itself. If all the groups of organs are equally developed it is a well-balanced head, whether it is large or small, and the size of the organs in such a case would be considered about equal, and would be registered the same as the size of the head. If the head is well balanced, all the organs should be of equal size, and if the adult head measure twenty-two inches and its size is called five, on a scale of seven, then the organs should average five; but a head may be twenty-two inches, and be related to a person of light body, or a young person, and therefore the head may be called six or large, considering the age and size of body, and the organs be marked accordingly.

—:o:—

CORRESPONDENCE.

GORRIE, Ont., June 24, 1890.

TO MY FELLOW STUDENTS OF 1889.

HAVING noticed Bro. Judkin's letter in the JOURNAL, and remembering our promise to write up something, I feel as if I was neglecting my duty did I not contribute a few lines describing my phrenological experience. In the spring of '88 I accidentally fell in with a work on Phrenology, and seeing in it the solution of some religious problems which had always been a puzzle to me, I determined to investigate further. The same friend also loaned me the book called "Human Science," where I saw fact upon fact by the score to convince me of the truth of Phrenology, and also to teach me some of its lessons. Then and there a flood of light burst upon my intellectual vision. I understood then the difference between morality and religion, and learned how to understand certain *dishonest* religious persons. I saw what would prove the salvation of the race. I saw, *first*, what the teacher wanted: a knowledge of the primitive powers of the mind. Second, what the clergy wanted: a knowledge of the human soul which they talked so

much about and yet knew so little of. Phrenology filled these wants. My whole being became enlisted in the cause of Phrenology. I secured some books from the Fowler & Wells Co. and continued the study. The more I knew of it the more I wanted to know. I learned to have charity for the shortcomings of my fellow man. I saw in Phrenology basis for church unity. I saw the causes of theft, lying, murder, etc. When September, '89 came I could not refrain from going to New York and taking a course in the Institute of Phrenology. Since we parted I have been doing what I could in the good cause, and I may say that I have succeeded in awakening interest on the subject, advising the wayward, throwing light on many mysteries, dispelling "bump theories," and in short, using the science as a lever to uplift the race. So far as *financial* success is concerned, I have done as well as I expected, and I hope to do better during the coming season. I believe that Phrenology is the science destined to redeem mankind. Of course some religious journals ridicule Gall and Spurzheim's doctrines, and recommend the "*new Phrenology*" of the experimentists. It is more than amusing to notice the displays of ignorance manifested by opponents of the science. When they know better they will write more to solid edification.

Hoping to hear from some of the other students through the JOURNAL.

I remain,

Fraternally yours,

W. D. LAMB.

—:o:—

SIoux CITY, IOWA, June 16, 1890.

MY DEAR PROFESSOR SIZER:

I LEARN that you have just completed your seventy-eighth year. Allow me to congratulate you, and may you live many years yet to bless mankind. Yours, surely, has been a long and useful public service, and the grand and noble results of your labor are seen in all parts of the world. It can most truly be said of you when life's

journey is reached: "Well done, good and faithful servant."

In the fall of 1885 I stepped into your examination room, a stranger to you, and asked for a full written delineation of character. I was astonished at its accuracy, and also by the ease and rapidity in which you "hit" off each characteristic. I treasure that chart, for it has been a great blessing to me in cultivating and restraining some organs. I was perusing it to-day, and can most certainly declare that not a single point in my make-up was omitted.

I have added one new lecture to my course, upon the all-absorbing topic of Temperance. There is much to be done here, and it can not be done too quickly, and I really believe it to be the duty of every lecturer upon Phrenology to add one on the subject of "Temperance." I shall continue to lecture upon it the rest of my life. May I have the privilege of meeting you again this side of the grave is the fervent wish of your old pupil,

DR. F. W. OLIVER.

—:o:—

—, OHIO, June 14, 1890.

PROF. NELSON SIZER—My Dear Sir:

YOUR delineation of my character came this A. M. I have read it over carefully, as has also J. A. Rafferty, the gentleman who advised me to send to you, and who is a firm believer in Phrenology, having read several of your books through. We both came to the conclusion, and were not long at it either, that if any man ever read another, you surely have read me, and to say that it is wonderful is but putting it mildly. The law and medicine have always been my favorites, and I have often thought of the stage, also, but owing to the fact that my parents would oppose such a step, I have never seriously considered the subject. To be a physician has been my highest ambition, and I firmly believe that I would like it as well as anything. For a physician is almost a member of the family of his patients. If he is good and successful he is admired and looked up to, and what is better than alleviating the sufferings of humanity? He also has a chance to become professor of some branch of medicine in a medical college, and there surely he can use his power of utter-

ance. You have said that I would do well as a physician, and hence I am pleased.

Thanking you for your kind favor, I remain.

Very truly yours,

— — — — —

Please do not use this in print with my name or initials affixed. But you are welcome to use the letter, and if any one wishes to know the author, then give them my name.

—:o:—

W—, CONN., June 21, 1890.

PROF. N. SIZER—Dear Sir:

I RECEIVED my pictures and character yesterday, and I am very well pleased with them, as you have told me the truth, both in my favor and against me: you described me exactly. I think you will hear from another in this family (since mine is so correct), and from me again when I shall desire to select a companion.

Yours truly,

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—:o:—

SPRINGFIELD, MASS., June 24, 1890.

THE phrenological character of myself, and also that of my young lady friend, from photographs, were received a few days ago, and I am a firmer believer in Physiognomy and Phrenology than ever. As far as I know the characters of both myself and the young woman, you have given a perfect mental photograph of both of us, and every statement you have made is borne out by fact. When I sent the pictures to you, I did not expect you would tell me much more than I knew already, but I wished to have my knowledge of the young woman corroborated in a scientific way. I shall do my best to win, feeling that sentiment and science are both with me, and that God's blessing will be on my efforts.

Respectfully,

— — — — —

P. S.—I am willing that you should use this testimonial if you wish it, providing you withhold my name.

—:o:—

THE brain is absolute master of man, and by proper habits it should be kept healthy.

CHILD CULTURE.

LOVE AND LAW.

BY THE AUTHOR OF "AN AUNTIE'S NOTIONS ABOUT CHILDREN."

IT is difficult to say how or by whom it was first originated the notion that love and law must necessarily be opposed, or at least unsympathetic to one another. Perhaps it was whispered by the serpent of Eden into the ear of Eve, and so descended through each generation until the present. Certainly the error is nowadays widespread.

Children seem to fall into it almost from their first dawn of intelligence. Mother is "kind" when she will let them do as they like, and "cross" when she can not. She is "a dear" so long as no improper tendency calls for restraint, or neglected duty has to be enforced; but only let her feel compelled to administer correction or insist upon obedience to some just rule, and the love speedily evaporates, the smiles give place to frowns and, ceasing to credit her with any kindliness or affection toward them, her erstwhile caressing pupils are too ready to dub her "a disagreeable old thing." Even grown persons appear to cling to the same mistaken idea, or why do so many hold the heresy that Divine love has provided us with a means of escape from Divine law, instead of a new and better way of fulfilling it?

Law is apparently regarded by the majority of persons, both old and young, more or less in the light of tyranny—an unwarrantable interference with the liberty of the individual; anything in the shape of a rule which happens to clash with their selfish desires stirs up immediate and unceasing rebellion. How the notice "Visitors are requested to keep off the grass" arouses in many vulgar minds (and in some who would be indignant at the imputation of vul-

garity) a feeling of resentment and possible defiance! They do not reflect that in parks and places frequented by many feet such a restriction is essential, if the grass is to preserve any of that delicious verdure so grateful to the eye; it is a rule made, if not in positive love, yet with regard to the "greatest pleasure to the greatest number." Turf, unguarded by such prohibitions is, in the neighborhood of large towns at least, soon trodden into the yellowness of hay, if the ground it covered is not eventually worn quite bare. As another evidence of this instinctive revolt against law, we remember noticing how many persons deliberately disregard those prominently placed injunctions "Keep to the right," and "Keep to the left" in the subterranean passage to the Exhibition grounds at South Kensington; a few showing, by their remarks, that they felt something resembling annoyance at being thus enjoined; not considering that it is solely for the greater comfort and convenience of passengers that the notice is displayed.

That numerous offensive laws have been enacted no one can deny, which fact has no doubt done its share in producing the disastrous impressions above mentioned. But law originally was the outcome of love, and the great majority of existing legislation, both public and private, is undoubtedly framed for the good of the community at large. That children should be early imbued with this view of the matter, would surely tend to the development of law-abiding citizens. With this object we strongly deprecate the enforcement of many rules, or of blind obedience. Reg-

ulations should be few, reasonable, and really prompted by a desire for the benefit of those ruled. Selfishly imposed restraints can not but be detected and justly resented by the victims. Much harm is done, we cannot but fear, by persons in authority forgetting that law, whether temporary or abiding, should be rooted in love, and placing upon those beneath them the galling yoke of compulsions and restrictions not good in themselves, but only insisted upon for the display of power or to save trouble. "Now, you sit down on that chair and if you move again I'll punish you?" an unthinking nurse or elder sister may say to a restless child, who simply wants more freedom to exercise its healthful limbs rather than arbitrary restraint; when possibly her only excuse for so severe an imposition is that she wants to read a book or trim a hat instead of romping with the child or taking him out. This is not the way to gain cheerful compliance. No command should be issued, unless under pressing necessity, which is naturally burdensome or very difficult of fulfillment, for revolt and disturbance will only be encouraged thereby. But essential laws should be firmly and constantly insisted upon; their observance and a sense of respect for authority in general will be resisted if the reason for their existence be explained and the resultant benefit pointed out.

We should never assume that rebellion is inherent in the young, and appear therefore to expect it. This is an error that youthful mothers and teachers seem very readily to commit. Some even issue injunctions in the challenging tone of those who take it for granted that all authority is distasteful, and will be resented. "You had better not let me see you" do so-and-so, is another erroneous form of prohibition, inferring, though of course nothing of the sort is meant, that secret transgression is quite to be anticipated. Here, also, we can not but express regret that any one should make

even childish rebellion against the command of those older and wiser a subject for mirth or a source of amusement. Too many and too popular are the tales, especially for boys, which captivate by representing school and other rules, even the law of the land, as despotic, and to be evaded on any occasion and by any means. "Fun," according to the writers of such stories, consists in disobeying the powers that be, and the greatest hero is he who sets them at defiance as often and as successfully as possible. This is nothing less than inciting to anarchy on a small scale.

Another and extremely subtle mistake is that of expressing love by the relaxation of good laws. "Early to bed," for instance, is a wise rule; it is instituted, or should be, not in "order that the children may be got out of the way," but because early sleep and plenty of it is needful for them to grow healthy, and cheerful and well; this being so, it is weakening to their respect for beneficent devices if caresses and coaxing and an awakening of maternal tenderness are allowed to result in the wise rule being carelessly set aside. It seems to justify the supposition that love, if it could always be thus brought into play, would always supersede not that regulation only, but all others which may be in any way distasteful to thoughtless childhood. To reward little folks, moreover, for good behavior, by excusing the performance of necessary duty must also convey the idea that duty is a sort of imposition from which escape is desirable.

It is only by making our charges fully to understand that the precepts to which we require their submission are the outcome of love and of an earnest desire for their highest welfare, that we are likely to be successful in impressing upon them a realization of the fact that their professions of love to us are comparatively valueless if unaccompanied by obedient endeavors. And unless we can accomplish this teaching as regards ourselves and what are called the secu-

lar obligations of life, we are scarcely likely to instill into their minds the corresponding, but infinitely more exalted truths of our relationship and duty toward our Heavenly Master and the injunctions which He has left for our perfecting in Divine grace truths that often seem strangely ignored even by those who call themselves after His Name.

"If ye love me," Jesus said, "keep my commandments; commandments that are themselves an expression of His love to us; to which the Apostle adds: "Love is the fulfilling of the law."

JENNIE CHAPPELL.

SHALL OUR LITTLE ONES COME TO TABLE WITH US?—In a number of the *PHRENOLOGICAL* published a few months since, a writer commented on the treatment of children at the table. The following from the *Homemaker* on the same subject is similar in tone and suggestive. A correspondent asks the opinion of the editor with regard to little children associating with the elders at the table and remarks:

"With many this may seem to be a decided advantage; the child learns patience, self control, and it is to be hoped, good manners, although it is a difficult thing to keep a young child from becoming self-conscious in the midst of an appreciative home circle.

"But, at the best, does he not hear facts stated which leave a false and often harmful impression? At most tables stories are related, arguments (often fervid ones) are carried on, and sarcastic remarks or jokes are made, which all understand except the baby, who comprehends just enough to have conveyed the wrong idea into the little retentive mind.

"Of course, on the other hand, great good may be gained if a little explanation is given—but in most families there is no time to do this, so that it is not until we hear some startling quotation which

'mamma said,' or 'papa said,' that we realize the full meaning of the 'misunderstood.'

"It is asking a great deal to have the conversation of a large or small family restricted for the youngest members, yet there is so much to be said on each side of this question that it becomes quite puzzling."

The editor's answer is:

"The question is a hard one to answer. One is not willing to permit a child to eat his meals only in the society of a nurse, who is unable to give him needed instructions as to his table manners, etc. In addition to this, the habits of self-restraint and of waiting upon the convenience of others, that a child must learn who eats with the rest of the family, are of incalculable benefit to him.

"Still, there is force in the remark that it is hard to subject older people to the constraint a child's presence frequently imposes. Perhaps the best method of settling the matter is by a compromise, permitting the children to eat with their parents at breakfast, and making the lunch time of the elders the little ones' dinner hour. An early nursery tea may then be given the children, and at the late dinner the older members of the household may be unhampered in the enjoyment of free speech.

"In this fashion the way may be gradually paved for the time when the juniors will have so far outgrown leading strings that it will be impossible, following our American mode, to keep them longer in the nursery."

A SOUND BODY FIRST.—The full-limbed and chubby faced baby, who squalls and kicks with vigor and eats enormously, as it performs gymnastics on its mother's lap, is the picture of physical health; but its feeble and semi-fluid brain grows slowly, as it is needed but little at this stage of automatic life. The brain gets behind in the race of life until the muscular system

develops somewhat and thinking is needed for self-preservation. This conservation of brain force is a wise provision when taken in conjunction with comparative growth and decay. It enables us to possess vigorous brains and strong minds long after our knees are becoming weak, our hands showing signs of shakiness, our shoulders having a stoop in them, and we begin to gravitate bodily toward the earth from whence we sprang. As age creeps on, waste is getting the better of repair. In work there is not only a holding of the fort, but also an extension of its defenses, hence the greater demand for building-

up material. The boy has to grow. Mental overstrain in youth and manhood is becoming a peril to the more civilized races. This malign influence of undue mind friction, and which begins in our schools, will have its full friction in national deterioration and decay. Vice, lust and moral corruption are largely found among the mentally defective classes. The nervous, overstrung, over-tense brain in one generation means low mentality or ill-balanced minds in the next. This is nature's inexorable law. The only hope there is lies in the fact that the weakest goes to the wall.—*Daniel Clark, M. D.*

A GIRL'S LETTER TO KING LEOPOLD.

IN the *Philadelphia Inquirer* of a month or so ago was an interesting account of a little girl's intervention in behalf of an imprisoned relative which it is a pleasure to repeat :

Six years ago, Frank S. Moore, of that town, was a sailor on board the "Rhine-land" steamship plying between Philadelphia and Antwerp. A letter from home informed him that his favorite sister was dying and wanted to see him. He took it to his captain and asked leave of absence. The captain said "No." Then Moore, watching his chance, deserted.

He reached home in time. After his sister's death he changed his name and shipped on the "Waesland," a steamship of the same line. All went well until he and a shipmate of his fell in love simultaneously with a pretty girl, an orphan, living at Antwerp. Then his rival, who had known all along who he was, denounced him to their captain, who put him in irons and at the first opportunity turned him over to the Antwerp authorities. He was taken into court, where he didn't understand a word that was said, even when the bailiff made him stand up and the judge addressed him from the bench. Afterward he was told that he had been

sentenced to imprisonment for seven months in the city jail.

The pretty Antwerp girl learned in some way of his misfortune, got a permit to visit him, and by paying weekly out of her own pocket the equivalent of three dollars of our money succeeded in getting him transferred to a less comfortable cell, supplied with more palatable food, and allowed to exercise an hour a day in the open air. She also smuggled little notes to him in rolls of bread, and one day mustered up courage to obtain an audience with the king and intercede for his release. But his majesty told her he couldn't interfere.

Meanwhile one of Moore's shipmates had looked up his people and told them what had happened. The very next day the following letter was written and mailed to Leopold II., King of Belgium:

YOUR MAJESTY: I am a little girl thirteen years old, and I hope you will pardon me for writing to you when you hear all.

My uncle, Frank S. Moore, is now in the Belgium prison for desertion from the Rhine-land over six years ago. He was sailing on the Rhineland and my aunt was very sick. Her only prayer was to see Uncle Frank before she died. We sent word to him that she was dying. He showed the letter to the captain of the Rhineland, but he refused to let him leave the steamer. The sailors

advised Uncle Frank to run away and he did.

Aunt Debbie lived about a week afterward. After she died Uncle Frank found that his vessel had sailed, so he sailed on the "Waesland" under the name of Frank S. Walker. That has been over six years ago, and he has just arrived in Antwerp, as you can see by the newspaper slip that I send in my letter.

Your Majesty, if you had been in his place would you not have done the same? Hoping you will pardon Uncle Frank for deserting, and me for writing to you, I am

Yours, respectfully,

BESSIE KEIM.

Bessie waited as patiently and hopefully as she could, and she didn't have to wait very long. One happy day a letter came from her uncle himself, announcing his release; and right on its heels another big letter with a big stamp on it, such as Bessie had never seen before. This second letter was in French, so she had to get somebody to translate it for her, and this is what the translator made of it:

AT THE PALACE, BRUSSELS, }
CABINET OF THE KING. }

MADAME:—I have the honor of informing you that the king has read your letter and taken action upon the request therein contained, by which you solicit that he remit your uncle's imprisonment.

By his Majesty's command an order to that effect has been transmitted to the minister of justice, out of compliment to his majesty's little friend. For the king,

BOMMERHEIM, Secretary.

To Madame Bessie Keim, at Philadelphia.

A GIRL'S TEMPTATION.—This is how she told of it herself:

"I've begun to find such little, mean streaks in myself that I'm quite frightened. Guess what I was tempted to do the other day! I was washing the dishes for mamma, and when I got to the tins and kettles I was discouraged. They looked so greasy and black, and I've always been a little vain of my hands.

"I am going to Kitty Merrill's party

to-night, and I want to keep my hands nice for that. I'll leave these for mamma; it won't make any difference with her hands, because she can't keep them nice.

"Then something seemed to say to me, 'Oh, you little coward. Oh, you little sneak! To be willing to have whiter hands than your mother! Aren't you ashamed?' I was ashamed, and I washed the kettles pretty humbly, I can tell you. I felt as if they weren't half so black as I. Since then I have watched all my thoughts, for fear I shall grow so wicked mamma won't know me. I have learned thoroughly what the minister means when he talks about the little foxes that spoil the grapes of a fine character."

I Can't, I Won't and I Will.

THREE little boys in a rollicking mood

Out in the snow at play;

Their hearts are light, for the sun is bright,

On this glorious winter day.

Three little boys with shouts of glee

Slide down a snowy hill,

And the names of the rollicking little boys

Are "I Can't," "I Won't," and "I Will,"

But play must cease, and a warning voice

Calls out from the open door:

"Come, boys, here's a task for your nimble hands,

We must have it done by four.'

"I Will" speeds away at his mother's command

With a cheerful and sunny face,

And "I Can't" follows on with murmur and groan

At a weary and lagging pace.

But "I Won't," with a dark and angry frown

Goes sauntering down the street,

And sullenly idles the time away

Till he thinks his task complete.

At school, "I Will" learns his lessons all well,

And is seldom absent or late;

"I Can't" finds the lessons all too hard,

"I Won't" hates book and slate.

So the seasons come and the seasons go,

In their never ceasing race,

And each little boy, now a stalwart man,

In the busy world finds his place.

"I Will," with a courage undaunted, toils,

And with high and resolute aim,

And the world is better because he lives,

And he gains both honor and fame.

"I Can't" finds life an up-hill road;

He faints in adversity,

And spends his life unloved and unknown

In hopeless poverty.

"I Won't" opposes all projects and plans

And scoffs at what others have wrought.

And so in his selfish idleness wrapped

He dies and is soon forgot.



FOOD HYGIENE.

IN a frankly written article by Helen Dunsmore in the *Pacific Health Journal*, we find statements of this sort :

There could not be a greater mistake than to suppose that there are persons who manage to get on, comfortably or otherwise, eating stimulating and rich foods who could not possibly live without such foods. Not very many years ago it was the universal opinion, not only of lay people but of physicians and scientists as well, that alcohol is an indispensable aid to illness. Thousands and thousands of sufferers have had alcoholic stimulants in the form of brandy, wine, or beer administered to them, and have seemed to be greatly benefited. Nevertheless, there is a large force of scientific physicians in the world to-day who have demonstrated, beyond the possibility of a doubt, that all patients suffering from the various conditions of weakness and prostration can be better helped by mild and natural remedies than by the administration of alcohol in any of its forms.

There are very many persons who have become addicted to the use of alcoholic stimulants to whom this poison seems to be a necessity. A man who finds that his digestion is improved by a cocktail before breakfast, and not only takes wine with his meals but gradually finds himself taking more and more of

this seductive stimulant throughout the day, finds himself at last injured in health, his nerves shattered, his voice and hands trembling, and confronted with the prospect of an absolute breakdown. He consults his physician, who tells him that to stop drinking is the only way to prevent complete ruin. If this alcoholic victim obeys his physician, he will find that he loses his appetite, is despondent, and daily grows weaker; and he will have incontestable evidence that the water he is now taking does not agree with him as well as the whisky which he took before. But it fortunately happens that not only his physician but his friends and neighbors are well aware that, whatever the seeming, it is better for the alcoholic victim to abstain from his accustomed stimulant; that his present weakness and prostration are results, not of the water that he is now taking, but of the poisonous stimulant to which he had been accustomed.

No real headway will ever be made in hygienic and dietetic reform until the old saying "What is one man's meat may be another's poison" is discovered to be an absurdity. Law governs the universe, and it will one day be seen that the law of physiology is as unerring and undeviating as the law of gravitation. It does not matter what the peculiarity of the patient, what difference there may be in temperament—if one

walks off the roof of the house and falls to the pavement the damage to one is certain. It will some day be found that whosoever resorts to stimulants of any kind is certain to suffer from the transgression of a very plain physiological law. In the fall from a housetop the amount of damage depends upon the distance and the more or less unfavorable conditions of the fall; in the use of stimulants, either in food or drink, the amount of damage depends upon the amount of stimulant used and the constitutional energy of the person to withstand such abuse.

I well remember one of the first cases that applied to me after I began the dietetic treatment. It was a lady of seventy-two years of age, who was a victim of vertigo to such an extent that she had not been out of her house without an attendant for three years. She was liable, without any warning, to fall in fits of unconsciousness wherever she might be. She could eat but very little food, was exceedingly dyspeptic, emaciated, and weak. When I explained to her that I would take all her stimulants away from her, and put her on a plain diet of brown bread and milk, she was appalled. "Why!" she said, "I have taken coffee every morning of my life for sixty years. I have to take a spoonful of whisky before every meal, and without it I do not believe that digestion would go forward; and unless I have my beefsteak I think I could not live; and

I have never been able to take milk." I explained to her, in reply, that if nature had been able to sustain her under all those abuses, it would be quite able to do so when freed from them. I explained also that if at first she had no appetite for the plain food, she was not to tempt it by dainties, but simply to abstain until her appetite came to her. For a stimulant I prescribed hot water, to be taken before meals and at any time when she felt the need of one, to be taken as hot as could be used. I shall not soon forget the mournful expression of her face as she said to her daughter, who accompanied her: "I would rather die than take such a treatment; but I am afraid I cannot die, and I shall try this method for relief."

On an exclusive diet of brown bread and milk, with no other food for a year, taken three times a day in such quantities only as she thoroughly relished, this lady, after a few weeks of weakness supervening on the stoppage of her stimulants, began rapidly to gain in appetite, and, consequent upon her improved nourishment, in health and vigor. At the end of one year she had gained eighteen pounds in weight, and in two years, having removed from the city, she wrote me that she was the only well member of her household, that her daughter, grand-daughter and son-in-law, who continued the usual diet of civilization, were all invalids.

DISCREET LIVING.

BACON says: "Discern of the coming on of years, and think not to do the same things still, for age will not be defied." Half the secret of life, we are persuaded, is to know when we are grown old; and it is the half most hardly learned. It is more hardly learned, moreover, in the matter of exercise than in the matter of diet. There is no advice so commonly given to the ailing man of middle age as the advice to take more ex-

ercise, and there is perhaps none which leads him into so many pitfalls. This is particularly the case with the brain-workers. The man who labors his brain must spare his body. He can not burn the candle at both ends, and the attempt to do so will almost inevitably result in his lighting it in the middle to boot; the waste of tissue will be so great that he will be tempted to repair it by the use of a too generous diet. Most men who use

their brains must soon learn for themselves that the sense of physical exaltation, the glow of exuberant health which comes from a body strung to its full powers by continuous and severe exercise is not favorable to study. The exercise such men need is the exercise that rests, not that which tires. They need to wash their brains with the fresh air of heaven, to bring into gentle play the muscles that have been lying idle while the head worked. Nor is it only to this class of laboring humanity that the advice to take exercise needs reservations. The time of violent delights soon passes, and the effort to protract it beyond its natural span is as dangerous as it is ridiculous. Some men, through nature or the accident of fortune, will of course be able to keep touch of it longer than others; but when once the touch has been lost, the struggle to regain it can add but sorrow to the labor.

In the same line of thought Sir Andrew Clark has pointed out the aid physiology has rendered to the physician in a hundred ways—notably in respect to the influence of our modern undue work and worry in depriving the stomach of its rightful share of nerve force, and so causing it to fail in its duty. Dr. Andrew Combe, by application of the principles of physiology, showed how mental stimulus influences muscular action, and indicated the influence which the higher

feelings, after they have the ascendancy, exert in promoting the general health. He has explained how the lower feelings, when unrestrained, how the mind oppressed with grief, anxiety, or remorse, have a direct tendency to produce bad health. We believed all this before on the authority of philosophers and theologians. The physiological physician gives us scientific reason for our faith. But he goes further. As we are not all intellect we must not concentrate our vital action in the brain, or we shall deprive stomach and other organs of their requisite nervous stimulus. Literary men, by a disregard of this axiom of the physiological physician, often become hypochondriacal dyspeptics, and blame the art of medicine for not curing by drugs what is the outcome of their own violence to physiology. As we turn the pages of this book we meet, in a score of pregnant passages, the warnings of wise physicians against the lives of "wear and tear" led by so many, Englishmen especially—the restless activity of mind, ever directed to one end, and that not the highest. Physiology has pointed the moral, and doctors have preached the gospel, of serenity; but too often they have been as voices crying in the wilderness, for no man regardeth them, and the reproach of the almost certain result of the disregard of their teaching is laid at the door of medicine.

A GROUP OF NOVEL HYGIENIC APPLIANCES.

THERE is a prevalent opinion among modern physiologists that diseases largely are caused by germs floating in the air called microbes, bacteria, etc. These minute organisms constitute the malaria that therapeutics is engaged in destroying.

The "Hygeia Protective Company" of this city has published an abridged edition of Mr. George Catlin's famous book, "Shut - Your - Mouth - and - Save - Your Life," with many of his illustrations showing the evil results of breath-

ing through the mouth. Mr. Catlin came from England an infirm young man, and spent thirty-four years among the Indians of North and South America, studying their character and habits and painting their portraits and customs. Many of his works are now among the art treasures in the National Gallery at Washington. He published his observations in several volumes, the last being that named above. He said he would spend \$1,000,000 if he had it to diffuse the book throughout the world.

Mr. Catlin, contrasting the vigorous health of the primitive Indians with the diseased condition of the civilized whites, sought the cause of the difference and found one very important cause to be the different manner of breathing practiced by most white people. The Indians, like animals in general, breathe through the nose, which prepares air for the lungs as does the mouth food for the

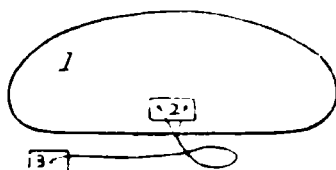


FIG. I.

stomach. The nostrils are lined with minute hairs and a mucous coating that catches and holds particles of dust and other impurities inhaled, which, when drawn through the mouth, pass into the throat, lungs and blood and cause disease. It is now held by the highest medical authorities that breathing through the mouth is exceedingly unwholesome, and mainly the cause of throat, lung and bronchial affections.



FIG. II.

Diseases are often traced directly to impurities in the air inhaled, which, being infected with microbes or other impurities, would have been purified or filtered by passing through the nostrils. Doctors and nurses are careful to keep their mouths closed as much as possible while in infected rooms. Mr. Catlin asserts that one may breathe mephitic vapors in a well through his nostrils, but is likely to fall as soon as he opens his mouth to call for help.

The inhalation of cold air through the mouth, especially in going from a heated room is more injurious to the throat and lungs than a douche of cold water

upon the heated body. Care is generally taken to properly cover the body under such circumstances, while the most delicate organs, the throat and the lungs, are exposed unprotected.

Catarrhal affections and toothache are induced or aggravated by the dry

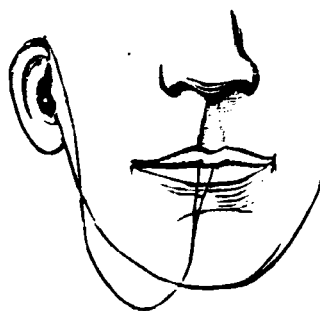


FIG. III.

ing of the mucous in breathing through the mouth, and dyspepsia by depriving the stomach of healthy saliva so essential to digestion. Snoring, too, that curse of social and domestic life, is caused by breathing through the mouth while sleeping, and the annoying guttural vi-



FIG. IV.

brations of the bronchial cords weaken them, render the voice strident and make them subject to various affections.

During the waking hours one can, by careful attention, keep the mouth closed, but when he lies down at night to rest from the fatigue of the day, and yields

his system and all of its energies to the repose of sleep, his volition and all his powers of resistance give way to its quieting influences. If he gradually opens his mouth he lets in the enemy that chills his lungs, racks the brain, paralyzes the stomach, and gives him the

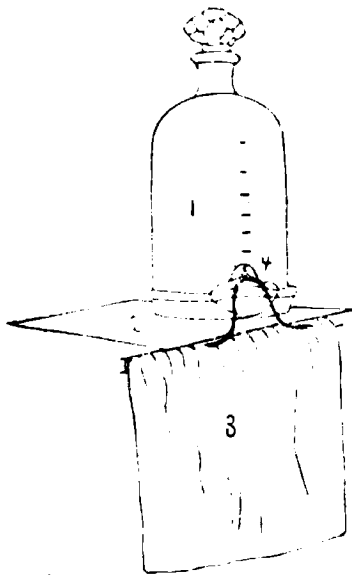


FIG. V

nightmare, which one rarely suffers who sleeps with his mouth closed. Destructive irritation of the nervous system and inflammation of the lungs, with their consequences, are the immediate results of this unnatural habit, and continued, its more remote effects are consumption of the lungs and death. All of these evils are graphically described by Mr. Catlin, and shown to be a leading cause of the difference in health between the whites and the primitive Indians.

The "Throat and Lung Protector" made by the company named above is a positive and simple remedial device for these evils by preventing and curing the unnatural habit of breathing through the mouth, which should never be opened except for speaking and eating. It consists principally of a thin, flexible piece of ivoroid or other non-absorbent material, shaped so as to be placed lengthwise

and perpendicular between the lips and the teeth, where it is held automatically and thus prevents breathing through the mouth (see Figs. I., II., III.).

The novelty of using it soon wears off, does not disturb the repose, and secures to the wearer tired nature's sweet restorer, balmy sleep. One of the most popular humorists of the age writes :

"It does certainly put an effectual clamp upon one's snoring apparatus, and stops the music, and so one more impossibility achieved has been added to the world's gain. I thank you gratefully for letting me be a partaker of your excellent discovery." Another, a clear-headed New York millionaire, says : "It is the greatest little thing out ; a boon to humanity. Thirty millions of our sixty millions of population ought to use it. It would prevent most of the throat and lung diseases now so com-

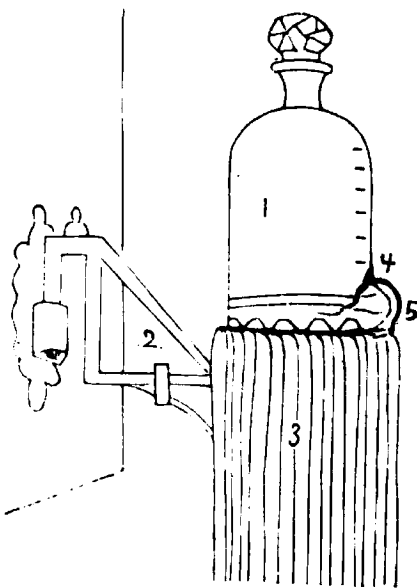


FIG. VI.

mon. I used to rise several times nightly to moisten my parched mouth and throat. Now, by the use of the Protector, they remain moist all night. I would not take a hundred dollars for it if I could not replace it."

A NEW RESPIRATOR.

If, as has been shown, diseases are

largely caused by impurities inhaled, then it is but reasonable that the antidote should follow the same channel. Hence medication by inhalation has become popular, as the medicine is passed directly to the lungs and the blood without passing through and deranging the stomach, as do most medicines when taken through the mouth. The celebrated Dr. John F. Gray said: "I am very confident that if means could be devised whereby remedial agents could be applied to all the ramifications of the lungs, including the terminal cells, a great step would be taken toward the cure of consumption." Medication by inhalation is recommended for all diseases that can be affected by reaching the blood, which is the life, as all parts of the body are secreted from it.

Provisions have been made for treating various diseases by charging sick-rooms with medicated vapors for the patient to breathe, or by elaborate devices to generate and supply them temporarily directly to the organs of breathing, all to be commended as working in the right direction. The "Hygeia Respirator" is about the simplest device for the purpose of inhalation we know, and consists of a peculiar glass pocket or phial to contain the medicaments, and is held under the nose by a light band passing around the head (Fig. IV.). In the phial the liquid medicament is placed and an absorbent with its two ends like wicks projecting one under each nostril, so that, the mouth being closed and the breathing being entirely through the nose, the particles of the medicated vapor as they rise in the wicks are in-

haled at every breath. One may sleep with the Respirator so placed and enjoy the pine groves of Georgia or mountain ozone without leaving the kindly care and associations of home to enjoy a more healthful locality and the soothing, healing atmosphere of a far-off climate. The medicament must of course be suited to the disease and administered under medical advice.

AN AUTOMATIC AIR PURIFIER.

Pure air is the elixir of life, and could people see the air they breathe, especially in crowded rooms, they would turn from it as a vile decoction. It is not strange that physicians trace to it diseases like typhus, typhoid and intermittent fevers, biliousness, and ill health generally. While each person consumes about two or three pounds daily of food and drink, he consumes and corrupts thirty pounds of air, vitiating eleven cubic feet of it per minute with poisonous excretions. The flames of gas, oil, burning fluids and perfuming lamps vitiate air many times more rapidly than breathing does. To those corrupting agencies must be added ex-

halations from the streets, sewers, ditches, cess-pools, etc.

Dr. Leeds remarks that thousands are poisoned to death by their own breath. No common air from without is so unwholesome and kills so many as air in close rooms that

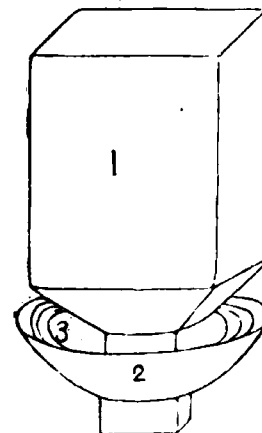


FIG. VIII.

has been breathed and not purified. The air especially in crowded cities and dwellings and miasmatic localities is charged with invisible unwholesome particles that breed all manner of diseases.

Dr. Hall said that the invisible perspiration of one sleeper is of itself enough to taint the air of one large room, and

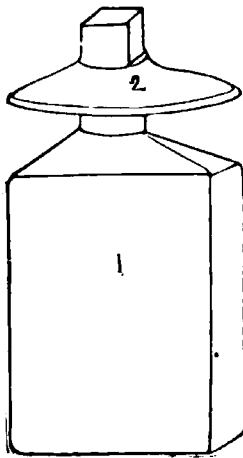


FIG. VII.

it is almost impossible for the sleeper within the four walls of any private house to get a single breath of really pure air in the whole night, which makes the night the usual time for attacks of violent ailments."

Dr. Brown-Sequard is reported to have lately informed the French Academy of Sciences that by condensing the watery vapor coming from the human lungs he obtained a poisonous liquid capable of producing immediate death. The poison is an alkaloid and not a microbe or a series of microbes. He also states that air expired contains a volatile element more dangerous than carbonic acid, which is one of its constituents.

Even with judicious care, the air of living rooms becomes vitiated. The choicest furniture and upholstery constantly decay and load the air with unwholesome particles and gases. Bed-clothing and wearing apparel absorb exhalations from the body, and should be carefully purified.

The Hygeia Automatic Air Purifier has been devised as an antidote for these evils. It consists (Figs. V. and VI.) of a closed jar or vessel (1) of glass, pottery or other material of any suitable size or form, with a top opening for receiving the fluid and another near the bottom for its outflow. On its side is a small receptacle or niche (4) opening into the interior of the jar with its outer edge or lip a little higher than the opening into the jar. Toweling or evaporating cloths (3) flat or circular and plaited and of unlimited surface are suspended before or around the jar.

The jar being placed on a small platform or bracket (2) and filled with water or a purifying fluid and stoppered air tight at the top, a little of the fluid will flow into the niche (4) until its opening into the jar is covered or sealed. An absorbent of wicking or darning cotton enters the jar at this niche with its other end or ends hanging out, and draws off, by capillary attraction, the

fluid, so that the hole is uncovered. Air then passes into the jar and rises as a bubble and a few drops of the fluid flow into the niche and seal the hole again. When this supply is drawn off more flows out, and thus the supply and exhaust are continued automatically until the jar is emptied. The flow is conducted by the absorbent (5) to the suspended evaporators, and thence diffused through the room, and the fluid being a disinfectant the air is purified. Pure water itself is a purifier, as it will absorb 780 times its bulk of gas, but more powerful disinfecting fluids are furnished. Fairly pure water may be had by boiling and straining or filtering it.

The flow of the fluid from the jar depends upon the size of the absorbent (5), and it may be graduated to one drop or a hundred drops or more per minute according to the evaporating surface of the cloths or the amount of vapor required.

This process of disinfecting is analogous to the common practice of hanging in sick-rooms towels or sheets dipped in a disinfecting fluid. The cloths may be tastefully draped, the vessel a handsome vase, and the whole purifying apparatus made artistic and ornamental. It is indeed a novel and curious scientific appliance, and its operation interesting to watch. It should be found in every sick, sleeping, or living room, parlor, work or school room, and wherever malarious conditions exist. It would prevent the lassitude one feels on sitting in a close, stuffy or crowded room. From a bed in a room thus purified one would arise in the morning refreshed and without the tired feeling now so common.

This jar is useful for surgeons to supply a constant drip to moisten or purify bandages on wounds and fractures or for charging rooms with agreeable and wholesome odors. That odors of perfuming oils is healthful may be inferred from the health of perfume manufacturers.

THE AUTOMATIC PERFUMER

is another device designed more especially for perfuming. If a bottle of perfume is left open, the essential oil quickly escapes and leaves a vapid residuum. To preserve a regular flow of the odor, a perfume bottle 1 (Fig. VII.) is provided with a dishing and channeled stopper, so that when the bottle is inverted (Fig. VIII.) the fluid will flow into it until it becomes sealed. In this dish (2) is an evaporator (3), which being saturated by

the flow, the perfume is diffused through the room. The flow and the evaporation are continued automatically of uniform strength a week or a month until the bottle is exhausted.

The perfumer is ornamental, and may be placed upon the daintiest toilet table or in the most refined boudoir and thus secure a constant and agreeable odor. It may be covered with artificial flowers to correspond with the odor. o.

UNDERGROUND STEAM PIPES.

NEW YORK CITY is now passing through a series of disastrous experiences in connection with the steam-power and heating systems. The pipes of the companies that supply the steam lie in the busiest streets down town, and by bursting or leakage keep some neighborhoods in a state of constant anxiety and dread. Several explosions have occurred to the damage of much valuable property, and even loss of life has followed a sudden outbreak from a ruptured main. Several years ago when the project was announced of laying iron pipes from a distributing center for the purpose of furnishing steam heat and power to those who might want it, a gentleman well-known in medical and scientific circles, contributed the following article to the *Scientific American*, in which it will be seen that he predicted the very state of things that is now a subject of complaint on the part of our sanitary officers and the business community:

I have been a reader of your valuable paper for several years, and for a still longer period have been interested in practical arrangements for the use of steam for many purposes; for power, for the warming and ventilation of buildings, for cooking, etc. I am, therefore, prepared to look favorably upon plans for such extension of its use as the interest, convenience, or necessities of men may suggest or dictate.

In accordance with this feeling, my attention was arrested by the earliest movement in favor of the project, as it was then properly called, to lay wrought iron pipes underground, for the transmission of steam for various practical objects. I have, however, regarded the project as quite impracticable, and now regret that I have so long delayed a statement of facts and an expression of my views in regard to it. The subject has three interesting and important aspects. The first is that of the cost of the original "plant," and for repairs afterward to projectors and owners; the second, that of utility and convenience to parties who use the steam for whatever purpose; and third, the effect on the public convenience, in having the surface of streets and sidewalks pierced, in first laying and afterward in the repair and renewal of the fixtures, when they are damaged and become leaky. Apparently, the parties concerned in placing these fixtures are doing what they can, and perhaps all that is possible, to protect the exterior of the pipes from injury from rust and other causes, and to prevent undue condensation of steam in passing through them. They, however, appear to ignore the fact that the serious wear of wrought iron pipes used for steam, and their early failure, result from scale and corrosion of the internal surface. This arises from the fact that the iron is laminated, and subject, under

the influence of varying temperature, to lose or throw off minute scales, which, of course, diminishes the thickness of the pipes and causes an uneven surface, which is followed by more rapid wear from the corroding and cutting influence of the steam than when perfectly smooth. The same kind of wear also occurs at the joints where two pieces are coupled together by sockets. The thickness of pipes at these points is diminished by having a thread of screw cut upon them exteriorly, while the uneven surface within renders the steam more effective in cutting away what remains of the thickness of the iron. From these and perhaps from some other causes (the natural imperfections of the internal surface of the iron among them), the deterioration from within is rapid, and the durability of the pipe in the most favorable circumstances is often limited to from four to six years.

When a fault occurs it must receive early attention to prevent a rapid increase and consequent loss of steam by leakage. When pipes are situated so as to admit of constant or frequent inspection and so as to be easily accessible for repairs or removal, the work is easy and inexpensive, and the use of wrought iron pipe for conducting and condensing steam is a thoroughly practicable matter. But, if the leaky pipe is situated three or four feet below the surface of frozen ground, and that ground a public thoroughfare of a great city, the cost to the owner of making repairs or renewal would be very great, the inconvenience to the user of having the supply of steam cut off for a day, or even a few hours, will be of still greater importance, while the frequent and more or less prolonged disorder and disuse, partial or general, of streets, will be, to the public, an embarrassment and eventually, as scores and hundreds of miles of pipes become honeycombed and leaky, an intolerable nuisance.

To show how certainly the end is foreseen and predicted in the way described, I send for your inspection samples of

wrought iron pipe, of various sizes and in various stages of impairment, from the causes named, and that have occurred within from four to five and six years' use. Specimens of this kind can be multiplied indefinitely from the stock of any large establishment using steam pipes; but of course, it is unnecessary for me to do this to convince the practical men of your house of the truth and importance of my statements.

Although much has already been done and a large expense incurred to inaugurate the system, yet it may not even now be thought too late to present the subject for individual and public consideration. That the system will, in the end, prove a blank and disastrous failure I am perfectly sure.

H. A. B.

ANOTHER "CURE" FOR OBESITY.— This time it is more in accordance with nature and hygiene, and more worthy, we think, of consideration. In the *Journal de la Sante* it is attributed to a medical officer in the French army. Thanks to this means, a colonel who was threatened with retirement because he was so heavy that it required two men to lift him into his saddle, became thin in a few weeks. The means consisted simply in never eating more than one dish at each meal, no matter what that dish may be, and one is permitted to consume as much as the stomach will bear, and satisfy the appetite without the least reserve. Nothing but the one dish should be taken; no condiments, or soups, or supplementary desserts are allowed. This system was recommended later to a lady who was slightly obese, and who put it into practice with the best results. The lady observed that she suffered no inconvenience whatever from this diet, and the result obtained by the medical officer may be well understood, as she found by her own experience that the partaking of only one dish, brought on a sense of satiety, much sooner than if she had partaken of a variety of dishes.

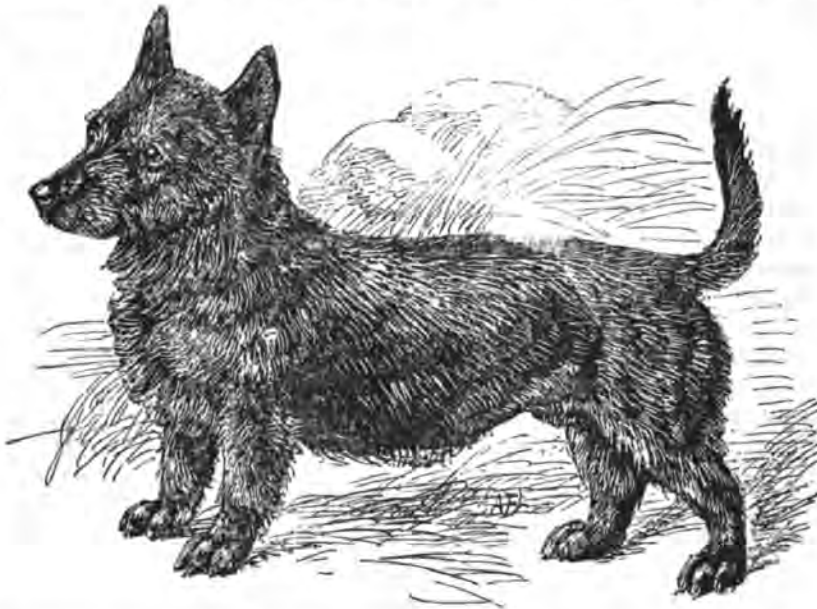
NOTES IN SCIENCE AND INDUSTRY.

The Scotch Terrier.—Our illustration may be taken to represent a true example of the lively spirited little dog of the highlands so much fancied by dog fanciers. A writer in the *Cultivator and Country Gentleman* writes of his history and qualities as follows :

Every new breed or new aspirant for public favor has to run the gauntlet of a scorching criticism ere it is finally accepted, but the Scotch, or Scottish, terrier has had to bear more than a usual share. Around it fierce controversies raged for many years, and it was not until after a great struggle that the

pluck and determination. He is also most intelligent, which we can understand when we consider his origin. Bred away in lonely places, perhaps for days the sole companion of his owner, these circumstances develop to an unusual degree whatever there may be of intelligence in the dog.

So far as records go, there has always been a breed of some kind or another known as the Scotch terrier, but these differ considerably from those accepted to-day. At one time the dog largely bred in the Lowlands of Scotland was commonly accepted in England under this name. This was a



type was determined, and the breed as we now see it acknowledged. To the perseverance of the breeders north of the Tweed is this due, and but for their determination and pluck it is probable that the result would never have been achieved. Fortunately there were a number of breeders who knew the type which they regarded as the true one and most fitted to bear the national name, and to them all the credit must be given for the settlement of the vexed question. As it is, the breed is growing in favor, both for appearance and courage, for this dog is capable of doing anything that needs

leggier dog, more nearly allied to the Irish terrier type as now bred. Youatt speaks of a similar dog: "There is reason to believe that this dog (the Scotch terrier) is far older than the English terrier. There are three varieties: First, the common Scotch terrier, 12 or 18 inches high; his body muscular and compact, considerable breadth across the loins; the legs shorter and stouter than those of the English terriers. The head is large in proportion to the size of the body, the muzzle small and pointed. * * * The hair is long and tough, and extending over the whole of the frame. In color they

are black or fawn; the white, yellow or pied are always deficient in purity of blood. Another species has nearly the same conformation, but is covered with longer, more curly and stouter hair; the legs being apparently, but not actually, shorter. This kind of dog prevails in the greater part of the western Highlands of Scotland, and some of them, where the hair has obtained its full development, are much admired. * * * A third species of terrier is of considerably larger bulk, and three or four inches taller than either of the others. The hair is shorter than that of the other breeds, and is hard and wiry."

The Scottish terrier is the original Highland or Cairn terrier, for which we are indebted to the old tod-hunters, whose duty it was, and for which they were paid by the district in which they lived, to keep down the foxes and other vermin. These men were largely found in the Highlands of Scotland, and they were accustomed to hunt their game by dogs in packs. The remuneration for their services was paid according to results, and thus it was essential that they have an effective dog to assist in the work. I have not space here to give an account of the operations of these tod-hunters as they deserve, but to them the credit must be given for the production of a dog which has well deserved the name given to it of "die-hard." It is told that George, Earl of Dumbarton, had a famous pack of Scottish terriers, which were so noted for their pluck and determination that they were termed die-hards, and that his regiment, the Royal Scots, were named after his favorites, "Dumbarton's Die-hards."

Save Your Own Seeds.—Many years ago, when I managed a farm of my own, it was my practice to save seeds of all kinds of farm and garden products. I did this every season. Seeds that were more than one year old were never planted. The result of such a practice was that every seed germinated, and grew as readily as a potato. Only the best and most perfect seeds were saved. One or two beets, one or two parsnips, carrots, turnips and other vegetables were set out in the spring, and cultivated for seed. When they were in blossom, all the small flowers, or panicles, were

clipped off with shears, leaving only such stems as would produce plump and perfect seed. As soon as the pods and panicles were brown, the entire stems were cut off close to the ground and laid on a sheet or large paper, in some room, where birds and mice would not destroy the seeds. After they had become dry and thoroughly cured, the seeds were put in small sacks of muslin, and hung up where nothing would damage or destroy them. Every seed was fully matured and plump, and would not fail to produce a large bulb, or root. I did not raise such small and half-matured seeds as we frequently purchase at seed stores, which are no more fit for seed than the grain on the smallest and half ripe nubbins of Indian corn. The small beet-seeds and little bits of turnip seed that are sold to tillers of the soil, if they germinate at all, will produce only little nubbins, scarcely worth harvesting. It will take just as much ground and just as much labor to raise a little nub of a beet, or any other root, as to cultivate one that will weigh several pounds. Tillers of the soil seldom realize how much they lose, in labor, and in dollars and cents, by planting inferior only a large garden), our supply of seeds has been purchased. On account of worthless seed, we have not been able to raise a single parsnip for six years. The past spring I purchased parsnip seed at four different places and planted, at different times, in excellent soil. But not one plant appeared. Some of the seeds were tested by placing them between folds of wet cloth, and putting the cloth in a pan and covering it lightly with a little fine and mellow soil, kept moist and warm. But not a single seed germinated. Seeds that I used to raise, when tested, as stated, would all germinate in a few days. Failure to germinate showed conclusively that there was no vitality in such seeds.

Hereafter I intend to sow my own seeds. The first mature ears of sweet corn are designated as seed-ears, by tying a narrow strip of red cloth around each ear, and are allowed to become dead ripe before they are broken from the stalks. The ears are then hung up, without being husked or shucked, in some dry and airy apartment, where they will be securely kept until the next season. When I owned a farm all my seed-corn was saved and secured in the foregoing manner.

The seeds of melons are saved in large quantities at market-stands, by spreading them in the sun to dry. As such seeds should be cured gradually, before they are dried, a large portion become literally baked in the hot sunshine. Consequently, the vitality of every baked seed will be destroyed. The seeds of pumpkins, squashes, melons and cucumbers should never be spread out in the sun to dry. Domestics frequently destroy the vitality of seeds by spreading them on plates and placing them in ovens to dry. It will require but little heat to bake the tender germs of seeds, so that not one will germinate. Every one who has only a garden should sow a supply of good seed, that will not disappoint him after the soil has been prepared and the seed planted.

Orange, N. J.

ESS E. TEE.

The Superior Race?—The great lesson driven in upon us by the irrefragable conclusion of modern ethnography is the lesson of the folly and futility of all race rivalries and race animosities. Not only is it true that God has made of one blood all the nations upon earth, but it is also true that the blood of all nations is so mixed and so blended that no pure race now exists anywhere in civilized Europe, Asia, or America. Nor has it ever been clearly shown that any one stock, in Europe at least, is intellectually or morally superior to any other. For years, for example, it has been usual to regard the fair-haired and blue-eyed type as the true Aryans and as the highest embodiment of European culture. But the most recent historian of the Aryans, Canon Isaac Taylor, has shown grave reasons for doubting this supposed pedigree, and has pointed out that culture belongs historically rather to the smaller and darker people of Central Europe than to the big-bodied and fair-haired Scandinavian mountaineers. The tall, blue-eyed race has in Europe formed by conquest for several centuries the dominant aristocracy; but the men of thought, the men of art, the men of leading and the men of letters have belonged, if anything, rather to the smaller and conquered than to the larger, fairer and conquering type. On a balance of all good qualities, mental and bodily, no one race can be shown to possess

any marked superiority all round to another; but if energy and activity of a military sort the so-called Teutonic type has the best of it, in brain and eye the so-called Celt seems on the other hand to have shown pretty conclusively that English poetry and English art have been mainly Celtic, while English engineering and English politics have been mainly Teutonic.

Weather Plant.—According to an English botanical authority, that remarkable specimen of the vegetable world, the "weather plant," continues to excite considerable interest abroad. Men of science, who on its first discovery were unwilling to express an opinion in regard to its prognosticating virtues, now agree, after extensive experiments, that the shrub is in truth prophetic. Thirty-two thousand trials made during some three years past tend to prove its infallibility. The plant itself is a legume, commonly called the "Paternoster Pea," but known in botany as the *Abrus Pereginus*. It is a native of Corsica and Tunis. Its leaf and twig strongly resemble those of the acacia. The more delicate leaves of its upper branches foretell the state of the weather forty-eight hours in advance, while its lower and hardier leaves indicate all atmospheric changes three days beforehand. The indications consist in a change in the position of the leaves and in the rise and fall of the twigs and branches.

A Census of Psychological Experience.—Professor William James, of Harvard University, is conducting an inquiry, or private "census," in regard to the prevalence of hallucinations, and puts the following question: "Have you ever, when completely awake, had a vivid impression of seeing or being touched by a living being or inanimate object, or of hearing a voice; which impression, so far as you could discover, was not due to any external physical cause?" For the purely statistical inquiry, the answer "No" is as important as the answer "Yes." But in case the answer is Yes, the circumstances of the phenomenon should be detailed with as much definiteness as possible. The editor of the *PHRENOLOGICAL JOURNAL* is also interested in the inquiry as a matter of candid psychological investigation, and will be pleased to receive from any

reader of this magazine communications on the subject, hoping in this way to promote the purpose of the Cambridge professor.

The Needle and Thread Tree.—Imagine, writes one in the *St. Louis Republic*, the luxury of such a tree and the delight of going out to your needle and thread orchard and picking a needle threaded and ready for business. Odd as it may seem to us, there is, on the Mexican plains, just such a forest growth. The tree partakes of the nature of a gigantic asparagus, and has large, thick, flesh leaves, reminding one of the cactus, the one popularly known as the "prickly pear." The "needles" of this needle and thread tree are set along the edges of these thick leaves. In order to get one equipped for sewing, it is only necessary to push the thorn or "needle" gently backward into its fleshy sheath; this is to loosen it from the tough outside covering of the leaf, and then pull it from the socket. A hundred fine fibers adhere to the thorn-like spider webs. By twisting the "needle" during the drawing operation this fiber can be drawn out to almost indefinite length. The action of the atmosphere toughens these minute threads to such a degree as to make a thread twisted from it not larger than common No. 40, capable of sustaining a weight of five pounds, about three times the tensile strength of common "six cord" thread. The

scientific name of this forest wonder is *Tenzyana mucanina*.

Antiquity of Steam Heating.—That heating with steam is not new, says *The Safety Valve*, appears from remarks made by George H. Babcock before the American Society of Mechanical Engineers some time ago. Mr. Babcock cited the fact that when at Pompeii he found that the old Roman baths there were heated by steam, and heated in a better and more scientific manner than is practiced at the present time. The walls were double, and the steam, of course not above atmospheric pressure, was carried up through these walls all round the room. The walls were thus heated to a temperature approximating to that of the steam, and the occupants of the room were exposed to a radiation from all directions. This, Mr. Babcock held, is the true theory of heating, and the system of steam heating by indirect radiation, or heating the enveloping air only, is unscientific, expensive and uncomfortable. It is of interest to add here that the late Joseph Harrison, Jr., of Philadelphia, in delivering a lecture before the Franklin Institute several years ago, said that he had seen in the museum at Naples a boiler substantially of the same construction as the modern vertical, tubular boiler. This boiler was found at Pompeii, and was made of copper.



NEW YORK,
September, 1890.

IN BEHALF OF THE PEOPLE.

WE do not often have a word to say in criticism of the measures of our law-makers at Washington, but there are times when it is the duty of every

writer who deals with subjects of practical interest to speak out. Perhaps by so doing he will accomplish something of good for the people, although the speaking out were prompted only by indignation at the injustice or indiscretion of the men invested with authority, and not with any but the barest hope that his utterances would conduce to a wiser course on their part. Everybody who reads the newspapers is aware of the indefinitely prolonged discussions in Congress with regard to the Tariff and the disposal of the surplus funds arising from the customs taxation. These discussions

have been going on for years, have been transferred from one administration to another, and are still kept up with apparently as little prospect of a conclusion satisfactory to the country at large as there was ten years ago.

Measures have obtained sanction indeed that, according to some plain economists, will make deep inroads into the surplus without reducing the tax burden upon the producing classes at all; and some of these measures seem to have that stamp of sheer political intrigue which is vicious and likely to be productive of serious embarrassments in the near future.

Looking at the Tariff question itself, we must confess to a great degree of wonder at the calmness with which the people have for so many years endured the imposition of taxes that have rendered many articles of necessity, among them food and fuel, more expensive than they should be. The rates of inflation days have survived till now, and only, as it would appear, that money should accumulate in the treasury, to be a rock of stumbling to many influential politicians whose tendencies toward jobbery and boodle are greater than their patriotism. In saying this, we speak without reference to party. More attention is really paid to questionable and wasteful methods of disposing of the surplus than of reducing the tax burden, which bears upon the people at the rate of two dollars per head, making an aggregate of say \$130,000,000 a year.

Mr. Edward Atkinson, who is credited with being one of our most impartial economists, says: "If this sum were applied to the reduction of taxation,

every tax on food or fuel, and on the materials which are necessary in the process of domestic industry, could now be wholly removed. The taxes which would then remain—and which would suffice to meet the entire cost of government, national, State and municipal, at ten dollars per head—would be the State taxes, levied as they now are on real estate, personal property, incomes and licenses; while the national taxes, which remain in force, would be imposed on whiskey, beer, tobacco, wines, laces and embroideries; on the fine textile fabrics which depend upon fashion and fancy rather than utility for their sale; on furs, fancy goods and a few other articles which are almost wholly of voluntary rather than of necessary use."

We know that the adjustment of the taxes on imports is a very grave matter, and not to be handled except with utmost intelligence and care. Yet the two great parties have treated it as a shuttle cock, each throwing it upon the other and coward like trying to divest themselves of the responsibility of any change, meantime ignoring the just demand of the million workers to be relieved from an unnecessary burden. Certainly this attitude is fraught with danger to national interests, however we may view it.

It must not be ignored that there are some far-sighted and independent men at the National capital who are bold enough to declare their opposition to the wholesale action of the majority, and to maintain earnestly that the interests of the people as a whole are not taken into account. Senator Plumb, for instance, is one, and in his proposition

of a tax on incomes, increasing the rates on injurious luxuries and prohibiting those monopolistic combinations called "trusts" he voices the sentiment of the fair-minded and loyal.

REGULARITY.

By this term we mean, of course, a mode of life that is characterized by habits of order and respect for moral obligation. In its effect regularity is conservative of health and conducive to comfort. And resultantly, he who practices it renders his vocation and social connections efficient means of personal advancement. Regularity is of great importance to the busy man, for it enables him to accomplish a vast amount of work. He may not have the talent or brilliancy of his neighbor, but if that neighbor is handicapped by the disposition to irregular, spasmodic effort, and works without method, the former's regularity will enable him to achieve much more of useful and precious service. Steady, systematic doing in any line of honorable labor is sure to give a man or woman a creditable place in the community. "Seest thou a man that is diligent about his business," says the prophet, "he shall stand before kings." We are not told of the nature of the calling that is likely to lead to the preferment implied, but left to infer that it may be anything in which a man can honestly engage. We hear to-day so much of nervous overstrain; is it not due mainly to the confusion that men allow to creep into their employments? Regularity relieves mental tension; it is a labor-saver, and prevents worry. It trains the brain and mind to work with ease and efficiency, and even in unexpected emergencies it

reduces the friction that occurs then, and keeps the mental balance unbroken.

The young man or young woman who early sets his mental house in order by establishing the habit of regularity, lays a good foundation for a successful career. Wherever he may go, he or she will be sure to obtain the notice and confidence of others. The irregular man or woman, despite the gifts that may be theirs, becomes an annoyance ultimately in their circle, because they can not be trusted. Indeed, "it goes without saying" that this should be the case. It is a great mistake for one to think that regularity limits capacity by restricting the exercise of the faculties. On the contrary, it is a mental discipline that, like exercise to the muscles, expands and strengthens capacity through the orderly exercise and control of faculty. Further, as a time-saver it conduces to diversity of occupation and consequent rest and recreation of faculty. The mind that works according to physiological law is more efficient than the mind that disregards law, and regularity is a prime element in the observance of nervous law.

MATRIMONIAL BUREAU — LONELY DRUMMER.—No doubt there is a laudable propriety in the endeavor to promote social and domestic harmony by professionally advising people with reference to marriage, but we are not prepared at present to organize an office for the purpose of receiving and considering propositions of marriage. There have been and are such enterprises, but what success they have achieved we are not able to report. The points "Lonely Drummer" makes are for the most part well

taken, and we are ready to concur in his statement that there are many men and women in the country who would be thankful for aid that would place them in congenial wedlock—having failed to find mates in the conventional manner.

It seems to us that while "drumming" around, our correspondent should find admirable opportunities for observation

in the particular line of his inquiry, and be able to find a suitable companion without the intervention of others.

If he will but acquaint himself with the principles of mental science and physiology, we are confident that he will then have no trouble; for doubtless every community with which he is familiar has women fully his equals in capacity for domestic happiness.

Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give it the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

SPECIAL PHRENOLOGY.—R. L. N.—Your question is scarcely one that may be discussed in this department. To give it anything like a satisfactory consideration would occupy more space than is allotted to correspondents. We refer you, therefore to text books on physiology, such as Dalton's, Yeo's, Landois', etc., for information that is to be relied upon.

BRAIN IRRITATION AND DREAMS.—*Question.*—In an article by the Rev. Mr. Talmage, of Brooklyn, published lately, he relates how his sleep was disturbed one night by an extemporized night-cap, made by knotting the

corners of a handkerchief. Using his own language:

"For some reason my dreams were of the roughest and most uncomfortable sort. I was falling over embankments; I was knocked on the head by marauders; I was dying of brain fever, and, in bewilderment as to where I was, I woke up. All this was so different from my usual quietude of slumber, I rubbed my eyes and said, 'What in the world is the matter?' The fact was, I had got one of the knots of my night-cap in the wrong place, and the pressure of it against my temple had caused this dislocation of things."

Can this experience be explained on the brain-center theory? G.

Answer.—We think it can, if by any theory or system known to science. Dr. Talmage evidently possesses much cutaneous sensibility, and the play of the rough knot upon his temple, where the skin may be thin and the bone a mere shell, no doubt set up a degree of excitement that was reflected to the convolutions of the brain beneath, and aroused a degree of functional activity that was sufficient to develop the incoherent mesh of visionary experiences. Ideality, Cautiousness, Sublimity, and other contiguous centers of the side head were evidently in a state of irregular excitement that accompanies an unbalanced circulation.

THE EAR AND PROPENSITY, ETC.—I. T.—The views of Mr. Bridges were discussed in

this country twenty-five or more years ago. While it was evident that there was a point or two of value for observers of brain development, the lack of scientific data for his conclusions did not then give much currency to them. In recent times the examination of brain and cranial development in relation to biometry or longevity has made it clear, I think, that the depression of the ear opening below the line drawn between the exterior angle of the super-orbital ridge and the occipital spine has a close relation to physical vigor and long life. Of course the development of the middle lobes of the brain enters into the matter, and we can determine much that is significant concerning the character by the situation of the ear meatus. Many instruments have been devised for craniometrical purposes, but none have as yet met the need of the observer perfectly. We are chiefly dependent still upon the tape and the calliper. It must be understood that scientific accuracy demands an instrument that can be adjusted so that its readings will furnish information concerning the capacity of the brain case with the smallest margin of error, and not mislead by including parts below the brain border. There are machines of elaborate design that with skillful management give excellent results, but they are too costly and complicated for general use. The phrenological and anthropological profession needs something light, simple and easily operated.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred

Creation.—Apostle Paul says, "Howbeit, that was not first which is spiritual but that which is natural; and afterwards that which is spiritual" (1 Cor. xv: 46). This is said in reference to man, and is only true in nature or creation; for God, the Creator, "is a Spirit," who was before the things made by Him. But it is even only the appearance in created things that the natural is first. The laws which govern matter, and the vitality in the seed, are not material, but spiritual; and these had to

be before matter, and before plant or living creature could be formed in nature.

Every person in this age clearly sees how absolutely deceptive is the appearance of things in our solar system as seen from the side of nature or effects; while that taken from the side of Cause furnishes a rational ground for all phenomena here, and causes yonder. Might not a view of the Creation taken from the other side also shed light upon many things that from a merely natural standpoint appear dark and mysterious? But how can such a view be obtained. One thing is certain, that what is, is not nothing, and had therefore to come from Him who Is, THE I AM. A grand purpose is stamped upon everything that exists; an infinite purpose. Innumerable as are the changes which constantly take place in nature, nothing is annihilated or cast off as useless; everything continues to subserve an important purpose. Is not, therefore, the Divine Purpose the source of all creation? If there are still persons whose philosophy teaches them that "out of nothing something comes," is not this worthy of their most earnest attention, that the Divine Purpose is a grand reality?

The first that is found on the side of Cause is the Infinite I AM; for there must be an Infinite from whom all finite things are. Consequently nothing can be added to, nor taken from what He is and does. Here is no increase or time, but an infinite Completeness and eternal Now. But there is no eternal fixity; for the attributes of God, the Creator, are Life itself, which is perpetual activity constantly exercised in elevating and purifying new things out of that which is; and this we call Creation. The forces in this Divine activity are, first, infinite Love—"God is love," then infinite Wisdom or Omniscience, and these constitute infinite Power or Omnipotence. The plans of the Divine Mind are therefore all infinite, embracing everything from beginning to end; "declaring the end from the beginning."

Man, in the image and likeness of God, must have the first place in the Divine Purpose, and be capable of partaking of everything in the Divine. Consequently he is the perfection of finite beings; and everything else in Creation partakes of so much of his nature that it can be made of some

use to him. His authority is to "have dominion over the fishes of the sea, and over the fowls of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth," and to "replenish the earth and subdue it." (Gen. i: 26, 28.)

All creative forces are living, being an extension from God who is "The Life." The forces in nature are not creative; they are but mediums or channels through which the living forces from the I AM act. Of all existence, matter is evidently the lowest and most remote from God, maintained through the natural forces called the laws of nature. It is the lower limit which God has set to life's action; therefore all activity in nature tends upward toward and into life.

Persons who have always regarded matter as a developing force and element, and have reasoned from these premises till they seemed to see it evolve plants, and finally man, are apt to find it difficult to pause so as to take a view from the Cause side of Creation, which is sure utterly to destroy their cherished theory of evolution by the lower into the higher, and to convince them that all evolution from the lower is by the higher and purer. If they ignored the Creator, and have not hitherto even recognized in nature and the Divine Word the infinite love, wisdom and power of the Eternal Jehovah, they must refrain from taking this view, or else be convinced, even from natural science, that the universe of nature has had a living Creator, who also is its support and life.

Matter being the lower limit of vital tendencies, all that is higher rests upon it. Crystallization is the most advanced evidence of action by a living force that is confined to dead matter. In vegetation every leaf and twig, petal and seed, shows that the living forces set their own limits from within. By these living forces life lifts this vegetable matter into the animal kingdom, in which the conscious degree of life enters the realm of nature. The character of animals shows that all the purposes of their life are here fully met, and that this world is therefore the extent of the sphere of their being. But not so with man. He not only continually reaches forth for new uses and better accommodations in

nature, but the more nature rewards his unceasing labors the greater efforts he makes for still more. The cravings of his soul for something far better than this world can give do not cease while he is housed in "this mortal coil."

Man starts at the bottom of life on the material level, with not even the instincts of the young animal; consequently his only course is continually upward. But how could he rise if there were not an open and free communication with things above? He is indeed "of the earth earthy," wrapped with the elements of the mineral, vegetable and animal kingdoms; but he has also in him "the breath of life" from Above, which makes him "a living soul." While the whole creation is for his use, it is also a glorious truth that "Man doth not live by bread only; but by every word that proceedeth out of the mouth of the Lord doth man live." (Deut. viii: 3.) J. R. HOFFER.

How Can Women Earn Money?

—With the women of to-day, one of the most important questions is: "What can we do to earn money?" With each succeeding year the vast army of women who have to earn their own living grows larger, until one who thoughtfully considers the outlook realizes that it is becoming a question of very much seriousness.

With the varied avenues which have recently been opened to women through philanthropic and reformatory measures, from the ministerial, medical and the legal, down to clerking, millinery and dress-making, all save the higher professional and seemingly unattainable for the many, are crowded, *save* one of the most vital importance—*housekeeping*—which seems to be passed over without bestowing upon it much thought as to the necessary preparation for it as a means of wage-earning.

We are well aware that to many, housekeeping seems complicated; and, perhaps, it is for one who would follow it out in all of its details. However, we advocate the theory of a young woman's carefully preparing herself for some one particular branch of housekeeping—say cookery, as that of most importance—when she can always command good wages.

The greatest need of to-day is more enlightened cookery.

What more pitiful tableau could be imagined than that of an inefficient cook going to an incompetent mistress for directions, while the mistress stands helplessly twisting her jeweled fingers, unable to give them?

There are many who can make soggy bread, muddy coffee, offer you watery potatoes, with a scorched steak thrown in; yet such cooks are likely to be very expensive, especially in preparing the way for large doctor's bills, besides making one very uncomfortable. Meanwhile, the larger cities are making a more thorough work of procuring more competent cooks than small towns. However, it is in the country where the greatest need is felt, where the farmers' wives are struggling through the sultry days of summer with barely life enough to place food upon the table—letting alone the cooking—with, perhaps, not a girl one could hire within a dozen miles.

Men's labor has been simplified, through machinery, until they ride through their fields like the squires of England on a fox-hunt; but who ever saw horse-power make loaves of bread on a country kitchen, or the turning of a crank fashion cake or pastry?

There will yet have to be many new inventions before people can get along without cooks; so it is perfectly safe for one to begin learning the fine art.

Not far away from my residence is a family containing six daughters who tried teaching, clerking, dress-making, music and painting, as a means of livelihood, but all finally settling down upon housekeeping as most agreeable.

The other day one of these girls told she would not exchange the knowledge she had of housekeeping for any other knowledge she could think of.

"In teaching," she said, "I had so many people to please it was wearing, and clerking keeps one on her feet most of the time. I think I can maintain my dignity and be a cook as well as in any of the lines of work I have followed. It is only a matter of capacity. Then, too, I consider myself as being quite capable of presiding over the home to which I shall soon go, and my knowledge will be worth so much to me."

The home to which the young lady alluded is one of the best the town affords—and its owner one of our most wealthy men

—he having chosen this young lady because he is assured she will make a thoroughly capable mistress of that home.

No, young women, housekeeping does not lower you in the minds of the really sensible.

MRS. S. ROSALIE SILL.

PERSONAL.

MICHAEL LINO, the hero of a hundred battles, and probably the last survivor of Napoleon's "grand army," lives at Reggio, Italy. He is one hundred and five years old, and was taken a prisoner by the Russians at Moscow. After suffering many privations for ten years, he joined the Russian army and passed through the campaign of the Caucasus in 1829. Then he married and settled down in Russia. His wife and children being dead, he has returned to spend his last days in his native land.

SIR JULIAN PAUNCEFOTE, the present British minister, is about sixty years old, of sturdy build, slightly above medium height, with a full face which, though marked with the lines of thought, is yet expressive of good humor. He has a firm mouth above a rather square though not massive chin, a straight nose and a pair of clear gray eyes.

WISDOM.

—
"Thou must be true thyself.
If thou the truth would teach."
—

It is more trouble to revenge a wrong than to bear it.

HE who observes the faults of his neighbor is too much occupied to see his own faults.

ONE of the greatest causes of trouble in this world is the habit people have of talking faster than they think.

Forgive us all!

Some rise by sin, and some by virtue fall!

—*Shakespeare.*

ONE may be better than his reputation or his conduct, but never better than his principles.—*Latena.*

ABIDE in the station appointed of God, and though it be not on the highest hill which

first catches the morning light, yet God will not leave you without visitation and succor and comfort — *Parker*.

THE best receipt for going through the world is to feel that everybody, no matter how rich or how poor, needs all the kindness he can get from others, and it is reprehensible to fail to be as good and great as one is naturally qualified to be. Every man has his own pattern, by which he should be guided.

MIRTH.

“A little nonsense now and then
Is relished by the best of men.”

A MOVING sight—a wagon load of household effects.

“How do you like your beau, Jennie?”
“He’s a fellow after my own heart.”

“I LIKE to gif somepody advice, but when somepody advises me, I feel dot he should mind his own peesness.”

A SMALL Boston girl of three, after a visit to the country, remarked wistfully: “I wish we had a house out-of-doors.”

BROWN: “You always act like a fool, Jones.”

Jones: “Well, my dear fellow, I always follow your advice.”

SHE: “It will be a pleasure for me to share your troubles and anxieties.” He: “But I haven’t any.” She: “Oh, you will have when we are married!”

FAIR GIRL (instructing her country cousin): “Always sip soup from the side of the spoon.” Country cousin (desperately): “Yes: but I can’t git it in sideways.”

HUMORIST: “I suppose this little joke will go at regular rates, if accepted?” Editor: “Yes, I guess so. It is too old to travel for half-fare any longer.”

“Ah, I see you have your son with you in business. This must make it very pleasant for you.” “Yes, it does. There is nothing like it. He can take a few days off at any time, and the business runs right along, as usual.”



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

THEY ARE NOT DEAD. Restoration by the “Heat Method” of Those Drowned or Otherwise Suffocated. By T. S. Lambert, A. M., M. D., LL. D.

At this warm season when a roll in the crested wave is so inviting that thousands go to seaside resorts for that purpose, advice of the kind given by Dr. Lambert is of high value. It goes without saying that many persons have lost their lives through sinking in the water as a first cause, and through imperfect or ignorant efforts for restoration as a second. Dr. Lambert is not satisfied to furnish simple directions for the application of heat, whether by dry or wet means, but he goes into the physiology of the subject rather deeply and seeks to prove by logic and illustrative cases how efficient heat may be in restoring drowned or suffocated persons even when the indications of death could be accepted as undoubted.

Upon the basis of the importance of awakening nerve function, the author has built an interesting treatise relating to nerve structure, and the changes it undergoes in disease and shock, yet without losing sight of the object of his book. He has endeavored to cover the field of the subject, and it must be acknowledged that he has done so and incidentally woven in a good deal of useful hygienic information. Numerous illustrations are given, and if we find that a few advertisements have been inserted by the publisher we can not say that they affect the useful quality of the book, because we need not look at one of them unless we choose.

SANITARY AND ECONOMIC COOKING. Adapted to Persons of Moderate and Small Means. By Mrs. Mary Hinman Abel. Published

by the American Public Health Association.

Having received a copy of this essay, which was awarded the Lamb prize of \$500, from the Secretary of the P. H. A., Dr. Irving A. Watson, we can say that it adds a valuable number to the best of prize essays already published by the Association. As a cookery book, it contains in a space of 190 pages not only a considerable number of excellent recipes, the larger percentage being an approximation to the hygienic in composition, but also plain information concerning the instructive elements of the food articles in general use among Americans. Mrs. Abel, author, has wrestled like Dr. Dodd, of "Hygienic Cookery," with the difficult task of making clear to the average housekeeper scientific principles involved in the preparation of healthful food, and has certainly succeeded. We are quite sure that if the advice given be carefully followed, the average cost of maintaining the table in most families would be considerably reduced.

FRUITS AND HOW TO USE THEM. A Practical Manual for Housekeepers, Containing Nearly 700 Recipes for the Wholesome Preparation of Foreign and Domestic Fruits. By Mrs. Hester M. Poole. 12mo, pp. 242, cloth. Price, \$1.00. Fowler & Wells Co., Publishers, 775 Broadway, New Y

Mrs. Poole, appreciative of the want of a late work in this special line that would meet the public need of a real Kitchen Guide, has earnestly set to work and carefully prepared the book under notice. A well-written introduction considers the value of fruits in their relation to human diet, and then the department of recipes is opened. We are taken through a long series, inclusive

of the fruit products of the temperate and tropical zones, the tamarind being the last. Even the puckery persimmon is not forgotten. Hundreds of delicious desserts are described that in the mere reading make the old-fashioned crusty and heavy contrivances that are deemed so essential to the completeness of a meal appear unnatural and dyspepsia-breeding. There is indeed a refinement in fruit eating that responds to the taste of those who would be free from the habits of the past, but there are few people comparatively who are not fond of fruit and their use of it expands with their knowledge of its adaptation.

The volume is neat and compact in form and in style, and the arrangement shows the hand of an experienced writer on topics affecting the home and family.

PUBLICATIONS RECEIVED

HIS FLEETING IDEAL: A Romance of Baffled Hypnotism, is a unique volume published by J. S. Ogilvie, of New York. Its "uniquity" consists in being the joint work of twelve writers of most widely different styles and capacity in writing. As a success it certainly must "take the cake" in the line of absurdity.

A STORY: DAMON AND PYTHIAS. A Souvenir to the Knights of Pythias of the World. A Brewing Company's Compliment to an Old Fraternity.

Whether or not there is anything of scheme for spare shekels in this device or not, it must be confessed that the souvenir is neatly gotten up. Mr. Morrison tells the story, and several well-engraved views of ancient Syracusan scenery, that have a relation to the event, Dionysius' Castle, Judgment Seat, Tomb, Altar, etc., are interesting.



The TALE OF A CENTURY.

OVER a hundred years ago Pears' Soap began in London its mission of cleanliness. To-day its use is universal, and more people than ever before acknowledge its superiority—a sure evidence that its mission has been successful. For one hundred years it has maintained its supremacy in the face of the whole world's competition. Such a record could not be achieved without cause. Temporary successes are comparatively easy, but for an article to go on maintaining its popularity through generation after generation, it must appeal to something more than passing fancy. This is the case with Pears' Soap. It is, and always has been, an honest



product. In the United States it has found a place in public favor equal to that so long held in England. Men and women alike find it good and reliable. The man who has once tried Pears' Soap in the form of a shaving stick wants no other; he takes it with him on all his journeys. That

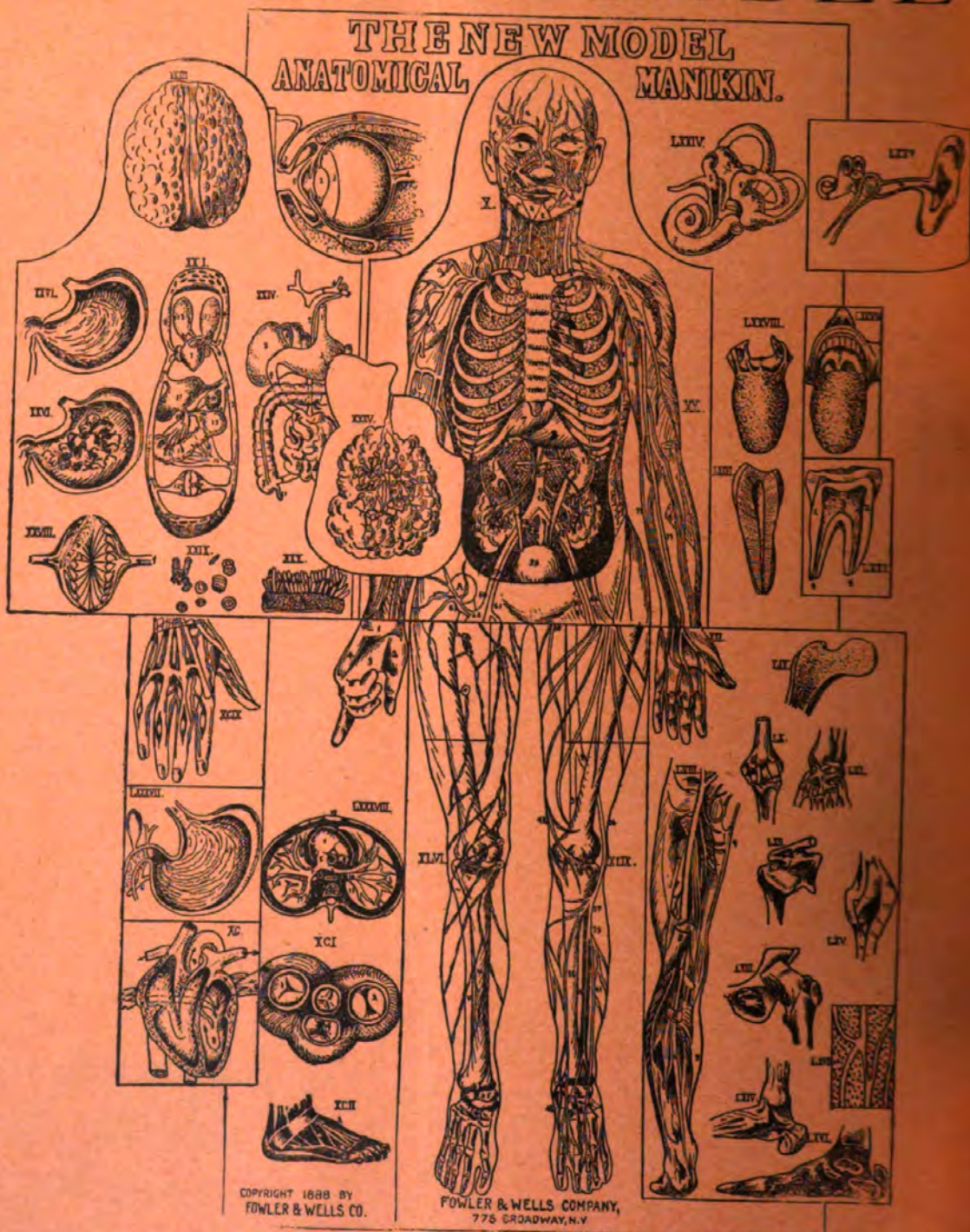


woman who travels and fails to take, as she would her tooth-brush, or hair brush, a supply of Pears' Soap must put up with cheap substitutes until her burning, smarting skin demands the "matchless for the complexion." Even children know the difference. So long as fair, white hands, a bright, clear complexion, and a soft, healthful skin continue to add to beauty and attractiveness, so long will Pears' Soap continue to hold its place in the good opinion of women who want to be beautiful and attractive.

Be sure to get the genuine PEARS' SOAP as there are vile imitations.



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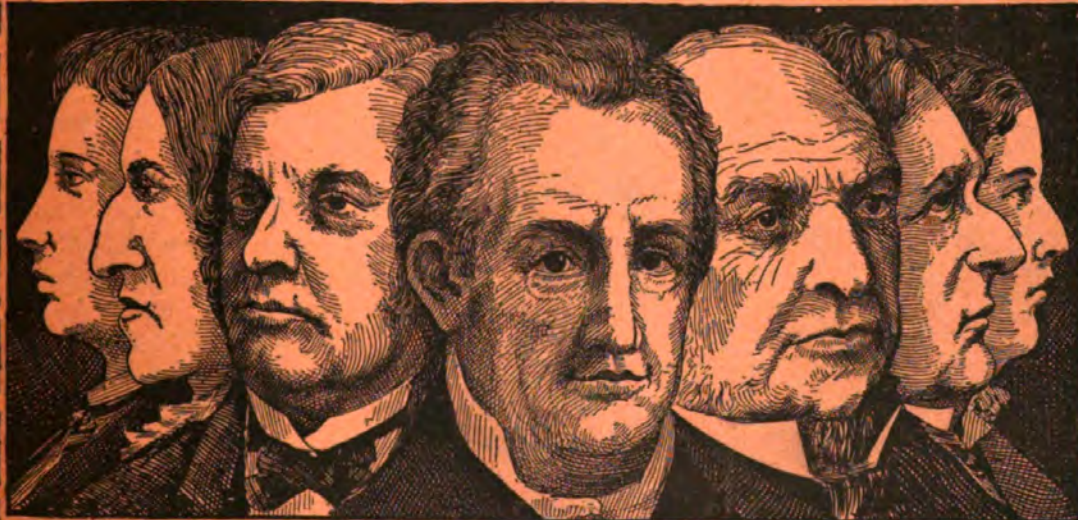
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Volume 90

THE

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SCIENCE & OF HEALTH



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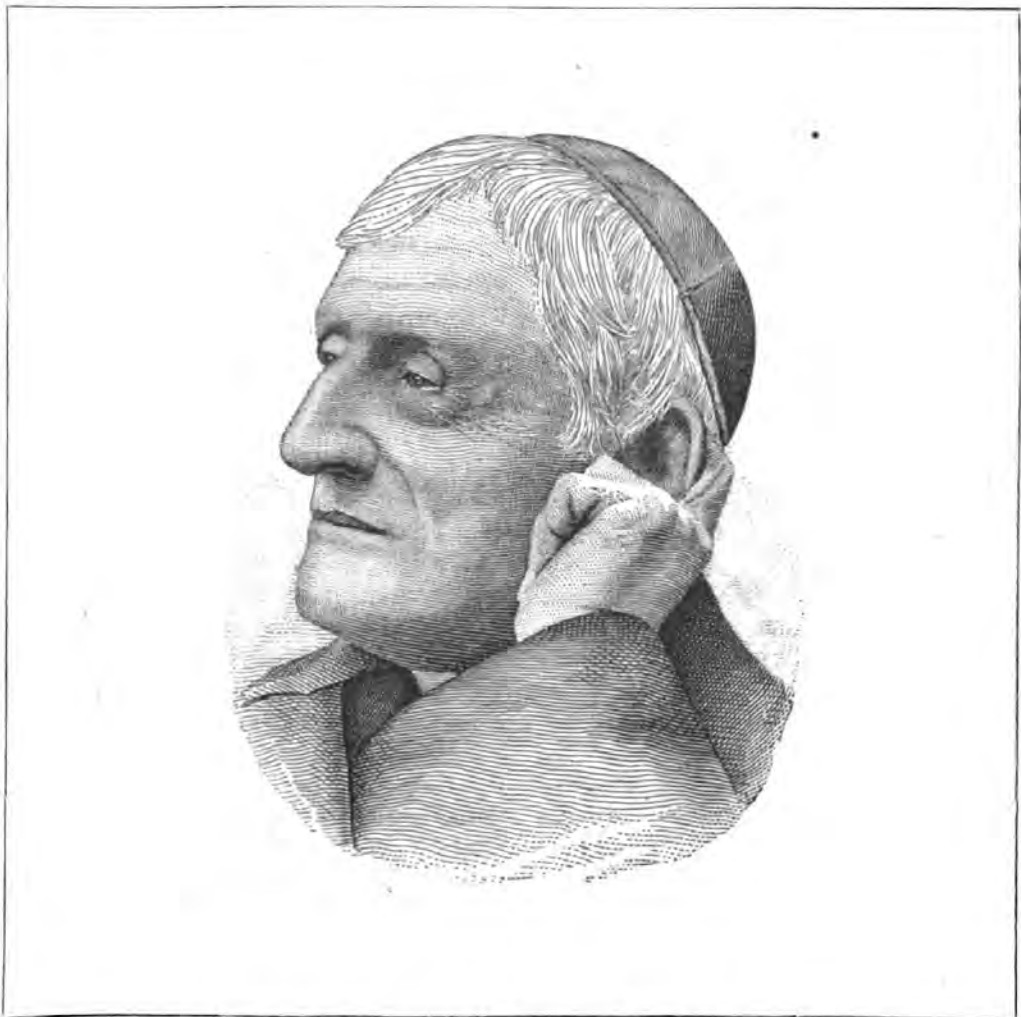
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AND
SCIENCE OF HEALTH.

NUMBER 4.]

OCTOBER, 1890.

[WHOLE NO. 619.



CARDINAL JOHN H. NEWMAN.

NOTABLE PEOPLE OF THE DAY.—No. 36.

CARDINAL NEWMAN.

THIS man, in the language of the day a Prince of the Church, has just died. He was indeed a prince, nay, a king among men; for few men in the past fifty years have exerted as great an influence upon European society, especially in affairs of religion. Possessed of a fine organization by inheritance, he appears to have neglected few opportunities in early life for its development and culture, and early attained a creditable position in the ranks of scholarship and authorship. Looking at him as he appeared in advanced life, we note the evidences of a powerful body and vigorous mind. His will was exceptionally strong, and associated with ambition to rise and take the lead. He aimed to be among the foremost, and whatever might have been his place in life, he would have won distinction. The breadth of the head and the depth of the middle or temporal lobes of the brain show organic sources of energy and industry to which a nervous, sanguine temperament furnished stimulus and support. He was eminent for power of observation, that giving to his mental operation acuteness of discrimination and critical resource. How strong that nose! If physiognomy mean anything, he must have possessed the courage of the lion and the tenacity of the game fowl. With him, to advocate a cause was to be its earnest supporter.

He should, with that head, have been a firm friend to those to whom he felt drawn by ties of interest and affection; and he must have clung to his social attachments to the last. That is the face of a man who has lived through a long season of trying experiences that involve the convictions of an earnest soul. Few cares concerning mere food, clothing and physical comfort were his, but he struggled in his spirit concerning the things that make for the eternal destiny of man, and his sympathies made his

struggle a matter of universal concern. No Englishman who understood the man, whatever his politics or religion, seems to have any doubt of the Cardinal's sincerity of purpose, or his great heart sympathy for the whole round of human nature.

John Henry Newman was the son of a London banker, and born February 21, 1801. His studies preparatory to entering the university were conducted at Dr. Nicholas' school in Ealing. As a boy he attracted attention by his scholarly habits. In 1817 he entered Trinity College, Oxford, and the following year gained a scholarship. He was made a Fellow of Oriel College in 1822, and two years later was ordained a priest of the Church of England. He received academic honors and appointments in rapid succession. In 1828 he became Vicar of St. Mary's, at Oxford, a place that he held until 1843, when he surrendered it.

In 1830 he was appointed one the select preachers to the University. The sermons which he delivered during the years of his service aroused profound and widespread interest, and placed the young preacher in the front rank of the theologians of his time. Those who read the sermons to-day note the drift of his thought toward Romanism, although this characteristic was not recognized at the time, and Newman himself seems to have been unconscious of it. In 1829 he opposed the re-election of Sir Robert Peel as a member of Parliament for Oxford, because that statesman had advocated Roman Catholic emancipation.

While he was one of the preachers of the University he began, in association with Hugh Rose, a history called "The Church of the Fathers." A volume called "Arians of the Fourth Century," published in 1833, shows that his thought was advancing along the line that led inevitably to Romanism.

About this time certain liberal ideas

found encouragement by some in the Church of England, and Newman was one of the strongest opponents of them. The great tractarian period followed, in which he was the leader, and founder of the views known as "Puseyism." Dr. Pusey was one of Newman's colleagues in tract writing. The tendency of the pamphlets was more and more toward strict forms and observances. Tract writers who sought to controvert Newman's views declared them to be rank Romanism. This the Puseyites vigorously denied, and the contest continued until Newman wrote Tract No. 90, in which he proceeded to demonstrate that belief in the thirty-nine articles was consistent with acknowledgment of the decrees of the Council of Trent. This tract the Church authorities ordered Newman to withdraw, but he refused.

Meantime the vicar had written other articles for British magazines, among which the most important was his "Essay on Justification," in opposition to the Lutheran doctrine on that subject. Finally, in 1843, he resigned his living and office as a clergyman and retired to his own house at Littlemore, and thirty men who were in sympathy with his views went with him. There they lived together in strict seclusion, and English Churchmen at once raised the cry that this was a revival of monasticism. Newman and his comrades found occupation in translating the writings of Athanasius and preparing a series of "Lives of English Saints."

These efforts resulted in the publication of some valuable works. While at Littlemore Newman published a retraction of certain violent utterances against the Roman Church. Next in 1845 he began an essay on "The Development of Doctrine," and on October 9 of the same year he was received into the Roman Catholic Church. Then he spent a part of three years at Rome, where he was ordained a priest, and when he returned to England in 1848 he established there

two houses of the Oratory of St. Philip Neri, one at Brompton and the other at Birmingham. He became the superior of the latter, and remained in that capacity there till his death. After entering the Roman Church he made up fully for his early attacks on Romanism by assailing Protestantism with great vigor. In one of his essays on "The Present Position of Catholics in England," he made some statements about Dr. Achilli, an Italian priest, who had turned Protestant. A libel suit followed, which resulted in a verdict against Newman for damages, with costs amounting to \$46,000. Contributions to meet this judgment came to Newman from all over the world, until the amount reached \$64,000. After settling the suit, the balance of the fund was divided between two Roman Catholic institutions.

In 1854 the Pope appointed him rector of the Catholic University of Dublin. While there he wrote one of the most important works of his life. Canon Kingsley published an essay in *Macmillan's Magazine*, in which he accused Newman and the Roman Catholic priests generally of lax ideas concerning veracity. A public correspondence ensued, which Newman brought to a close in his celebrated essay "Apologia pro sua Vita," published in 1864.

Newman took part also in the discussion concerning the infallibility of the Pope, a doctrine to which he adhered, and yet which he thought it unwise on the part of the ultramontane party to urge factiously.

He occupied two rooms in the house of the order at Edgebaston—one a plain chamber, uncarpeted. Adjoining it was his private library—a room lined from floor to ceiling with books. There he wrote most of his essays. The library of the oratory, containing 30,000 volumes, was in a room near by, and he was familiar apparently with its contents. It was his habit to rise at 4:30 every morning and occupy himself with his devotions until 7:30. At 7 o'clock

he recited mass in a small apartment partitioned off from his library. At 8 o'clock he went to breakfast in the spacious refectory, where he received his correspondence. After breakfast he performed personally the housework of his apartment, even to making up his bed, according to the rules of the order, and then sat down to answer letters. This usually took him until luncheon at 1 P. M., though sometimes he worked upon his writings for publication.

After luncheon he was in the habit of taking out-of-door recreation, and if the students were engaged in football or cricket he was pretty certain to be found watching them, for he kept a lively interest in physical sports to the last. After that he worked on his manuscripts until dinner at 5:30. Following the dinner there was always a discussion of

theological problems and a consideration of any questions relating to the order. After this Newman spent his time until 9 o'clock in private devotion, when he retired for the night.

Newman was made a Cardinal on May 12, 1879. His elevation made no difference in his demeanor. In public, as in recognition of the forms of the Church, he was a Cardinal bedecked in splendid robes, all of which were presented to him by wealthy admirers; but in private he wore the simplest insignia of his office, and had the faculty of making the humblest caller feel perfectly at ease.

Of late years he hardly ever appeared in public but lived the life of a recluse, breaking his silence only at rare intervals by essays written for the magazines and newspapers.

EDITOR.

STUDIES FROM LAVATER.

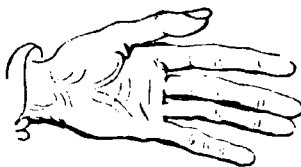
THE HAND.

THERE are as many varieties of hands as of faces, and each hand is a wonder in itself, and what wonders it may perform! What is the brain without this swift and ever-willing messenger and helper, or the heart without this sympathizing servant and friend. The hand throbs with the heart's joy and trembles at its grief. It is not only servant, but sentinel. One touch of the finger will convey to the brain at the same instant three distinct impressions, will tell us that something is too wet, too hard, or too hot for our grasping. These three impressions have different paths to the brain, but one touch leads them all. Dr. Buchanan tells us that he has known many cases of persons where drugs, merely held in the hand, would produce the same symptoms (only in a milder form) as if taken internally. He has often found persons sufficiently sensitive to read the character of another person or persons from an object they have handled, especially from a letter which they have written. Bayard Tay-

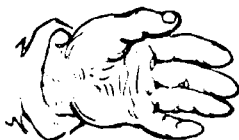
lor speaks of an artist he knew who, with bandaged eyes, would describe the character of the writer of a letter in a blank envelope placed between his two hands. In one case, one of his own letters was thus given him, and the result was such an astonishing revelation of himself, his own faults and weaknesses that the experimenter hastily removed the letter, feeling that he had committed a wrong. Not only are "the lower animal, but the finer psychic forces are put more or less into action by manipulation from some warm, magnetic hand." Those who have seen a "lightning calculator," in the process of addition, sweep immense columns of figures on a black-board from top to bottom almost as swiftly as the shooting of a meteor, and give a correct answer before any ordinary eye can even see the figures to read them, can form some idea of the quickness with which the hand registers the amazing velocity of mental action. The feet, like faithful servants, may bear us to the post of duty

or labor, but the hand is the brain's prime minister, secretary, treasurer, executor. It begins life's first work, and its trembling, tender clasp is the soul's last farewell to earth. Says Lavater: "No change takes place in the soul without a corresponding movement of body; no passion arises without the instant appearance of some bodily motion, and the hand often moves first; it pleads, urges, soothes, reproves, remonstrates, represses, commands, consoles, caresses." Professor Dondess, of Utrecht, who has made some experiments with two very delicate instruments, in regard to the rapidity of thought, says: "It takes the brain 67-1000 of a second to elaborate a single idea, and that for an eye to receive an

head." Does not this make it probable that in "most normal cases, if not all, one side of the brain (the left side in right-handed persons) chiefly controls language, gesture, and thought, while the other side controls chiefly the emotion and the nutritive requirements of the body?" Each person has his own peculiar movements of the hand in conversation. If we watch our friends, we will find certain movements of the hands will accompany certain intentions and plans. Sometimes we see two strangers talking in a car, although we can not hear the words we can see in the movements of the eloquent hands pleasure, surprise, impatience. First, with their hands they talk of some great bargain or heavy loss, and then, perhaps, of a



LONG, BONY HAND. MOTIVE TEMPERAMENT.



SHORT, PUDGY HAND. VITAL TEMPERAMENT.



NERVOUS HAND.

impression requires 79-1000 of a second, and for the ear to appreciate a sound, 149-1000 of a second is all that is necessary, showing that the eye acts with nearly double the rapidity of the ear.

We all know how very quickly the hand acts from the impressions of sight and hearing. How it beats time with all music, claps with pleasure at the sight of some imposing scene, or some friendly coming, or waves its adieu at the moment of parting. How, in some effort of memory, some concentration of thought, the hand is pressed to the side of the face; I think, in most cases, of some attempted recollection or a concentration of thought, the left hand will press the left side of the face or the fore-

good dinner. The head and hands everywhere are helping each other, and with certain heads and faces certain kinds of hands will always be found.

In almost every country the hands are used to express affection and salutation. There is none more graceful than the custom prevailing in Syria. "The hand is raised with a quick, gentle motion to the heart, to the lips, and to the forehead, to intimate that the person saluting you is willing to serve you, to think for you, to speak for you, and to act for you. In New Guinea they place upon their hands the leaves of trees as symbols of peace and friendship." We have all seen angry hands, indignant hands, fidgety hands, nerv-



ANGER AND OPPOSITION.

ATTITUDE OF EXTENUATION AND DEPRECATION.

ous hands. Hands are playful, firm, weak, strong, steady, stiff, shaky, fragile and delicate, tough and tender. There are whirling, fumbling, stealthy, liberal, stingy, beautiful, horny, awkward and graceful hands. The hand indicates the natural ability and disposition.

Physiognomists give us three grand classes including all these varieties of hands. The long, bony hand, the short, fleshy hand, and the small, slender hand: the long hand is connected with the predominant osseous and muscular system, the motive temperament and the tall body. Julius Cæsar, Cromwell, Lord Brougham, Andrew Jackson and Patrick Henry had hands of this form. The hands of Cæsar were remarkable. Lavater gives several portraits of Cæsar, and says, the nose, considered separately, announces more courage, resolution and native dignity than 10,000 other faces. With the Cæsar nose and forehead you find this long hand. The long, bony hand not only shows courage and dignity, but is often, when well supplied with muscles, a clue to a mechanical and inventive mind. It shows an active, strong, firm, reliable character, loyal in love and friendship. In art, music, and sculpture it indicates more originality and boldness than beauty of finish." It is the hand of "action and of power." The short, thick hand, with "round, soft palm and plump, tapering fingers, shows versatility and vivacity," reveals, sometimes, artistic and literary abilities, with love of ease, pleasure and social peculiarities. Irving and Browning furnish examples of this kind of hand. The small, slender hand indicates the predominant nervous system and mental temperament and is often found with a conical or pyriform face, expressive features, slight and graceful form.

Dr. Holmes has a hand of this sort. This is the "literary, the poetic and artistic hand," courteous to all, friendly to a few, and devotedly attached to one.

There is a great deal of eloquence and emphasis at times in the forefinger. "Remember what I tell you, May," says my friend, as she raises her hand and elevates the forefinger, impressively stroking it; "now don't go off the block," and little May as emphatically shakes hers as she elevates her hand and gives the same command to her flaxen-haired dolly. "Do you understand?" says the



THE BLOT. EMBARRASSMENT AND DISGUST.

father, stroking his hand emphatically and bringing it down quickly, perhaps, on the child's shoulder, and of course dolly has to understand too. When he says, "I want you to understand I mean what I say," then comes a very quick, violent shake of the hand. "Remember, my dear," says the mother, and she gives a very gentle, affectionate wave of the hand, "be sure and come in before dark," and bending over she gives the child a light, caressive touch with the hand on the shoulder. In great sorrow, though a word may not be spoken, how

much sympathy the hand can show ! When depressed or discouraged, a kind, cordial, warm-hearted hand-shake will sometimes cheer and help one all day. Lavater says the shake hands of greeting is a truer test of friendship and real character than the parting shake hands.

A cold, formal hand-shake is only an affectation of cordiality. "All affectation," says Lavater, "is vain and ridiculous ; it is the attempt of poverty to appear rich." The giving one finger in shaking hands is a great rudeness. A "quick shake and sudden letting go the hand indicates a high temper and a cold heart." Some hand clasps are chilling, repelling. When the tips of the fingers only are given it shows cold indifference. When one gives you a warm, cordial, hearty grasp, looks you straight in the face with a pleasant, open, smile, and shakes your hand up and down, withdrawing his after a gentle, earnest pressure, you will find such a man an honest, earnest, true friend." But if one gives you the "wagging, horizontal shake, and drops your hand as if it were slippery," he is probably selfish, and mercenary, and will make something out of you if he can. A cool, formal shake hands shows a cool, formal character.

Some hand-shakes thrill us, cheer us, animate us. A hearty hand-shake costs nothing. Give it to one poorer, sadder, less fortunate than yourself, you may lighten a burden and inspire hope. There is one clergyman, beloved and honored wherever he goes, whose hearty *How ARE you*, and firm, whole-souled, friendly hand shake, is a "God bless you !" in itself. I always like to meet him. The thousands who have taken his hand on both sides the sea will never forget it.

Another friend's exhilarating *How do you do?* and earnest hand-shake is worth walking a mile to gain. There is a great deal of soul in a hand shake. More than all his gifts this cordial grasp of the hand won for Bayard Taylor

myriads of friends. There are good men, and well-educated men that are never popular for want of this cordiality of manner.

More tenderly than many of his more illustrious deeds, with eloquent words, do we remember the simple story of Henry Ward Beecher's walking out that last night from his church with his arm around the stranger boy's shoulder, and Longfellow's writing his name in the little boy's book—whose father worked in the college—writing his name and then drawing the lad toward him, affectionately patting his head and kissing his cheek in sign of adieu, is one of the most pleasant memories of the past. If the boy is living now, the memory of that hand upon his head will never be forgotten. There is one, now departed, who, to my childish eye, was the noblest, greatest of all men ; whose hand was once so kindly laid upon my head, with some cheering words of commendation. Through all the years he has been gone the memory of the pressure of his hand and his kindly words has given me intense pleasure every time it comes to me. I, a child, was so grateful for it, so proud of it. It is now like a star in my memory that never sets.

I wonder not that in the twilight years for so many centuries the Supreme Eternal One was represented by a hand extended from the clouds, a halo encircling the fingers raised in blessing. The hand everywhere is the world's symbol of protection and benediction. It is the heart's high priest. It lifts the curtain of sorrow, rings the bells of joy, lights the fire of comfort, and waves the censer of gratitude.

LYDIA M. MILLARD.

IF thou dost bid thy friend farewell,
But for one night though that farewell may be.
Press thou his hand in thine.
How canst thou tell how far from thee
Fate or caprice may lead his steps ere that to-morrow comes ?

A BIT OF CONVERSATION.

"LITTLE PITCHERS HAVE BIG EARS."

I WASN'T a little pitcher, but I had big ears and they were always hearing something. One evening they were listening to pleasing music and to some conversation agreeable to hear. If I were a phonograph I would delight you with repeating the music I heard, but I cannot do that. But to tell some of the conversation may be just as good as the musical sounds.

An eminent musician was playing on a sweet-toned piano in such a masterly manner that when his voice united in song with the notes of the instrument, the people assembled in the parlor arose to their feet and gathered closer about him. The player's body swayed with the sounds he made; the spirit of music seemed to have entered the man, using his voice and playing in his fingers. A little tot of a girl, who stood near, looked up at him in a wondering way and said, "Oo plays all over, doesn't oo?"

In the background of the room stood a girlish-looking seamstress; she spoke to a white-haired woman near by. "I would rather sing and play like that than have fifty thousand dollars or even a million." Then with a grim little smile she added, "and you know I haven't a dollar in the world except as I earn it. But such a world of joy there is in fine music."

The old lady smiled in reply, "Your sensitive nature is overwrought to-night, my little music lover. But do you sing or play none at all?"

"None at all," was the answer with a pathetic shake of the head. "I suppose I am lacking in the musical faculty, or my voice would have gone out in full utterance of song naturally like a bird. But it seems to me that I have always been more like a caged bird, so sad and broken that any small element of song was kept crushed down within me. Perhaps I might have learned to sing and play a few simple airs; but now—a bird

with clipped wings need not try to fly."

"And is there nothing else in the world you would desire so much as music or a million of money?" inquired the old lady.

"Yes, oh, yes; there is much that is far more desirable than either; some things within one's individual self. I would rather have nobility of character; or kindliness of disposition; a soul that is true, without taint of falsity is better than outward possession of gold. To be able to keep one's heart in an atmosphere of sunshiny happiness with feelings of charity and good toward all, is of highest value."

"You dear girl!" exclaimed the white-haired woman. "You know the secret of all that is of real worth in life, and if you are courageous and strong enough in spirit to live as you know how, a treasure more than music, and a richer gift than money, is yours. A cheerful, sunny disposition is of untold wealth to any one, and a cultivated, sweet-toned, gentle voice, that speaks the kindliness of the heart, may be continually uttering words that refresh the hearts about us with bright sprays of gladness; words are such beautiful little trifles that may be made sparkling joys, chinking in and gleaming all along the golden sum of life."

The girl looked up with a happy smile. "I would like to tell you a little secret," she said; "my heart's biggest, greatest wish. If some wonderful fairy or genii would come to grant me whatever I most wanted, I would ask for the power of making others happy and to do some good to every person I met, and—and to make people love me."

A queer expression was on the old lady's face, a sparkle of tears it might have been in her eyes, but she only put her arm around the girl, and lightly kissed her forehead.

I saw that the white-haired old lady

had fallen in love with the little seamstress. The musician had ceased playing, and the crowd had broken up into little companies here and there, and were

engaged in lively conversation; but I had been eavesdropper in only one corner of the room.

LISSA B.

MARGARET E. SANGSTER.

MRS. SANGSTER was born in New Rochelle, N. Y. During her childhood her parents moved to Paterson, N. J. In that city and Brooklyn, where her family afterward removed, Mrs. Sangster spent her girlhood and attended school, receiving a substantial education.

Her early life seems to have been comparatively uneventful. One of her schoolmates says: "All that I can remember of Maggie Munson is that she was an unusually quiet, studious girl." While still a child she began writing, and many of her youthful productions appeared in print.

She did not, however, enter upon a distinctively literary career until many years later. Her first work then was done for the *Christian Intelligencer*, of which the late Rev. Dr. E. S. Porter was at that time editor. He was also Mrs. Sangster's pastor, and strongly encouraged her literary efforts. Another warm friend in those days of struggle that come to many new writers was George Cary Eggleston.

Mrs. Sangster's poems, stories and essays, however, soon gained popular favor, which always means favor eventually with editors. She has ever been a hard worker, and the honors and rewards that have come to her must be considered the result of her patient and persevering labor, as well as of her fine abilities. She has, indeed, justly earned the rank she now occupies as a leading woman-editor of our country.

Special mention of Mrs. Sangster's literary work seems scarcely necessary, so long and favorably has it been known to the public. She is a very prolific writer, with a style characterized by grace and simplicity. While she has

written much prose that has been helpful to thousands in her day and generation, we venture to predict that her poetry will prove the basis of her most enduring fame.

As an editor, she has for many years been greatly in demand. In this capacity she has been known through *Hearth and Home*, *The Christian at Work*, *The Christian Intelligencer*, *Harper's Young People*, and *Harper's Bazar*. Mrs. Sangster's personal appearance is prepossessing. She has gray hair, soft brown eyes, a fair complexion, and features irregular but pleasing; she is tall and well proportioned, her fine physique and fresh color giving the impression of superb health, which she does, indeed, as a rule, enjoy. Her possession of this boon she attributes to the constant maintenance of regular habits of living, particularly to her custom of retiring very early. "I can work hard all day," she says, "but my strength seems to leave me all at once, early in the evening."

She also takes abundant exercise in the open air, to which, with an ample amount of sleep, she undoubtedly owes the remarkable preservation in texture and coloring of her skin. This and an expression of singular purity and sweetness seem, despite her silvery hair, to invest Mrs. Sangster with much of the charm and freshness of early youth. Her face always recalls to mind that delightful period as certain Autumn days fill us with thoughts of new verdure, bird-songs, and apple-blooms; while in both face and day there is the added beauty of a peace and calm that youth and Spring have not.

In her speech and action Mrs. Sangster also combines the same characteristics to a marked degree. Her manner

and bearing are easy and as unaffected as those of a child, and she frequently expresses herself with a winsome, child-like *naivete*, while at the same time a gentle dignity pervades all that she says and does. Her intercourse with every one is distinguished by a true Christian courtesy, while to those she particularly cares for her demeanor is tender and caressing. Her atmosphere is restful and genial. As one of her friends once

sound and wholesome. In her is found that happy combination of the ideal and the practical which furnishes society with its most useful members. It is this combination that enables her to write poetry that appeals so strongly to the hearts of the people, and prose that appeals with equal power to their common sense; that makes her at once the true poet and efficient editor. As one of the composers at Harper's aptly put it, "Mrs.



MARGARET E. SANGSTER.

remarked, "she always seems to bring sunshine with her." Yet Mrs. Sangster's is by no means a nature devoid of firmness, strength and fire. These qualities, however, are admirably balanced and tempered by her benevolence, broad charity, and sweetness of disposition. One can not be much with Mrs. Sangster and not feel her absolute purity of motive and purpose. Indeed, her entire personality impresses one as peculiarly

Sangster is the best all-around woman I ever knew."

Her knowledge of human nature and its needs and her quick, strong sympathies, constitute her the trusted confidante, adviser and helper of a large circle, composed of strangers as well as relatives and friends. She is deeply religious, but with no ascetic piety, however; it is the warm, sunny religion of love that brightens her own life and the

lives of all with whom she comes in contact. She has been for many years very active in church and Sunday-school work, and was for a long time corresponding secretary of the Woman's Board of Foreign Missions and editor of the *Manual of Missions of the Reformed Church in America*, to which denomination she belongs.

Mrs. Sangster's great tact enables her to be sincere with every one and yet give no offense. It also makes her an admirable hostess, as all who have enjoyed her graceful hospitality will unhesitatingly admit. Her evenings at home are among the pleasantest memories of those who have enjoyed them, I am sure. On these occasions Mrs. Sangster devotes herself so impartially to each guest that no one can ever complain of having been slighted by her. Then, too, she has the happy faculty of bringing together those having tastes and sympathies in common, so that when she leaves one guest to attend to another, she always, as it were, provides an agreeable substitute to fill her place.

Her home, like her personal attire, indicates the simplicity of her tastes. It is characterized by an air of comfort, culture and refinement. Mrs. Sangster is very fond of pictures and music. Various compositions of Beethoven, Chopin and Mendelssohn are great favorites with her, although she is partial to any music of a soft, rippling, soothing order.

When the writer first knew Mrs. Sangster, she was at the head of a large household, consisting of her mother, a widowed sister, two children of the latter, an uncle, her son, and a step-daughter. Mrs. Sangster was her mother's right hand and housekeeper, and between the two subsisted the tenderest affection. Within a few years, however, death and marriage have diminished the family until only the niece and nephew are now left to Mrs. Sangster. Since the death of her sister she has been to these young people a mother in the fullest

sense of the word, and they have been to her as son and daughter, replacing the children who have left her to establish homes of their own. She has several grandchildren, who, like all grandchildren, are, of course, the delight of their grandma's heart.

Perhaps a few of her poems will form an appropriate ending to this sketch, illustrating as they do much that has been written of her.

THE SIN OF OMISSION.

It isn't the thing you do, dear,
It's the thing you leave undone,
Which gives you a bit of a heartache
At the setting of the sun.
The tender word forgotten,
The letter you did not write,
The flower you might have sent, dear,
Are your haunting ghosts to-night.

The stone you might have lifted
Out of a brother's way;
The bit of heartsome counsel
You were hurried too much to say;
The loving touch of the hand, dear,
The gentle and winsome tone
That you had no time nor thought for,
With troubles enough of your own.

These little acts of kindness,
So easily out of mind,
These chances to be angels
Which even mortals find—
They come in night and silence,
Each chill, reproachful wraith,
When hope is faint and flagging,
And a blight has dropped on faith.

For life is all too short, dear,
And sorrow is all too great,
To suffer our slow compassion
That tarries until too late.
And it's not the thing you do, dear,
It's the thing you leave undone,
Which gives you the bitter heartache
At the setting of the sun.

OUT OF SIGHT.

WHEN the hillsides are flushed with the pink
of the laurel,
And green are the meadows where lambs
are at play,
'Mid snow-drifts of clover, and blush-blooms
of sorrel,
There's beauty broadcast on the fair summer day.

In the distance the mountains are purple and hoary ;

And nearer the valleys are sweet in the sun,
Each turns a new leaf in the brilliant old story,

Which ever is telling, and never is done.

But alway, my heart in the midst of the splendor,

Goes roving afar from the beauty I see,
And thought, with affection ineffably tender,

Flits swifter than pinion of bird or of bee,
To pause in the clefts never trodden by mortal,

To climb to the heights where the morning is born,

To rest, like a pilgrim at ease, in the portal
Ajar for the lark soaring up from the corn.

There, swinging their censers, and lighting the altars

In gloom or in grandeur, built only for God,
Where winds are the minstrels, and mountains the psalters,

Sweet, sweet are the flowers which sprinkle the sod.

There, facing the sky when the tempest is over,

And strong with resistance to whirl and to shock,

The pine to the sun lifts the look of a lover,

With head heaven-tossing, and roots in the rock.

Brave beauty, alone for the Lord and his angels;—

How quiet and soothing the lesson it brings!

A heart-chord struck out from the best of evangels,

A strain for the soul which in solitude sings.
No child of the Father should ever be dreary.

Nor slip from the blessing, the gladness, the light,

For God and the angels will never grow weary
Of guarding and keeping what blooms out of sight.

MARIE MERRICK.

WHERE HAST THOU GLEANED ?

O, WEARY worker in life's harvest field,

Where hast thou gleaned to-day ?

Mid golden heads of ripened grain,

Where sweet and clear the soft refrain

From labor's song of calm content,

With note of thrush and goldfinch blent,

There hast thou gleaned to-day ?

Ah, no; quite lone the harvest field

Where I have gleaned to-day.

No golden grain repaid my care,

But thorns and cruel briars were there.

No happy song-bird cheered my way,

But pain and bitter grief held sway

Where I have gleaned to-day.

O, patient worker in life's harvest field,

Thou hast done well to-day!

Though tired of limb and weak of heart,

Most nobly thou hast done thy part,

And doubtless He who gives the yield,

Will bless thy labor in the field

Where thou hast gleaned to-day.

SUSIE E. KENNEDY.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

GEORGE COMBE.—5.

In the following August (1839) Mr. Combe learned that Dr. Sewall had reprinted his two lectures entitled "Errors of Phrenology Exposed," and included testimonials from several noted men, who did not understand Phrenology, among whom were John Quincy Adams and Daniel Webster; but their testimonials were rather compliments to Dr. Sewall than effective condemnation of Phrenology. Mr. Webster said, "If your premises be well founded, the argument is conclusive."

Mr. Combe took a rather comic view of the matter, and published in the New York *Evening Post*, Sept. 6, 1839, a

letter—supposed to be addressed to Dr. Sewall, but which was received too late for insertion in his work—by Whang Ho-Ching, Emperor of China, in which the assertions of the writers of the testimonials that they did not understand the subject, but were quite satisfied that the refutation of it submitted to them was successful, were exaggerated and burlesqued.

The letter was extensively published in the newspapers and in the *American Phrenological Journal*, but is now out of print. Below is a copy made from Combe's "Tour in the United States," published in 1841.

"LETTER OF THE EMPEROR OF CHINA TO DR. THOMAS SEWALL, ON THE MERITS OF PHRENOLOGY.

"Since the second edition of Dr. Sewall's work, 'Errors of Phrenology Exposed,' was published, the following letter has been received. It came too late to be printed along with the letters from Mr. John Quincy Adams, Dr. Reuel Keith, and other distinguished men, prefixed to the volume itself. The *Evening Post* is, therefore, requested to give it a place in its columns. It is proper to observe that in the Chinese language the word 'Barbarian,' which occurs frequently in the letter, has a signification very much resembling the word 'foreigner' in English. All who are not subjects of the Celestial Empire are 'Barbarians' in the court language of China; and the term is not intended to be offensively applied.

"We, Whang-Ho-Ching, Brother to the Sun and Moon, Cousin to the Stars, Grandfather to the Comets and Meteors, Supreme Ruler of the Celestial Empire, and only Fountain of Universal Truth—To the learned Barbarian Thomas Sewall, M. D., Professor of Anatomy and Physiology in the city of Washington, District of Columbia, in the United States of America, greeting:

"Thou hast done well, O learned Barbarian, to lay at our feet thy production entitled 'An Examination of Phrenology: in two Lectures,' for we are the fountain of all science. Thou askest our judgment on thy grand proposition—'the brain is a unit.' We condescend to inform thee that we have never inquired into the dark mysteries of the human skull, but in virtue of our high relationship to the Sun and Moon, it belongs to us to know all things without study; and also, in matters recondite and strange, to judge infallible judgment even without knowledge. Learn, then, that in the Celestial Empire, men distinguished for their stupendous wisdom have no brains at all. It is only in the desolate outskirts of the universe, in regions far removed from the dazzling glories of the Celestial Kingdom, that brains are known to exist, and there they darken the sublime and immaterial spirit. We, and our treasurers and sub-treasurers; our postmasters and collectors; our mandarins and judges, district and supreme, men of surpassing wisdom, our

wives and concubines, and the ten thousand millions of subjects who live on the breath of our celestial nostrils, are all brainless. Hence the greatness and glory of the Celestial Empire. Know, then, that the great sun of science, Confucius, before whom all barbarians are ignorant as unborn babes, hath written, 'A hen's head to a wise man, a big head to a fool. Small heads shall be exalted, because they are light; large heads shall be abased, because they are heavy and full of brains.' In the Empire which encircles the universe, and is endless as time, we cut off all heads that are large, because they are troublesome. Hence our everlasting peace.

"But, O most learned Barbarian, we chide the presumption of thy friends. Know that it belongs to us alone, in virtue of our high prerogative, to judge infallible judgment without knowledge. To Barbarians this is not vouchsafed; yet a certain Barbarian, who in thy pages indicates his existence by the hieroglyphic marks 'J. Q. Adams' speaketh as one possessing wisdom, concerning the uses of the brain; nevertheless this Barbarian saith, 'I have never been able to prevail on myself to think of it as a serious speculation!' We, the great Whang-Ho-Ching, rebuke the barbarian Adams. It belongs to us ALONE to judge infallible judgment without knowledge.

"We rebuke, also, the Barbarian whose marks are 'John McLean,' who useth these words: 'I am, in a great measure, unacquainted with the anatomy of the parts involved in the question; but I have always supposed that there was a tenancy in common in the brain.' Make known to this Barbarian that he insults our Celestial Majesty by his presumption, and surely, in his brain wisdom has no tenancy. It belongeth to the brother of the sun and moon alone to judge righteous judgment without knowledge. Thou stylest this Barbarian 'Judge of the Supreme Court of the United States.' Truly hath heaven-eyed Confucius written, 'Darkness envelopeth the Barbarian.' How, otherwise, could a Barbarian judge pretend to judge without knowledge.

"We rebuke also those who are known among Barbarians by the hieroglyphic marks 'John Sargeant,' 'H. L. Pinckney,' 'S. Chapin,' 'Justin Edwards,' and 'Reuel

Keith.' Touching the brain they have all usurped the Celestial prerogative, which belongs to us alone—they have pretended to judge without knowledge. Verily Barbarian brains obscure wisdom and engender presumption.

"We commend the Barbarian whose marks are 'Daniel Webster.' He judgeth cautious judgment as behooveth all Barbarians. He saith, 'Of the value of the physical and anatomical facts which you state, I am no competent judge; but if your premises be well founded, the argument is conclusive.' Our great interpreter of the Barbarian tongue, Hungi-Fuski-Chang, read to us lately, forth of a Barbarian book, these words—'A second Daniel come to judgment.' We condescend to greet this 'Second Daniel.' His wisdom is worthy of a mandarin of the Celestial Empire. 'If the brain be good for nothing, then good for nothing is the brain.' Has not this Barbarian read the pages of the sublime Confucius? Only from the deep fountains of his inspired volumes could such discreet wisdom penetrate the mind of a Barbarian obscured by a brain.

"We instruct our interpreter, Hungi-Fuski-Chang, to render this our epistle into thy Barbarian speech, lest our celestial wisdom, radiating with too intense a brightness, should extinguish thy feeble and Barbarian mind, clouded by that unit styled by thee a brain.

"Given at our Palace of the Moon, in the year of the Celestial Empire the seven hundred and fifty-four thousandth; and of our reign the 399th year.

(Signed) WHANG-HO-CHING.

Seal of the
FIGURE.

A large man with a small head, sitting on a white cloud, the sun beneath his right arm, the moon beneath his left, a team of comets around his head, and a firmament of stars beneath his feet. His countenance is radiant with self-complacency, good-nature and foolishness.

Celestial Empire.

"A correct translation.

(Signed) HUNGI-FUSKI-CHANG,
Interpreter of Barbarian tongues."

Mr. Combe lectured in several other cities, on education, or on some special department of the science, and was well received. At Boston and New York his classes presented him with pieces of plate, accompanying them with resolutions expressive of high appreciation. At the close of lectures in other places, he was always complimented by such resolutions. His dissections of brains before medical men and others in nearly every place where he lectured, gave great satisfaction. He gave two full courses, consisting of sixteen lectures, in Philadelphia and New York.

From May 24 to July 18, 1839, Mr. and Mrs. Combe spent in visiting various places in the State of New York, to Kingston, Canada, to the White Mountains in New Hampshire, and to Portland, Maine, where they rested several weeks before proceeding, on the 18th of September, on their way to Hartford, where a course of twelve lectures commenced the 27th and closed Oct. 25. His second course (of twelve lectures) in Boston began November 1 and closed the 27th, after which he gave a few special lectures in several towns near.

On January 9, 1840, they "sleighed" from Springfield, Mass., and arrived at Albany, N. Y., the 10th, where his course of twelve lectures closed Feb. 7. His thirteen lectures at New Haven, Conn., closed March 15, 1840. An interesting circumstance, worthy of record, occurred at New Haven. At the close of his twelfth and closing lecture of his course, by the request of Professor Silliman and others, he appointed an extra lecture, which formed his farewell address to the American people, and the proceeds of the lecture were used to purchase the casts he had used to illustrate his lectures, and as this was the close of his professional tour, he had no further use for them, and they were left in New Haven for the use of those who desired to pursue the study of Phrenology.

At the close of the first hour of his lecture on Education, in New Haven,

Mr. Combe suddenly lost memory and clear conception, but was able to proceed after a pause of ten minutes. On the 25th they left New York to visit Ohio and Kentucky via the Philadelphia and Baltimore Railway, the National Road to Wheeling, and down the Ohio River by steamboat, reaching Cincinnati April 8. From there they visited Gen. Wm. H. Harrison, then Whig candidate for the Presidency, and of whom Mr. Combe gives an interesting history. April 15, they reached Louisville, Ky., where they visited Dr. Charles Caldwell, our greatest advocate of Phrenology, with whom Mr. Combe had been in correspondence more than twenty years. They reached New York May 1, and on the 1st of June sailed on board the steamer "British Queen" for London, where they arrived on the 17th, after a prosperous and agreeable voyage. He wrote:

"Here ends my visit to America, which I look back to with great satisfaction."

He looked upon the American people with a critical eye, yet with an intense interest, and was pained on his return to Britain to observe the differences among them.

When again settled in his home, Mr. Combe devoted his time to the revision and issuing of his book on "Moral Philosophy," and the preparation for publication of "Combe's Tour in the United States," not neglecting many other duties, and on May 19, 1841, started on a long-anticipated visit to Germany, with the hope of acquiring the language sufficiently to revive an interest in Phrenology in the land of its discovery, but he found it a difficult task at his age. With patient perseverance, however, he succeeded in preparing them, and they were given at Heidelberg, commencing May 11, 1842. He succeeded, though under great bodily suffering, in delivering the course of twenty-two lectures, closing on July 22. From Heidelberg he sent his casts to Dresden, where they intended to spend the next summer, and, if able, to lecture there; but the

effort of studying the language, of preparing lectures in that tongue, and then reading them to his class, and all the attending excitement and pain proved too great for his strength, and when 1843 rolled round he was forced to postpone, and finally to entirely abandon the idea. They reached Edinburgh Oct. 31, 1842. During the succeeding winter his health remained so good that he contemplated and almost determined to repeat his German lectures; but Dr. Andrew Combe and other physicians forbade the attempt, and he reluctantly submitted to their decision. In April he had undergone an operation by Professor Syme, but found difficulty in regulating or controlling his mental labor.

During this year he gave some attention to the investigation of Mesmeric Phrenology, but had no great interest in it as an aid to Phrenology, but said:

"I must either reject all human testimony, or admit there is truth in these phenomena."

He attended experiments and was unable to account for what he saw and heard, but did not become enthusiastic, yet he added a section on Mesmeric Phrenology to the fifth edition of "Combe's System," which was issued in two volumes, in April, 1843. That his lectures in Heidelberg had effected much good he was often convinced, and this assurance afforded him consolation, notwithstanding it had broken down his health, and was, literally, the close of his lecturing career, though he gave an occasional lecture later, and made speeches on reformatory subjects. Had it not been for the encouragement and aid of Gustave Von Struve, a young advocate of Mannheim, who had read the "System" and "Constitution of Man," it is quite probable that last course of lectures would never have been given, for the effort exhausted him more than many courses in his own tongue. The Combes visited Italy, France or Germany every summer, and during his

visit in Sept., 1845, the measurements of his head were taken by Von Struve, and by Mr. Combe were considered quite accurate.

At a meeting of the Trustees of the Henderson bequest, a motion was seconded and carried endowing a chair of Phrenology in the Andersonian University at Glasgow with the sum of £50 annually, and on the 24th of November Dr. William Weir was appointed the lecturer. Mr. Combe was much elated by that event, and regarded it a remarkable one in the history of the science, being the first admission into a chartered university, and where many of its students were in the medical classes.

This lectureship was fairly tried for two sessions, but opposition was strong and the number of students was so small that the Henderson trustees withdrew the bequest.

In April, 1846, the Combes visited London, and enjoyed meeting many persons of distinction, visited Buckingham Palace, were introduced to Prince Albert and examined the heads of the Princess Royal, then about six years of age, Prince Albert, four and a half, Princess Alice and Prince Alfred. In later years he was called upon to repeat the examination, and give practical advice regarding their training, their education and their instructors.

In September, on a visit to Ireland, Mr. Combe met Archbishop Whately for the first time, though they had been correspondents for fifteen years. In January, 1847, Dean Ramsay brought the Duchess of Buccleugh with her four sons to George and Andrew Combe for advice regarding their education and physical treatment. Another lady (a marchioness) desired to have the heads of her sons examined, but Combe declined to make any except for friends whom he knew to be actuated by serious motives.

On the 25th of June Mr. and Mrs. Combe started for the Continent, where, on the 17th of August, he heard of the death of his brother, Dr. Andrew Combe, at mid-

night, August 9. There had ever been a strong attachment between the brothers, and the shock was very severe.

In July, he had journeyed to Treves and endeavored to learn something of the Spurzheim family, several members of whom had died, and the others had moved to other places and were lost sight of.

They visited Paris, and in "Pere la Chaise" found the grave of Gall, situated behind the monument of Casimir Perier. On a freestone pedestal stood a marble bust of the founder of Phrenology—"a speaking likeness and a good work of art." On the front of the pedestal was the single word "Gall," and on the back and sides sections of a phrenological bust, with organs numbered, and the names indicated by the numbers were given below.

At Passy Combe spent a day with Dr. Vimont, and learned that "the plates of his great work on 'Human and Comparative Phrenology' cost £3,000. Vimont also gave lessons in Phrenology to the late Duke of Orleans, heir apparent to the throne of France, and, if he had lived, Dr. Vimont would have been appointed professor of Phrenology in the School of Medicine of Paris. Vimont presented to Combe a lock of Gall's hair. At the house of Dr. Fossati a number of French phrenologists gathered to meet Combe; among them was Dr. Voisin, whom he visited a few days afterward at his school for the education of idiots at Bicetre." Much more of interest to phrenologists occurred while he was in Paris, but which can not be inserted here for want of space. O. F. W.

(To be continued.)

WHAT'S IN A MUSTACHE.—There is a great deal of character in the mustache, says the *Northwest Magazine*. As the form of the upper lip and in the regions about it, has largely to deal with the feelings, pride, self-reliance, manliness, vanity and other qualities that give self-

control, the mustache is more particularly connected with the expressions of those qualities or the reverse. When the mustache is ragged and straggling, there is a lack of proper self-control. When it is straight and orderly, the reverse is the case, other things, of course, taken into account. If there is a tendency to curl at the outer ends of the mustache, there is a tendency to am-

bition, vanity or display. When the curl turns upward there is geniality, combined with a love of approbation; when the inclination is downward there is a morose turn of mind. It is worthy of remark that good-natured men, in playing with the mustache, give it an upward inclination, whereas cross-grained or morose men are disposed to pull it obliquely downward.

REVELATIONS OF ALCOHOLISM, CRIME, AND INSANITY.

A CONDENSED statement in the *Medical Record* has some striking points.

The time must soon come when the question of the proper method of dealing with the alcohol question will become one for statesmen, rather than, as now, for fanatics and politicians to consider. The facts and statistics recently brought out at the Congress of Alcoholism in Paris illustrate this very well. One of the topics for discussion was the relation of alcoholism to crime. Every one knows that excessive alcoholic indulgences leads to crime, but the attempt was made to show a direct relation between the two.

The following tables were given. In France the average amount of alcohol consumed *per capita* was in

1873-77.....	2.72 liters.
1878-82.....	3.53 "
1883-87.....	3.83 "

The increase of crime was from 172,000 to 195,000; the increase of insanity from 37,000 to 52,000. In Belgium the figures were:

Beer.	Alcohol.	Wine.
1851... 138 lit.	5.87 lit.,	2.00 lit.
1871... 159 "	7.66 "	3.55 "
1881... 170 "	9.75 "	3.75 "

There was, during this period, almost a doubling in crime, suicide, etc.

In Italy a similar increase of alcoholism, crime, and insanity was shown.

In Norway, since 1844, the amount of alcohol consumed has gradually been reduced from ten liters per inhabitant to

four liters (in 1876), with a corresponding decrease of crime.

The above figures are certainly very striking, and it is particularly instructive to learn that the decrease of crime and alcoholism in Norway has been due, not to Prohibition, but to lessening the number of licenses, increasing the tax on spirits, and the temporary depression in business.

It will not do, however, to trace all the increase of crime and insanity to alcohol. In Berne, for example, where there are only 4 saloons to 1,000 inhabitants, crimes were more numerous than in Zurich, where the ratio is 12 to 1,000. Professor Vauderoy, of Liege, asserts that the increase of the tax on spirits in Belgium has had but a slight result; and Dr. Icovesco, of Roumania, asserted that in a district in his country where a large number of saloons were closed alcoholism increased.

Such exceptions must be borne in mind, but on the whole it seems to be quite certain that a high tax or license, and a reduction in the number of saloons and total amount of alcohol consumed, is followed by a diminution in crime. The statistics of some of our own cities carry out this view.

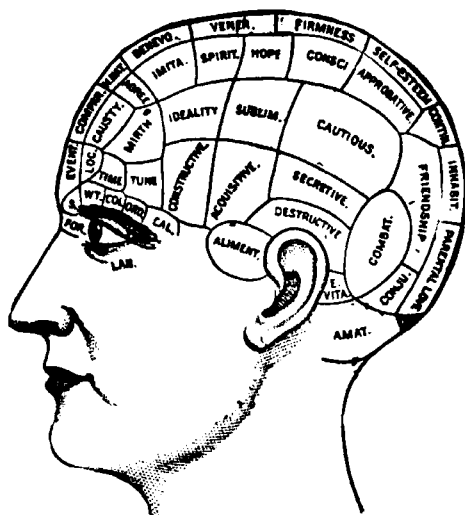
Prohibition can only come in with the growth of an improved moral tone in society. Repressive measures must be gradual, and steady helping by their nature to educate the people with regard to the depraving influence of liquor habits.

D.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



SHAPES OF HEADS.

IN the examination of heads, and in the study of character therefrom, something has to be considered beside how large the brain is as a whole, and how well adapted the size of the brain is to the size and health of the body. We hear men who are not acquainted enough with Phrenology to do it or themselves justice in talking about it say that such a man wears a hat of the same size as such another man wears, and one of them is a brilliant thinker and writer, and the other is a stupid bully; and they therefore object to the truth of Phrenology because, as they look at it, the size of the brain does not seem to have any influence in determining the amount of *intellect* a man has.

If the whole brain were devoted to intellect, that argument would be worthy of consideration; but as one part of the brain is devoted to intellect, and another

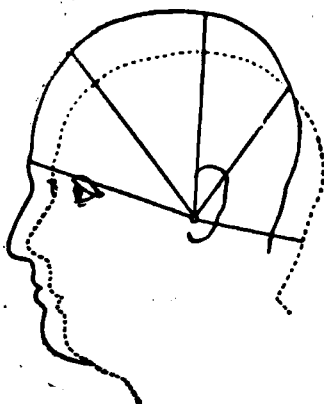
part is devoted to force, and another to affection; one part is devoted to skill, and another to strength, the size of the hat merely, or the measurement of the brain as a whole, does not determine the question of *intellect*.

If the reader will study the length of the head from the opening of the ear forward, from the opening of the ear backward, from the opening of the ear upward, and then the width of the head from side to side—the broadness—and will bear in mind that the intellectual organs are located in the forehead—and that the length of the brain forward from the ear has quite as much to do with intellect as the height of the forehead even more—he will get a correct idea of the phrenological development.

Force, acquisitiveness and policy and appetite are related to the side-head, and those in whom these developments are strong have executiveness and selfishness. Those in whom the head is narrow and flattened at the sides are frank, often wanting in the craving desire for property, and they may have activity but they lack force; while those that have a long back-head, broad and plump and full, are sociable, companionable, lovable and loving, and the tall head is expected to be firm, honest, reverent, sympathetic and imaginative.

In the outlines of the heads on the next page the reader can see that the dotted out-line head would take a hat of the same size that the solid-line head would take. Where the hat comes, the size of brain is about the same, but the lines from the opening of the ear will be seen to be much longer to the front and top

head in the complete-line head than in the dotted-line head; but the dotted line head is much the larger in the back portion. If the intellectual and moral characteristics depend upon the amplitude of the anterior and top development of the head, then the one is highly endowed with intellectual and moral power, and the other, with the dotted-line, is weak in these humane regions and strong in the animal regions.



A LESSON IN DEVELOPMENT.

The dotted-line head would be broader in the region of the ears, which would make but a trifle of difference in the size of the hat.

We have such heads under our hands alternately. A man with a head like the dotted-line comes to us, and we are compelled to recognize him as a low, animal, coarse, unambitious, and, in a certain degree, detestable character. He belongs to the criminal class—to those whose culture has not been intellectual and moral, but the reverse.

Young men that from infancy are trained to be tricky and dishonest, who squabble and quarrel in the nursery and on the street, and form the agencies of midnight brawls and the inmates of prisons and penal institutions,—their training cultivates the lower faculties and depresses and perverts the higher qualities. Within three hundred yards where such as the dotted-line represents are bred and trained and contaminated, there may be raised a family in favor-

able circumstances and with tendencies and dispositions to train their children morally, intellectually, decently; and when these boys from families brought under such opposite influences meet on the way to school—if one of them ever goes to school—the difference will be seen instantly in the appearance and manifestation. The head that is high in front and at the top will sheer off, hurry away, and get out of reach of the one with the head like the dotted-line.

The latter, as they get old enough to be characterized, will be called "roughs," "toughs." They belong to the "gangs" in our great cities. Nine-tenths of all the police expenditure and criminal jurisprudence, the prisons and the poor-houses, are devoted to the watching, the restraint, and the punishment of these undeveloped, or improperly developed, people.

The truth is, human beings deserve the right training and culture and treatment. A child brought into life without his consent or responsibility deserves to be tenderly and properly cared for, and led in the path of righteousness and truth until he is old enough to take the responsibility on himself. In the large cities perhaps four-fifths, if not nine-tenths, of the pauperism and crime, the imperfect development of the children, and their consequent imperfect character, may be traced to the sale and use of alcoholic liquors.

Hundreds of good men and women are perverted by the use of liquors, and their children are neglected and become vagabonds. The children of such parents, to be sure, will have better heads and be less bad in character than the children of those that have been perverted for three generations before them. Then the low development becomes chronic and constant, and it would take some time to civilize those that have been a good while running down, and get them back to the normal standard.

Mental culture develops brain as physical culture develops body; and

the injunction to this culture is very old. We read in the Bible the command to the Jewish people to train their children and teach them the laws of righteousness :

"Keep thy soul diligently lest thou forget the things which thine eyes have seen, and lest they depart from thy heart all the days of thy life; and teach them to thy sons and thy sons' sons, that they may learn to fear me all the days that they shall live upon the earth, and that they may teach their children:" and, "Thou shalt love the Lord thy God with all thy heart, with all thy soul, and with all thy might; and these words that I command thee this day shall be in thy heart, and thou shalt teach them diligently unto thy children, and shalt talk of them when thou sittest in thy house, and when thou walkest by the way, and when thou liest down, and when thou risest up."

Thus, children have a right to intellectual and moral education; they have a right to proper guidance and culture. We talk about well-trained and well-bred animals, and sometimes forget that training is equally useful to children.

—:O:—

WHAT IS THE GOOD OF IT?

"**W**HAT good will it do me to have a phrenological examination?" is a question often asked, and it is an awkward one to answer, because there are so many conditions in human life that one may be greatly benefited by a statement of truth, and another will be so organized, and so selfish or careless as not to be benefited by the truth, though uttered by an oracle. I am reminded that on the twenty-ninth of August, one year ago, a stranger came into the office, looking sober and careworn, and simply asked for an examination, and at the close of it gave his name. He asked no question, he gave no statement of his history or conditions. The examination or any part of it was

not prompted by questions or observations.

He went his way, and on the twenty-sixth of October, fifty-eight days afterward, a gentleman came in and inquired, "Do you know me?" I said: "I know your face. I remember having seen you before, but I don't remember the name or the circumstances." He replied, "I was here fifty-seven days ago, and had my head examined, and I have now called to thank you over and over," and he made this statement:

"For years I have been engaged in a business which taxed my thought and energies severely, and I had become overworked and run down. I had gone from 184 pounds to 121 pounds; I was troubled with dyspepsia, kidney difficulty, general weakness, and found myself unable to sleep. Meantime I had been consulting physicans and taking their prescriptions for two and a half years, at an expense of \$970. I finally called on the president of the company with which I was connected, and said, 'I must resign the position, or take my chances between death and the insane asylum.' He urged me to take a vacation and rest, I insisted on the resignation, and he accepted it, and then drew a check payable to my order for \$3,000, and told me to go home and rest, and return when I felt able. From April to August I rested, but I did not improve. I happened to hear a friend remark that he had been greatly benefited by some advice he obtained in a phrenological examination, and I thought I would call and see what would be said to me. I did so, and the result has been this. I am entirely recovered from my dyspepsia and kidney trouble, I sleep like an infant, and eat heartily, but I eat the food which you recommended. I have tried to follow implicitly your advice in regard to diet, and habits, and regimen, and I am happy to say that I have gained twelve pounds in fifty-seven days, and feel well enough to go to work."

About three weeks since he came into the office, but as I happened to be engaged in examinations, he said to the people in the store, "Say to the professor that I am getting along nicely; I came in to thank him some more. Since I went to work, I have made twenty thousand dollars; I have not resumed my old place on a salary, and life to me shines brightly." He left his respects and departed.

Some people get benefit in other ways; one man is directed to the right business and turns over a new leaf, greatly to his advantage, and there are very few men who are sufficiently perfect in health, and in their habits and usages, or in the selection of their business, so that a good analysis of their mental and physical make-up would not be of some service to them. When we find a man so perfect that he does not need any advice, we tell him that the amount he has paid he may regard as a thank-offering for his good fortune in a proper organization, and in a wise selection of pursuit, and that he can afford to contribute so much to the good of the cause, which saves so many from wrong pursuits and unfortunate habits.

Some who are benefited by examinations never return to reveal the fact, or give thanks. In this case we have the consolation of feeling that that one hour's work, a year ago to-day, has benefited the individual referred to as much as my whole year's work has cost the public, and all the good which the other thousands have received is clear profit to the community.

—:O:—

WORDS OF ENCOURAGEMENT.

—, Mass., August 2d, 1890.

PROF. NELSON SIZER—Dear Sir :

I RECEIVED the phrenological character of myself the other day. Thanks. I supposed the book you gave me was all I was to receive. This may be useful to me some time in the future. I consider the amount I gave you for the examination well spent; had I only known and visited you

when I was younger, my life might have been happier and more useful. It seems to me, you must have done, and are now doing, a great deal of good. If only our young people knew more about themselves and what they were best adapted for, our world might be better. I told you I thought of attending your phrenological school some time. I am very much interested in the study, and if I thought I would be successful, I would buy a set of books, and devote all the time I could to the study.

Respectfully yours,

—:O:—

—, Pa., Aug. 30th, 1890.

FOWLER & WELLS Co.:

YOUR letter is at hand, also the pictures and the description of character, and you have told me the truth. I thank you heartily for the advice you have given me. I shall try to profit by it. Have always thought I would like to be a doctor.

Five years ago I was married to one of my choice, who was devoted to me. I was his idol, and we were very happy. But six months ago, he said "Farewell," and went on before to the land of rest, leaving me to follow after. My people are living, yet I desire to be independent of them. Therefore I am going to try to earn my own living. I shall always be glad I sought your advice in regard to occupation. I should have gone on at dressmaking, perhaps, and as you said, in a few years would be considered not stylish.

Yours, gratefully,

—:O:—

—, Wis., Aug. 21st, 1890.

FOWLER & WELLS Co.:

I HAVE received your description of character from the photographs that I sent you. The description, I think, is true, and I am very much pleased with it, but if I am not intruding too much on your time, I would ask one more question, and that is, "Do you think I would become a successful minister of the Gospel, or should I give it up and engage in something else? Will you please give me a word in answer to that effect.?"

Thanking you for the favor you have conferred upon me.

I remain,

Very truly yours,

—

*With the proper culture, you would succeed.

N. S

CHILD CULTURE.

THE CHILDREN'S BED-TIME.

IF I, Hetty Deane, spinster, were the mother of children, the hour of their bed-time should be the happiest, the most loving, the most religious—I use that word in its highest sense—of all the twenty-four. I should look forward to it as the holy time of my day, and I would let no demand on my attention, whether from the household, society, or the church, interfere with its sacred duties. To see a child going to bed unhappy, in tears, left, perhaps, to wail itself to sleep, or consigned to the unsympathetic care of a paid nurse, gives me a heartache that will return for days afterward when thought recalls the scene. But the happy, laughing, chattering group at the mother's knee, some undoing their own buttons and straps, or helping their brothers; some breaking away for a race round the nursery till recalled to the business of the hour; the mother, guiding, assisting, answering questions, half joining the play, yet keeping order in the ranks, while the baby sprawls on her lap half naked, his dimpled legs and shoulders winning kisses from all—these make the sweetest picture the domestic, or any other circle, can produce, and come the nearest of anything in the wide world to making me renounce my spinsterhood at once and forever. Then, when all are ready for bed, the little prayers or hymns, the few serious sweet words from mother lips, the cradle song for baby—till, finally, the children glide into the beautiful sleep-land with mother's voice, mother's kiss, mother's brooding love, the last thing in their waking consciousness—oh, what can ever compensate a woman for the loss of a home like this? But!

At one time my room adjoined that occupied by a young mother and her son. Every night I was the unwilling witness of a little—comedy I should like to call it, only for its serious aspects. The boy was put to bed with the sweet old “Now I lay me down to sleep,” to which when lisped by infant lips I involuntarily bow my head. In this case, however, it was followed by a drama which caused quite opposite emotions. The child was perfectly healthy, and so was full of fun and frolic. He had no brothers or sisters to romp with till tired nature demanded the sweet restorer sleep. He was as ready for play at bed-time as he had been early in the morning. The mother, instead of wooing sleep with song or story, gave him a hurried kiss and hastened to the parlor to resume the novel she had reluctantly left to go through these perfunctory duties. The boy, left to himself with the gas burning brightly, would begin at once a series of gymnastic performances which, I own, I longed to be a spectator of. My ears told me that the pillows suffered a woeful drubbing, and his merry laughter was softly echoed by the listener. After a while the tumult would cease, then there was a patter of feet past my door and down the stairs. Soon a sharp command from the parlor would send him flying and panting up the stairs in high glee. When this had been repeated three or four or half a dozen times, as the interest of the novel was greater or less, the mother would spring upon the little rebel at the stair foot, drag him up by the arm, dash into the bedroom, throw him on the bed and chastise him roundly with the back of the hair brush.

Then there was weeping and wailing in one room and the gnashing of an old maid's teeth in impotent rage in another room. The gas was then turned off, as it ought to have been in the first place, the child was left to sob himself to sleep,

while the mother's tears were saved for woes of her lovelorn heroine.

The mother is to be pitied who neglects or is indifferent to the hallowed influences of the children's bed-time.

SARAH E. BURTON.

CHARLES LORING BRACE.

FOUNDER OF THE CHILDREN'S AID SOCIETY.

ONE of New York's best-known citizens, a man who has for over thirty years illustrated in a most practical way one of the most useful departments of philanthropy, has just died, in the midst, or rather at the height, of his work. We may say it with little probability of objection, that the death of no other man in the United States at the present time would awaken tender and grateful regrets in a larger personal "constituency" than the sudden passing away of Mr. Charles L. Brace has awakened. He, indeed, had won the high title "the children's friend," as no other man we can recall has won it.

Mr. Brace was born in Connecticut in 1826, studied at Yale, later at Union Theological Seminary, and in 1850 made a pedestrian tour in Europe, spending the winter of 1850-51 in Berlin in study. Later, while traveling in Hungary, he was arrested as a "political agent," and imprisoned for a month. The son of a teacher, he was naturally interested in educational matters, and studied school and prison management in Switzerland and Italy.

Returning to the United States in 1853, he very soon set about the organizing of what became so well known as the Children's Aid Society. As the secretary of this enterprise, he was the manager of its important work, and continued to be its recognized executive officer until his sudden death at Camfer, Switzerland, whither he had gone for change and rest.

Shortly after the foundation of this society the necessity of a newsboys' lodging-house became apparent, and Mr.

Brace was instrumental in the establishment of the present New York institution—the only one of its kind in the world.

In 1856 Mr. Brace went abroad again, as a delegate to the International Convention for Children's Charities in London; and in 1872 he was a delegate to the International Prison Congress in London. That same year he revisited Hungary, and was received there in a very different manner from that which characterized his first visit; indeed, with distinction. He went abroad, also, in 1865 to carry on a special sanitary investigation into the cities of Great Britain.

New York City and other cities and towns of the country have felt the effects of his beneficent activity. The Children's Aid Society has helped thousands of destitute and friendless boys and girls to a better life. Since its organization the society has placed in good homes no fewer than 70,000 children. In the lodging-houses, more or less closely associated with the society, more than 200,000 boys and girls have found shelter.

About seventeen years ago Mr. Brace started, under the auspices of the Children's Aid Society, the "Fresh Air" movement for small children, which has since become a feature in the summer life of New York and other cities.

At first only excursions were planned, but very soon a permanent summer home for children was established, of which the present "home" at Bath Beach, and another down on the Jersey coast, are the outcome.

"The vital principle of all Mr. Brace's efforts was to help others by enabling them to help themselves. The sense of self-respect was never degraded by his efforts. To his sensible and practical application of this principle his marvelous success was mainly due."

Mr. Brace was a frequent writer for the press, finding leisure also, amid his pressing cares, to write a number of books dealing with the topics in which he took especial interest. Among these

ciate life on its physical sides. He could find on the great level of common humanity abundant scope for intellectual and moral effort. His sympathies were strong, and his temperament of that ready sort that inclined him to act promptly in response to sympathy. His back-head was largely developed, and especially so in the region allotted by the phrenological classification to home and the interests that center in home. He must have closely resembled his



CHARLES LORING BRACE.

may be mentioned *Hungary in 1851*, *Home Life in Germany*, *The New West*, *Short Sermons for Newsboys*, *The Dangerous Classes of New York*, etc.

The organization of Mr. Brace was that of a practical man, as one may see at once by the portrait. He was not a dreamer or an idealist, but a close observer of the actual world around him. The head was broad and strong in the base, inclining him to study and appre-

mother in mentality, for his head has so much of the feminine in its conformation as regards the social and moral qualities. D.

THE LITTLE HIGH CHAIR.—There was an auction at one of the down town auction houses recently. A plain, sad-faced woman, in a plain, calico gown, stood in a crowd. The loud-voiced auc-

tioneer finally came to a lot of plain and and somewhat worn furniture. It had belonged to the plain woman, and was being sold to satisfy the mortgage on it. One by one the articles were sold—the old bureau to one, the easy rocker to another, and a bedstead to a third.

Finally, the auctioneer hauled out a child's high chair. It was old and rickety, and as the auctioneer held it up everybody laughed—everybody except the pale faced woman. A tear trickled down her cheek. The auctioneer saw it, and somehow a lump seemed to come up his throat, and his gruff voice grew soft. He remembered a little high chair at home, and how it had once filled his life with sunshine.

It was empty now. The baby laugh, the two little hands that were once held out to greet "papa" from that high-chair were gone forever. He saw the pale-faced woman's piteous looks, and knew what it meant; knew that in her eye the little, rickety high chair was more precious than if it had been made of gold and studded with diamonds. In imagination he could see the little,

dimpled cherub which it once held; could see the chubby, little fist grasping the tin rattle box and pounding the chair full of nicks; could see the little feet which had rubbed the paint off the legs; could hear the crowing and laughing in glee—and now the little high-chair was empty.

He knew there was an aching void in the pale faced woman's heart; there was in his own. Somehow the day may come and go, but you never get over it. There is no one to dress in the morning, no one to put to bed at night.

"Don't laugh," said the auctioneer, softly, as somebody facetiously offered ten cents; "many of you have little, empty high chairs at home with which money would not tempt you to part." Then he handed the clerk a bill out of his own pocket and remarked, "Sold to the lady right there," and as the pale faced woman walked out with the little, high-chair clasped in her arms, and tears streaming down her cheeks, the crowd stood back respectfully, and there was a suspicious moisture in the eyes of the man who had bid ten cents.

NEED OF COMPANIONSHIP TO CHILDREN.

AN only child is naturally at a disadvantage in his own home because he is an only child. He lacks the lessons which playmates there would give him; the impulses and inspiration which he would receive from their fellowship, the demands on his better nature, and calls on his self-control and self-denial, which would come from their requirements. Parents who have but one child ought to see to it that the lack in this regard is, in measure, supplied by the companionships of children from other homes. It is, indeed, a mistake for any parent to attempt the training of his child without the help of his child companionships. No child can be inspiringly and symmetrically trained without as with these. Even where there are half a dozen or more children in one family,

there is still a need of outside companions for each child; for it is not possible for any person to bring himself into the same relations with a child as can be entered into by a child of his own years and requirements.

Because a child's companionships are so influential, it is the more important that they be closely watched and carefully guided by the child's parents. In choosing a neighborhood—for a residence or for a Summer vacation; in choosing a week-day school; in choosing a Sunday-school—where a choice is open to the parents, the companionships thus secured to their child ought to have prominence in the minds of the parents. And when in the neighborhood a week-day school and Sunday-school are finally fixed upon, the responsibility is still

upon the parent to see to it that the best available companionships there are cultivated and the most undesirable ones are shunned by the child. Neglect or carelessness at this point may be a means of harm to the child for his lifetime. Attention just here may do more for him than were possible through any other agency.

It is a parent's duty to know who are his child's companions, and to know the character and course of conduct and influence upon his child of every one of these companions separately. Here is where the parent's chief work is called for in the matter of guiding and controlling his child's companionships. A parent must have his child's sympathy in order

to gain this knowledge, and a parent must give his sympathy to his child in order to be able to use his knowledge wisely. It may be necessary to keep an open house for these companions, and an open heart and hand to them personally, as it surely is necessary to keep an open ear to the child's confidences concerning their sayings and doings, if the parent would know all about them that he needs to know. There are parents who do all this for and with their children, as an effective means of guiding those children in their companionships. It is a pity that there are not more who are willing to do it, in view of all that it may be a means of accomplishing.

S. S. MINER.

THE LOVE OF FLOWERS.

MOST of us will agree with a writer in *Vick's Magazine* as regards what he says on this subject, but few parents are wise enough to carry into effect what he says.

Most persons are born with a natural love for flowers. I never yet saw a toddler whose eyes did not light up with pleasure at the sight of bright blossoms, and whose fingers did not itch to hold in their grasp "the pitty flowers," and small boys show fully as much liking therefor as their sisters. It is considered the proper thing for our girls to wear flowers, to love them and care for them, and so encouraged and trained the majority of our girls grow up into flower-loving women. On the contrary, in many homes, the boys are made to feel that the love of flowers is "girlish," and twit our modern boy for wanting at all times to be "mannish!" So our boys smother their natural liking with a forced indifference, which later, alas, becomes a second nature. Ninety-nine one-hundredths of the men and women who manifest this indifference never had their tastes cultivated in this direction while young. It is freely admitted that there is a refining, elevating influ-

ence about flowers; why, then, should not parents feel it a duty to encourage the love of the beautiful in bud and bloom. * * *

Among the best sorts for children are balsams, nasturtiums, portulacca, phlox, pinks and sweet peas. These good, old fashioned flowers grow easily, last long in bloom, and are amongst our brightest and best flowers.

As a rule these bright, easily grown flowers please the children well; sometimes children whose parents pay much attention to flowers, and have many rare sorts, with the keen sense of justice all children possess, grow dissatisfied with annuals alone and long for a share of the rarer flowers that their elders have. "I don't like my bed at all," confidentially said a little girl to me once. "It is just full of petunias and larkspurs that no one else will have. Mamma has beds and beds full of geraniums and gladiolus, lilies and roses, and I haven't one. I just hate my old bed!" Don't be afraid to give the children a few gladiolus or geraniums. They often take more pains than grown-ups with some plant they think is extra choice, as I have reason to know. One child, now

nine years old, has for two years raised the best dahlias and gladiolus grown on the place. Her little hoe is forever stirring the soil around them, and she is

always ready to supply needed water or mulch. Divide with the children—they ought to have a share of the good things I am sure.

AN INDISCREET TEACHER.

A "LOOKER ON" illustrates a reprehensible habit, by no means unusual among teachers, in the following incident communicated to the *Journal of Education*:

A lady who was visiting a city school recently spoke to a teacher concerning a child who had done remarkably good work. Her words of approval, were spoken in an undertone, but the teacher replied in tones so loud that all the children could easily hear, "Oh, Annie is a very smart child. She knows more than her big sister does already, and is in the same class with her."

The visitor made no comment. Poor Annie! to hear such woful praise. Poor sister! to be goaded or embittered by such comparisons. Poor teacher! to know so little of child nature, and to work such harm so recklessly. The vanity and self-complacency with which little Annie was learning the habit of looking down from her little pinnacle upon the lesser attainments of the older sister, are sad accompaniments of her growth in knowledge of the three R's. The pain, the jealousy, or the indifference which in the older sister's life marked the result of the unwise dealing are features too serious to be ignored, or even measured, beside the progress in the nominal work of the grade.

Why this mistake? Because the teacher lacked fine instincts--and was not sensitive herself, perhaps. Because she had not the happy power to put herself in a child's place. Because her ideals were not high, the number of words spelled or problems solved counting for more, in her eyes, than the growth in gentleness and meekness and truth. She herself needed to grow.

But because she was not fine, her sen-

sitive pupils were hurt. Because she did not understand, she wrought positive harm. Because her ideals were low, she failed to lift her children to a higher plane. Except as she was noble and womanly, her pupils must suffer at her hands.

Her case is not unique. This teacher is unfortunately one of many. For the sake of the children, for the sake of the profession, for their own sakes, too, may they grow into deeper insight and fashion higher ideals!

THE SKEPTIC'S REVERIE.

I SAT with my child one evening

At the close of a summer's day,

And she looked at me and questioned,

"How far is Heaven away?"

"I can not tell, my darling,"

Was all that my lips could say.

While I sat and thought and wondered,

"How far is Heaven away?"

"Why, you ought to know, dear father,

You were never puzzled before."

But I could not respond, for her question

Made my doubting heart feel sore.

Night's dreamy light was shining

And casting on the floor

The spectral shade of the poplar

And the spreading sycamore.

The harmony of the evening

And the little maiden's creed

Filled my thirsting soul with longing

For my nature's greatest need.

And I kissed my sweet child's visage,

Full of innocence and mirth,

And thought if all were like her,

Then Heaven would be on earth.

CHILO STEVENS



WHAT THE LIVER DOES.

A WRITER in *Hall's Journal* describes in a clear style the multifarious work of this organ.

The liver is the largest gland of the body; it is located at the right, above the lower border of the ribs; reaching over to the left side, and lying close to the heart, overlapping the stomach.

It carries on several separate and distinct lines of work; has probably more functions than any other organ of animal life. We are best acquainted with its work of making bile, which is largely, if not entirely, made up of waste elements taken from the blood. Bile is a golden-yellowish fluid; but when vomited from the stomach it is green, and many people suppose that this is its natural color. The change is due to the action of the gastric juice.

It is an excretory and digestive fluid, converting fats which are not acted upon in the stomach, but in the small intestine, into an emulsion. Bile also acts upon the mucous surfaces, stimulating the absorption of food after it is digested.

The digestive fluid of the stomach is acid, the bile is alkaline, and the two being poured into the small intestine simultaneously with the food, prevent an irritating action of the gastric juice. Pure gastric juice is so strong an acid that it will irritate the hand if it is placed upon it. Were not the stomach

protected in a peculiar manner, it would itself be digested with the food, as often happens in cases of sudden death after a person has just eaten a hearty meal.

Bile stimulates peristaltic action, by which means the food is moved along through the entire length of the intestines. It is an antiseptic, and preserves the food from fermentation and decay in its slow progress through the twenty-five feet of alimentary canal. This is one of its most important uses. With the food is always taken a quantity of germs, and they would surely induce fermentation but for this preventive agent. About fourteen hours are required for the complete process of digestion from the time food enters the stomach until it is entirely absorbed. If a single one of these several offices be absent or interfered with, it seriously affects the health of the individual.

The liver itself is a digestive agent. All the digested food, with the exception of a small portion of the fat, is absorbed and carried by the portal vein to the liver. The heart pumps blood directly into the general circulation, but all of it which goes to the stomach, spleen, and other abdominal viscera is carried to the liver before it is allowed to go into the general circulation. Thus the liver acts as a filter for the blood received through the portal circulation, and completes the work of digestion. The

stomach is only the ante-chamber where the process of digestion is commenced. There are twenty-five feet of intestines, and the work of these upon the food is vastly more important than that of the stomach. When the stomach and intestines have done all that they can do to the food, its nourishment is expended, and it is carried off as waste matter by the kidneys. The liver acts upon all its elements, which no other organ does. Starch constitutes one-half to two thirds of all our food. When we take it into the mouth, the saliva begins to change it into sugar. It furnishes heat for the body, and muscular and brain force; hence we need a large amount of it. In the process of digestion, a large amount of sugar is manufactured. If all this were poured at once into the circulation, it would thicken the blood and render it so sluggish that the blood corpuscles would all be destroyed, and it would have to be hurried out of the system to save the person's life; so the liver goes

immediately to work to change the sugar back into liver starch, and stores it up in its tissues. Then it begins slowly to change the starch back into sugar again, and doles it out for use as needed for force, heat, etc.

The liver is also a sort of rendering establishment. It takes what would otherwise be offensive and dangerous elements, and utilizes them, just as the rendering establishments of large cities take the dead animals and offensive garbage and make them of value. The liver takes all the broken-down tissues, the millions of dead blood corpuscles, and works them over and changes them into material of which corpuscles can be made. The coloring matter found in these corpuscles is worked over into material which furnishes coloring matter for the eyes and hair, as well as furnishing color to the bile. Nature shows wonderful economy in thus taking old, wornout material and converting it into such a variety of new uses.

IMAGINED AILMENTS.

HOW much of illness is due to the advertisements and circulars of the patent medicine venders it would be impossible to estimate, but for a certainty the percentage must be large. The matter is somewhat amusingly set forth by Mr. J. K. Jerome in his book "Three Men in a Boat," as follows:

I had just been reading a patent liver pill circular, in which were detailed the various symptoms by which a man could tell when his liver was out of order. I had them all.

It is a most extraordinary thing, but I never read a patent medicine advertisement without being impelled to the conclusion that I am suffering from the peculiar disease therein dealt with in its most virulent form. The diagnosis seems in every case to correspond exactly with all the sensations that I have ever felt. I remember going to the British Museum one day to read up the treat-

ment for some slight ailment of which I had a touch—hay-fever, I fancy it was. I got down the book, and read all I came to read; and then, in an unthinking moment, I idly turned the leaves, and began to indolently study diseases generally. I forget which was the first distemper I plunged into—some fearful devastating scourge, I know—and before I had glanced half down the list of "premonitory symptoms," it was borne in upon me that I had fairly got it.

I sat for awhile frozen with horror, and then in the listlessness of despair I again turned over the pages. I came to typhoid fever—read the symptoms—discovered that I had typhoid fever, must have had it for months without knowing it—wondered what else I had got; turned up St. Vitus's Dance—found, as I expected, that I had that too,—began to get interested in my case, and determined to sift it to the bottom, and so started alpha-

betically—read up ague, and learned that I was sickening for it, and that the acute stage would commence in about another fortnight. Bright's disease, I was relieved to find, I had only in a modified form, and, so far as that was concerned, I might live for years. Cholera I had, with severe complications, and diphtheria I seemed to have been born with. I plodded conscientiously through the twenty-six letters, and the only malady I could conclude I had not got was housemaid's knee.

I felt rather hurt about this at first; it seemed somehow to be a sort of slight.

Why hadn't I got housemaid's knee? Why this invidious reservation? After a while, however, less grasping feelings prevailed. I reflected that I had every other known malady in the pharmacology (*sic*), and I grew less selfish, and determined to do without housemaid's knee.

Gout, in its most malignant stage, it would appear, had seized me without my being aware of it; and zymosis I had evidently been suffering with from boyhood. There were no more diseases after zymosis, so I concluded there was nothing else the matter with me.

A NOTE ON EPILEPSY.

IN chronic epilepsy the patient shows a want of vital tone. There is an uneasy, excitable manner, restless eyes with the pupils usually dilated, a relaxed state of the muscles, yet the responses of the reflexes to local irritation are abnormal or exaggerated. As a rule the mind shows a correspondence with the general nervous tone, being highly excitable and spasmodic in expression. The skin exhibits vascular change, want of complete nutritive support, the color being sallow, patchy, or dark, and suggestive of a sluggish circulation. One can not help thinking of liver disturbance on observing such a skin, and examination usually elicits the fact of biliary derangement.

In discussing the probable state of the brain that precedes the epileptic convulsion, one authority* says: "There is an important vaso-motor centre for the brain vessels in the region between the optic thalamus and subthalamie region above, and the pyramidal decussation below. The pupils though the irritability of this center, undergo contraction and immediately afterward they relax."

An excitement of peripheral nerves that may produce a simultaneous action of the sympathetic, causing an increased flow of blood toward the brain, or that may reduce the arterial pressure in the

cerebral vessels, will throw the circulation in the convolutions, in the district supplied by those vessels, out of balance and unconsciousness with the epileptic clonus immediately ensues. The attack is doubtless precipitated in most cases by uncompensated blood-pressure, the area in which the brain lesion exists being rendered hyperæsthetic, and out of control. Obstruction of the venous blood is consequent upon the disturbance of the arterial circulation and the accumulation of the former in the capillaries of the medulla is indicated by the reflex contraction of the cervical muscles.

Meynert ventures the opinion that some change in the chemical constitution of the venous blood is the excitant of the symptoms observed in the post-convulsive act. In *petit mal* the patient may have a brief *accès* with unconsciousness for a moment and not fall; the arterial disturbance being in such cases confined to the cortex, while the basal ganglia are unaffected and able to continue their functions automatically.

Meynert suggests that those cases in which there is a variety of sensory phenomena show the effect of variable blood pressure in the convolutional areas. I think that with the facts of localization in mind, few will take issue on this point. One arterial trunk being

*Dr. Brockway.

engorged by the sudden afflux, and its district of supply rendered hyperæmic, the sensory centers in that area will, as a consequent effect of the abnormal stimulus, manifest their function to the consciousness for a time. For instance, if it be the region of visual perception, the patient will see a play of color or luminous objects, apparitions, etc. If it be the olfactory district, odor of one sort or another will be noted. The speech center indicates excitement by phrases, exclamations, snatches of song may be mentally heard, and so on. Thus, on most rational grounds we have an explanation of the peculiar "aura" that this or that epileptic may experience; and this aura, while not identical with the sense function of the diseased part of the brain, if disease exist, will, as a rule, help toward the diagnosis.

It should be remarked further that the multiplied researches of neurologists with regard to the etiology of epilepsy show that the great majority of its causes are *extra* cerebral, and the spasm is due to the reflex irritability of an unstable vaso-motor center. The small minority

of cases in which the cause is a brain lesion, have little encouragement for medical treatment aside from possible sedation. Surgery has a record of many excellent diagnoses, but few cures. Of the reflex class, however, we can speak hopefully, and claim that even old cases may be greatly relieved by careful management in which hygiene, massage, magnetism or hypnotism are factors. Intelligent massage of the head for the purpose of promoting the balance of the circulation, and so reducing abnormal blood-pressure with its tendency to congestion in any region of the hemisphere I hold to be of high value, and much of my success in treating the cases that have come under my care, I feel assured, has been due mainly to manipulations on the head, at the time, of an expected crisis. The mental reaction that may be induced through *suggestion* is not to be overlooked as a factor in the procedure of relief; for doubtless at times its influence in abating neural excitement exceeds that of any mechanical treatment.

H. S. D.

in *N. Y. Medical Journal*.

"HYPNOTISM."

EDITOR of the AMERICAN PHRENOLOGICAL JOURNAL:

The word "Hypnotism" as applied of late to the experiments in what has been called animal magnetism, is supposed by many to be a new name given to an old fact or science by certain observers, as a sort of blinder, to produce the impression that they had recently discovered a new science. But even the *name* is by no means new. Webster says: "Hypnotic, sleep. Having the quality of producing sleep; tending to produce sleep; soporific. A medicine that produces or tends to produce sleep; an opiate; a soporific."

As usually understood, sleep is not always produced, nor required, in order to effect the reputed cures by hypnotism. And, besides, the *name* as applied to mesmeric or magnetic experiments, is old,

as evidenced by an article hereafter copied from the Manchester, England, *Courier*, of September 6, 1847, which you may think interesting enough to publish:

"JENNY LIND AND HYPNOTISM.

"On Friday, the 3d instant, Mlle. Jenny Lind, accompanied by Mr. and Mrs. Schwabe and a few of their friends, attended a *seance* at Mr. Braid's for the purpose of witnessing some of the extraordinary phenomena of hypnotism. After showing his mode of inducing the sleep, and many of the ordinary phenomena of mesmerism, Mr. Braid illustrated his views of the nature and cause of the manifestations called Phreno-mesmerism. He neither touched the head, nor gave any vocal enunciation of the ideas he meant to excite in the minds of the patients, but excited into action

those muscles in the face, or other parts of the frame, which, in the waking state, give active physical manifestation of such passions or emotions, and instantly the corresponding ideas were excited in the minds of the patients.

"But now came the most extraordinary part of the exhibition. There were two girls who work in a warehouse, and who had just come in their working attire. Having thrown them into the sleep, Mr. Braid sat down to the piano, and the moment he began playing both somnambulists arose and approached the instrument, when they joined him in singing a trio. Having awoke one of the girls, Mr. Braid made what appeared a most startling announcement regarding the one who was still in the sleep. He said, although she was ignorant of the grammar of her own language when awake, that when in the sleep she would prove herself competent to accompany any one in the room in singing songs in *any* language, giving *both notes and words correctly*—a feat which she was quite incompetent to perform in the waking condition. Of course all were most incredulous on this point, but the result proved that Mr. Braid had not exaggerated the powers of his subject. He requested any one in the room to put her to the test; when Mr. Schwabe sat down to the instrument and played and sang a German song, in which she accompanied him correctly, giving both notes and words *simultaneously with Mr. Schwabe*. Another gentleman then tried her with one in Swedish, in which she also succeeded. Next, the queen of song, the far-famed Jenny Lind, sat down to the instrument, and played and sang most beautifully a slow air, with Swedish words, which the somnambulist accompanied her in, in the most perfect manner, both as regarded words and music. Jenny now seemed resolved to test the power of the somnambulist to the utmost by a continued strain of the most difficult roulades and cadenzas for which she is so famous, including some of her

sostenuto notes, with all their inflections from pianissimo to forte crescendo, and again diminished to thread-like pianissimo; but in all these fantastic tricks and displays of genius by the Swedish Nightingale, even to the shake, she was so closely and accurately tracked by the somnambulist, that several in the room occasionally could not have told, merely by hearing, that there were two individuals singing—so instantaneously did she catch the notes, and so perfectly did their voices blend and accord. Next, Jenny, having been told by Mr. Braid that she might be tested in some other language, this charming songstress commenced "*Casta Diva*," in which the fidelity of the somnambulist performance, both in words and music, was most perfect, and fully justified all Mr. Braid had alleged regarding her powers. Indeed, he said, he had never known this patient fail in such feats. The girl has naturally a good voice, and has had a little musical instruction in some of the "*Music for the Million*" classes, but is quite incapable of doing any such feat in her waking condition, either as regards singing the notes or speaking the words with the accuracy she did when in the somnambulist state. She was also tested by Mlle. Lind in merely imitating language, when she gave most exact imitations; and Mr. Schwabe also tried her by some most difficult combinations of sound, which he said he knew no one was capable of imitating correctly without much practice; but the somnambulist imitated them correctly at once, and that whether spoken slowly or quickly. When the girl was aroused, she had no recollection of anything which had been done by her, or that she had afforded such high gratification to all present by proving the wonderful powers of imitation which are acquired by some patients during a state of artificial somnambulism; she said she merely felt somewhat out of breath, as if she had been running. Mr. Braid attributes all this merely to the extraordinary exaltation of the sense of hearing

and the muscular sense, at a certain state of the sleep, together with the abstracted state of the mind, which enables the patients to concentrate their undivided attention on the subject in hand, together with entire confidence in their own powers. By this means, he says, they can appreciate nice shades in sound, which would wholly escape their observation in the ordinary condition, and the vocal organs are correspondingly under control, owing to the exalted state of the muscular sense, and the concentrated attention and confidence in their own powers with which he endeavors to inspire them enables them to turn these exalted senses to the best advantage. He

says it is no gift of intuition, as they do not understand the meaning of the words they utter, but it is a wonderful example of the extraordinary powers of imitating sounds, at a certain stage of somnambulism. And wonderful enough it most assuredly is, that by human art an individual, such as that referred to, should by such a simple process and in a few minutes, too, be invested with such extraordinary powers as above described, by which she could instantaneously catch the exact sound of both words and music, so as to accompany the others as if she had previously been perfectly familiar with both.

W.

COFFEE INEBRIETY.

DR. MENDEL, of Berlin, Prussia, has lately published a clinical study of this neurosis, which is growing rapidly in this country. His observations were confined to the women of the working population in and about Essen. He found large numbers of women consumed over a pound a week, and some men drank considerable more, besides beer and wine. The leading symptoms were profound depression of spirits and frequent headaches, with insomnia. A strong dose of coffee would relieve this for a time, then it would return. The muscles would become weak and trembling, and the hands would tremble when at rest. An increasing aversion to labor and any steady work was noticeable. The heart's action was rapid, irregular, and palpitations and a heavy feeling in the precordial region were present. Dyspepsia of an extreme nervous type was also present. Acute rosacea was common in these cases. These symptoms constantly grow worse, and are only relieved by large quantities of coffee, generally of the infusion. In some cases the tincture was used. The victims suffer so seriously that they dare not abandon it for fear of death. When brandy is taken, only temporary relief

follows. The face becomes sallow, and the hands and feet cold, and an expression of dread and agony settles over the countenance, only relieved by using strong doses of coffee. In all these cases, acute inflammations are likely to appear any time. An injury to any part of the body is the starting point for inflammations of an erysipelatous character. Melancholy and hysteria are present in all cases. In this country the coffee-drinker, after a time, turns to alcohol and becomes a constant drinker. In other cases, opium is taken as a substitute. Coffee inebriates are more common among the neurasthenics, and are more concealed because the effects of excessive doses of coffee are obscure and largely unknown. Many opium and alcoholic cases have an early history of excessive use of coffee, and are always more degenerate and difficult to treat. A very wide field for future study opens up in this direction.

T. D. CROTHERS, M. D.

A vivid and not extravagant description of the effects of coffee when taken in excess. We have frequent occasions to warn the users of it because of the indications of cardiac disturbances that we find, especially in the young. EDITOR.

NOTES IN SCIENCE AND INDUSTRY.

Iceland as an Interesting Place to Visit.—There is no other country in the known world where volcanic eruptions have been so numerous as in Iceland, or have been spread over so large a surface. No part of the isle is wholly free from the marks of volcanic agency, and it may be truly called the abode of subterranean heat. Vesuvius is dwarfed into insignificance by the twenty volcanoes of Iceland, all of them larger. The lava flood at the last eruption in Iceland, in 1875, has been computed to contain 31,000,000,000 cubic feet, while the largest eruption of Vesuvius on record, that of 1794, threw out 790,000,000 cubic feet of lava. Some of the Icelandic lakes are studded with volcanic isles, miniature quiescent Strombolis, whose craters rise from bases green with a prolific growth of angelica and grasses. Even in the bosom of the sea, off the coast, there are hidden volcanoes. About the end of January, 1782, flames were observed rising from the sea about thirty miles off Cape Reykjanes. They lasted several months until a terrible eruption commenced 200 miles away in the interior, when they disappeared. A few years ago rocks and islets emerged from the sea in this place. Another volcanic feature is the Solfatara valleys, plains studded with a number of low, cone-shaped hillocks, from whose tops jets of steam ascend. In other places boiling water issues from the ground six to eight feet into the air, as in New Zealand. Standing on the feeble crest where literally fire and brimstone are in incessant action, having before your eyes terrible proofs of what is going on beneath you, enveloped in vapors, your ears stunned with noises, is a strange sensation, and of remarkable interest.

Rustless Iron.—The rustless process, which has been until lately an experiment, has now demonstrated that great economy can be realized not only in water pipes, but in every article where iron is used. In the past year over 2,000,000 kettles have been subjected to this process in Pittsburgh. The method is very peculiar. After the article is made, it is put into a furnace about

3½ feet high, 15 feet long, and 8 feet broad. The furnace is made in an oval shape, air tight. After the iron has been in the furnace for two hours, and has attained almost a white heat, the air that comes through the regenerators and air valves is shut securely off, and the furnace is made air-tight.

After the air has been shut off, the superheater, which is located in the combustion chamber at the rear of the furnace, and at right angles from the air valves, is opened, and the furnace is filled with steam and kept in this condition for eight hours. At short intervals a small valve is opened, so as to allow an escape of steam in the furnace, permitting fresh steam to be introduced. When the articles have been ten hours in the furnace there has been accomplished the formation of magnetic oxide upon the iron surface. They are then put into an acid well, which is the last treatment.

To Cure Consumption.—The bacteriologist, Robert Koch, now Professor of Hygiene in the University of Berlin, has been making experiments in inoculation, which have resulted in producing absolute immunity of guinea-pigs from phthisis (these animals being peculiarly susceptible to this terrible disease), and it seems also to reveal the means of arresting the growth and development of the tuberculous bacilli wherever they exist. If similar results follow from experiments on men, as he believes, consumption will become both curable and preventable, and Dr. Koch will be held a greater benefactor to the race than Celsus, or Hunter, or Harvey, or Morton, or Simpson.

Emigration Statistics of England.—Some recent figures by Robert Giffen, the English statistician, confirm the received opinion that emigration affords no sufficient check upon the population of the United Kingdom. Great Britain has lost 9,000,000 by emigration since 1853; of this number 7,000,000 were of British or Irish origin, and this is an average of 243,000 a year, yet the population of Great Britain has grown to about 38,000,000, a gain of about 10,000,000 in the same time. In the

last four years the excess of births over deaths was 1,763,000, while the excess of immigration over emigration is only 685,000. There has been a gain, therefore, of a little over 4,000,000 in the population of Great Britain since 1835.

A Stave Machine.—We are told that a Michigan man has perfected a machine by which he can cut staves for seventeen barrels, completely chined, crozed and equalized in fifty seconds. By this method there are just two staves to a barrel, each stave being a perfect half section of a barrel. The machine increases the capacity of 1,000 feet of log measure greatly, and as a labor-saving invention represents an advance of 60 per cent. on old methods. The inventor has been working twenty years on the machine.

Heligoland Disappearing.—The island of Heligoland, which the British Government bartered away to purchase the recognition of its territorial claims in Western Africa, may be a thing of beauty to the eye of rock-admiring travelers and German strategists, but can hardly be hoped to prove a joy forever. Two centuries ago the *Unterland*, or coast plain below the rock, comprised 22 square miles, and there are historical records in support of the tradition that A. D. 950 the island contained three cities and several dozen villages, with an aggregate population of 100,000. Its present population has dwindled to less than 3,000, and the remaining portions of the old table-land crumble away at a rate that makes it safe to predict that within another century the "German Gibraltar" will have shrunk to a small reef with a scant fringe of sand bars.

A writer in the *Examiner* quotes a letter from a preacher who was the recipient this summer of a D.D., from a Baptist college, which has not sent out a single graduate. In this letter the spelling is original and certainly is not of the "reformed" variety. The following words are taken from it:

Menchin, persude, methoods, perminant, aranged, resorces, cas, acording, menchined, prepair, buisness, onely, increse, increas, begining, hardely, wer, strenth, indebtness,

remaning, arrisen, easely, sufficent, vacent, possibilites, guarenty, safty, soal, comunity, pararie, slue, kneed, disgussing, opinon, enterd, famiely, enroled, vigerous, planing, realy, convension, hed.

We could furnish parallels of this received from "professional" gentlemen at different times.

The Milk Industry of the United States.—There are \$2,000,500,000 invested in the dairy business in this country, says a Rhode Island paper. Think of it—two billions of dollars!

That amount is almost double the money invested in banking and commercial industries. It is estimated that it requires 15,000,000 cows to supply the demand for milk and its products in the United States. To feed these cows 60,000,000 acres of land are under cultivation. The agricultural and dairy machinery and implements are worth \$200,000,000. The men employed in the business number 750,000, and the horses over 1,000,000. There are over 12,000,000 of horses, all told. The cows and horses consume annually 80,000,000 tons of hay and nearly 90,000,000 bushels of cornmeal, about the same amount of oatmeal, 275,000,000 bushels of oats, 2,000,000 bushels of bran, and 80,000,000 bushels of corn, to say nothing of the brewery grains, sprouts, and other questionable feed of various kinds that are used to a great extent. It costs \$450,000,000 to feed these cows and horses. The average price paid to the laborer necessary in the dairy business is probably \$20 per month, amounting to \$180,000,000 a year. The average cow yields about 450 gallons of milk a year, which gives a total product of 6,750,000,000. Twelve cents a gallon is a fair price to estimate the value of the milk at a total return to the dairy farmers of \$810,000,000, if they sold all their milk as milk. But 50 per cent. of the milk is made into cheese and butter. It takes 27 pounds of milk to make one pound of butter, and about 10 pounds to make one pound of cheese. There is the same amount of nutritive albuminoids in $8\frac{1}{2}$ pounds of milk that there is in one pound of beef. A fat steer furnishes 50 per cent. of boneless beef, but it would require 24,000,000 steers, weighing 1,500 pounds each, to produce the same amount of nutrition as the annual milk product does.

An Ancient City.—Professor Horsford, of Harvard University, in researches made some five years since, discovered the remains of Fort Norembega, occupied by the Bretons some four hundred years ago. This was also occupied by the Northmen. This fort was located near the junction of Stony brook with the Charles river, and its site is now marked by a monument or tower erected by the American Geographical Society. To the town around this fort the section called Vinland, extending from Rhode Island to the St. Lawrence river was subject. The country was first seen by Bjarni Herjulfson, 985 A. D. This region was occupied by the Breton French in the 15th, 16th, and 17th centuries. The Charles river was discovered by Lief Erikson, 1000 A. D.

Wonderful Mechanism.—Probably the most delicate and sensitive piece of mechanism in the country, says the *Age of Steel*, St. Louis, is that which has just been added to the equipment of the United States Assay Office, in that city. The device in question is an assay or button balance, made by Henry Troemner, of Philadelphia, specialist in this kind of work. Its interesting points were kindly explained to an *Age of Steel* representative by Mr. Eliot C. Jewett, assayer in charge of the St. Louis office, but are only barely outlined in what follows.

In this new balance the needle deviates 65 divisions on the scale for one millogram. The sensitiveness which this bespeaks may be inferred when it is stated that one division on the scale means about the two-millionth part of an ounce.

The construction of this machine is, of course, wonderfully minute and nice. The middle bearing is an agate knife edge on an agate plane. The end bearings are agate planes supported by agate needle points. The beam is aluminum, in skeleton form. There are double levels, and a double arrangement for riders. Everything is gold plated except the beam, and the whole rests on a handsome plate-glass bottom. The cost was \$175.

Another decidedly interesting object in the assay office is the large bullion scales, which, in connection with the balance just referred to, cover the whole range of beam balances. These scales have a capacity for weighing 5,000 ounces, and yet they are so nicely

exact that if two heavy men could find room together in one of the pans to be weighed, the removal of a pin from the coat collar of one of them would be shown by the scales in the loss of weight.

The Hebrews and Higher Education.—A Berlin report gives these statistics: Of every 100 Protestant youth in Prussia 91.68 per cent. attended the elementary, 4.87 per cent. the middle, 3.25 per cent. the high schools, and 0.25 per cent. the universities. Of every 100 Catholics there were 97.21 per cent. in elementary, 1.18 per cent. in middle, 1.48 per cent. in high schools, and 0.13 per cent. in universities. Of every 100 Jewish youth there were 52.71 per cent. in the elementary, 24.40 per cent. in the middle, 21.26 per cent. in the high schools, and 1.68 per cent. in the universities.

Tabulated:

Protestants.	Catholics.	Jews.
91.68	97.21	53.71
4.87	1.18	24.40
3.25	1.48	21.20
0.25	0.13	1.69
100.00	100.00	100.00

Moving these numbers closer together, we find that of each 100 Christian children about 10, of the Jewish children about 47, aspire to an education which goes beyond the elementary school. There is a volume of sermons in these three school columns. A similar tendency in American Jewish life is notable.

Poudrette.—Some years ago I read in THE JOURNAL an article on the defilement of our streams by washings from vaults and cesspools in our cities. Since then it has been a subject of thought. The dictionary says that *poudrette* is "a manure made from the contents of privies, with charcoal, gypsum," etc. This is the thought I wish to impress and expand in this article. Every village, town and city should have a system of vats, or reservoir for all their refuse. Here it should be mixed with absorbents and disinfectants, thoroughly disinfected, by heat, if necessary, to destroy germs of disease, and then sold as a fertilizer. This filth should never be emptied in our streams of water. Vast wealth is thus lost. Disease is bred. The attention of the legislatures in all the States should be called to this ques-

tion, and laws provided to meet the case. Health officers should be required to see to it that the provisions of these acts be carried out. Such poison as floats in our streams should not be permitted in a civilized country. There is no excuse for it, seeing it may be utilized so as to add wealth to the nation in enriching the soil. Privies should never be built with pits, but with drawers, so that all effete matter may be disinfected and frequently removed by the scavenger and deposited in the cesspool.

All barn manure, and the offal of slaughter-houses, etc., could be rotted in the same connection, so that the compost would become very valuable. It occurs to us that a company of men, with an ample capital, having for its object the manufacture of city compost, would do a good business in the country, and render an excellent service to society from a hygienic standpoint. Who will form a trust on the city compost business?

JOHN V. POTTS.



NEW YORK, October, 1890.

A TEACHER'S WORK.

A WRITER in one of our scientific monthlies mentions a prominent engineer as having been fortunate when a school-boy in receiving the instructions of a teacher who was a careful observer and student of physical phenomena, and by his example and interesting experiments at school the school-boy was stimulated to work in similar lines on his own account. The result was that the boy rapidly developed in taste for physical studies and capacity for their mastery. Such a teacher is, to-day, an exception to the general rule, for there are few who are disposed to take the trouble to illustrate the principles and methods of the text-books. Where a teacher does take the trouble to make experiments and present examples for the purpose of making the text book

thoroughly intelligible to the pupils, it is to be presumed that he or she is deeply interested in such study, and enjoys the work that is thus imposed.

This is *practical* teaching, and to be serviceable to an entire class, it must not only apply to one study but to all. Because a teacher is interested in botany, or chemistry, or geology, is no good reason that he or she should exercise special care to give thorough and illustrated instructions in botany, or chemistry, or geology, and be indifferent to other and more important lessons. The children who show a taste for the teacher's favorite study while engaged upon it may, for the most part, a year or two later, lose their interest in it, and take up something else with even more earnestness. Nature attracts the average child, and he goes from one feature of it to another in easy successions. It is right that he should be instructed with regard to what will be of use to him incidentally in the common channel of life, but to make a special object of study for a whole class some sciences that probably but one will prosecute to any determinate end in later life is not wise.

It is the teacher's duty to teach everything in such a way that the faculties of the pupils under instruction generally

shall be awakened and stimulated to a good degree of activity and the whole mind developed, so that the school time shall be a season of sowing facts and counsel that may bear good fruit in mature life. The good teacher makes mind a most careful study, and observes each pupil with close attention, to be able to learn what of particular aptitude or talent he or she has, and having learned this the best work is done that sets the pupil in the direction of using to advantage the endowment that nature has bestowed. We think that the tendency of the day to make psychology and physiology prominent subjects of study by teachers is a happy thing, and promises well for the schools of the future.

THE EARNINGS OF INDUSTRY.

"You can prove anything by statistics," has been flung in the face of many a speaker who would establish his proposition by an appeal to facts. Such an assertion may have the effect of wit in a given instance, but it is usually a subterfuge or piece of shallowness on the part of him who supports the weak side of a discussion. "Facts are stubborn things" and must have their weight in all serious thought. We hear a great deal of oppression and injustice suffered by the working classes, and the tendency of the poor to become poorer and the rich richer, so that a great chasm is forming between those who are compelled to work for their subsistence and those who are not. There are many wrongs in our civil, social and industrial affairs, it must be admitted, but do they not grow out of the very constitution of American society? Is it to be expected that so heterogeneous a mixture as our

population is, especially at those centers where great numbers are accumulated, will evolve a homogeneous, consistent, harmonious order of life, intellectually and morally? The wonder is that affairs go on so well. Consider the tariff problem! What a variety of private and public interests it involves! The doctrinaires who discuss its issues, removed as they may be from personal or selfish relations to them, are much at variance in opinion as to the effect of this or that change.

If matters are going from bad to worse, as many writers have decided, we wonder at the late showing made by the savings banks of the State of New York:

The number of depositors January 1, 1890, was 1,420,997—almost one in four of the entire population of the State, young and old—and the average amount for each deposit was \$387.10. In 1820 the total on deposit in the New York State savings banks was \$432,576; in 1840, \$5,431,966; in 1890, \$550,066,657. Thus there was a growth in twenty years of over 12 per cent., and in the last fifty years of over 100 per cent. The total *surplus* reported by these banks January 1, 1890, was \$94,601,800, while their *total deposits* January 1, 1861, were \$67,440,397.

Savings banks were originally started for the benefit of the working classes, and the depositors are in the vast aggregate chiefly mechanics, clerks, etc., men and women employed by others. Certainly this indication, furnished in the substantial form of over half a billion of dollars, is that their condition is improving.

Here is food for reflection for both the man who may boast of

his large capital and its power in securing whatever he may demand, and for the working man who may think that he is not getting his part of the results of enterprise and labor.

\$550,000,000. We'll warrant that scarcely a mechanic or clerk not conversant with monetary affairs would have guessed a tenth of this immense sum had he been asked to venture a guess as to the amount of money that lay in the banks to the credit of fellow toilers in this State. Then, too, there are the thousand building associations with their millions of share-holders, like the savings banks, maintained almost entirely by wage earners—whose money aggregate is immense. Verily industry and economy have their reward.

VALE ANTIPYRETICS.

A PHARMACAL exchange has an item in which reference is made to the disposition of the editors engaged in a revision of the British Pharmacopœia to devise a word that shall take the place of "Antipyrin." The exchange editor remarks:

"It seems a pity to waste all this ingenuity in such vain endeavor. Antipyrin is a copyrighted name, and the product and process are patented; no substitute product or name can, therefore, be legally adopted, and if plans looking thereto are persistently pursued, the patentees will quickly step in with injunctions. But why should anyone continue to squirm under the supposed imposition? Why not allow the inventor to enjoy the benefits of his lucky invention for the brief term of years for which his patents yet hold good. In less than a dozen years antipyrine will

be free and the property of the world." Precisely, and it might be added, in view of the incoming flood of "new remedies," it would be wise to omit it altogether, for it is next to certain that in a short time something with better antipyretic qualities will crowd those now in use to the wall. Further, the growing interest in hygienic methods suggests the probability that coal-tar products and all other chemical compositions will be laid aside, and treatment of a simple, natural character be the rule. With our knowledge of the results obtained in hospitals and in private practice, through the use of hygienic appliances and a careful diet, we should expect that in less than a dozen years the variously-styled refrigerants will have been proven unnecessary.

NOT REPRESENTED.

A CORRESPONDENT writes to us, in a tone of surprise, that the published reports of the late meeting of the American Association at Indianapolis do not show that Phrenology was represented in the discussions, and asks why. Our answer must be that we do not know. The most important section intrinsically in the distribution of general subjects that engage the attention of the members of the Association is Anthropology, and to that belong naturally the departments of Phrenology and Craniometry. Yet we have noticed that this section is by no means as full as other sections. Researches that pertain to subjects like physics, chemistry, geology and chemistry, biology, economics, electricity, etc., appear to command more attention; matters *extra* human are to the majority more interesting than matters *intra*

human. The great problems that vex society, industrial relations, moral education, civil reform, crime, penology, receive scant attention, if any at all, while Indian life and American archæology are accorded a leading place.

To be sure we have noted papers, read by title and given places in the list of contributions, that had some reference to the relation of brain to body or of mind to physical organism, yet because of no printed abstracts of their contents we could not determine their bearing or value.

There are among the members of the American Association those who are strong advocates of Phrenological principles. This we know, just as there are in the British Association men of similar

opinion, and we do not claim the right to demand of them the reason why they have not stood up in the meeting and declared their sentiments. That is their own affair.

Over in England the very respectable Society of Anthropology and the British Institute have yielded the platform to the Phrenological essayist, and this fact should stimulate the learned American phrenologists to overcome their reserve and insist upon a hearing on the broad platform of the American institution. Why the disciple of Gall and Spurzheim does not figure in the annual meeting of the savants is due to his own dissimulation or negligence. Learned and educated men are as ready to hear him speak as anybody else.

Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

IMMORTALITY DEMONSTRATED.—S O R A N T O N.—Out of the realm of faith, or, as some would say, religion, human immortality lacks confirmation. To be sure, of the sciences

Phrenology offers testimony, in the structure of the brain and its mental correspondences, that approaches nearer to a demonstration of a future existence than can be found logically in any other field. You are but one of uncounted millions who entertain a similar hope, and in proportion to the development and strength of the moral sentiments is that hope usually earnest and controlling. The existence of such a hope implies the probability of a second state. Without such hope, how degenerate human nature would become!

COMBATIVENESS AND DESTRUCTIVENESS.—*Question.*—Missouri Student.—Have you ever met with a head that was largely Combative but not developed in the region of Destructiveness? In other words, is not Combativeness dependent upon Destructiveness? Is there such a case as large Combativeness and very small Destructiveness?

Answer.—We often find Combat much larger than Destruct, and the reverse. They

work together. Watts says, "Let dogs delight to bark and bite." Some bark furiously but seldom bite. Others bite quietly but severely and do not bark. Others bark and bite equally, thus using both faculties. Combateness brags or "barks," and threatens and often fails to do more. Destructiveness bears and forbears until too much annoyed, and then executes vengeance or "bites." Benevolence pities and helps but may not have the loving patience of friendship, and many a person is friendly but not generous or pitiful. Each faculty does its own work, but they often "hunt in pairs" and aid each other, as Approbativeness and Self Esteem, for Cautiousness and Secretiveness, or Constructiveness and Ideality.

STUDY OF PHRENOLOGY.—Question.—Will you send me a catalogue of your phrenological works and the annual announcement of the American Institute of Phrenology? Can any one master the art thoroughly by the aid of your works?

Answer.—Yes. A man can "master the art" by the aid of our books, with time and practice enough to become an "artist" in the science. If one desires to know the subject at once through positive training by those who have read all the works on the subject and have spent nearly a lifetime in its practice, a course of instruction in the institute would save fifteen years' time and much doubt and uncertainty in the matter. It is easier to study a map than to make an original survey—to study Stanley's descriptions of his travels than to wallow through the rank undergrowths and muddy lagoons of the "Dark Continent."

"GALL'S SYSTEM AND PHRENOLOGY."—TRUTH SEEKER.—This article and the others from the pen of the same author have been published to show the drift of physiology, as illustrated by that class of observers who make the brain their specialty. It is a fact that Gall's attitude was quite different from the position of many prominent phrenologists to-day. He discussed the external manifestations of mental faculty as physiological for the most part, and while he sought to confirm in the structure of the brain itself his impressions of head configuration, his method was very different from

that of the cerebralists to-day. Mr. Hollander leans rather to the side of the latter, although he avows himself a phrenologist and very desirous of the establishment of the science upon grounds that will be acceptable to scientific men generally.

THE CANARY'S DEATH.—S. I.—It may spoil a good story, but we have the opinion that the pining and drooping of the bird after the death of the person, and its subsequent death, were due to disease contracted in the sick-room, where its cage was daily hung. Birds and animals are subject to diseases that human beings suffer from, and they are found to be easily infected by the common germ diseases like measles, scarlet fever, etc., and will even contract consumption when much exposed to it. Canaries are delicate, and require good air as well as good food if they are expected to thrive.

WOULD BE A BANKER.—Question.—How can I find the way to become a clerk in a banking-house. I should like to be a banker.

Answer.—To answer your question we may not do better than to quote from Mr. Manson's "Ready for Business." He says: "A boy may enter an office that does nothing but a strictly banking business. After he has thoroughly familiarized himself with his boy's work, and has shown himself to be quick and accurate with figures, and has mastered the elements of bookkeeping, he will probably be promoted from time to time to positions of increasing responsibility, until eventually he may become cashier. The position of cashier in a banking-house is a very important one. He receives and pays out all the money, and has charge of all the accounts. A young man has about the same chance of becoming a real banker as he has of becoming a broker—to be either, he must, as a rule, have money or influence; though there are not a few instances where men by their own individual efforts have advanced themselves."

This means, get a place and do your best to get ahead. We must refer you to the book for other good suggestions, and also to that well-known volume, Sizer's "Choice of Pursuits," that deals more with personal qualifications.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

Plato and Paul.—In reference to the article in the PHRENOLOGICAL JOURNAL, No. 4, Vol. 89, by J. W. Lowber, Ph.D., permit me to say, I greatly doubt that in the estimation of the world at large Paul is superior to Plato. I am not able to make a fair outline of the mental capacity of either, or, perhaps, what constitutes true greatness. But aside from religious belief, a prominent factor in the comparison made by the writer, I can not see that "Paul towers above Plato as a great mountain towers above the sea." I repeat, outside the enunciation of Christ's charitable doings, he could aspire to no greater prominence than a disciple of Gamaliel, at one time an able lawyer. With advanced thinkers the Platonian stream lies above the episodes relating to Paul's experience in his journey to Damascus, etc. Plato is denominated the "divine philosopher," inasmuch as his soul was absorbed in divine things, including, like his teacher, Socrates, a belief in immortality.

The pure teachings of Christianity, as enunciated by the benevolent and charity-loving Christ, stand upon an equal platform, I think, with true philosophy: both conduce to happiness. Paul taught his belief in the way to spiritual life. Philosophy and science teach the way to demonstrate truth as revealed in God's works. Inquirers after truth must possess noble faculties of mind. Paul evidently had veneration, ideality, a spice of wonder and firmness large. The Christian philosopher and scientist may possess all these, and in addition he must possess the breadth of intellectuality that places man in the noble position of a rational, thinking being, nay, more, the world's regenerator.

Far be it from me to belittle Paul's teachings toward righteousness. But in the face of true research, the stream of truth as a sunbeam will surely tower as a mountain towers above the sea; and at last spread a higher knowledge of God's greatness, as manifest in our world and in the immensities

of the universe as revealed by the telescope or spectrum analysis around us.

In conclusion, let me say, whoever has seen the magnificent head of Plato, as represented, can not fail to discern great mental power and superiority, reminding one of the God-like form of the Apollo Belvedere. The aspect is noble, truthful, far removed above the frivolities of ignorance and debasing superstition.

JOHN E. METHUEN.

Natural Religion.—The cry is raised that a tide of skepticism is sweeping over our land as it swept over France in past time. A careful research into the nature of this skepticism reveals it to be in most cases an indifference toward the accepted theology, or an opposition to church dogmas, rather than any real want of religious feeling. Whether man was created in his present form and with his present mentality, or brought to perfection through the slow process of evolution, requiring ages for his development, we may fairly assume that the first man, or a culminating type of humanity, possessed the same mental faculties that we do now. He looked about him. Nature's mysterious forces were everywhere producing phenomena which he curiously observed. Many things were entirely beyond his comprehension, yet his causality demanded a reason for all. He was thus early led to recognize a power higher than himself. He observed that in animal and vegetable life individuals came into existence, lived, died, and were succeeded by others of the same species. Looking backward his mind would dwell wonderingly upon the primogenitor of each race. Whence came it? Here was a creative power also incomprehensible. Recognizing himself as the only being who could intelligently exert power to produce a desired result, the only creature having inventive or formative ability, what was more natural than that his spirituality, ever delighting in the marvelous, should ascribe these unknown forces to the activity of a being like himself, but infinitely more powerful?

Omnipotence is without doubt the first attribute man ascribed to the Creator. Finding the same forces in operation wherever he might wander, he next assigned the attribute of *omnipresence*. In course of time,

when it was discovered that these forces always acted in the same way and were working together in harmony. *wisdom* and *unchangeability* came to be attributes also. Thus does the idea of a Creator progress in the human mind. Veneration, naturally seeking something to deify and worship, accepted this Creator as its proper object, and the religion at the beginning was simple, because perfectly natural.

Omniscience soon came to be associated with *wisdom*; *justice* with *unchangeability*. Cautiousness inspired man with fear as he beheld the mighty energies of nature, and, after veneration, his most natural impulse was to "fear God."

It seems that the original idea of a Supreme Being gave him infinite knowledge, wisdom and power, made every natural phenomenon, however trivial, his direct act, and placed the entire universe under his immediate control. As a Deity he was the subject of intense veneration, feared by all, accredited with stern justice, yet showing mercy to the penitent. This religious feeling naturally found expression in some form of worship, and in rites or ceremonies supposed to propitiate the Deity and secure his divine favor, simply through fear that in his displeasure he might bring evil upon them.

In all probability this was the original feeling of mankind, destined to progress as he himself progressed, to decline as he declined; but not many ages had passed before rites and ceremonies came to be a most important part of divine worship. Religion among many people became formal, its substance almost forgotten in ceremony, and instead of acceptable heart service it degenerated to a great extent into ritualistic mannerisms.

Such was the condition of the religious world when, more than eighteen centuries ago, a most remarkable attempt was made to re-establish true worship and to introduce a religion of love instead of fear, mercy instead of "law." Its promulgator was denounced by his own people as a false teacher, a blasphemer, an insurrectionist, and was, no doubt, regarded by them much as we would regard an infidel; yet he secured a small number of zealous adherents and laid the foundation of what is known as the

"Christian" religion. After eighteen hundred years of teaching, nearly one-third of the world's population is numbered with the Christian nations; but of these a large proportion have made no religious "profession" whatever. More than three-fourths of human kind is thus "outside" of Christianity; yet who will presume to say that these have no religion? Who shall cry down the religion of Mohammed or Buddha as altogether unworthy? Who can deny that even the most barbarous pagan has a religion of his own?

In all these instances the religious *sentiment* is precisely the same, being the exercise of identical faculties; *expression* only is different. In a natural system of religion the ignorant savage and the most enlightened Christian are brothers and experience the same feelings of reverence, faith, hope, perhaps different in degree yet always the same. The peculiar manifestation of religious feeling by the savage is entirely due to his mental state, which is also equally true of enlightened Christians, who have been divided and subdivided into many sects simply through educational influence.

History has repeated itself. The natural religion of mankind is lost in sectarianism, and have we not again reached a condition when he that would promulgate a doctrine of primeval simplicity and universality would be denounced as a fanatic or an impostor. All mankind should be united into one universal Christian brotherhood, but facts show it to be so far otherwise that great-minded men and women who yearn for a higher degree of perfection may well be forgiven if they doubt the genuineness of nineteenth-century religion.

The writer does not wish to be understood as favoring infidelity or skepticism, but desiring to call attention to the fact that much of the skepticism heard of is merely a breaking away from fetters of dogmatism and a partial return to natural religion, which may be defined as the activity and exercise of those faculties classified by phrenologists as the "Moral and Religious." We have found the origin of religion to be within the mind itself; the idea of God to be perfectly natural to mankind; but the attributes assigned Him vary as the mind of man varies. The human race has made vast

progress since its first appearance upon the earth ; what seemed marvelous then, is now commonplace ; and our ideas of a Creator are so changed that a return to natural religion now would be to advocate a faith far different from that of the first man. In God we recognize the Author of all natural laws, that of themselves and *among* themselves produce all natural phenomena that are necessarily harmonious. We do not imagine Him connected with every act as a puppet showman might cause his images to move or perform his will. With this grander conception of Deity, the attributes of omnipotence, omniscience and omnipresence are not so strongly impressed upon the mind. We rather regard the Creator as in a state of rest, while His eternal laws are producing their legitimate effect in nature.

A knowledge of these laws has enabled us to place ourselves in harmony with them, and even make them subserve our will to a great extent, so that fear is no longer an element in our religion. Propitiatory rites are also found to be unnecessary, since a strict observance of natural laws will bring us every desired blessing. We behold infinite wisdom in the creation of these laws, and, recognizing their very immutability as one of our choicest blessings, we feel more of gratitude and love toward the "Father" than we would experience were we ignorant as our first parents. Natural religion preaches the gospel of love and the brotherhood of man.

S. P. SHULL.

The September number of the *Phrenological Journal and Science of Health*, is a most interesting publication. The contents are both instructive and entertaining, "a sound mind in a sound body" being the underlying principle of each article. Although it is doubtful whether we shall ever be able to predict with certainty the particular sphere of life in which a given individual would be most successful, the subject is a mighty interesting one, and parents will find the hints on child culture and kindred topics in the *Phrenological Journal* of much service.—*Philadelphia Com. List*.

PERSONAL.

WILLIAM WATERMAN, who died at Grand Rapids, Mich., Friday, October 18, deserves

an item here, as he was 114 years old at his death. He was married twice. His first wife lived to the age of 75 years. He married his second wife in his 100th year. She died a few years ago. He was temperate in his habits ; while he used liquor to some extent it was never to excess.

MISS HARRIET HOSMER, the most eminent woman sculptor, is about to return to Rome. She has completed the model for the Crerar Lincoln Memorial, on which she has been engaged since last December. (On the way she will stop a few days in London, to search through the British Museum for ideas of costuming in the time of Queen Isabella. She hopes to return some time next winter with a wax model of her statue of Queen Isabella, which, it is expected, will be one of her greatest works. She will be represented at the World's Fair by this statue and a pair of bronze doors.)

THE Empress Eugenie, in whom the world does not lose interest, is now a white-haired and pallid woman of sixty-four, with few traces of her former beauty. She lives the life of a recluse, dividing her time between her devotions and the writing of a memorial of Napoleon III. and the Prince Imperial, which will contain their private letters, and the proceeds of whose sales she will give to the fund for the relief of the widows and orphans of the war of 1870.

THE Czar of Russia is a big fellow, and very strong, yet they say he lives "frugally." An English newspaper notes that his Majesty breakfasts at nine upon boiled eggs, ham, roast beef, omelette, and tea, while at noon he takes a luncheon of chicken broth with an egg in it, cutlets, cold fowl, game, river fish, vegetables and cake. At two he consumes a dish of rice boiled in milk. He drinks a great deal of champagne at and after dinner, but at the midday meal he contents himself with a bottle of either Bordeaux or Rhine wine. Very "frugal"!

WISDOM.

"Thou must be true thyself,
If thou the truth would teach."

SOME people sponge on their friends so much that they absorb all their profits.

THE BRAVEST OF BATTLES.

The bravest battle that ever was fought,
Shall I tell you where, and when?
On the maps of the world you'll find it no
'Twas fought by the mothers of men.

Nay, not with cannon or battle shot,
With sword or nobler pen;
Nay, not with eloquent word or thought
From mouth of wonderful men.

But deep in a walled-up woman's heart—
Of woman that would not yield,
But bravely, silently bore her part—
Lo! there is the battle-field.

No marshaling troop, no bivouac song,
No banner to gleam and wave!
But oh, these battles! they last so long—
From the babyhood to the grave!

SUPPORTED.

It is by no breath,
Turn of eye, wave of hand, that salvation
joins issue with death!
As the love is discovered almighty, almighty
be proved
Thy power, that exists with and for it, of being
Beloved!
He who did most, shall bear most; the strong-
est shall stand the most weak.
'Tis the weakness in strength, that I cry for!
my flesh that I seek
In the Godhead! I seek and I find it. O Saul,
it shall be
A Face like my face that receives thee; a Man
like to me.
Thou shalt love and be loved by, forever; a
Hand like this hand!
Shall throw open the gates of new life to
thee! See the Christ stand!

ROBERT BROWNING.

ANY fool may meet with good fortune, but
the wise man only will profit by it.

VENTURE not to the utmost bounds of
even lawful pleasure: the limits of good and
evil join.

It is one of the easiest things in the world
to get into debt, but debt is one of the hard-
est masters to serve, and one of the most
difficult to escape.

How can we ask others to think as we do
when to-morrow we probably shall think
differently ourselves.

NONE are so fond of secrets as those who
do not mean to keep them; it will generally

be found that such persons covet secrets as
a spendthrift covets money—for the purpose
of circulation.

AFTER you have weighed your neighbor
in the balance, drop a nickel of fairness in
the slot of self-examination and ascertain
your own moral avoirdupois.

MIRTH.

"A little nonsense now and then
Is relished by the best of men."

AN old saw newly set—What can't be en-
dured must be caricatured.

ONE reason why marriage vhas a failure
vhas because der wife married for a home
und der husband wanted a servant.

LITTLE Country Girl (pointing to a tender
little dude)—"Mamma, what's that?"

Wise Mother—"That's what comes of
livin' in flats."

At the table—His hostess anxiously—
"Charley, can you cut your own meat?"
"Humph!" said the youngster, who was
sawing away, "can't I? I've cut up quite
as tough meat as this at home."

"Did the lady buy anything?" asked the
jeweler of his new boy, as the lady in ques-
tion left the store, apparently in a temper.
"She did not. She asked me for an old gold
breastpin, and I asked if she took this store
for a junk shop. Then she went out!"

MAKING up lost time—Mrs. Youngthing—
"How long have these eggs been boiling,
Bridget?"

Bridget—"Eighteen minutes, mum."

Mrs. Youngthing—"Why, I told you to
boil them only three minutes!"

Bridget—"Oi know that, mum; but the
kitchen clock is fifteen minutes slow,
mum."

"Why don't you get married, Uncle
Peter?" asked an acquaintance of a bach-
elor negro.

"Why, bress yer soul, I've got an old
mudder, an' I has to do fo' her, sah, an' if
I don't buy her shoes an' stockin's, she don't
git none. Now, if I was ter git married, I'd
hab to buy 'em fo' my wife, an' dat'd be
takin' de shoes an stockin's right out o' my
mudder's mouth."



In this department we give short reviews of such New Books as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

FORMS AND LAWS for the Organization and Successful Management of Boards of Trade, Village Improvement Societies, Business Men's Associations, and Chambers of Commerce.

A convenient manual, by F. Newell Gilbert, of Binghamton, N. Y. So much activity is shown now in almost every American town that claims representation in the ranks of enterprise for the organization of societies having in view community improvements, that such a manual is a necessity. The author has compiled it with much care, and made it suitable for use in all the States and Canada. He says only what is patent to the economic observer, that "every village or hamlet or town which has a railroad or water-power, or natural resources of any kind worth developing, or which desires manufactories needing capital and enterprise to develop them and make them successful, should have a village improvement society, a board of trade, or chamber of commerce." This means only the bringing together of men and women having common interests and sympathies for the discussion and ordering of measures for the public welfare—palpably a most proper thing and everywhere desirable.

THE NEW MODEL ANATOMICAL MANIKIN: New York. Fowler & Wells Co., Publishers, 775 Broadway. Price, \$12.00.

This is a combination of charts of portions of the human body, hinged so as to lay over one another and to be opened or dissected, exhibiting the general anatomy in all its parts, and their relation to each other, and mounted on a base 18 x 86 inches. The figure represents the adult human form on the scale

of one-half the size of life, the entire work being done in brilliant colors by the most improved chromo-lithograph processes, on fine cloth-lined material, highly finished, being strong and durable as well as handsome, presenting upward of one hundred views of various parts of the body, giving the entire anatomy, showing with many details the Osseous or Bony Structure, the Muscular Organism, the Brain, Nervous System, the Heart, Lungs, Blood Vessels, the Abdominal Viscera, embracing the organs of digestion and assimilation, etc. In addition to the dissections of the body, there are a number of special charts of various parts, including the Eye, Ear, Heart, Stomach, Liver, Kidneys, Teeth, Tongue, Throat, etc., mounted on the margins of the chart, some of them much larger than life, including illustrations of the effects of stimulants and narcotics on the digestive organs, the throat, the brain and nervous system.

These are so hinged as to fold together in their proper places, or to open or dissect.

When not in use the manikin folds together like a book, and when closed is 18 inches square.

The manual accompanying this is not only a key, but a comprehensive work on the physiological functions of all the parts, and adds much to its value, the two constituting a text book, that can be used independently of any other work.

PUBLICATIONS RECEIVED.

Bulletin XIX. of the Agricultural Experiment Station, at Cornell University, is a report upon the condition of Fruit Growing in western New York, and prints the chief reasons for the melancholy failure this year of our favorite fruits, especially pears and peaches, and raspberries. Neatly illustrated. Published by the University.

THE NAME SHYLOCK: A critical examination of the character in the Merchant of Venice. A reprint from the *Religio-Philosophical Journal*.

The cabalistic subscription, El Seyonpi, we suspect to be an invention of a certain Washington writer, for turning it backward we read I. P. Noyes, Lc. Whatever he means by the el or le in English he must explain, although we are inclined to think it a

bluff. In the essay of nearly 14 pages we find an effort to paint the famous character of the Jew in better colors than he is usually represented on the boards, and a good case is made out.

PEN AND PENCIL; or Pictures, Puzzles, and Short Stories for Boys and Girls. By Edward Carswell. Large 8vo, 80 pages. Sixty Wood Engravings. Price, only 25 cents, paper cover; 50 cents board cover.

This new volume of that ever-active temperance worker will please the children. It is a collection of stories, pictures, puzzles and shadow drawings, nicely printed and bound. The nine shadow pictures are entitled, The True Friend, Seeing Double, Farmer Barleycorn's Dream, The White Elephant, Chain the Beast, The Hawk and the Shadow, Hogs' Hollow, How to Fight the Beast, A Great Destroyer.

J. N. Stearns, Publishing Agent, New York.

THE SEWERAGE OF COLUMBUS, OHIO: Address of Col. George E. Waring, Jr. at Board of Trade Auditorium, Columbus, O., June 23, 1890, and discussion following. From Secretary of Columbus Board of Trade.

FIRST REPORT OF THE NATIONAL EXECUTIVE SILVER COMMITTEE, appointed at the St. Louis Convention, November, 1889.

An argument for the free coinage of silver. It seems, by the position of silver in the market, that these "silver men" are going to have their way.

OZONE: In Chemistry and Medicine. Circulated by the Ozone Manufacturing Company.

A commercial treatise on the antiseptic preparation of ozonized oxygen or other decomposed substances that evolve ozone. New York.

CURRENT EXCHANGES.

Notes on New Remedies.—Monthly. New additions to contemporary Therapy, etc., noted. Lehn & Fink, New York.

Architecture and Building.—Weekly. W. T. Comstock, New York.

Literary World.—Fortnightly. C. H. Hames & Co., Boston.

Journal of Education.—New England and National. Weekly. New England Publishing Co.

Boston Budget.—Weekly. Discusses movements in society in facetious vein.

In the September No. of *The Century* California topics occupy considerable space, viz.: "Features of the Proposed Yosemite National Park," finely illustrated, and "How California Came Into the Union," Commander Goodrich describes "Our New Naval Guns," "The Social Problems of Church Unity," an "Artist's Letters from Japan," "The Women of the French Salons," "Topics of the Times," are among others that are valuable.

In *The Treasury for Pastor and People*, September, Dr. R. S. Storrs contributes a fine sermon, and so do Dr. Meyer and Dr. Hart. The Prayer Meeting Topics and International Lessons have their usual good features. The editorials are on "The Long Prayer," "Dogged Misrepresentations," "Capricious Fashions," and "Great Preaching." New York: E. B. Treat.

America.—Devoted to Honest Politics, Patriotic Interests, Literature, etc. Weekly. Slason, Thompson & Co., Chicago.

The Western Rural and American Stockman.—For the Farm, Field and Fireside. Milton George, Chicago.

The Jury.—A humorous illustrated Weekly, gotten up in Rochester, N. Y.

Harper's Magazine for September, opens with a finely illustrated paper on the South American Andes, Daudet's grotesque yet quite realistic tale of French adventures at "Port Tarascon" continues with its piquant figure sketches. Other illustrated features are: Recent Discoveries of Painted Greek Sculpture, several of the engravings representing faithfully the exquisite contours of the original figures. The Social Side of Yachting, The Wild Garden. Other departments as well filled, as usual. Harper Brothers, New York.

Hahnemannian Monthly.—Drs. Van Lennep and Van Baun, Editors, Philadelphia. Old organ of the school.

Sanitary Era, or Progressive Health Journal.—Discusses topics of interest to public and private life, diet included. Monthly. William C. Conant, New York.

New York Observer.—Weekly. Old representative Church organ.

Canada Educational Monthly and School Magazine.—Toronto. An excellent publication for teacher and parent.

Cincinnati Medical News.—Monthly. Dr. J. A. Thacker. The only American medical we know that keeps up a microscopical department.

St. Louis and Canadian Photographer.—Illustrated Monthly. Devoted to the Elevation and Improvement of the Art, and well sustained. Mrs. Fitzgibbon Clark, St. Louis.





SCRAMBLING FOR IT.

Here is a good-natured tussle for a cake of Pears' Soap, which only illustrates how necessary it becomes to all people who have once tried it and discovered its merits. Some who ask for it have to contend for it in a more serious way, and that too in drug stores, where all sorts of vile and inferior soaps, represented as "just as good," are urged upon them as substitutes. But there is nothing "just as good," and they can always get the genuine Pears' Soap if they will be as persistent as are these urchins.

Shun misrepresentations.

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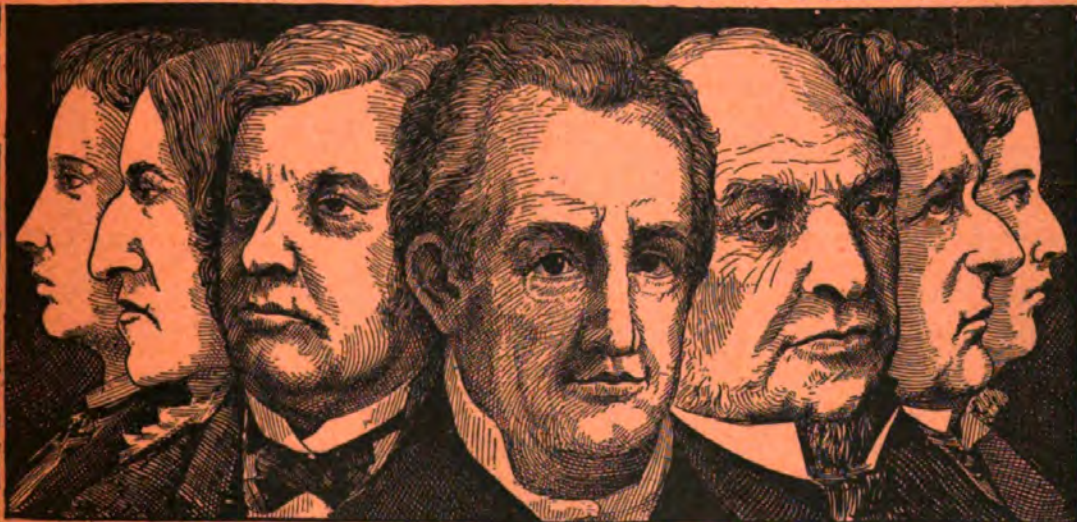
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The Phrenological Journal is published monthly at \$1.50 a year, or 15c. a number. To each new yearly subscriber is given either the Plaster Paris Phrenological BUST or the New Lithographic Phrenological CHART Premium, a new plate, 19 x 24 in., with rings for hanging. When the Premium is wanted, 15c. extra must be received with the subscription to pay postage on the JOURNAL, and the expense of boxing and packing the Bust, which will be sent by express, at expense of the subscriber; or No. 2, a smaller size, or the Chart Premium, will be sent by mail, postpaid. To new subscribers for 1891 whose names are received now, the balance of this year will be sent FREE.

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THE
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AND
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NOVEMBER, 1890.

[WHOLE NO. 620.]



THOMAS B. REED.

NOTABLE PEOPLE OF THE DAY.—No. 37.

THOMAS B. REED,

Speaker of the House of Representatives.

THIS gentleman has been a very conspicuous figure in national politics since the opening of Congress last winter. His election to the speakership of the House of Representatives gave him what a western speculator is in the habit of calling a "boom," as it proved the opportunity which his capabilities in parliamentary procedure only needed to project him as a strong element in legislative affairs. Mr. Reed, when once seated in the chair of authority, showed himself no passive or plastic official, as too many prove to be, but an energetic administrator of the affairs coming before the House.

Many of those sitting under his gavel appear to have found his discipline too severe, and have protested very earnestly, according to newspaper reports.

In appearance this gentleman from Maine has a marked character for energy and determination. We should consider him positive, thoroughgoing and emphatic in everything that pertains to business transactions—a man prompt and up to the mark, believing in doing business on business principles, and applying rules, where rules are in order, according to their practical meaning. He has a great reservoir of vitality, so that his brain is thoroughly vitalized, and he has no occasion to weaken or break in carrying out his purposes. He can stand up firmly against strains and opposition that would annihilate ordinary men. An interesting view of the speaker comes to us from a frequent Washington correspondent, Mr. I. P. Noyes, who writes from personal observation as follows:

There are many men with large mental faculties who have the power to obtain knowledge, with little or no power to use what they have obtained. They are like a learned carpenter with an expensive kit of

tools, and who prides himself on that kit of tools, as many a college man prides himself on his diploma and library. For any regular work that has been done a thousand times before, the superficially learned man with his fine kit of tools may be fairly competent, but as a pioneer he is wanting.

Mr. Reed is the ready man with an excellent outfit; and not only ready, but able to cope with the best men of the day. He is thoroughly acquainted with the details of parliamentary law, including all the details of legislation. This, it must be understood, like other branches of human knowledge, has advanced with the progress of the time.

Mr. Reed we believe to be an honest man; and surely no more modest man ever held an exalted position before the American people. His opponents, of course, endeavor to break the influence of his work by representing him to be a typical Czar; and when the contest is ended and the great American people have settled down into the calm of quiet ways, even his present opponents will admit his sterling qualities, and that it required no mean ability to hold day after day the scepter of power in the trying circumstances of his late experience.

By the term dignity I would not mislead the reader. What one man understands by this term may not be the ideal of another. While Mr. Reed is a most dignified man, he is not in this respect after the type of the old school, which was of a rather stiff order. Mr. Reed is a genial, pleasant-looking man, devoid of those schoolboy airs which young and verdant people are apt to think the embodiment of greatness. His bearing is more that of a practical business man who is equal to all emergencies, and rises as the occasion demands. The desire for quiet seclusion is one of the types of the man. After the exciting scenes of the day in the great political arena, it is not uncommon to see Mr. Reed quietly wending his way through the more retired walks of the Capitol grounds, rather than through the common thoroughfares where the throngs leaving the great building go.

By his ready, timely and able articles in

one of the great magazines of the day, Mr. Reed has shown himself to be as ready and able with the pen as with his tongue.

The lines of his head are of the round rather than of the square type, and it is round lines that make the ready man. They do not seem to be so imposing as the other type, for dignity, as a rule, goes with the square rather than with the circular lines. If mere dignified looks would always carry with them superior qualities, then we might accept the square lines as our criterion; but merely looking at the head from an artistic point of view is not what we are after. It is the mental grasp, the width at the base, the large occiput and perceptive, all of which add power to the subject and give soundness of outline to the whole head. We must not, however, be misled by the mere roundness of outline, but must notice from whence the roundness proceeds; whether it is from the massive lines at the base, which rise as the bastions of a fortress, or whether merely from the lack of strength in the central lines of the work. The head may be round and yet wanting in all that would give power to the subject. The human brain is made up of two great parts, the so-called "purely intellectual," and the "animal." The "purely intellectual" is of little value unless there is some "animal" to drive it. It is like the fire engine without sufficient boiler power. The boiler power is all important. These well-balanced round lines are what makes Mr. Reed the able and ready man he is. He is a knight with a keen Damascus blade, ready to meet his opponents on all occasions, whether it be in the uproar of the contending factions of the House, or in the quiet of the study. The word *character* well defines the man. He is the embodiment of sterling character; character that has stood many a trying ordeal, and has never been found wanting in those elements that mark the typical American of our day.

Mr. Reed has had an active life in political affairs almost from the time he commenced the practice of law in 1865, being then about twenty-six years old. He was born in Portland, Me., and after careful preparation entered Bowdoin College, where he was graduated in 1860.

He studied for the law, interrupting his study in that behalf to serve as acting assistant paymaster in the United States Navy from April 19, 1864 to November 4, 1865. Returning to Portland he was enrolled as a practitioner at the bar, and commenced his career as a lawyer. Becoming actively interested in the politics of his city and State, he rose rapidly in the esteem of the people, and in 1868 was elected a member of the Maine House of Representatives; re-elected the following year, and in 1870 sent to the Senate. For three years, 1870, '71 and '72, he served as Attorney-General of the State, and from 1874 to 1877 was City Solicitor of Portland.

Accepting the nomination to represent his district in Congress, he was elected for the Forty-fifth, and has been returned at every successive election since.

CHARLOTTE MARY YONGE,

The English Author.

WHEN a boy attending Sunday-school there were certain books in the library that we scholars were permitted to borrow for our weekly reading that seemed to me eminently worthy of respect, and among them "The Daisy Chain," "Lances of Lynwood," and "Heir of Redclyffe" stood well up in the scale. I did not bother my young head about the author, but her name, if I saw it on the title-page of a book, was sufficient to convince me that it would pay well for the time taken to read it. From that time to the present, over thirty-two years, Miss Yonge has continued to write books mainly for young people, and few writers of her class can claim a wider popularity and greater usefulness to society as an author. To give a full list of her books would occupy two or three "sticks"—as a printer would say—of space. The following, besides those already mentioned, are certainly very well known on both sides of the deep sea:

"Abbey Church; or, Self Control and Self Conceit;" "Book of Golden Deeds

of all Times and all Lands," "Book of Worthies," "Cameos from English History," "Love in the Eagle's Nest," "Heartsease; or, The Brother's Wife," "History of Christian Names," "Kings of England; A History for Young Children," "Landmarks of History," "Prince and the Page," "The Chaplet of Pearls," "Pillars of the House," "The Two Sides of the Shield."

of Sabinus," the scene of which is laid in the time of Vespasian.

Miss Yonge was born at Otterbourne, at Hants, England, in 1823, and published her first work, "Abbey Church," in 1844. She is the most industrious and interesting of living English writers, quite tall and somewhat stout, with white hair. She speaks of herself as one of the happy women with no history, having always



CHARLOTTE M. YONGE.

"The Victorian Half Century" was written in 1887, at the time of the Queen's Jubilee in England, and was followed by a "Life of the Prince Consort," in 1889.

She has also written a series of "Young Folks' Histories" of Greece, Rome, Germany, England, France, etc. "More Bywords" is announced for early publication; and a story entitled "The Slaves

lived at Otterbourne, the only move of her life having been from her brother's house, near at hand, to her present home, "Elderfield," a number of years ago.

Although a writer of tales and sketches of social life, she can not be styled a novelist, as the leading object has been to illustrate the best phases of moral and religious conduct, and to teach homely

truths in a practical yet attractive manner. She in most of these shows the spirit of the devout churchwoman, and that scrupulous care to avoid any offense to the highest ethical principles that is inspired by religious fidelity. Her biographies and histories, like her stories, are adapted to the tastes of young readers.

The portrait is that of a well-developed woman, physically and mentally, with a temperament largely partaking of masculine elements. She probably shows characteristics of intellect and disposition that are much like those of her father. The expression has a strong vein of independence; both nose and mouth intimate will, decision, staunchness, self poise. The head is doubtless well elevated in the crown and prominent at the lower part of the forehead, while there is breadth between the ears. Altogether, as inferred from this front view, Miss Yonge should be known for energy, spirit, aspiration, industry, systematic application, and natural constitutional vigor.

RACHEL STILLWAGGON.

One Hundred and Five Years Old.

THAT inveterate skeptic Thoms, who refused to believe in the centenarian, would have been compelled to "own up" or sit with locked lips had he been present at a certain gathering in Flushing on the 18th of September last, for it was the anniversary of the birth of a lady who was born one hundred and five years before, and her relatives and friends made the occasion one of special respect to her. The evidence of her great longevity, we may say, were there in the shape of her descendants—some of them well on in years.

Rachel Stillwaggon, whose portrait is given, was born in the family of Stephen Acker, who lived in 1785 near the old village of Tarrytown, Westchester county. The date of her birth, September 18, 1785, is down in the record of the old family Bible formerly the prop-

erty of her parents, in which is also recorded the marriage of Stephen and Mary Acker a few years before.

The Acker family remained on the farm near Tarrytown until 1796, in which year they removed to a house in Stone street, near Broad, New York City. On February 14, 1811, when in her twenty-sixth year, Rachel Acker married David Stillwaggon, a carpenter, with whom she lived in Stone street until his death in 1826. She has had seven children, four girls and three boys, of whom but three are living—George, David and Katharine—the latter the wife of a Mr. Willetts now living in Denver, Col., a



RACHEL STILLWAGGON.

the age of seventy five. She has many grand and great grandchildren. She is somewhat below medium height, with a pleasant though much wrinkled face.

Rheumatism has caused her much trouble of late, and when she moves around the house it is with the aid of a stout cane. She always enjoyed vigorous health until her ninety-sixth year. Since then she has suffered from rheumatism; however, the services of a physician have been required but seldom since she passed her one hundredth year. Her mental faculties are good, though for the past three years her sight and hearing have failed perceptibly. She can, however, still carry on a spark-

ling conversation, and her well-told stories of incidents in her younger days shows that her memory has not become much impaired.

Mrs. Stillwaggon always was a very active woman in housework until she was ninety-six. She now goes to bed between nine and ten o'clock in the evening and rises between six and seven in the morning. Until recently she has been in the habit of spending most of her time in a comfortable old rocking-chair, knitting socks for her great-grandchildren.

In conversation with a news reporter lately Mrs. Stillwaggon said: "I was four years old when General Washington was inaugurated as President in 1789. I did not see him then, though I did on other occasions, but it is so long ago I can not describe his looks. I remember when the first post office in New York City was established, in a small room in a building at the corner of William and Garden streets, and the first postmaster was a woman, but I can not remember her name. I do, however, remember Henry Bedlow and Sebastian Beaumont when they were postmasters of the city and postage was a shilling for

each letter. There was only one mail each week, arriving by coach on Sundays.

"I remember going to see what was called a 'bone procession' to the Wallabout, near the Brooklyn Navy Yard, where the bodies of a great many Americans taken from the British prison ships had been buried and their bones were removed in thirteen coffins and several hogsheads for burial in a cemetery. I also recollect the yellow fever and cholera scourges, and the great fire of New York. I went down with some of the Vanderbilt family to meet the Marquis de Lafayette when he visited this country as its honored guest, and I knew him very well. I know I am growing feeble every day, but I expect to live to see another birthday yet."

The face, as furnished us in the portrait, is that of a well-preserved woman. She evidently still possesses a good degree of vital capacity, and will compare for good looks with the majority of elderly folks twenty years her junior. In her youth she must have possessed more than the average of womanly comeliness.

EDITOR.

PRACTICAL HONOR.

HONOR is something we hear very much about, and something which was formerly regarded much more than at the present time. A person's "word of honor" was once regarded as even more binding than an oath. But of late years the claims of honor seem to have lost their power in a great measure. Nowadays we think more of having "notes of hand" and oaths in a justice's court than of a person's word.

Honor is a combination of qualities; to be honorable one must be truthful, just, kind, chaste and strictly honest. No one can be considered honorable unless he or she can show all these qualities in their character. A poet has said:

"Honor and shame from no condition rise;
Act well your part; there all the honor lies."

An honorable person will always wish to keep himself free from any direct association with evil people, and will wish to keep himself unsoiled by gross and mean sins. He will never seek to become rich by dishonest methods, by gambling, or "making corners" in the necessities of life, or by watering stock, or in any other doubtful ways. If he gains wealth it is by some honest employment, not by robbing orphans, or stealing church funds, or embezzling from a bank.

The honorable boy never says mean words to girls, never cheats at marbles or in games of any kind, never keeps

any other boys' books, pencils or knives, never tells lies to his father or mother, or teacher, never does anything to annoy any older persons, nor his own companions; returns everything he has borrowed in good condition; pays his debts, and finally grows up into an honorable man, a man that is an ornament to his family, a blessing to community and country.

It is better to be an honorable man than to be an emperor or king. A mean man is more despised upon a throne than he would be if he were a low servant in a garret. Many men will pretend to honor the mean rich man in an influential position, because they wish to share his "loaves and fishes," yet all the time they despise him, and talk against him behind his back, and perhaps while pretending to be his friends are scheming to turn him out of his position or destroy his life.

There is so much dishonorable deceit in the world that men and women are obliged to be very careful whom they trust and whom they associate with, for every one is marked by the company he keeps, and if that company be bad in any way, all who join it will be regarded as of the same character. The ways of the world are various, and many of them are exceedingly crooked; the best test of what you are thinking to do to others, as to whether it be right or not, is to think, "Would I like that done to me?" That will always settle any question, for what one would not like done to one's self, should never be done to another.

It is truly a golden rule, "Do to others as you would they should do to you." It is an absolute test whether the contemplated act be right and kind, if you are willing the same should be done to yourself.

A. VERONICA PETIT.

PHRENOLOGY THE KEY TO THE MYSTERY OF LIFE.

SEATED in an easy chair, where I had thrown myself perplexed and wearied with a never-ending round of uncongenial tasks, the fulfilling of which brought most unsatisfactory results, I fell to wondering if I were following the life work for which I was best fitted. Wondered, too, if some of my neighbors had not mistaken their sphere. The clock ticked drowsily on; all was still, and sleep overcame me, whereupon I dreamed a dream.

Methought I was suddenly transferred to a distant planet, where there was much that was new and strange; but the strangest of all things were the attempts of various birds, beasts and reptiles to accomplish tasks for which they were most manifestly unfitted. An eagle had harnessed himself to a plow and was vainly trying to turn a successful furrow, while a draft horse stood by, his eyes fixed on the sun, endeavoring to plume himself for flight. A community of snails was congregated about a race-

course whereon a few of their number were making a trial of speed, with the intention, I was told, of cultivating in the young snails a fondness for racing and a proficiency in the same. A few rods distant some fine specimens of horseflesh, of the Flora Temple variety, disdained to exercise their fleet and vigorous limbs, but were busily at work building shells for themselves, into which they might retire and pass the time in masterly inactivity.

A donkey, fancying himself possessed of the powers and attributes of a lion, lay in wait for the coming of a flock of sheep which he sighted from afar, intending to make a stealthy spring upon one of them and devour it. With lion-like ambition, he scorned to select some feeble ewe lamb, but took, instead, the champion buck of the flock. The powerful horns and well-developed fighting qualities of his anticipated prey proved too great for assinine ferocity, and the would-be lion was forced to make a

most inglorious retreat. In his mad flight he ran upon a genuine lion, making a dreary meal of thistles, his shoulders, galled by ill-fitting harness, and himself emaciated by pulling loads of garbage in a donkey cart.

A nightingale was in imminent danger of drowning as she tried to swim in a duck-pond, while the natural occupant, having laboriously fluttered to the top of a neighboring shrub, essayed to sing a song, the like of which mortal ears had never heard, and which so grated on my sensibilities that I could not resist stoning the creature, first indignantly asking why and wherefore she had quitted her native element to betake herself to the performance of that which was to her such a manifest impossibility.

Methought that suddenly there stood before me one, whose appearance was more than human, and, as I shrank from him in awe, he said: "Fear not; I am come to explain what thou seest. These are but transmigrated souls that, when they occupied human bodies, attempted deeds no more in keeping with their powers than those they now strive to perform. Thou hast seen but a few of these misguided creatures; their number is as the sands of the seashore; they come from that planet called the earth, where, doubtless, you have seen some of them before. Indeed, you have been permitted to visit this place, and will be allowed to return to earth again, that you may aid in helping blinded mortals to find the work for which Providence has fitted them, and thereby decrease the number of unhappy souls that come hither, because forsooth, having, when on earth, become habituated to attempting what was to them impossible, they must needs, in their transmigration, continue in the same fashion."

"A'as!" I said, "and what is to be the cure for all this misery, and how shall each human being be made to understand his own powers and possibilities?" Why did not the All Father

endow us with instinct and with reason? I see no way out of this darkness."

"Nay, say not so," said he. "There is a science, which men call Phrenology, that teaches all this. 'Tis true, that as yet there be few that study diligently to understand it, although it is the key given by kind Providence whereby men may unlock the mysteries of life. Here and there one has done so, thereby finding his own niche and filling it with pleasure to himself and benefit to all those about him."

As he spoke, I recalled a few such that had fallen under my own observation, and I sighed as I thought of the multitude that still groped in darkness, not knowing where nor how to obtain light. Suddenly I bethought myself to ask him what had been the earthly occupations of the beings that now appeared before me.

"The eagle trying to turn a furrow," said he, "was a man of poetic temperament, a born orator, who might have made his name immortal with his verse, or stirred a nation with his eloquence, had he ever discovered his own talents.

"The draft-horse that stood beside him, pluming himself for flight, was a man whose inherited millions, and whose wife's ambition pushed him into prominence with a view to securing a seat in the Senate. The ass was a conceited fellow, who edited a small, country paper. He should have been a ditch-digger, or an ox-driver, but fancied himself a veritable lion in journalism; and in his overweening vanity attacked every opponent as you saw him do to-day. He is only continuing his earthly career in a modified form.

"The lion was a man of grand, unselfish nature, who should have been a leader, a king among men, but believing that to labor for others was his sole duty, did not stop to learn how he could work to the best advantage, and wore out his life allowing his inferiors to load him with burdens and harness him to tasks that a donkey could have done

better. The nightingale fluttering miserably in the duck-pond was a gifted, but mistaken mother, who sacrificed her tastes and talents to uncongenial drudgery that her duck of a daughter might soar to heights for which she had no natural fitness. The race-horses that were about to retire into shells were persons who started out in the occupations for which nature designed them, but because of envious and adverse

criticism dropped out of the race early and allowed their natural gifts to perish from inactivity.

The snails on the race-course were those very conservative people who once sneered at Phrenology, but later eagerly availed themselves of all that it has given the world, and while coolly feeding on its fruits, put their heads out of their shells long enough to say, 'I told you so.' " DELIA LAWRENCE.

CONVERTING SOULS IN EASTERN KENTUCKY.

REV. ABNER SIMPSON was, by unanimous consent, voted the ablest wielder of the gospel club that ever battered Satan's head at Mount Zion church house in Eastern Kentucky. He was able in more ways than one. Physically speaking, he was the ablest man that ever lifted a handspike, or thumped an obstinate sinner in McGoffin County. At a log-rolling he was always placed in charge of a gang, and the man who had been boasting of his powers to outlift anybody, always became modest and reserved after he crossed handspikes with Parson Simpson. Mentally, he never found any one in the controversial arena that could stand before him two rounds. As an expounder of the doctrines of baptism, he was a walking commentary, and to dispute one of his dogmatical premises was a perilous feat that no one had the hardihood to attempt the second time.

To show how effectually he could dispose of an opponent, I will cite one incident. He had been challenged to debate, in an adjoining county, by Rev. Gabriel Summers, on the efficacy and absolute necessity of infant baptism. On the figurative "teetering board" they occupied opposite seats, Rev. Simpson sitting squarely on the necessity end. An exciting time was anticipated, for both men were great debaters, as well as physical giants. When the controversy was concluded, Rev. Simpson returned with the flag of victory streaming over

his head. The first man he met on his arrival was Deacon Peters.

"Did you get away with your opponent?" asked the deacon, in a tone of fear and hope.

"You bet!" returned the minister, in a tone of triumph. "I gouged his left eye nearly out, if you call that gittin' away with him!"

At the time of which I write, Simpson had been holding a two weeks' revival at Mount Zion, and his success had been remarkable. Abe Martin, one of the most notorious sinners of the county, who had run a moonshine still for ten years, had been converted, and offered the sale of his still at half price, and the "good-will" thrown in for good measure.

Amos Goodrig, a veteran horse-swapper, who had not even hesitated to cheat the preacher himself in a trade, had joined the church and vowed to swap and sin no more. With this impetus, the revival wave swept over the whole community, and some of the ablest and most active disciples of Satan to be found anywhere were converted.

But with all the delight Rev. Simpson experienced in capturing these satanic freebooters, it was not to be compared to the thrilling ecstasies that flooded his soul when, one evening, after a most telling revival song had been sung, Miss Maggie Rankins, one of the prettiest girls in the county, who had long maintained an air of seeming indiffer-

ence, suddenly succumbed to the spiritual melody and the persuasion of the preacher, and marched forward to the mourner's bench.

Oh, the shouts that went up and made the loose boards rattle on the roof when Maggie, the proud and dignified, the hope of so many hearts, and the despair of all, was thus seen to lay aside her vain pride, and fall limply down, and, like the any other humble heart, plead for the blessings of forgiveness!

This act was no less a tribute to the eloquence of the preacher than a wild joy to his heart of hearts, for he had loved Maggie long, and had hoped and prayed for the day when the proud beauty would be the daughter of holiness and the wife of himself. Heretofore she had been distant and cold; now she would be near and warm. She had refused to listen to his pleadings before; now she would bend her ear with attentive interest.

But the smoothest sky must, at times, be scarred by a cloud. The prettiest field often has a black stump in it. The triumph of Parson Simpson was not to be wholly free from dark streaks. Maggie had not been at the mourner's bench more than one hour, when her father, a tall, double-jointed, rugged specimen, entered the house, strode slowly to the mourner's bench, took his daughter by the hand, and without a word led her toward the door. Rev. Simpson, who was engaged at the time with some other mourners, did not notice this high-handed proceeding. Rankins had got on the outside with his daughter, and was proceeding to his wagon, when Sister Manners crept to the side of the preacher, and in a hurried whisper informed him of what had taken place.

"The nation he did!" exclaimed the preacher, in reply to the quiet information, "I'll see about that right now. We've beat the devil on his own grounds during this meelin', and I'm willin' ter take an oath that none of his subordinates ain't goin' ter beat me."

His eyes had lost their spiritual expression and were now blazing like distant headlights. His mighty form shook with the terrible wrath that flooded his system. He made a rush for the door, the crowd falling back to give him free passage. When he leaped beyond the threshold, Jim Rankins was in the act of lifting his daughter into the wagon.

"Hold on thar, Jim!" shouted the preacher, in tones of suppressed power.

"I'm goin' home," returned Jim, quietly but firmly.

The preacher was making rapid strides toward him.

"You'll not go home jist yit, I reckon," said the preacher, ominously; "at least if you do, you'll leave the gal."

"I'll not leave the gal, neither," replied Jim, doggedly. "She's ben hur too long now, fer a gal what wants ter be respectable. I tell you, Parson, I don't hev my gal wallerin' around on benches in public, and makin' a fool of herself. I didn't never think she'd come to what she has to-day, or I'd kep her at home."

"You'll be kep at home yourself with disabilities for three months if you don't let Maggie right out of that wagon. I'm fightin' for the Lord, and I'm ready to fight any way he wants me to. I don't propose to let no great, big malunix like you step in an' spile my work. I'll spile your face when you undertake it."

"I don't want to stop your work. If you want to make fools outen people you've got a houseful in thar to work on. Jest go ahead. As for me an' mine, I'll try to boss when it comes to us. Jest keep your hands off."

"Jim Rankins," roared the preacher, "git outen that wagon. I must answer a fool accordin' to his folly. Thar ain't no use to scatter spiritual pearls before the devil's swine. Thar ain't no use to preach to men of your stamp. You are the kind that has to be whipped into right thinkin'; you ain't got sense enough for any reason to impress you. But your face can be impressed, and

I'm goin' to beat salvation into you, if I've got strength enough to do it."

"If you tackle me," returned Jim, "if you've got any salvation in you, I'll knock it all out."

Jim had got out of the wagon and braced himself. The preacher made a spring for him. Jim dodged a left-hander aimed at his face, but the preacher's right caught him just below the spare ribs. Jim was a powerful man, and recovering himself landed one against the preacher's jaw. Instead of knocking him down, it only infuriated him to stronger action, and, making a spring, hurling the whole weight of his body at the same time, he struck Jim under the left eye and knocked him under the horse's heels.

Quick as a flash the preacher seized on one of his legs, jerked him out and administered three terrible kicks.

"For the Lord's sake, quit!" yelled Jim.

"It's for the Lord's sake that I'll keep right on," returned the preacher, giving him another punch.

"I'll let the gal go back," pleaded Jim; "let me go."

"I'll not let you go, neither, until the Lord gets through with you. He's got a fight to make with you when I'm done."

"Great God!" said Jim.

"Yes, he's great," said the preacher, with another blow; "he's Lord of all, and can't be conquered."

"But I give up, indeed I do. Help me!"

"Are you callin' on the Lord to help you?"

"Yes, yes!"

"Then he'll do it; praise his holy name! He'll help you, and bless you, and protect you, and forgive you, and make a good man of you, and take you home to glory if you'll let him."

"Well, I let him. Let me up, and I'll go in and ask him to save me."

"Amen! God bless you, Jim! God bless you!" fervently spoke the preacher, with tears in his eyes.

They all went in, and as Jim went ahead toward the mourners' bench, with his daughter and the preacher in the rear, the people, as by one impulse, started up the grand old song:

"Thus we come rejoicing, bringing in the sheaves."

Jim Rankins is now Rev. James N. Rankins. He is the father-in-law of Rev. Simpson, and will never forget to bless the day when his son-in-law convinced him of the error of his ways.

JAS. NEAL JOHNSON.

THE LAST BULLETIN.

DEAD!

What do you mean when you say he is dead?
I sense not the message that you bring.

Is the robin, carolling in the spring,
Dead to our hearts if he cease to sing?

Is the rose, whose prayer of bloom it said,
Dead, when its fragrant soul is fled?

The song through the air will endless ring;
The scent of the rose to its name will cling.

Dead!

Speak not that word of lost and dread;
It puts no stop to a life like this.

The victory over, death is his.

Say not that he was. He is! He is!

The flock by its Shepherd still is led,
And shall not his hand yet break the bread
Of the truth by which he now is fed?

He lives for the race. We shall not miss
The grace of this latest blessedness.

ANNIE L. MUZZEY.

THE knees of a man are an index, to some extent, of his character; that is, if they have not been injured. A strong character is accompanied with a strong walk. A weak character is shown in the weak knees, and the shilly-shallying, scraping walk. If one should desire the performance of a deed which requires nerve and perseverance, he would never trust it to a man who drags his legs about as if they were made of lead, or half asleep. If you want to measure a man's character, and have not the time to scrutinize and analyze his features, and through them the soul, study his nether extremities and how he uses them. You will get from his legs in action, and sometimes from his legs in repose, the general outline of his being.

SKETCH : OF PHRENOLOGICAL BIOGRAPHY.

GEORGE COMBE.—*Concluded.*

OWING to the death of Dr. A. Combe and the advanced age of George Combe, with his uncertain health, together with other attendant circumstances, it was deemed best to suspend the publication of the *Edinburgh Phrenological Journal*, which closed with the October number, 1847, at the end of the twentieth volume. But Combe's active mind could not keep quiet. He took great interest in the condition of the Irish, and August 15, 1848, wrote to Richard Cobden and Lord Dunfermline of a scheme he had suggested to Carmichael:

"A division of the House of Commons into three parts, embracing in each English, Irish and Scotch members; that one section should sit two or three months annually in Dublin, one in Edinburgh, and one in London, to pass bills affecting exclusively these respective countries; that they should meet at 10 A. M. and sit till 6 P. M., if necessary, but not in the evening; that the whole sections should meet as one house in London for three months, and discuss all questions and pass all laws affecting the United Kingdom generally, as taxes, expense of fleets and armies, colonies, foreign relations, etc.; and that the House of Peers should sit in London during the whole time, and receive bills from all the sections, and pass, reject, or modify them, as they do now. This would secure harmony in their legislation. The diminution of members would render them all more efficient; meetings in the morning would give a character of business to the House; and their localization in the countries for which they were to legislate would render them more earnest and alive to the interests of the people and subject them more to the influence of public opinion. It would tend, also, by bringing them more directly into contact with men of the middle classes, to break that exclusive aristocratic spirit which prevails in Parliament, and produces a wonderful want of sympathy between the House of Commons and the nation."

While in Dublin he was introduced to

Lord and Lady Clarendon and Lord and Lady John Russell, and others of note, and by request of Lady Russell examined the heads of their daughter and son. At that time he prophesied that Lord Clarendon would be the future Prime Minister of England. During 1848 Combe was enrolled on the Commission of Peace—a minor incident of his life.

While writing the biography of his brother Andrew, wishing to show the effect on the lives and health of the family of their surroundings and circumstances where they dwelt, in Livingston's Yards, Mr. Combe met with objections from some of their relatives, who thought the revelations unnecessary, but he regarded them as the key to a true understanding of his brother's character, and a cause of the devotion of his thoughts to the conditions for health.

He submitted proofs of the early part of the work to Cobden—and others—from whom he received this suggestion. "In my judgment the most interesting part of biography is that of autobiography; and next to that is the plan of allowing the subject to speak for himself through letters or conversations."

Combe desired to live to write three works, after completing the biography of his brother—a work on Natural and Revealed Religion; the Philosophy of Art, Painting and Sculpture, and his own life. He completed the two first named and began the third. In December, 1849, he took a severe cold, which produced an irritation of the mucous membrane of the lungs, and from this date was subject to similar attacks which required much care to avert fatal effects. With this care, however, he managed to perform considerable mental as well as physical labor, speaking in public and writing articles on his favorite reformatory topics, the education of the rising generation being the last which took him to the platform, at Edinburgh, on January 21; Glasgow.

April 18; Aberdeen, April 25; Paisley, September 29, and Edinburgh, again, November 25, 1851. What he pleaded for was that only secular education should be taught in schools, leaving lessons in religious tenets for the parents and the clergy. Combe was but one of several speakers at these gatherings under the Association for National Public School Education in England and Wales, advocating free schools.

Arrangements were made for a great demonstration to take place in the Manchester Corn Exchange, December 1, 1851, and here he made what was practically his last public speech. The proceedings lasted from seven o'clock until midnight. The next day he was obliged to keep his bed, because of exhaustion and a severe cold, and the excitement of the occasion. His illnesses were becoming more frequent and prostrating, and their effects more enduring, but his interest for free schools was strong, and when unable to attend public meetings and speak, his pen was active or else he dictated for other pens to record his thoughts.

"The soundness and value of Combe's educational views, and of his judgment as to the kind of education adapted to children of different temperaments, found large appreciation even among those who dissented from the phrenological principles on which he founded his counsel. Among others who consulted him regarding the education of their children were the Duchess of Sutherland, the Cobdens, Lady John Russell, and Lady Romilly. He also had several interviews with Prince Albert and Baron Stockmar; and in 1850 had an opportunity, at Buckingham Palace, of explaining to the Queen his theories of education, based on the physiological development of the royal children. Her Majesty was less inclined toward his theories than the Prince and Baron, but his observations and the various reports which he prepared by Her Majesty's command were treated with consideration. He had consultations with the tutors of the Princes, and he was most anxious to induce them to study physiology, in order that they might

be qualified to carry out the system of education which he was convinced would be most advantageous to their Royal Highnesses. Dr. Ernst Becker, a young German and a friend of Liebig, who was appointed German secretary to Prince Albert, and to take charge of the Prince of Wales in his hours of recreation, spent three months in Edinburgh in the winter of 1850-51, and studied Phrenology under Mr. Combe. The esteem with which Prince Albert regarded Combe was evinced in the following autograph letter, and in the gifts which accompanied it:

"MY DEAR MR. COMBE: You have been several times so good as to give me a portrait of the *phrenological* conformation of our children; I take the liberty to-day of sending you Winterhalter's view of their physiognomies. May you, in looking on them sometimes, remember that their parents are very sensible of the kind interest you have taken in their welfare.

"I likewise send you an illustrated catalogue of the Exhibition, knowing that you have taken a lively interest in that child of mine also. We have attempted to give the work as much as possible a scientific character; the shortness of time allowed for the completion has, however, been a great drawback.

"You will be pleased to hear that the importance of Science to all industries and commercial pursuits is beginning to make itself strongly and generally felt, and may be soon publicly recognized by the establishment of institutions for its connections with those pursuits. Hoping that you are quite well, believe me always,

"Yours truly,

"ALBERT.

"Windsor Castle, October 29, 1851."

In 1852, May 18, the Combes went to London and, visited Sir James Clark, dined with Lord Ashburton, where they met Lords Lansdowne and Granville, Thomas Carlyle and wife, and others, whom he describes in his diary. From London they traveled leisurely in the south of England, by advice of his medical advisers, making occasional trips to London, in order that they might notice the rapidity with which his diseased left

lung was being absorbed. In September they reported that the whole of the right and the greater part of the left were sound, and life might go on for years with only a gradual diminution of strength.

They reached home September 22, where he worked at his book and entertained occasional guests, among whom was Miss Evans—George Eliot—who spent two weeks with them. She was at this time assistant editor of the *Westminster Review*.

In May, 1853, he finished his "Inquiry into Natural Religion, its Foundation, Nature and Applications," and printed 100 copies, of which about one-half were sent in sealed wrappers, accompanied by a *confidential* letter, to special friends, for their scrutiny and criticisms or advice for emendations. (The result of these communications was that in 1857 he published the book with additional matter, and the original text remodeled, and in great part re-written, under the title of "The Relation between Science and Religion.")

In the summer of 1853 the Combes spent a month in London, and July 10 sailed for the Continent, where they enjoyed two months revisiting places in Germany and Switzerland, and returned with improved health, bodily, but with a less active mind. In April, 1854, was published in the *Westminster Review* an article on prison discipline. This article, with additions, was issued in pamphlet form in May, under the title of "The Principles of Criminal Legislation and the Practice of Prison Discipline Investigated." This pamphlet was appreciated by the best judges.

The winter of 1853-1854 found Combe confined to the house with a severe cold, but with an active pen. July and August were spent on the Continent, where, in the neighborhood of Lucerne, their carriage was overturned, but Mr. Combe was fortunate enough to be able to resume his travels on the second day after the occurrence of the accident.

An extract from his daily record dated Zurich, August 8th, says:

"In comparison with what I was and could do thirty years ago, I am more than half dead. My head is bald, my teeth are mostly gone, I am a good deal deaf, my sight is available for reading only by the aid of spectacles, my digestive and breathing powers are diminished by one-half; on many days I desire only to sit and look outwardly or talk lightly. I can read very little without falling asleep, write but little at a time without being fatigued, walk only about two miles in a day, and sleep enormously. All this is partial death," etc.

And yet his interest in all public topics continued, and in May, 1855, he completed his work on Phrenology applied to Painting and Sculpture, which was published June 1. It contained 158 pages. He traveled on the Continent again, visited the Paris Exhibition, wrote for the *Scotsman* a series of his most vivid sketches of the highways and byways of France, Switzerland and Germany, and returned to Edinburgh in the Autumn, "feeble, but otherwise well." His series of articles on the "Currency Question" were completed in February, 1856, and reached the seventh edition within a few months.

Mr. M. B. Simpson, for many years City editor of the London *Times*, with whom he became acquainted in Philadelphia in 1838, when Mr. S. was there on business for the Bank of England—spoke highly of the pamphlet. Mr. Combe's experience while writer for the *Signet* had qualified him for the effort on this subject.

He was attacked with a severe illness in December, 1855, from which he partially recovered. But January 31, 1856, was prostrated with pain so that from the 1st to the 3d of February he was thought to be dying. On the 8th he underwent a severe operation (without chloroform, as the state of heart and lungs would not allow its use). There were moments when his heart ceased to beat and the end seemed to have come,

when he had passed through all the unconscious stages of dying; but his recovery was so rapid as to surprise himself and others; and in March he was able to write long letters, and also to receive friends and discuss various questions with them. On April 30 he attended a lecture of Kossuth's, who breakfasted with him a few weeks later.

In June, July and August, 1856, Mr. and Mrs. Combe went, as usual, to the continent after a month spent in London. He found the journeys too fatiguing in France and Germany, and was glad they were not to be repeated. With pathetic resignation he was taking his last look at the scenes which had afforded him so much interest in former years. About the middle of August he returned to England, and after spending a few days at Moor Park, Farnham, a water-cure establishment, under the care of his friend, Dr. Edward W. Lane, he recovered from the fatigue of his journeys, and returned to Edinburgh September 17, where, among other distinguished visitors he received, was Miss Florence Nightingale, who gave him a description of the sanitary deficiencies at Scutari and the Crimea. He also kept up an extensive correspondence. A Mr. Breed, formerly a merchant in Liverpool, often expressed his obligations to Combe for the help derived from his works. He now sent £50 for the distribution of cheap copies of the "Constitution of Man," and £50 as a contribution toward the expenses of a cheap edition of the new work on "Science and Religion." He died in 1857 and left Combe a legacy of £2,000, one-half to promote the circulation of his works, and the other half as a mark of personal esteem and admiration.

In September, 1857, Combe wrote his essay "On Teaching Physiology and its Applications in Common Schools." In October, November and December, articles for the *Scotsman* on "The Crisis in Banking." In January, 1858, he began his autobiography. In Feb-

ruary the *Scotsman* contained his correspondence with Mr. Richard William Young on "Our Rule in India."

His last contributions to the press were a leader on the past and present condition of farming, and a sketch of the progress of the Irish National schools, in the *Scotsman* for May, and "Why is a Free Government Preferable to a Despotism or an Oligarchy," written for the *Manchester Examiner* on June 5.

His excursions in the summer of 1857 were few, being a month at Moor Park, and a fortnight at Charlton, a week at Manchester, in visiting the Art Treasurer's Exhibition, and a visit to Belfast. The following winter, 1857-58, was passed with comparative freedom from illness, and he paid a few visits and received a few friends on whom he conferred hospitalities. Among them was Charles Sumner, of Washington, and Dr. J. G. Holland. In May he took Dr. Struthers and Robert Cox to the Phrenological Museum and there gave them instruction for the *post-mortem* examination of his brain in regard to the comparison with his brother Andrew's brain where they differed mentally, and said, "I have in this paid my last tribute to truth." June, 1858, was spent mostly in London, where he received many visitors. John Bright, Richard Cobden, Dr. Lyon Playfair, Mr. Robert Tait, H. T. Buckle, author of "History of Civilization," Sir James Clark and others. Of Sir James he said: "I draw more completely to him than to any other man alive. We are of the same age; both born in 1788."

July 8, he lunched with the Prince of Wales and enjoyed the visit much. July 10 the Combes arrived at Moor Park, where they were to remain a month. The 25th was Mrs. Combe's 65th birthday, and they walked in the glade and he found shelter from the wind under high ferns and sat on the ground.

From the 26th he felt low and sleepy to the end of the month; but on the 2d

of August he visited a school, and on the 3d drove through the grounds of Waverley Abbey. On the 4th he had much conversation with visitors and, during the night felt uneasiness in the chest, and in the morning had a violent cough. He went to bed apparently well on the evening of the 7th, but on the morning of the 8th was prostrate, pulse 84, and the stomach rejecting all food. In his diary of the 10th he wrote: "Pulse all night and day 80; nausea continues; no appetite; to-day I have been hot and thirsty and drank cold water. Not uneasy till to-day, when I have slight restlessness, and the power of sleep is diminishing. Expectoration three times the normal quantity. No pain in any vital organ; only heat and fuss in the head."

This was his last entry in his diary with his own hand, but he dictated to Mrs. Combe to write for him the 11th 12th and 13th. She wrote:

"At a quarter past seven of the 14th he said: 'From my present sensations I should say I was dying—and am glad of it. Before Dr. Cox left he had two hours of most distressing struggle for breath, the respiration becoming more labored every minute. Dr. Lane raised him to drink, and, while he was in that position, he opened his eyes *widely*, looked upward, as if in adoration and with longing for half a minute, then sank back, closed his eyes, grew marble white, the respiration became gradually slower, and in eight or nine minutes ceased, after two contractions of the jaws. Dr. Lane said, 'It is over.' In a few minutes the countenance took on a peaceful, happy expression, the wrinkles vanished, the blood returned to the surface."

"At 8 P. M. Abram and Robert Cox came. They had no idea of the rapid change. We arranged plans. Dr. Cox went to London to try to get some one to take a cast, Robert to Farnham to make other arrangements. The funeral to be on Friday. All his wishes and directions will be fully carried out. The malady has been an attack of pleuro-pneumonia."

He was buried in Dean Cemetery,

Edinburgh. A simple head-stone with a medallion portrait of Combe marks the grave, and a granite tablet bears this inscription:

IN MEMORY OF

GEORGE COMBE,

Author of "The Constitution of Man."
Born, 21st October, 1788. Died, 14th
August, 1858;

And of

CECILIA SIDDONS,

His Wife.

Born, 25th July, 1794. Died, 19th February, 1868.

It is a source of regret to the present writer that many things of very great interest could not find room in this sketch of Mr. Combe's biography, and which possess an intrinsic value for students and readers aside from their connection with him. Meager as it seems to the writer, she submits it for their perusal and assures them that they can not enjoy the reading hereof as highly as she has enjoyed the writing of it.

CHARLOTTE FOWLER WELLS.

UNDIRECTED.

We work without a purpose,
We pray without a God,
And then we curse the pathway
Our untrained feet have trod.

We love, and loving blindly
Our love is lost in sin;
We woo, and woo so fondly,
Our wooings never win.

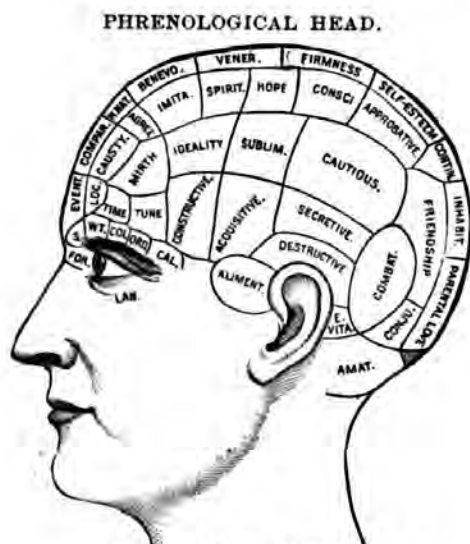
The tears that start unbidden,
Flow back from whence they came;
We love, we pray, we murmur,
And yet go on the same.

'Tis work without a purpose,
And toil without an aim,
That makes the poor man poorer
And brings great thoughts to shame.

L. B.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]



SHAPES OF HEADS.—No. 2.

IN the October number the subject was illustrated by two outlined heads, showing the side view, and also showing that the size and form of heads should be studied from the center of the brain where it unites with the spinal cord; and that center is sought and found by drawing a line through the head from the opening of one ear to that of the other; and radial lines drawn from that center to any part of the surface of the head, forward, upward, backward, or sidewise, become the true measure of the size of the head in different sections, and therefore of the size of the organs in those sections. If the head be as smooth as a billiard ball, it suits the phrenologist better than to have some parts much larger and others much less; he does not look for hills and hollows and what are called bumps, though somehow the public insists upon it that the phrenologist judges of the head by bumps; it has not

been so taught by those who understand it, from the beginning till now.

By caliper measurement some heads are an inch and a half wider than others through the region of the ears, or higher up, which heads measure the same in length from front to rear. The side views we gave last month do not show the width of the heads, only the profile or outline of the heads. The anterior section of one is much longer or larger, and the superior or upper section is much the larger in the solid-line head; while in the dotted-line picture the back-head is much larger than that of the other figure.

Some heads are strong in the side development, while others in the same region are narrow, and therefore weak; some heads, as we have said, being an inch and a half wider than others, which are of the same length, fore and aft. These wide heads are frequently very



BROAD HEAD.



NARROW HEAD.

short from front to rear, and, therefore, are nearly round, and a hat of ordinary shape when pulled on their heads, will buckle the rim out of shape by the great side pressure. In walking the streets, the common observer will instantly see

the great difference in the form of the narrow and broad head.

Persons having the broad side-head are apt to be severe and cruel in their dispositions; they are aggressive; they are strong in appetite; they are strong in the desire for property; they are secretive, crafty, and sly, and often very cautious. The organs in this region of the head are called the selfish propensities, the faculties representing and manifesting qualities that minister to selfhood and crave gratification. The better head in the last month's illustration shows a predominance of the intellectual and moral regions; these superior developments lift a man above that which is merely selfish and sordid, and give a tendency for the public good; and the difference between the round head, full on the sides and lacking in upward and forward development, is about as broad as difference can be made to appear; yet the size of the hat or the number of inches which would measure the circumference of the head might be the same even as it was in last month's illustration and in the round head which we are now describing, and the character would be as distinct as that of any three men who would ever be found together.

—:O:—

TEACHERS AND TEACHING.

IT is not the whole of education to inform and guide the intellect. Teachers are very apt to start with the thought that they are expected to develop the understanding, to store the memory of the pupil with facts, and to train him to think. This of course is the ostensible sphere of the teacher, and if children had intellect only, or according to old mental philosophy, PERCEPTION, MEMORY and JUDGMENT, education would be a comparatively simple task; but when it is considered that the pupil has propensities and passions, affections, aspirations, sentiments, imagination and moral qualities, as well as intellect, to be dealt with, the problem of education

becomes complicated. We often hear the statement from those who are guided in their ideas of mind by the old-school mental philosophy, that there is an education of the heart as well as of the intellect. By this we suppose they mean the same that we do when we say the sentiments, affections and propensities need be educated as well as the intellect.

TWO MODES OF EMOTIONAL ACTIVITY.

There are two ways of training and educating the emotional nature. One may be called the normal and the other the abnormal. We learn bad habits; we acquire good ones. The imagination, for instance, may be diverted from its legitimate action, and led into the realm of wild and romantic fantasy until the mind loses its just balance. The faculties which give energy, courage, industry and force, are frequently perverted by training so as to act in the form of low and quarrelsome dispositions. Prudence, arising from Cautiousness, may be diverted to fear and timidity; ambition, arising from Approbateness, may be perverted to vanity; and pride, which originates in Self-Esteem, and which gives a just self estimation and dignity of character, may be so warped as to exhibit austerity, haughtiness and egotism. Alimentiveness, or the faculty which lies at the foundation of appetite, instead of being guided and regulated in its action towards objects legitimate and proper, in the use of nutritious and wholesome articles, may be so trained as to crave noxious drinks, stimulants and narcotics, and what is true of the propensities here named, is true of every mental power; especially is this true of everything but the intellect.

The old style of mental philosophy is more nearly correct in respect to the intellectual faculties than in respect to the affective faculties or feelings, out of which character proceeds. One writer teaches us that man has conscience, and another that he is induced by the love of praise to do that which is approved

as just and proper by the community. Some believe that man has by nature a spirit of devotion. Others teach that man reverences according as he is instructed to reverence, and that his religious training is the mother of his religious sentiments, and so of nearly all the emotional elements of the mind.

RIGHT VIEWS OF MIND NECESSARY.

Until the true philosophy of the mind can be understood and applied, there will be no system of instruction which shall be fully adapted to the wants of the human race. In imitation of the lessons which nature teaches, let us study to know what are the elements of the mind, and then we can impress the young learner in regard to obedience to the laws of his body, his disposition and his intellect. Every school should teach physiology. By this we do not mean a long list of hard technicalities, but the subject of right living and right feeding should be so simplified that children ten years of age can understand it as well as they can a game of marbles or checkers. It certainly would not be difficult to inform an intelligent child that while it would be his duty and privilege to nourish the body, the entire system may be debased by the over-indulgence of appetite. If teachers would learn, in their own experience, how to nourish the body so as to insure health, and the highest order of physical and mental development, it would not be a difficult task for them to train the young in such a way that appetite will be kept in its normal channel. As perfect health is the first condition of human happiness, if this can be attained, one-half the task of training normal propensities is accomplished. A fever of the brain or of the body causes a fevered state of all the mental functions, and especially of the lower feelings.

So long as the teacher supposes that the whole mind is engaged in each of the emotional feelings, he will not be likely to impart to those under his charge any higher or clearer views, and

it will be quite natural for one of his pupils, when indulging the feeling of anger, and when under its domination, to suppose that he is really outraged, and grossly and maliciously wronged. He feels that he is doing the right thing to chastise the object of his displeasure. When, however, he shall be instructed sufficiently in the philosophy of the mind to know that he is under the influence of perhaps a single faculty—*Combativeness*—his inclination to submit to its sway will be modified; but so long as he believes that his whole mental nature is invaded, that he is suffering indignity and insult, and that every power of his mind should be engaged to repel it, he will of course lose his self-control, and be impelled, as by a moral necessity, to act, for the time being, the part of a maniac. It is not difficult to teach an intelligent boy or girl ten years old that this feeling is but the perversion of a single faculty or propensity, and that an effort should be made through other faculties to repress it.

LIKE EXCITES LIKE.

There is one law of mental action which needs but to be stated to be understood and accepted, namely, that the excitement and exercise of a given faculty on the part of the teacher or parent tends directly to excite the corresponding faculty in the child or pupil; yet nothing is more common than for a boy who is gritty and fractious in his temper, to be treated with severity and annoyed with provoking threats by the teacher. There seems to be an erroneous general idea that we must meet might with might, severity with severity, quarrelsomeness with a corresponding state of mind; and most teachers, when they come into the presence of a boy of rough temper, feel that they must put on a stiff face, and a firm voice, and a rigid form of statement, just as they would hold a headstrong horse with a stiff bit. If *Combativeness* and *Destructiveness* are the leading qualities of a child's mind, it is the true philosophy

not to awaken these feelings, but to talk to something else. The boy may have the sentiments of honor, justice, kindness, affection, any one of which qualities may be easily awakened by a kindly address, and his Combativeness will subside. We have seen a party of angry men ready to commit violence in the destruction of property, and possibly in the shedding of blood, who were quieted by some wise and well-balanced person. The men would have resisted bludgeons and blunderbusses bravely, but when a

benevolent man with a calm face calls them "friends" or "gentlemen," and asks permission, as a friend, to communicate to them some thoughts that might seem true to them, they listen, and in five minutes are ready to defend and protect with their lives that which they had just been plotting to overcome and destroy.*

* "How to Teach ; or, Phrenology in the School-room and the Family," by Nelson Sizer, pp. 331. Fowler & Wells Co., publishers. \$1.50.

EIGHTEEN HUNDRED AND NINETY'S SUPPER.

ON the evening of the 9th of October the students of the American Institute of Phrenology, members of the Board of Trustees, several of the graduates and invited guests, numbering in all about sixty, sat down to a well-appointed table. Prof. Nelson Sizer, President of the Institute, acted as master of ceremonies.

Dr. H. A. Buttolph, of Short Hills, N. J., and Mr. L. A. Roberts, of the trustees, wrote of their regret in not being able to be present. Mr. E. W. Austin, at one time lecturer, sent his "best wishes for the success and fame of the Class in the promulgation of a science that lies at the foundation of human elevation and culture."

Mr. Howell B. Parker, of Georgia, wrote in enthusiastic terms of the Institute's work. Dr. A. H. Laidlaw, compelled to decline on account of infirm health, wrote of his cordial sympathy, as did also Dr. R. Shultz, and Prof. S. S. Packard, previous engagements making it impossible for them to be present.

After the excellent service of eatables had been made, and the company were discussing the fruity accompaniments of the dessert, the President rapped for order, and during the silence that followed the Rev. Samuel K. Heebner offered an appropriate invocation, after which President Sizer said :

The American Institute of Phrenology was incorporated in 1865. In the month of January, 1866, the first class under this charter was taught in New York. That class consisted of six members. The second class, that of 1867, had fourteen students, several of whom were connected with professional work in other departments, such as teaching and literature. One of the students of that second class has become widely known as a successful lecturer on Phrenology in the western country, and has made in his profession a handsome fortune. The Institute graduated in its first 25 years 487 students, an average of 19½ per year.

In looking over the history of Yale College from its commencement in 1701 up to 1874, a term of 173 years, we find that during its first twenty-four years it graduated 141 students, or an average of less than 6 per year, and we, during our twenty-five years, have graduated 487 students, or over 19 a year. If our Institute could have the fostering assistance of the general public, and rich endowments to enlarge its field of culture in any measure approximating to that which has fostered Yale College, our Institute might become as prosperous and quite as prolific of good results as Yale.

When the public come to consider that man is the greatest factor in the created universe, that a knowledge of mind and character, and the culture of the human race in all that belongs to *self-knowledge* and *self-improvement* must be the *first* and *highest* line of human inquiry, schools that are established for the promulgation of such knowledge will then be endowed and sustained ; will be fostered and encouraged as liberally, and we trust more successfully, than the

famed institutions of learning with which the world is to-day blessed.

Four years more and we shall celebrate the centennial of Dr. Gall's first public lectures on Phrenology. In August last, the sixty-second anniversary of his death occurred; in one month from to-morrow we shall celebrate the translation to a brighter sphere of Dr. Gall's first beloved disciple, Dr. Spurzheim, whose body Boston laid, as the first occupant in Mount Auburn, her beautiful city of the dead, in the year 1832—fifty-eight years ago. These were the founders of Phrenology. The best citizens of Paris and of Boston respectively gave the strangers and benefactors peculiar honors at their graves, regarding them as among "the few, the immortal names that were not born to die."

We are making history. Monday, the 6th of October, this Association of the Alumni of the American Institute of Phrenology was formed. We are the constituent members. May our honored successors cherish the pleasant work and field we now open to them.

We trust that our successors shall celebrate the Centennial of this Institute in this Imperial City—and that its Alumni will be numbered by thousands, and grace every eminent position in the world of letters, law, divinity, science and business. The study and culture of man, in mind and morals, are the objects of our effort, and time and truth shall reward it.

The Secretary then read several letters of regret and congratulation, after which Mrs. Charlotte Fowler Wells responded to the toast, "For the Future."

Our president says that he wishes me to speak something of the future; of course he must mean a prophecy. I prophesy that Phrenology is to be known the world over; that it will be taught in all schools; that children will have their heads examined early and be put in the right direction, and when they start right they will not deviate from that path. Phrenology is bound to succeed, for it is true, and truth must prevail; it is one of God's truths. We may not live to see the bright star that will come eventually, but we can see the forerunner of the star. You may think it is a long time coming, for Phrenology was made when the world was made, when man and animals were made. Even animals understand character.

Perhaps they precede man a little sometimes; they know whom they like and whom they dislike. One man in a million can control any horse, any dog, and control most wild animals better than other men; so I suppose they have a little more of animal nature, that is, the human nature that animals have, for if they have intellect, so far they are human. Mr. Sizer has been telling us how long it is since Gall began to lecture on the fact that the brain is an indication of the mind. Dr. Gall was born in 1758, and in 1767, when nine years of age, he began to study character, from the face, we might say, for he began to study the eyes. As the face of the clock is the indication of what is inside, the works of the clock, so is the face of man an indication of what his head makes him. Therefore, if he studies the face, he thereby studies Phrenology. Trees of slow growth last longer than those that grow quickly. The oak is an example; so perhaps the slow growth of Phrenology indicates that it is to last as long as man lasts. I congratulate the Alumni Association of the American Institute of Phrenology that has just been organized, and I prophesy for it greater attainments and hope it may do wonders. There is a great deal for you all to do. I wish to express to you my thankfulness I would if I could, but I have not the power to express to you how thankful I am for the relief you have given me in the stand you have taken, the efforts made and the promise given to work for the prosperity of the American Institute of Phrenology, and securing of a building of its own in which to do its work and care for its valuable cabinet of busts, casts, crania, portraits, library and illustrations. I have felt that I had a load upon my shoulders; you have removed it. I felt that when the home for Phrenology was obtained I could die easily. Now I feel and see the beginning of the end. The Alumni have taken from my shoulders what I had felt that I must do myself, and I thank them for it, and I hope they may do more than they expect.

The next toast was "The Alumni Association," to which Mr. George McDonald, of Albany, said:

MR. PRESIDENT, LADIES AND GENTLEMEN: It gives me great pleasure to listen to the sentiments expressed. I feel my incompetence to address you with regard to the work laid out by the

Alumni; it is work of the greatest importance to this Institute and to the world at large. We have stated in our new constitution that we shall gather funds for the purpose of building a home for Phrenology. We have heretofore, as phrenologists, been empty-handed, so to speak, with regard to a depository for all the precious relics of Phrenology. Our honored "mother," Mrs. Wells, has had her heart set on that subject for many years, and I trust she will live to see the day when the foundation stone of the universal home of Phrenology will be laid. While I was sitting here the story of King Robert Bruce occurred to me. When Bruce had fought and driven the English from Scottish soil, he wanted to go to Palestine, and there build a shrine on Calvary. But his hands were so full of home duty that he never could accomplish it, and when he was old and dying he called one of his chiefs to him, the young Lord Douglas, and said, "Douglas, the desire of my heart in all my work has been to go to Palestine and build a shrine and there to worship, but now I can not go. When I die, take my heart out and put it in a casket and carry it and bury it in the shrine on Calvary." Our noble "mother in Israel" is like Bruce, and we to her are like the Douglas. Douglas took the heart and placed it in a casket which he suspended by a chain from his neck, and with a few followers started for Palestine. In passing through Spain he was attacked by the Moors and there received a mortal wound, and as he was dying on his saddle he took off the casket, handed it to one of his followers and said: "Onward, onward, noble heart! Douglas will follow thee." If we fall by the way without accomplishing our object, let us take the sentiment of Douglas and cry "Onward! onward!" While we are here to-night, my friends, let us resolve that we will not leave a stone unturned until we have laid the foundation stone, and if it cost a million dollars we shall carry it through. We have the material here, we have the will here, we have got the intellect here, we have got the power to influence others to come in, and fill the fund that will raise a monument to those who have worked for the good of the human race. My friends, let us pledge ourselves as men and women to accomplish this object.

The President then called on Mr. Matt Alderson, late editor of the *Avant Cour-*

rier, Bozeman, Dak., to respond to the toast, "Our Graduates." Mr. Alderson said:

Mr. PRESIDENT, LADIES AND GENTLEMEN: I feel that it is no small honor to speak for the former students of this institution. Professor Sizer has called your attention to the fact that they number nearly five hundred, and I think that there are few institutions that have been attended by individuals from parts of the world so far distant. I remember, when I attended in 1875 that it took me about thirty days to get here. I traveled about three thousand miles; and there were students from Canada. At other sessions, there have been students here from the Old World, from Australia, and I believe there are some present now from the Old World.

The students of this institution, so far as my knowledge extends, certainly stand well before any and every community. It has seldom been my privilege to associate with men who have been of better habits. Some of those who are present to-night may be a little surprised, perhaps, that among so many that have graduated at such an institution, so few have been actively engaged in phrenological work. Now, a word or two from me, in explanation of this, may not be amiss. Many who have attended the institution have attended it solely for the purpose of acquiring information concerning human nature, not for the purpose of practicing the science as a profession. Those who have entered the field, at least many of them, have been, perhaps, too easily discouraged with the obstacles that have beset them. Some have been ill prepared for the work. Most of the students, too, have been persons who have made their own way in the world, self-made men, as you may say. They have come to New York City with little means, the means that they have accumulated by hard labor, and expended it for knowledge here. Some of them have entered the field without experience in lecturing, and with little experience in delineating character, expecting to make a success of it in the start. They went into the field, perhaps, with more enthusiasm than reserve power, and they drifted back to the business in which they had been able to make a living, perhaps easily, forgetting the fact that that had taken them a long time, that they had served a long apprenticeship in the occupations where they made their money

before they were able to do well therein. If they had worked as long at Phrenology they would have made a success of it. Henry Ward Beecher once remarked "that no man ever knows how to do a thing until he has forgotten how he ever learned." In other words, it becomes automatic to him. He does his work without stopping to think how he does it, and it takes a man years, perhaps, before he is able to read character as easily as he will do some other things. There is another reason, perhaps, why the practice of Phrenology as a profession has not encouraged many, and especially so in the last few years. The lecture field is overdone. Many professional men have seen in it a chance to increase their remunerations, and have stepped into it, until there has been too many in it. And then again, the newspaper of to-day is a different thing from what it was forty years ago. The weekly newspaper was the one that was most extensively read. To-day nearly every man reads a daily paper, and goes to it for the news and such information as he may need. Then the multiplicity of books, cheaply and easily obtained, stands in the way of the necessity for public instruction from the rostrum.

But there is, perhaps, another reason why some of the most capable men have not followed the profession of Phrenology in the field for a lifetime. The majority of men that are the best men in the community get married before they pass the meridian of life, and after a man is married, and especially after there are children in the family, he does not take so kindly to an itinerant life, and prefers to settle down somewhere; but notwithstanding the fact that there are not a great many practicing phrenologists in the field, I think that it would be the unanimous voice of all persons who have attended the American Institute of Phrenology that the information they obtained there has been invaluable to them ever since. They find use for a knowledge of human nature in every walk of life, and whether they use it as a profession or not, they make use of it in the editor's chair, on the bench, in business offices, at home, everywhere. I am pleased to meet so many representative people at a gathering of this kind. I certainly think it is a creditable gathering, and all here should go out satisfied that Phrenology is making rapid advance in the opinion of the world, and is being now generally accepted.

The succeeding toast was "The Trustees," and Dr. Drayton, Secretary of the Board was invited to speak on their behalf, which he did as follows:

MY FRIENDS: You will recognize one thing, that our worthy president is a capital marksman; when he sees a head, he generally hits it; somewhat unlike the dude that I heard of, who attempted to commit suicide and failed. Somebody asked a friend of his why he had failed, and he said, "Oh! Charley was not accustomed to firing at small targets."

Now, as one of the trustees, I am expected to be able to say a word in response to the toast just propounded. There are five of us; two are absent to-night; the president of the board sits on my immediate right. The vice-president of the board sits also on my right, next the president. Dr. H. A. Buttolph is also a trustee, a gentleman of wide experience, a specialist in medicine for the insane, unable to be here to-night, but always expressing himself as most warmly in co operation with us. Mr. L. A. Roberts, from whom we have heard by letter, is the other trustee.

From the very beginning, so far as I know, this board has been actuated by but one purpose, and that is to make the Institute of Phrenology a working, educational, useful organization. I remember in the early days of my connection with the Institute that the classes that assembled were not remarkable for numbers, nor were the lectures remarkable for numbers, and yet the student fee of one hundred dollars a course was deemed by no means excessive. Those who came paid the money freely, and went away perfectly satisfied with what they received for it. I believe that a score or so of lectures were delivered at the first, and the number was gradually increased. There were but a brace of lecturers at first (if I am wrong, the gentleman on my right is warranted to interfere), and those lectures were mainly delivered by Mr. Samuel R. Wells, then a trustee, and Prof. Nelson Sizer.

The trustees have not been backward in making use of their opportunities and the cash that fell into their treasury, and therefore no large fund has been accumulated. Perhaps the trustees have been unwise in the management; perhaps they should have economized more, and should not have extended this course into its one hundred and twenty-five or more lectures, or added year by

year additional instructors, and so broadened the curriculum. Students would not have been any the wiser for it, and they could have come and received what was given them and gone away satisfied. Who ever heard from an old student, say of twenty years ago, without an expression of the highest esteem for the Institute, and for the good that it is doing? I have read you to-night a letter from one of the older students. With his growth in years, he has grown in appreciation of the courses he pursued here and of the Institute's capacity for good. So the trustees—and I speak without thought of personal credit in the matter—have always worked for the growth and benefit of the students, not for the Institute merely. Of course they have had their expectations; they have thought a great deal all these years, as one of them has intimated just now, with regard to erecting a permanent building, the creation of some granite block, that would fitly represent their aim, but theirs has been the spirit of liberality for the student, not of economy for the sake of creating a large fund. There have been those that have proffered financial assistance, you must know; we have been offered thousands of dollars, but somehow or other, the money has not come. There are promises still in the air, and perhaps they will be realized ere long, and with this growing potentiality of an Alumni Association at hand, very likely the funds will come along for a start of the structure so warmly depicted by Mr. McDonald, and then the Institute of Phrenology will be established on a solid basis, with its own lecture halls, and its own museum, and other facilities much needed to perfect, in grand review, the system of instruction. But even now, as I look over this large company, it seems that we might be strong enough to make a start in the direction of our purpose.

And then those statistics which you have heard from the president; they are very encouraging. It makes a trustee feel that he can go on; that he can spend all the money that may be placed in the treasury, and more will come. In twenty-five years, five hundred students! Compare the record of Williams and Yale and Princeton, and some other colleges that are leading to-day; look over their record of twenty-five years from the beginning. We have done well. We expect to do better, and with your co operation, friends of the Alumni Association, so kindly, so earnestly, so

zealously promised, I am sure we can go on and do grander things.

"Our Class" was then announced, and Mr. Frank Mannion rose to reply:

I am sorry that an abler person has not been selected to speak for the class, for I feel unequal to the task, but with the inspiration from so many fair women and brave men, I may hope to say a word or two in behalf of the class. I may say that those before me have outlined our work. Our president has told us that we are making history. Do we realize that? Can we say to our president that we do here realize that we are making history in the sense that we represent the phrenological world. There are many different kinds of worlds now; the world of science, the world of ethics, the religious world, and so on—so that this school and this place fairly represent the phrenological world. The eyes of the phrenological world, we may say, are upon us as truly as the eyes of Europe were on the army of Napoleon ninety years ago. Great things are expected of us; a great charge is placed on our hands as a part of the Alumni. It is the erection of the building that is to be the memorial of the work that has been done in the past, and a foundation for the great work before us in the future. We realize this, Mr. President, and are fully impressed with the great importance of this work. There are great things for Phrenology to tell; there are great truths to be spread abroad in this world. There are dark continents of humanity, as dark as that in which Stanley has labored and explored, and it is for us to explore, to civilize those. We have dark prejudices to combat with, many obstacles to meet. We are here to-night, under these bright auspices, happy and free, enjoying the pleasures of this splendid society and of these efficient teachers who have so faithfully labored for our advancement; but we go forth to-morrow to fight great battles, to fight and to conquer.

At Thermopylæ, when Leonidas with his three hundred was urged by the conquering horde of Asia to desist and surrender, he replied that he would not. Urgent again came the demands from the king of the Persian host, but again he refused. Again he was informed that unless he surrendered the Persian army would make the sky dark with arrows. He responded to this, "Spartans can fight in the dark." Remember, brothers and sisters, that we must fight

in the dark sometimes, and let us prove to our Alma Mater, prove to the world, that we, as the Spartans did, can fight in the dark, can meet, resist and overcome the armies of ignorance and prejudice that oppose us. We thank you for the interest you have manifested in us, and we reciprocate the interest in you.

I thank you in behalf of the class for the privileges we have enjoyed. I thank you in behalf of the class for the promises of earnest interest in the future; and we will work to build up this great work that is before us, this great institution. We have signed our names to the constitution that calls on us, as honorable men and women, and as classmates, to work and labor in that behalf, and we are pledged to the support of that constitution. We are here to night and perhaps will never all meet again, for we can never again enjoy the pleasures of to-night. Let us go out as did those from the Last Supper of history, to preach the gospel of Phrenology to all the world.

"Our Guests" found in Mr. W. H. Vanderbilt, of Brooklyn, an advocate, and in speaking of them he said:

MR. PRESIDENT AND FRIENDS: I am a guest here this evening. I have not been a student yet, but have been a reader of the books for some thirty years, and have taken great interest in the subject all that time, as my business would permit. Some of the things I might have said, have been outlined by the former speakers, and particularly by the speaker for the former students. I feel that the whole community is interested in this work, parents, teachers and business men. I believe the world is interested, and the world has contributed well to the classes of this Institute, and I feel that from all quarters, if you cast the seed, the growth will be more rapid. Bacon has said that reading makes a full man. I have been a reader of the books, but have hoped, at various opening of the session that I could be able to come into the class, but the opportunity has not been given me. However, I may send one of my children as a substitute later, and then I shall be just as well pleased. I feel that whatever we can do for those that are about us will do us as much good as if it were done for ourselves, for our neighbors.

I have often said that study in this line must be a great benefit to every editor or reporter, to every minister of the

gospel, to every teacher in a school, and certainly to every business man. You see that I have great faith in what comes of it, and yet do not feel at all expert in the knowledge of it. I hope that the ambition of the trustees will be fully realized, and that they will have a proper place for the Institute. I remember reading years ago that that was an ambition, and they still keep it in mind: yet it is a matter of solid business, and they may be disappointed from year to year, but finally it will come. I am glad to feel that the class express themselves as ready to go out and work for the Institute, and in my reading of addresses by former classes, the same sentiments seemed to prevail. I feel that the students, coming from scattered portions, will make that growth assured, and trust the present trustees will live to see their hopes realized.

"The Ladies" proved a sentiment that Prof. Charles E. Cady promptly rose to greet, saying:

MR. PRESIDENT, LADIES AND GENTLEMEN: Owing to our guileless friend, brother Turner, and the ladies, you are to suffer a present infliction, but I assure you it will be made very short, for two reasons: one is, the lateness of the hour, and the other is, the ability of the speaker, the one coming to the rescue of the other very nicely. You remember, perhaps, the villainous joke of the Turkish pasha, that if there is any trouble, there is a woman at the bottom of it. I will not repeat it, for I might not get out of the door soon enough.

Well, what should be said for the ladies. I am a woman's rights man, whatever the word implies. I believe in giving even a dog his rights, and I believe a woman is worth much more than many dogs. I have been a teacher a great many years in public and private schools; have tried to teach even those hieroglyphics that our friend (referring to the report) is putting down as I utter the words.

I should like to relate something of two incidents that illustrate the value of a word dropped in season. A pupil of mine, years ago, determined to study medicine. She studied it, under great difficulties. First her pastor censured her, because it was not proper; it was not modest for a woman to study medicine. Then another friend said, "Well, if you are going to study medicine, you can walk on the other side of the street,"

and a word which I dropped, she says, encouraged her more than anything else to go on. She is one of the smartest women in that line I know. In this city there is to-day one of the most successful lady stenographers, whom I am happy to call one of my pupils, who now teaches it, and is employing eight or ten others to assist, and she has a contract for doing some work that will bring her a thousand dollars or more. She left my school, went to work for an employer, left him three or four times, and at last said she had left him for good. "Of course you have," I said; "you have done that three or four times. I believe just exactly what you say." "No, I have left him entirely this time, and have come to ask your advice about opening an office." I advised her to open an office, and begin work, and she has done it, and won success.

Now, I remember when it was hardly respectable for a woman to do anything in the way of self-support unless it was school-teaching. Why, the people would have looked with holy horror to see women in the stores, business women, as we see them now. The world has not exactly grown out of that idea yet.

One of my very best friends who has two fine daughters, smart as any two girls I know, will not let them look toward anything like self-support. Those two girls will grow up. In the natural course of events, the father will be called to his fathers. The mother has nothing by which to earn money, and the girls will be, it is likely—it would not be polite to say *beggars*, but they will be dependants. How many, many, many such there are! Phrenology opens a good field for one of the best paying occupations that a woman can take up. I am delighted to see women studying Phrenology. I believe that they may make better examinations than men. They have the deftness of finger, the delicacy of touch which should enable them to examine better than most men can. If they have intuitions, as women are credited with having, that should help them in reading character. Now, ladies, I am delighted to see you in the study of mental science. I am sure there is a great field for you there. As a teacher and an observer and reader, I may say this, that there is a great field for women in Phrenology, and I am delighted to see so many engaged in that study.

I ought to compliment the phrenological school on what it is doing in this

line, but that not being my topic, I must not touch on it. I will simply say that I hope that the classes, instead of being as my class was, five years ago, composed of one woman and forty or fifty men, the time will come when those conditions will be reversed. Not that I do not want the men there, but I think so much of the business, occupation, profession for women, that I hope the time will come when the women shall outnumber the men.

Mr. Albert Turner was called upon, and spoke for "The Field," saying:

I certainly have a better excuse than Mr. Cady, or anybody else who pleaded the lateness of the hour, and the fact that others before them had said what they might have said.

The field that is before the phrenologist is a good subject, perhaps, for me to consider. I stand on a high point in this matter. I can view it from many ways, and think I know as much about it as you are likely to have a chance to know. There is scarcely a week that we do not get letters from somebody wanting a lecturer, and every mail brings letters asking for information on our subject. The writers want a list of books, or want to know about examinations or something else that is kindred. It is not always that which will bring us money, it is not always business, but the people want information, and expect answers to their questions. Now, that being the case, is it not fair to presume there is a good field for you, an open field? Whether you go out for business, or whether you go out for the purpose of doing good, it does not make any difference which, you will find openings. The greatest thing in the world is love, and the greatest opportunity for the expression of love is through this subject. There is no broader field for it, there is no better opportunity for it, no better chance for doing good with full compensation, than this. The man that does good in any other way expects to be paid for it. The phrenologist who gives advice for pay, does very much more service than is paid for. I have studied this ground carefully, and I have taken it very strongly, that there is no amount of money that it is possible for you to collect from anybody who may consult you that will form a full equivalent for your advice.

Now then, if you want to make money, if you look upon this as a business en-

terprise, and you are prepared to do it, if you have the qualifications, if you have the capital either in brain or bank account, and will put yourself in the right relation to the public, you can make money. Others have done it, and many of them—I am speaking now, to those who are planning to take up this field, to fill it, to do justice to it, to go in with a spirit that will not be discouraged. Some do not want to work. That is so very largely with men who go into a professional work; but we must work for success; we must not be lazy, and if you do work, you can make money. This field is wide and broad, and growing deeper and broader all the time. The more you know, the larger the field will seem to you; the more you work, the more you may be discouraged by the fact that you cannot do it all; and wherever you go, you will find wider opportunities for doing good, and being paid for it. If you are honest, square, earnest, the people will pay you. I hope that this class will do their level best to occupy the field; not to fall back and let it go, but do something. If you cannot lecture, examine heads; if you cannot examine heads, teach. Whatever you do, try to spread the light you have. Keep your light burning, and spread the good news that you have to carry. Take it for granted that you know more than anybody else on the subject that you come in contact with, as you assuredly do, unless it be a fellow phrenologist. Tell what you know, and be assured of another thing, that you have the backing of the New York office. We are always glad to do for those who are trying to help this cause along.

I am more than pleased by the spirit of the new Alumni Association, and I hope soon to see every graduate enrolled and that there shall arise among them the spirit of cordial union. I am glad we have met here to night. I believe that this has proved so happy an affair to all here, that it will be but the first of the annual class dinners.

With the remarks of Mr. Turner terminated an occasion which will be remembered long by the participants as one of rare enjoyment. Those who were chiefly instrumental in organizing the supper are to be congratulated for the happy manner in which everything connected with it was carried out.

THREE TRAVELERS.

THREE travelers met in Brander Pass.

By the bubbling Brander springs,
They shared their cake and their venison,
And they talked of many things—
Of books, of song and foreign lands,
Of strange and wandering lives,
And by and by, in softer tones,
They spoke of their homes and wives.

"I married the Lady o' Logan Brae,"

Said one, with a lofty air;

"There is na in a' the North countree
A house with a better share
Of gold and gear, and hill and lock,
Of houses and farms to rent;
There's many a man has envied me
And I'm mair than weel content.

"Dream of a woman as bright as day,"

The second traveller said.

"Dream of a form of perfect grace,
Of a noble face and head,
Of eyes that are as blue as Heaven,
Of flowing nut-brown hair,
That is my wife, and, though not rich,
Oh! she is wondrous fair."

The third one said: "I have a wife,

She is neither rich nor fair

She has not gold, nor gear, nor land,

Nor a wealth of nut-brown hair;

But oh, she loves me! and her love

Has stood through every test,

Beauty and gold are good, my friends,

But we know that love is best.

They filled their cups in the spring again,

And they said right heartily:

"Here's to the loving, faithful wife,
Wherever her home may be!"

And soon they took their different ways,

One thought in each man's breast:

Beauty is good, and gold is good,

But true love is the best."

VICARIOUS PLEASURE.—It is related that Ira Trippe, a millionaire of Scranton, Pa., has a peculiar habit. For many years he smoked cigars until his physician told him he must stop smoking or die. Thereupon Trippe hired a negro to smoke all day near him and blow the smoke into his face. The negro did this for years until he died, and his place was taken by a white man. Mr. Trippe is in perfect health. His smoker uses about twelve fine cigars a day. Trippe seems to derive great enjoyment from his second-hand method of indulging in tobacco. Meanwhile, is he not killing his foolish smoking machines?

CHILD CULTURE.

A FAMILY STRIKE.

THE following, from the *Congregationalist*, hits off neatly certain points in our domestic and civil relations:

"I'm going to strike, mother," said Tom.

"Strike what?" asked mother.

"Why, strike—strike work, you know. Strikes are all the fashion now. Ned and I have been holding a caucus about it, and we have made up our minds to try one. Now, mother," said Tom, impressively, "you're to remember that if you want us to do anything specially for you, we're ready to do it. This strike doesn't apply to anything of that sort."

"You are very kind, I am sure," said mother.

"But," said Ned, "if Bridget wants any wood brought, or any kindlings cut, she's got to make special terms. And if father wants the garden worked, he must make special terms."

"I understand," said mother. "I dare say a strike is a very good thing sometimes, and serves a very useful purpose in showing how much people depend on each other. When does the strike begin?"

"This morning."

"Well, you must notify Bridget of what is going on."

The boys skipped off to the kitchen and informed the maid-of-all-work that they had "struck," and then rushed off to school full of joy over the new state of things. An hour later mother received a note from father stating that he had been suddenly called out of town, and might not be able to return home for two or three days.

"Ah," she said, smiling, "this will help out the strike very well."

She had a little talk with Bridget in the kitchen, and then went to make a few calls among her friends.

"Hurrah!" shouted Tom as he ran into the house on his return from school at noon. "I'm hungry as a bear, mother."

No answer came to his calls.

"What's to pay?" said Ned, who had come in more slowly. "Bridget! Where in the world is she?"

But silence seemed to reign where the clatter of pans and dishes usually made music in the ears of hungry boys.

"Well, well!" exclaimed Tom, as he flung open the kitchen door.

The shades were drawn down, the stove cold, the table bare and clean, and everything in apple-pie order.

"Doesn't look much like dinner," said Tom, fretfully.

And as the noon hour wore away, and neither mother, father nor Bridget appeared, the boys hunted for what they could get to eat, and, feeling much abused at the cold, comfortless lunch, went back to school.

Mother sat in the window when they returned home in the afternoon.

"Mother, here are Phil and Harry Graham," said Tom, ushering two boys into the room. Mother gave them a cordial greeting, after which Tom took them out to see his rabbits, while Ned lingered to talk a little.

"They're jolly, nice boys, that have just moved here," he exclaimed, "and they're going to stay for tea. But mother, where's Bridget? There wasn't a soul here when we came home at noon," he added, waxing a little indignant at the remembrance of the injuries put upon them.

"O, when I told Bridget you were going to strike, she said she thought it would be a good time for her to strike, too, so she's gone."

"H'm," said Ned, discontentedly, "I don't see why women want to strike."

He went out to see his friends, and the four had a merry time at play.

"Seems to me it ought to be supper time," said Tom, as the darkness began to close in. "Come in, boys. The tea bell will ring in a minute, I know."

But the bell did not ring, and before long Tom made his way to the kitchen. Darkness and quiet still reigned there.

"Dear me! I forgot all about the strike," he said, looking about him in great dismay.

He went to his mother's room, to find that she had again gone out. Greatly mortified at the inhospitable state of things, Tom and Ned did their best to find something fit to set before their visitors. But it was easy to see that no one had thought of setting a lunch, and when the Graham boys at length said "good-bye," our strikers felt that the visit had been a sad failure. They groped around for a lamp, and went to their room.

"Is mother on a strike, too, I'd like to know?" said Tom, the next morning.

A heavy scowl settled on his face as, going to her room, he saw that she had been there during the night, but had now gone out again. No bell had aroused them, and they had slept late. No pleasant warmth and stir in the kitchen gave promise of a comfortable breakfast. Bread and butter and cold meat seemed most unappetizing in the chill of the Spring morning.

"I say, Ned," said Tom, with energy, "don't let's allow ourselves to be beaten out so. Let's cook breakfast ourselves, and have something comfortable. Let's make an omelet. They are splendid, and nothing at all to make."

"How do you do it?"

"I know how. I saw Bridget doing it once, and it was just as easy! You

take the eggs and milk and flour. You make the fire while I get the things."

"I'd like to see if we can't look out for ourselves," said Tom, his spirits rising at the sound of the cheerful crackle.

"I don't see what makes this flour so lumpy," said Tom, as he stirred it into the eggs. "But I guess it will all come right in the cooking. Now, Ned, bring the spider."

The two watched eagerly as the omelet began to cook. But the lumpy mixture failed woefully in taking on the puffy appearance always assumed by Bridget's omelets.

"It's time to turn it," said Ned.

"It won't turn," said Tom, trying his best with knife and spoon. "It's all stuck to the pan. O—I forgot to put butter in it!"

"Take it off and we'll eat it without turning."

"Bah!" exclaimed Ned, in great disgust, as he took a liberal mouthful. "It's all burnt and there's something else the matter with it."

"I guess I forgot the salt," said Tom, meekly, as he went out of doors to relieve himself of his first taste of the omelet.

"Look here!" said Ned, when Tom came back. "I'm getting tired of strikes. I move we have another caucus and let the strike go. I wish mother was here so we could tell her."

Tom felt like holding out a little longer; but when at noon he stood again by the kitchen table, he agreed that he had had enough of it.

"There's mother," said Ned joyfully, as he heard an approaching step.

"Where have you been all these days, mother?" asked Ned.

"Why, on the day your strike began I chanced to call on Mrs. Alton, and learned that her little Alice was very ill with whooping cough and other troubles. Mrs. Alton herself is not well; so she thought it very neighborly when I told her I would help her take care of Agnes.

As you were on a strike and father away, I knew I should not be wanted at home."

"Not, eh?" grumbled Tom. "Well, mother, the strike's over. So I hope little Agnes is better."

"She is," said mother, "but that need not interfere with your strike. I want you to realize fully how important your work is here. I don't want you to do anything but what you think you get fair pay for."

"Important—ho, ho!" laughed Ned. "Mother, if you'll get things running again just as they used to, I'll put my

work into the business, and never say strike again."

"Then you are sure that things go a little better when each member of the family does his best to co-operate willingly and cheerfully in the work in which all share the benefit?"

"Yes, I'm sure," said Tom. "If only you'll come back and get Bridget back, I'll never grumble about chores again."

Bridget was there at supper time; the kitchen was clean, a good supper cooking, and everything running smoothly in the old groove.

SECURING OBEDIENCE FROM THE BABY.

ONE young mother, who had at the start decided that it was so very cruel and unnecessary to whip a child, tells, in an exchange, in an interesting manner, how she came to it at last, and the result:

"I never punished a child before it was two years old," said a dear old lady to me when my first baby lay in my arms.

"I don't intend to punish at all," I replied; for, like most inexperienced persons, I had fine theories in regard to bringing up children.

"I hope you won't need to; but 'in Adam's fall we sinned all,' you know," she said, with a hearty laugh; thinking, no doubt, that a few years would teach me many things.

While my baby was "in arms," my theories were delightful; but, with creeping, trouble began. The things that he ought not to touch were the only attractive ones, and most fascinating of all was the bookcase. Nothing delighted him more than to tug away till the books tumbled out upon the floor. Persuasion and arguments were of no avail. "No, no!" and "baby naughty!" were greeted with bright smiles of utter indifference. I began to fear that the child knew he was not doing right, and that this knowledge added an element

of mischievous pleasure. But what was to be done? I taxed my ingenuity, but I could not keep my child away from the books. Must I give up to a baby of a few months? I asked myself, ashamed that my theories had failed in the crucial test.

Suddenly common sense came to the rescue. A dozen times I had carried the little thing away from the scene of conflict, only to see him creep back, with all speed, at the first opportunity. Then deliberately I threw my theories to the winds, and gave the dear, chubby little hand a smart slap. Such a look of surprise and distress! It nearly broke my heart. Then a change came over the face, and, with a defiant look that said, "I will," again he attacked the books. Again I slapped the hand; then I took the sobbing baby on my knee, talked with and quieted him. When I put him down this time, the books were safe; he would not touch them.

The victory is won, I thought, with a sigh, for I was tired out with excitement. It was a relief to conquer, but the method was a trial. Then I remembered that our Heavenly Father teaches obedience in ways quite as hard to us as this had been to my child, and I was comforted.

Whenever, after that, my baby crept

to the books, a decided "No !" or, at most, "Mamma punish !" was sufficient to keep him out of mischief.

The battle had to be fought again in regard to other things—the poker and tongs, the album, piano ; but in the course of six weeks I felt safe to take my baby anywhere. In the midst of costly bric-a-brac I had no fears, for my child had learned the grand lesson of life—obedience.

"How do you manage?" a friend asked me, as we were preparing to leave her house after a two days' visit. "Much as I wanted to see you, I will confess that I hesitated when I thought of the child. My cousin's little boy was here a week, and I couldn't tell you how many things he ruined."

"Has your cousin ever punished her child?" I asked.

"Oh, no! Why he isn't three years old yet." I smiled and did not wonder at her troubles.

There may be some mothers who can spare the rod without spoiling the child; there may be some children more easily influenced than mine; but for the majority I do believe some punishment is necessary, and the earlier a mother begins, the less of it she will have to do. "Wait until the child can understand," but who can tell how early a child can understand the difference between right and wrong? Experience has taught me that if a baby learns to mind before he learns to walk, by the time he is two years old he will have settled into a habit.

A BOY'S TEMPER.

KINDRED to what is told in the foregoing is this little talk from an English paper:

A boy is none the worse for possessing a little swagger and self-assertiveness, and any attempts on the part of parents to break his temper is a step in the wrong direction. It was said of the mother of the Wesleys that she tried to crush the self-will of her son John, yet any one who knows anything of the history of John Wesley is ready to admit that he was one of the most stubborn of men when once his opinion was formed upon a subject. Properly developed, a boy's self-confidence may blossom into a noble decision of character, which will be of infinite service to him in the struggle of life. In these days of keen competition, when every year makes the world's prizes harder to get, the victories and rewards of life are for those who, by indomitable pluck and energy, are able to grasp and retain their own. The child who grows to manhood with a broken spirit, must inevitably go to the wall. I do not say that a boy must be allowed all his own way, and have the privilege of riding

rough-shod over the household rules and usages, or that his tendency to overbearing and rudeness should be encouraged. By all means, give him a taste of the birch, when the power of persuasion fails to bring him to reason. Let him know that he is under government; that he has a place in the home where he will find a welcome and shelter as long as the old nest remains; that his boyish exuberances and frolicsomeness will, to an extent, be tolerated; but so far and no further must he go without experiencing the weight of parental displeasure. The boy who has a fair share of elbow room for himself, yet knows that there are certain well defined bounds over which he must not pass, is almost certain to thrive both in physique and character. But the one who is constantly lectured for little offenses, whipped when he hardly knows why, and in various ways reminded of his own unworthiness, will cherish a dislike for his childhood's home, and will leave it without a pang of regret. Too many children are positively driven away from home by unwise severity on the part of "well-meaning" parents.



GROWTHS BACK OF THE NOSE.

IN no other department of surgery has more positive advancement been made than in treating the mouth and nose. Defects of speech, of breathing, of hearing, as well as of smelling, that were formerly considered incurable now easily yield to the skillful treatment of the rhinologist. A very large proportion of cures of chronic catarrh, so called, are found in the examination of the part of the throat and the post nares to be nothing more than the necessary results of obstructive growths of the mucus membrane, these growths sometimes completely plugging the nasal passages and Eustachian tube of one side, and thus setting up a constant irritation in both the nasal and aural membranes. Many children, whose wheezy breathing, running noses, frequent coughing and earaches are regarded by their parents as merely going through experiences necessarily incidental to childhood, and which will be "outgrown" in time, are suffering from disease of the nose that might be cured by a little surgery in a few weeks, and a lifetime of inconvenience if not misery be averted.

In children it is by no means uncommon to find soft tumors, *adenoid* growths, polypi or vegetations in the front nasal space that are the cause of many infirmities, mentally as well as physically. Dr. Delavan, in an excellent synopsis of rhinological surgery, published some

months ago in the journal of the American Medical Association, describes the effects of abnormal growths in striking terms, pointing, for instance, to easily recognized anomalies like these: Want of symmetry in the form of the face, pinched nostrils, open mouth, projecting teeth, arched palate, stupid expression, anæmic surface, drooping eyelids, stenosis or narrowing of one or both nostrils, with constant catarrh and defective speaking, discharge from the ears, loss of hearing, mental dullness, deformity of the chest, and so forth. If adenoid vegetations in the post nasal space are a prime cause of such evils in children, it is full time that physicians generally gave close attention to them, treating them early in their development and not waiting until so far advanced that their removal must involve serious consequences. The idea of outgrowing these sequels of a malady that if let alone will persist in its development is monstrously absurd, and should stamp the physician who entertains it with fossilism. We wonder how many children and young people have lost their hearing, for instance, by such ignorant counsel.

As to the removal of these troublesome growths, it can be said that the procedure is simple, and may be undertaken by any physician who has some capability in the use of his index finger

or a curette. In most children the growth is soft and easily detached by the finger nail, and removed in a few minutes, and if there be much bleeding a nose douche of warm salt water usually stops it.

Where the growth is extensive, several attacks may be necessary before all that should be removed can be taken out. Dr. Behrens says that he has found in most cases that the little patient experienced so much relief after the first operation that he readily submitted to the succeeding. As in other operations on the mucous surfaces of the nose and throat, cocaine muriate is serviceable in mitigating the pain of the operation, the fear of which is the chief bugbear in dealing with children. In some of these cases, especially for polypi, we think that removal by the snare is desirable, because in the dextrous hand this method gives less discomfort, is cleaner and more thorough. We would refer to Dr. E. H. Griffin's Bellevue Hospital experience in this respect as confirmatory of our preference for the snare in nasal surgery.

COLD AIR APPLICATIONS.

Ordinary catarrhal disorders may be relieved in the majority of cases by breathing cold air. This reduces the congestion and consequent "stiffness" of the head in two ways—by reducing the capacity of the capillary vessels and suppressing the development, if there be a tendency of any germs or parasites in the mucous membrane. The cold air operates as a purifier and antipyretic. An enthusiastic admirer of cold air as a remedy says:

"The hospitals of the future will be ice-houses. Dyspepsia, catarrh and fevers of all kinds can be frozen out of the system, not by letting the patient shiver in the snow bank, but by giving extra allowance of warm bedclothing, with the additional luxury of breathing ice-cold air, which under such circumstances becomes as preferable to hot miasma as cold spring water to warm ditch water. I have also found that the best brain work can be done in a cold room, and that stove heat has a tendency to stultify like a narcotic beverage. Warm wraps make fires tolerably dispensable."

An old physician, who advocates breathing ice-cooled air as a most valuable curative agent for rheumatism, told us a while since how he disposed of a long-existing tendency to rheumatic attacks whenever he was exposed to dampness or chilliness. He procured a piece of rubber tubing of small diameter, coiled it closely at the bottom of a large teapot, with one end projecting through the spout. The teapot was filled with cracked ice. Then by placing the projecting extremity of the tube into the mouth and breathing through it, he obtained the supply of cold air that was needed for his ailment.

Modifying this apparatus so that the breathing could be done through the nostrils, and the water from the melting ice not be permitted to interfere with the passage of cold air, it would prove serviceable, not only to the victim of catarrh, but also, we are quite satisfied, to those troubled with bronchial and pulmonary maladies. H. S. D.

HEALTH A DUTY.

"**H**OW many mothers have taught their daughters that health is a duty? How many are taught to be ashamed of a headache, a backache, a narrow chest or round shoulders, or how to avoid each or all of these! A recent writer has said that a mother ought to

blush for these defects quite as much or more than she would if they did not know how to read or write."

I wonder if the day will ever dawn when this mode of thought shall prevail. If so, then there will be a generation of beautiful women, of women able to bear

their part in life, to be and do what their Creator designed.

I heard a gentleman say that the only way to bring about a temperance reform was to begin with the children by educating them up to a standard of right. Though much may be done in this way, I can not believe that it is the *only* way. I think that while this is in progress much may be accomplished by other methods, but in the matter of bringing about an improvement in the race, we must begin as near the root of the trouble as possible. Our children were born with diseased bodies, the result of broken health laws, these the result of our own ignorance. But now, if our eyes are opened, let us try to teach our daughters that it is a woman's duty to be well. How else may she perform the various duties assigned by her Creator!

"Even God is hindered in his workings in a diseased body, for morbid conditions of the physical being bring correspondingly morbid states of the mental and spiritual life."

There is less excuse for ignorance of physiological laws now than there was even a score of years ago. It is not now considered immodest to be informed upon this subject. Less than ten years ago I was trying to impress upon the mind of a young lady the importance of physiological study. She turned up her pretty nose and declared that she did not want to know about those things. She did not consider it proper. I am glad that such foolish notions of false modesty are becoming stale, that common sense is grounded in the minds of young people. It is the duty of mothers to foster their inclination by every means in her power.

It can not be done wholly by precept. If we talk to them of the necessity of good health, and act as though everything else was of more importance, our teaching will not avail. Be what you would have your child to be, touches a parent's experience at every point. They *will* be what you *are* whether you wish

it or not. One writer says: "What you would your child to be to you, be yourself to God. Is not this a grand thought. and does it not make the way very plain? Faith and Godliness are said to be the best preservers of health. We must teach them by practice and precept that it should be their continual study to be pure bodily and spiritually."

The prattling little creatures at our knee are to be the mothers of the next generation. Do we covet for them such an experience as this? "How many a tired and overburdened mother has sent her husband to the office or the store and the children to school soured for the day by her irritable words, and then alone with her God has wept tears of anguish over what she could not seem to help. With dyspepsia and attendant evils comes the loss of a sweet disposition. There is irritability, fretfulness, impatience, often resulting in harsh, unkind words and wrong acts. Now if she had been taught that health is her first duty, she would study to know the causes of her nervousness and irritability and abandon everything likely to develop these conditions.

Then let us incite our daughters to the study of the laws of health. Let us strive to impress upon their minds that it is a woman's duty to be well, that hygienic living is of the utmost importance and that a disregard of these things is the cause of much of the world's misery. MRS. SUSAN E. KENNEDY.

EFFECTS OF QUININE.—Dr. Barton, of Mississippi, in the *Memphis Journal of the Medical Science* last March, charged that malarial hematuria, a disease prevalent in the low river country of the South, was really nothing but cinchonism, due to the "absurd and criminal quantity" of quinine used. He stated that he is fresh from the teachings of late authorities in medicine, but has had to unlearn much about the use of quinine.

TRAINED NURSES.

A WRITER in the *Home Magazine* speaks of this department of useful work as a domain for which women have special aptitudes. Thus if there is any one department in the field of human occupation where the supply is far below the demand, it is found in the matter of skilled attendants—female—upon the sick and the injured. I have in mind a great city in one of the Middle States; a busy city full of great mills and workshops; a place from which railways radiate like spokes from a wheel's hub.

To the restless energy of this city, human life and limb pay constant tribute. Not a day goes past that does not send some maimed mortal to the hospital, a helpless man dependent on his doctor and his nurse for restoration to active duty as a breadwinner. In the homes of the wealthy of that city there are to be found invalids and sufferers—men and women and children—whose disabilities do not arise from mangling in machinery or crushing between cars, but from some of the ailments that flesh is heir to. And from the hospitals and the humble homes, as well as from the stately mansion where the demon Pain holds sway, comes the demand for women who know what to do in a sick-room, and by the bedside of suffering mortality.

As it is in that city so it is in all the cities of this great land. There is, as is set forth in "Bingen on the Rhine" so pathetically, "a lack of woman's nursing;" a dearth of womanly efforts that so potently second the physician's skill. This lack is no new thing, but it is only of late years that the offices of the skilled and trained nurse have found general recognition from one end of the country to the other. This has led to the establishment of training schools attached to the hospitals of the better grade, and operated independently. Graduates from such schools are in more active de-

mand than those from any of the foremost colleges or seminaries of the world.

A young woman who has any aptitude in this matter, who can deftly carry out the family physician's instruction, who has mastered the art of bandaging, and the various details which arise from a surgical case; who has her wits about her and does not shrink or pale at the sight of suffering—such a young woman can usually step from the stage of the graduating hall and receive from fifteen to twenty dollars a week for her services. Now, there are thousands of young girls throughout the country who are fitted by nature to become trained nurses.

In themselves they possess the material which a course at the training school would render perfect for the lofty calling of the trained nurse. I write "lofty calling" advisedly, for there is nothing nobler in life than the alleviation of suffering.

The trained nurse is the doctor's right hand. The untrained nurse, even if the deepest regard for the sufferer fills her heart, is often the worst possible attendant upon that sufferer. But the deft-handed, steady-nerved young woman whose years at the school have shown her just what to do and how to do it is the one to increase the chances of life for her patient, to keep grim death at bay, and to win a place in the affections and esteem of her patient, and his or her household, that no other form of service can obtain. Good health, determination, patience—these are the great requisites, and with these and a three years' course at a training school, thousands of young women now bewailing their lack of occupation of mind and body would find themselves gaining independence as well as lessening greatly the sum of human pain and unhappiness. This field is now far from being filled, and it is unlikely that it will be crowded for many years.

TO HAVE COMFORTABLE HOMES.

A LARGE proportion of the colds and ailments of the respiratory organs suffered during this season of the year are attributable to the want of proper measures being taken by builders in laying foundations and in executing the basements of our houses. Hundreds of the houses let in the suburban districts of London are built upon clay and marshy ground, often of "made earth" and rubbish (and this is also the case in the outskirts and suburbs of most American cities). The present by-laws as to foundations and building sites have been in operation only a few years; but previous to that time houses were built upon decaying matter deposited by dust contractors, the foundations of walls were laid on the damp soil without concrete or proper courses to prevent the rising of damp in them, and damp earth was allowed to extend above the basement floor level. By the legislation of recent years, these matters have been more looked after by the district surveyor. We may point now to a few of the causes which contribute to cold and uncomfortable houses. First and foremost is the imperfect arrest of dampness from the soil. The only way of securing a healthful house is to cut it off as much as possible from the soil on which it stands. Ideally, one may imagine a house standing on stilts or piers, having a free current of air below, and a stair up to the floor; but this would be unattainable under existing arrangements. The next best thing is to obtain a well-ventilated cellar; or, what is almost as good, a sufficient air space between the ground and the floor, this space being well ventilated by bricks, and the ground covered with asphalt or concrete. Neither of these essentials is found. There is an air space below the floor; but it is generally a rough and unlevelled surface of rubbish, with the air bricks so scantily introduced, and they often clogged up by earth or dirt, that the air is

in a state of stagnation, and the emanations from the soil are sucked up into the house by the warmth and fires. Another danger is added if a disused cesspool or a drain is beneath the house, and who knows how many of our houses are built over these receptacles of a past civilization? The many houses and tenements built almost level with the ground are particularly open to suspicion. A fast-decaying floor or a mildewed appearance of dampness, or a musty smell under oilcloth or linoleum in the hall or passage will reveal the evil. On examination it is found, on taking the rotten boards up, that the joists are close to or rest on the ground, that the bond timber is rotten, or no damp-proof course inserted. Hundreds of small houses are found yearly in this condition of incipient decay, which often begins under the passage floor, near the staircase or back door. The only remedy is to excavate the soil, underpin the walls, and lay a damp course over-soil, replacing the timber on sleeper walls of proper construction. The want of ventilation is usually found to be the cause. Houses having half basements or parlors below the ground floor are very common in the metropolis; but these as living rooms are highly objectionable, with the exception of those which have not been excavated, and are built up from a lower natural level in the rear, in which case the lower story becomes the ground floor story of the house behind. Then it becomes necessary to form a good area or retaining wall in front to give light to the front room, or, if there is no front room, to well line the wall forming the back of the room in the rear with some bituminous compound. It is better, perhaps, to make it thick and hollow, ventilating the space. And speaking of half basements leads us to dwell on one or two points connected with dry areas. A wall built against earth ought to have an area

formed along it of its whole height. On the return side of semi-detached houses the side wall must be built often without any area, and in this case the space next the wall for a foot or more should be filled in with broken stone, and a drain be placed at bottom just below the level of footing.

An asphalt coat should invariably be put on the outer face of wall returning in the joint at the floor level. A more efficient protection would be an

area covered over next the outer wall, called a "French intercepting drain," or a concealed area. Sometimes an impervious tile facing has been placed against the outer face of a wall so built; but of all these plans the open ventilated area is the best. We have here referred chiefly to foundation and basement measures; but the dry wall and the well-protected roof are other necessities of warm and healthful dwelling houses.—*Building News*.

A COLD IN THE HEAD.

A GENUINE cold is simply the closing of the pores of the surface, about seven millions in the human system, retaining a portion of the effete particles of the ever-decaying body, more or less poisonous, this retention necessarily antagonizing good health; the lungs—sustaining a very intimate relation to the skin—usually are more especially affected, performing some of the labors of the surface. It is usual, however, for the weaker parts of the system to take on diseased action, which is but another name for recuperative efforts, the efforts of nature, by apparently inimical means, pain-producing, ordinarily—by which to remove a real difficulty, not always observed by the victim. Some of these efforts are regarded by the masses as "colds in the head," while it is probable that not more than one in ten of these supposed colds have any connection with the closing of the pores. Most, if not all, of the irritation in the nasal passages, the inflammation of the mucous surfaces, not only of the nasal passages, but of the throat, etc., with the sores about the nose and on the lips, usually regarded as "cold sores," have their origin in a deranged state of the stomach, the inner surface of this organ having a similar appearance. As a result of improper dietetic habits, taking food very difficult of digestion, too much of ordinary food, or at improper times, eating so rapidly that

it is not half masticated, some have a continuous "head cold" and are unable to breathe with the mouth closed, thus inducing additional disease. The appropriate treatment of such supposed colds, etc., is the adoption of simple habits, careful dieting, making the grains and fruits more than usually prominent, eating flesh very sparingly—if at all—no pork, or any of the products of the filthy scavenger! In these modern, progressive times there are so many excellent, nutritious, easily-digested, delicate and palatable preparations from the grains, that none need select food of a doubtful quality, these preparations being sold for far less than the popular luxuries, although they contain much more nourishment. These preparations may, with great propriety, constitute a part of the morning meal or the dinner, while the majority of all communities would be benefited by using them as the only food taken at the latter meal. Such a course, with due care in all respects, would soon remove that "all-gone feeling at the pit of the stomach," with other unpleasant sensations, when the "head colds" would also disappear. I will add that these supposed colds have led many persons to take undue care of the head, in contrast with the feet, which demand a great deal more attention as the means of warding off such dreaded evils, such as wearing fur caps or close hats, and in audiences covering the

head when there may be the slightest air stirring, etc., while those of reasonable intellect and a normal amount of hair should have sufficient brain

activity to keep the head as warm as it should be, under ordinary circumstances.

DR. HANAFORD.

A GREAT BUILDING OF COAL

THE rivalry among western cities is productive of many exhibitions of the special industry in which the citizens of this or that one is chiefly engaged. A while ago the prosperous merchants of Sioux City built a large structure into the fabric and decorations of which the cereal productions of the

set in red mortar and backed with a plank sheeting. The coal castle or palace is 230 feet long and 130 feet wide, and the height of its principal tower is 200 feet from the ground. The style of architecture to which this novel building material has been ingeniously adapted is a combination of Gothic and



THE OTTUMWA COAL PALACE.

region entered very extensively and it was fitly named "a Corn Palace." This building itself was the principal feature of the admirable show that was associated with it, and naturally drew many visitors. This year Ottumwa, a thriving town of Iowa, ventures into the exhibition line and symbolizes the importance of its mining resources by the character of the building used for the purpose.

It is constructed of large blocks of coal

Byzantine. It contains an auditorium with a seating capacity of from 6,000 to 8,000, and on each side are two stories devoted to the exhibition of mechanical, agricultural and industrial products and exhibits of various kinds. At the rear of the building is an artificial waterfall forty feet high and thirty wide. Below the building and reached by an elevator is a miniature coal mine, in which the visitor can see the miners with their lamps and picks actually at work, while

the mules drag away the cars laden with the results of their labor.

The site of this unique building is the Sunken Park, which was the bed of the Des Moines river before it was turned from its course by the embankment of the Chicago, Burlington and Quincy Railroad. The land so reclaimed was not filled, in but was converted into a beautiful garden by its owner, Col. P. G. Ballingall, and has since been known as the Sunken Park. On 300 piles driven into this park the coal palace has been built.

The town of Ottumwa has about 17,000 inhabitants, and is growing rapidly. Having fifty years of existence, its age among western towns entitles it to be considered venerable. Of late it has developed remarkable activity in coal mining. Over three million tons were taken out of veins found in surrounding counties—a fact of which the East probably knows little.

NO PLACE FOR DOCTORS.—An old book tells the following story of a French doctor seeking a place to begin practice, which points out a valuable hygienic lesson: "A French doctor went to Damascus to seek his fortune. When he saw the luxurious vegetation, he said:

'This is the place for me; plenty of fever.' And then on seeing the abundance of water he said, 'More fever; no place like Damascus!' When he entered the town, he asked the people, 'What is this building?'—'A bath!' 'And what is this building?'—'A bath!' 'And that other building?'—'A bath!' 'Curse on the baths! they take the bread out of my mouth,' said the doctor; 'I will get no practice here.' So he turned his back, went out of the gate again, and hid himself elsewhere. It would be well if every city were, in respect to baths, like Damascus, and all the people bathers."

NOTES IN SCIENCE AND INDUSTRY.

Head Deformity by Manipulation.—In an extensive account of "The Ethnography of the Western Tribe of Torres Straits," recently contributed to the Anthropological Institute of Great Britain by Prof. Alfred C. Haddon, reference is made to the practice, by that tribe, of cranial deformation. During the first few weeks after the birth of a child the mother spends many hours a day compressing its head in a certain direction for the purpose of giving it a conical shape. This is considered the beau ideal of beauty, and Prof. Haddon states that he has frequently noticed the hair of young men "so cut in front as to carry on, as it were, the slant of the forehead, and trimmed behind as to form a fairly straight vertical line, thus emphasizing the local conception of a good shaped head." The mother applies one of her hands to the forehead of the child and the other to the occiput, both of which are thereby flattened, while the skull is rendered proportionately broader

and longer than it would naturally have been. Prof. K. E. de Baer, of the Imperial Academy of Sciences of St. Petersburg, doubted the correctness of the observations of Mr. Macgillwray, who first drew attention to what is supposed to be the only real example of cranial deformation by means of *manual* pressure, but Baron de Miklonho-Maclay himself saw the operation performed on many children. It is now known that cranial deformation of this character is common in New Caledonia, New Hebrides, the Solomon Islands and New Guinea. Deformed skulls have also come from Tenimber, Timorlant and Timor, so that it appears to be general among the Papuan peoples. Whether any or what mental effect is consequent upon the deformation is not considered by Prof. Haddon, but considering the comparatively high standard of morality enforced on the young men during their "initiation," we may judge that it has no deteriorating effect. O. S. D.

Anthropological Meeting.—The New York Academy of Anthropology resumed its meetings October 7, with a good attendance. The President read, as his opening address, a summary of Mr. Stanley's expedition to relieve Emin Pasha and travels through the upper Congo country. Ex-Judge C. P. Daly, president of the Geographical Society, made some remarks in reference to the subject, with his usually interesting manner. Public lectures, two each month, during the season of 1890-91 will be given, for which distinguished scholars and observers have been listed.

Black Walnut Culture.—It is an undisputed fact that there are hundreds of farms in the United States and Canada in which, in the land-clearing process, sufficient black walnut timber has been converted into rails for fencing and cremated in log heaps "to get rid of it," which if it had been permitted to stand would to-day be sufficiently valuable to purchase several farms with all the improvements and stock, and scattered trees, which were fortunately spared from the wreck and destruction, have been sold for from \$100 to \$400 on the stump.

With these facts before the farmers of the country, it seems almost incredible that so few of them avail themselves of so apparent an advantage. True, it is a crop that requires several years of waiting for return, but any farmer who, when starting in as an agriculturist, will plant an acre of ground to black walnut, and continue to plant one acre yearly, in the ordinary course of nature will live to reap yearly returns far in excess of all the roots and cereals he can raise by laborious and toilsome application to his usual avocation as a tiller of the soil; and providing he should fail to reap the reward himself, he has made provision for his family that is as safe as Government bonds, and more profitable than life insurance, as the planting of black walnut means the harvesting of a tree in twenty years the minimum value of which shall be \$20 and an increase in value thereafter of at least \$2 per year if permitted to stand, and a final value of from \$100 to \$300 per tree when they reach full maturity.

An experimental black walnut grove now nearing fruition in Michigan is rapidly de-

veloping, from which the owner, in a very few years, will reap the harvest of the most profitable crop ever planted in the State, and the owner's greatest regret is that he did not enter more extensively into the business. He says if he had planted half his farm with black walnuts, the standing timber in twenty-five years would have been worth three times the balance with all his stock, buildings and other improvements.

The certainty of returns is the great feature of the business. Black walnut is in demand from one end of the country to the other, and its scarcity is becoming more apparent from year to year, dealers finding it more difficult to obtain. It is one of the most valuable timbers capable of production, besides being hardy and thrifty; hence the farmer who devotes a small portion of his time and opportunity to meet the unfailing demand, makes an investment for the future which will certainly meet his most sanguine expectations.

Soapstone incorporated with oil, after the manner of paint, is said to be superior to any kind of paint as a preservative. Soapstone is to be had in an exceedingly fine powder, mixes readily with prepared oils for tint use, covers well surfaces of iron, steel, or stone, and is an effectual remedy against rust. It has been known to protect some stone work, such as obelisks, in China for ages past.

One of the New States.—Wyoming is a great State in size and revenues. Without the Yellowstone Park she is larger than all of New England. Her coal fields are twice as broad as those of Pennsylvania, having an area of 80,000 square miles. The oil regions cover a belt thirty miles wide and two hundred miles long. Some large wells are now plugged awaiting facilities for transportation. There are no navigable rivers, and only about 1,000 miles of rail. Water power is unlimited, and the greater part of the State is available for agriculture. The potato crop yields from 500 to 800 bushels per acre. Not "small potatoes!" Mining industries offer incalculable possibilities, both in the noble metals and in chemical substances. Building stone of the best qualities abounds. With good government, good schools, unsurpassed beauty of scenery, and

healthful climate, Wyoming is fully equipped for her new position.

Distance of the Dog Star.—It is difficult to conceive that the beautiful dog star is a globe much larger than our sun, yet it is a fact that Sirius is a sun many times larger than our own. This splendid star, which even in our most powerful telescopes appears as a mere point of light, is in reality a globe emitting so enormous a quantity of light and heat that were it to take the place of our sun, every creature on this earth would be consumed by its burning rays.

Sirius, shining with far greater luster than any other star, it was natural that astronomers should have regarded him as being the nearest of all the "fixed" stars; but recent investigation on the distances of the stars has shown that the nearest to us is Alpha Centauri, a star belonging to the Southern latitude, though it is probable that Sirius is about fourth on the list in order of distance. For, though there are about fifteen or twenty stars whose distances have been conjectured, the astronomer knows that in reality all of them, save three or four, lie at distances too great to be measured by any instruments we have at present.

Astronomers agree in fixing the distance of the nearest star at 22,000,000,000,000 miles, and it is certain that the distance of Sirius is more than three and less than six times that of Alpha Centauri, most likely about five times, so that we are probably not far from the truth if we set the distance of Sirius at about 100,000,000,000,000 of miles. What a distance is this that separates us from that bright star; words and figures themselves fail to convey to our minds any adequate idea of its true character.

To take a common example of illustrating such enormous distances: It is calculated that the ball from an Armstrong 100-pounder quits the gun with the speed of about 400 yards per second. Now, if this velocity could be kept up it would require no fewer than 100,000,000 years before the ball could reach Sirius.

Economics in Japan.—Some remarkable statements are made by Prof. Rein, a scientist who has been investigating the material resources of Japan. They reveal a national frugality and economy of a

marvelous type. The area of Japan is less than that of California. Its cultivated land is less than one-tenth of its total acreage, yet its products support about 38,000,000 persons. The United States has about 40,000,000 population, and this allows over a square mile of territory for the maintenance of every two individuals. In Japan 2,560 persons subsist from each square mile of tilled land. A people existing under such circumstances must from necessity of preservation be provident, painstaking, hardworking, ingenious and frugal. The Japs appear to deserve all these adjectives. Agriculture with them is literally market-gardening, because the soil is required so produce more in proportion than any other in the world.

A Terraced Mountain.—A southwestern newspaper describes a terraced mountain in Mexico, located about fifty miles southwest of Magdalena. The mountain is circular in form, about three-quarters of a mile in diameter and terraced from base to peak. The height of the terrace is from ten to twelve feet, and in many places is built of solid masonry. At many other places it is cut out of the solid rock. The roadway is from fifteen to twenty feet in width, starting at the base of the mountain and coiling itself spiral-like to the peak, which is not less than 1,200 feet higher than the base of the mountain. The cost of the construction and cutting out of the solid rock of this terraced road must have been enormous, and the remarkable feature of this wonder is the state of its preservation. Here and there masonry has yielded to the crumbling influences of time, but these are exceptions.

At the base of this terraced mountain is a mighty rock, which has the appearance of having been hewn out of the solid mass, and weighs 100 tons or more. It is placed at the mouth of what appears to be the entrance to this terraced mountain. Here another query is suggested: Does this door to the mountain open the way to mineral treasure or to the shrine of ancient religious devotees? Again, does the terraced road which coils itself to the peak of the mountain lead to the shrine of the ancient vestal virgin who kept eternal watch on the sacred fire which was never suffered to die?



NEW YORK,
November, 1890.

THE PROPHYLAXIS OF CRIME.

UPON the basis of statistics accumulated by observers with regard to crime, pauperism, disease, insanity, vice, etc., predictions are made of future and increasing developments of the same unfortunate conditions in our population, it being understood that the same public and private "institutions" for the production and maintenance of vice, crime and disease will continue to be part of our social organization. The economist calmly announces that the output of so many inebriates, so many murderers, thieves and vagabonds, so many lunatics, idiots, imbeciles and paupers is to be expected yearly, aside from the additions incidental to the unrestricted immigration of foreign paupers and outlaws.

In the public schools of New York city there are upward of 150,000 children enrolled. Of these, saying that the males and females are equal in number, it is to be expected that about 750 of the girls and 1,500 of the boys will develop into criminals of different types, while 3,500 or more will become victims of alcohol or its congeners, and go through the various stages of inebriety to the last. Further, 150 will become insane, and 4,000 hopeless pen-

sioners upon the benevolence of the public. That there is no vein of exaggeration in this terrible statement is to be shown by merely pointing to the great and increasing array of public buildings used for the confinement of offenders and the subsistence of the multitude of the diseased in mind or body. Besides the public institutions there are upward of 250 charitable societies all fully occupied in endeavor to meet the demand for help constantly coming from the haunts of the poor and miserable.

When scientific investigation has reached that stage that it is competent to assert that a future of woe awaits so many young people now hopefully pursuing their studies in the order prescribed by municipal authority, is it not full time that stern measures were set on foot for the removal of the salient causes at least of the mental and moral degeneration that leads to vice and crime?

Science points with warning finger to these causes and urges their immediate restriction. She insists upon the far-reaching consequences of social indifference and delay. She appeals to the custodians of society—those intrusted with the administration of law—to the leaders of party, to the professed guardians of religion, to the missionaries and teachers of virtue and morality, to the fathers and mothers of the land, to rise to a fair apprehension of their duty to themselves, the nation and posterity, and to cast off the bonds that enslave and corrupt so many millions of the people, and harass and block the advancement of the nation in all the arts and refinements of true civilization.

This is no longer a matter for platform harangue by the avowed champion of reform who wraps about him the mantle of prohibition, and for other rigid measures of authority, but a matter demanding the serious and practical consideration of every man and woman who desires happiness for themselves and their children, and substantial prosperity for the community.

REPRESENTED IN THE BRITISH ASSOCIATION.

If advocates of Phrenology desire the encouragement of a precedent for taking part in the discussions of American scientific societies, they will find it in the proceedings of the late meeting of the British Association of Science, at Leeds. According to an extended report published in the *Mercury* of that city, Phrenology came in for a good share of attention in the section for Anthropology under the presidency of Prof. Rudler. The paper that led to the discussion was by Mr. Hollander, in which the closeness of the results of modern experiment to the localization of the older phrenologists in many respects was pointed out with so much success that the president in his remarks referred to "the very scientific manner" in which the subject had been introduced.

The tenor of the discussion is to be obtained from a summary of the remarks of those who participated in it, especially those of the following :

Dr. W. Smith said that as a boy he was an ardent phrenologist, but as a student of medicine he lost his ardor. Still, he was bound to admit that in dealing with persons in actual life he was a good deal

influenced by physiognomical considerations akin to those of Phrenology.

Dr. Garson said that the great difficulty in the way of accepting the conclusions of Phrenology lay in the fact that the exterior skull varied considerably, but it did not vary in the same way as did the brain in the interior. There might be an absolute prominence on the outside and a depression on the brain surface.

In reply to this the reader of the essay quoted authorities like Flourens, Bell, Holden and Brown, we presume, in support of the general correspondence of the cranial vault to the contour of the brain.

A lady member, Mrs. Stopes made some witty remarks that awakened much interest, in the course of which she said there might be something true in Phrenology, although all that had been said about it might not be true. The important discoveries of Ferrier, which had been received as undoubted physiological science, were really foreshadowed in the works of the earlier phrenologists.

Another participant in the criticism of the paper informed the audience that he "always selected his errand boys on a phrenological plan." In his note on this statement the editor says : "The errand boy of this generation has fallen upon evil times. An abnormal development of the crown can not be reconciled with a thoroughly placable disposition, and a turn of the eyebrow may blast his prospects for life. So, at least, the anthropologists gathered, and though in courtesy they applauded the gentlemen who spoke in this way, there was at bottom considerable sympathy with the lot of the errand boy under the advance of science."

So, too, we hear of much sympathy for the criminal whose career the science of heredity claims is largely predetermined by birth, although we shall continue to insist that a properly devised system of training and good moral surroundings will greatly modify the pernicious inheritance.

GEORGE COMBE ON THE IRISH QUESTION.

RECENT occurrences in Ireland have awakened the most lively attention, and projected the question of Home Rule upon the view in lines of deep color. In this number of the PHRENOLOGICAL a paragraph occurs near the beginning of the Combe biography which should be of interest to the reader who is watching the great parliamentary contest in Britain. That paragraph, which is a quotation from a letter by Mr. Combe to Richard Cobden and Lord Dunferm-

line, written August 15, 1848, shows that a struggle on the part of the Irish people was going on then similar to that in progress now, and the Scottish observer whose chief study and desire were the promotion of the welfare of his fellow men could not refrain from offering a suggestion for the adjustment of the trouble.

In the course of the biographical sketch we are told that Mr. Combe was highly esteemed as an adviser by the Queen and Prince Albert, and many of the leaders in civil and social affairs sought his counsel on matters of high importance.

It is therefore altogether pertinent to refer to his views on what would probably help toward a solution of a national matter that was urgent in his day, and, having been left unsolved till to-day, has become perilous to Britain's peace and honor.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

THE DUNKERS.—Y.—You have but to visit Lancaster, Pa., to meet with members of this peculiar religious sect. No more interesting people than these simple, straightforward, industrious and thriving descendants of Dutch settlers, who came to Pennsylvania over a century ago, can be found on our broad continent. To know what they really are, one must visit them and see them face to face.

HIGHLY CULTIVATED, YET CAN NOT READ OR WRITE.—ZAY.—The instance you refer to is very unusual in the history of brain-derangement. The lady's defect is constitutional, and due, we think, to an arrest in the development of the centers relating to visual perception. She can not read because the forms of the words are not registered in

the brain. Although the eyes as mechanical instruments seem to be perfect for written or printed language, they have no intelligent function. The seen word has no meaning, while everything heard is understood with remarkable facility, and stowed away in a memory that seems to be faultless. It is a case of "word blindness" combined with "agraphia," that is, sensory in its nature rather than motory.

MOLES.—A. S.—May be the result of a slight injury to the skin or a spontaneous growth, the dark color being due to deposit of the blood pigment or to the excessive vascularity at the part. Sometimes a bruise will leave a permanent mark because the ruptured blood-vessels of the skin do not recover their previous condition. Where they appear spontaneously there is defect in the circulation of the blood, and the skin lacks that perfect organization which is necessary for uniformity of texture and color. We do not think the mental conditions may be said to be productive of moles, or that they indicate any particular characteristics of disposition, fortune-tellers and charm workers to the contrary notwithstanding.

MORALITY AND RELIGION IN CULTURE.—*Question.*—In reading an article in the JOURNAL lately this question was suggested: Can not the natural morality of a man be stimulated and developed without any appeal to a power which is above the natural, and belief in which is rather a matter of credulity or faith than of tangible substance?

S. B.

Answer.—Some persons are so organized that their moral forces, particularly those of benevolence and justice, operate strongly in their mental economy, and incline them to a life that is characterized by kindness, sympathy, and a thoroughgoing integrity, while there is no marked expression of what people call religious sentiment in their conduct. These people find in the exhibition of good-will and in the exercise of strict honesty a hearty enjoyment, and thus do right from the love of right. These are your moral men; your pillars in society; they mingle in every phase of life, having none of the scruples which religious sentiment

suggests and fosters with regard to special associations.

On the other hand there are many whose endowment of these faculties is weak by nature, and to them it is a very difficult task to show convincingly the practicability of generous actions, and the utility of performing certain things as a matter of duty. Perverting associations easily lead men thus weakly organized into vicious and criminal practices, and they are found to be quite insensible to the ordinary methods of logical argument. Yet to such as these, in the prison cell or in lawless freedom, the Christian evangel may come and exert a power for the awakening of the torpid moral susceptibilities which is marvelous.

In hundreds and thousands of cases have men and women been reclaimed from evil lives by the labor of missionaries, when all secular means for their reformation had failed. We have among us and in foreign lands hard-working, self-sacrificing souls, devoting their lives to the spread of the Gospel of Jesus, who not many years ago were slaves to vice, or habituated to deeds of plunder and of violence.



Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred

Value of an Education on the farm.—The farmer is worth more than the money he makes, more than the fine stock he raises, more than the land he owns. While it is right and proper to strive for excellence in his vocation, while it is right for him to try to raise the most and the best of every commodity which his farm is capable of producing, while it is right for him to improve his land in every way that is possible, it is of far greater importance that he improve himself. Life means more than simply gaining a livelihood. Though the farmer's calling is an honorable one, he should not regard it as the end and aim of living. Though he supplies the world with food, though on his labors depend the lives of all mankind, he should make his work contribute to his own intellectual, social and moral

advancement, as well as to the physical sustenance of himself and others. His mental faculties were given him for exercise and cultivation. He should remember that while he is a farmer he has also a man's duties and responsibilities resting upon him. He should be ambitious to succeed in his chosen vocation, but he should also cherish the more laudable ambition to attain the full measure of manhood.

The duty of educating himself, of storing his mind with knowledge, and giving it the discipline it needs, should not be looked upon as something to be dreaded, and performed as an irksome task, but it should be made a source of pleasure as well as of profit. The right kind of an education will enable him to see everything in its proper relations and to understand many of the phenomena of nature which would otherwise have no meaning to him. Every object and every natural phenomenon which comes within the range of his observation may be made to contribute something to his fund of knowledge. The rocks at his feet, the trees of the forest, the flowers, the birds and the beasts may all be made to teach him some valuable lesson. He may, with a reasonable effort, know something of geology, or botany, or zoology, or etymology. The materials for the study of all these sciences are everywhere about him. The great Book of Nature lies open before him, and all that he has to do is to open his eyes and read.

The educated man is able to derive a great deal more pleasure, as well as profit, from the study of our literature than can be gained by one who is uneducated. Nor is there any reason why the farmer should not claim his share of the enjoyment which is to be gained from this study. The splendid variety of human character, which has been portrayed by Shakespeare in his matchless dramas; the pictures of men and women of every conceivable class which Dickens has painted in his novels; the historic as well as the fanciful scenes which Scott has given us in his ballads and his romances, may well be studied and enjoyed by the farmer as well as by the professional or business man. Then there are the many volumes of history and biography and poetry, presenting enough of a variety to satisfy the taste of everybody. Why should

not the farmer make each of them contribute something to his pleasure and his intellectual growth.

If education were only for the farmer's own enjoyment, or if he were the only one who would suffer for its neglect, its importance might not be deemed so great. But there are reasons beside his own welfare which should induce him to educate himself.

He is a member of the social compact and a citizen of the commonwealth, and he owes duties to society and to the State which he should not seek to evade. And the better educated he is, the better able he is to perform those duties. That he has not educated himself is, in fact, the principal reason why the farmer has failed to exert the influence that he should, and to secure the recognition he deserves from the people of other classes. If any reform is to be brought about that will benefit the farmer, if he expects to obtain any relief through legislation, if he expects to advance his own interests by means of agricultural associations, it is not going to be or brought about by the farmers who don't care to know more than their grandfathers did, and who are opposed to giving their sons and daughters a liberal education; but it will be done by the educated farmer; it will be the work of those who have trained their minds to think, and whose intellects are capable of grappling with the perplexing questions which demand solution.

When the farmers everywhere realize the true value of an education, when they determine to avail themselves of every opportunity to cultivate the faculties which they possess, when they conclude that it will pay to educate their children who are to remain on the farm, as well as those who expect to enter the professions when the farmers' sons and daughters are taught that it requires as much intelligence to be a successful farmer as it does to succeed in any other calling, then, and not till then, will the farmers receive the recognition to which they are justly entitled, and to be a successful cultivator of the soil will be deemed as great an honor as to be successful at the bar in the pulpit, at the desk or in the counting-room.

H. S. BARTHOLOMEW.

PERSONAL.

THE oldest pensioner in the United States is Mrs. Henry Ray, a colored woman, one hundred and twelve years old, who lives near Glen Gardner, New Jersey. Her husband was an army cook during the war of 1812, and she draws a life pension of \$12 a month. She is in good health, but nearly blind. Pensioners are long lived as a rule.

Two young women, the Misses Kelly, of West Fifty-second street, own and manage a prosperous blacksmith and horseshoeing shop. On the death of their father, who owned it, the eldest daughter took charge of affairs, engaged the best workmen, and gradually established a reputation for good work, reasonable prices, and prompt accounts, which gives her such patronage as that of Robert Bonner, the Rockefellers, and other owners of valuable horses.

MISS MATTIE HESTER is United States mail carrier over the route from Condar, Laurens County, to Lothair, Montgomery County, Georgia, a distance of forty miles through a sparsely settled region, and which she traverses three times a week. She is punctual as the sun at all seasons and in all weathers. Besides transporting the mails, she manages a farm, gets out lumber, splits fence rails, and contrives to support a widowed mother, two younger sisters and a brother, while not yet twenty years of age.

MIRTH.

"A little nonsense now and then,
Is relished by the wisest men."

HE: "Oh! what a charming plant!" Elder Sister: "Yes, it belongs to the Begonia family." Smaller Sister: "No, it don't. It belongs to the Brown family, who lent it to us for this evening."

HE (at breakfast): "I shall never ask you again what you do with your pin money, my dear." She—"Why not, Henry?" He: "I have found out. I stepped on about six hundred of the darned things when I got home last night."

No man is entirely satisfied mit der weather. For instance, der fly-screen man firmly believes dot der winter vhas invented shust to spoil his peesness und help der woodman out.



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

MYSELF. The Great Teachers of Mankind on the Nature of Mind and the Laws of Life. Lafayette Charles Loomis. 93 pp. John B. Alden. New York.

Culled from the masters of thought in all ages are the sentiments arrayed in this neat volume. Having one common object, as stated in the title, these sentiments form a certain body of doctrine that has a striking homogeneity, and the collator says with full warrant: "Whatever their religion or civilization, the supreme end of life with them has ever been to learn the will of the Creator of mankind and to walk in the way appointed by him." The book is convenient for those who would have at hand in compact form the best thoughts of a goodly list of great minds.

THE STRUGGLE FOR BREAD. A Discussion of the Wrongs and Rights of Capital and Labor. By Leigh H. Irving, author of "The Iron Highway," etc. Third edition, 182 pages. John B. Alden, publisher, New York

In this thoughtfully written essay the author supplies many valuable statistics of American industries, showing the growth and relative changes during fifty years or more, and discusses the relative positions of the employer—whether an individual or a corporation—and the worker. The treatment of the points involved is for the most part clear, and while his conclusions show that the worker of to-day gets more wages than ever before, the capitalist's advantage over him has advanced immensely beyond what it was a while ago and is increasing. The American railway system receives a

good share of consideration, and properly. He takes ground substantially with Prof. Harris with regard to Henry George's errors on land use, and surveys in concise terms the social status of our people. A book for both sides to con.

A COURSE OF LECTURES ON THE GROWTH AND MEANS OF TRAINING THE MENTAL FACULTY. Delivered in the University of Cambridge. Francis Warner, M. D., Lond., F. R. C. P., etc. Macmillan & Co., New York.

This series of lectures embraces the views of a careful observer in the development of the mind, being specially intended for the use of teachers who would, as true educators, employ methods of exact observation in the classifying of children. The rules in formulæ given are derived from the data supplied by thousands of girls and boys, and cover a broad variety of temperamental or physical indications. The whole treatment is eminently scientific. Just as a naturalist would examine a plant, so should the teacher examine the pupil, and note in detail the evidences furnished by the head and body of the brain state and mental condition.

"A common type of low development," says the author, "is the child with a badly made head; the forehead narrow laterally and shallow, the skin may be dull with innumerable fine horizontal creases from recurrent over action of the frontal muscles." Facial expression is rightly traced to central innervation of the facial muscles. The author has much to say regarding the relation of the muscles of face and hand to brain condition, and rightly so, but the detail of what constitutes a good or bad head is too brief and general in terms to be of much service. The quotation above is a fair sample of the treatment of configuration, but the critical reader would want an explanation of the terms shallow, narrow, etc. Want of symmetry between the two sides of the head and the structure of the ears, nose, etc., is dwelt upon as an indication of possible defect, and many admirable suggestions given for measurement and comparison. The book, as a whole, is serviceable to teachers who would be true educators of the young.

EPILEPSY. Its Pathology and Treatment. By Hobart Amory Hare, M. D., B. Sc. Clinical Professor of Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania, etc. 12mo. F. A. Davis, Publisher, Philadelphia and London.

This number of the neat and compendious series of volumes for physicians and students published by Davis, is to be commended for its thoroughness and condensation. The author has marshaled the facts involved in the pathology of epilepsy and defined its numerous phases, in language singularly free from that intricacy of statement that we find in most medical books where an author deals freely with technicalities. That the volume was selected as worthy of a prize of 4,000 francs by the Royal Academy of Medicine in Belgium stamps it with a special merit, particularly when it is the work of an American physician. From our own study of epilepsy, we feel warranted in stating that the book is an excellent discussion of this fearful disease and furnishes the profession the material that is wanted for a practical understanding of a given case.

PUBLICATIONS RECEIVED.

GEOMETRY IN RELIGION, AND THE EXACT DATES IN BIBLICAL HISTORY AFTER THE MONUMENTS; or, the Fundamental Principles of Christianity, the Precessional Year, etc., as based on the teaching of the Ancients by the cube, square, circle, pyramid, etc.

This is an attempt, evidently one of great pains, to trace the manner in which the Bible was made up. Published by E. W. Allen, London. It is a curious compilation of old notions.

THE TREATMENT FOR THE RADICAL CURE OF POLYPI OF THE NOSE. By E. Harrison Griffin, M. D., Attending Surgeon of Throat and Nose Department, Bellevue Hospital, New York. A Reprint from the *Medical Record*.

A short monograph describing an improved method of removing these disagreeable and often obstinate growths. It commends itself to the rational physician because of its simplicity and thoroughness.

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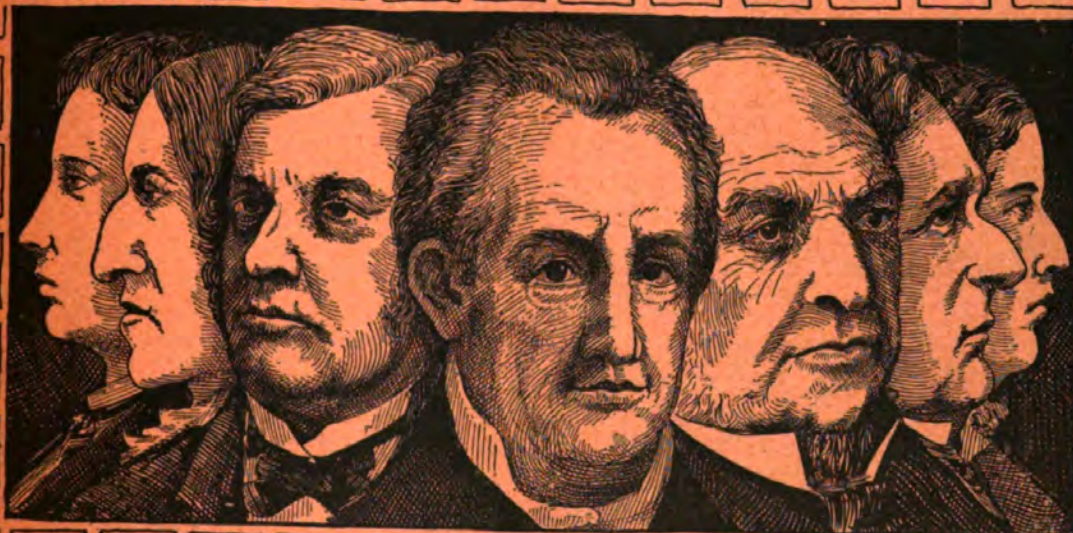
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THE
PHRENOLOGICAL JOURNAL
AND
SCIENCE OF HEALTH.

NUMBER 6.]

DECEMBER, 1890.

[WHOLE No. 621.



SAMUEL F. MILLER.

JUSTICE SAMUEL F. MILLER.

THE first thing which attracts the attention of the observer in the portrait of this gentleman is the lines of strength in the face. There are evidences of sturdiness that make him resemble a veteran farmer more than a man of intellect. One looks in vain for evidences of physical weakness. The high cheek bones show superior lung power, the width of face at the mouth, good ability to assimilate food, and the large chin, a strong circulatory system. The short, thick-set neck is another evidence of a superb physical organization. Such a man might move deliberately, but it would always be with strength. He could easily manufacture vitality sufficient to sustain his mind in prolonged efforts without feelings of exhaustion.

Next to the showing of strength, the countenance has something of the appearance of a clerical gentleman. This is not wholly due to the kindly look in the clean-shaven face, but is borne out by the shape of the cranium; the head is high for its width, and the organs on the median line are large, while those of the side head are less marked; the selfish nature of a person thus constituted would be subordinate to higher impulses.

Physiognomically considered the nose, though not of an aggressive type, indicates positiveness and courage, and the rounded fullness of the head above and back of the upper part of the ear confirms the opinion that Judge Miller was not wanting in these qualities. The lines of self-control are shown in the rather closely drawn upper lip and correspond with the organ of Firmness, which seems quite prominent. While the lips indicate subservience of the feelings to the judgment, they do not show lack of geniality. With such a chin, the red part of the lip somewhat rounded, and the fullness of the head observable in the region of Benevolence, one would expect to find the individual approachable and sympathetic, rather than austere and distant.

The head is long from the forehead to the occiput, rather than broad from ear to ear. The length from a center on a line with the opening of the ears forward to the eyebrows is great, and this, together with the width and height of the forehead, indicate that the intellectual organs are large, especially the perceptive faculties, Eventuality and Locality. The first of these would prompt the mind to a thorough knowledge of details and interest it in many things. The next would give memory of occurrences and situations. The very large Comparison shown at the center of the forehead would confer power to analyze and discriminate.

It would be expected that such a man on the bench would take a decided interest in the facts that might be presented by counsel on either side, and would be able to judge intelligently of their importance. In reaching his conclusions, facts would always form the groundwork, reasons would come next, and his large Veneration would prompt to a proper respector of precedents. His elucidations would not be marked by redundant expressions, but would be clear and explicit, leaving no ground for any misunderstanding of his meaning. His most useful place would be where extensive knowledge and the ability to elucidate and explain were a necessity.

Judge Samuel F. Miller was born in Kentucky, April 5, 1816. His father was a Pennsylvania German, his mother a native of North Carolina. He studied medicine and was graduated from the Transylvania University of Kentucky. The wear of this profession upon his sympathetic nature was such that he concluded he was not adapted to medicine, and when about thirty years of age he began the study of law. In 1850, having been admitted to the bar, he removed to Iowa and soon obtained a good practice. He was an emancipationist, and the early friend of Lincoln, Chase, Giddings and Thaddeus Stevens.

Judge Miller was the oldest judge on the bench, in point of service, having been appointed by Lincoln in 1862. The office he had creditably filled for twenty eight years was the only one he ever held, although at the time of his appointment he was the leader of the bar of his State.

Until within two years Justice Miller was an admirably preserved man. He weighed over 200 pounds, and yet it is said of him that he walked to the Capitol and back, from his residence on Massachusetts avenue, every fair day with the quick, springy step of a boy of twenty. He was five feet nine inches in height. His face was always smoothly shaven. His head was very large and somewhat bald on top. At the time of his death his hair, originally dark brown, was slightly tinged with gray. His smile was said to be peculiarly kind and winning. He had the credit of being a good story teller and the life of a company. Being markedly unselfish and sympathetic, he was very popular in private life.

He was untiring when at work, often sitting at his desk for several hours without rising. He made a thorough study of his cases before putting pen to paper, and when he had accumulated his data, he was rapid in writing his opinions. He was identified with some of the most important decisions ever made by the Supreme Court. He first gained national reputation in decisions of suits brought from the West to enforce the payment of bonds given by municipal corporations in aid of the construction of railroads. He led the minority of the court at that time in a decision denying the legality of these bonds. His view has since prevailed in all the leading courts of the country.

Another noted decision of his was in the case of *Lot vs. Hinton*, in which he decided that the Constitution forbids each State from imposing taxes discriminating against the products of sister States in favor of its own. In the case

of the Clinton Bridge, he decided in favor of the right of Congress to assume the control and regulation of all railroad traffic when it exceeds the bounds of a single State. This was the first declaration of the authority of Congress on this subject.

What is accepted as the most important of Judge Miller's decisions was his opinion in the slaughter-house cases, in September, 1872. It required an exposition of the Thirteenth, Fourteenth and Fifteenth Amendments of the Constitution, which amendments were before the court for the first time. The cases were twice argued in the court and decision was withheld for one year. In his opinion Judge Miller held that while these amendments secured liberty, suffrage and equality of civil and political rights of the African race, and placed the protection of these rights and others belonging to citizens of the United States under the control of Congress, the right of the States in regard to the control of domestic and internal legislation remained unimpaired otherwise than as above expressed.

Justice Miller also contributed aid with his professional skill and knowledge toward the perfection of the Legal-Tender Act. In the three causes before the court Justice Miller upheld the power of the United States to make paper a legal tender for debts in time of war and in time of peace, without regard to the war power.

REAL ability is shown not in destroying but in constructing. It does not require much brains to be a destroying critic. Small calibered men may point out defects in the Iliad. An idiot can manipulate the muscles of his face and nose so as to manufacture a sneer; but he couldn't look intelligent did he try ever so hard. A tramp with his foul fist could destroy a masterpiece in marble statue that would require the genius of a Phidias to replace.

MENTAL EVOLUTION.

THERE are three marked epochs in the mental life of man: the epoch of Adolescence, the epoch of Puberty and the epoch of Maturity. The first is an epoch of credulity, the second of doubt, the last of faith. The child believes; the young man doubts; the old man knows. During the period of adolescence the mind accepts as history the traditions and as religion the creed of its parents. This is the era of superstition. On reaching puberty, one finds himself in an atmosphere of doubt which must be succeeded by either skepticism or faith; the last, if the process of mental evolution continues; the first, if from any cause it is suspended. The eras of which I speak are not marked by the growth of the body as measured by the calendar of time, as are the seven ages of man given by Shakespeare. These epochs of mental evolution are not limited to time, but to eternity. Were this not true, the large majority of the race would fail of reaching the second stage of development, and only a few of the minority get beyond the mountains of doubt which surround the valley of adolescence, and enter upon the rich heritage of philosophic faith.

The thoughtful observer finds himself surrounded by middle-aged and even gray-haired men, who are prattling of toys that amused their childhood, and repeating creeds and catechisms taught them at their mother's knee, in a way to prove that they have not lost their innocent interest in the one, or their childlike credence in the other. And others, middle-aged and old, who, while they laugh at the infantile credulity that once enthralled them, sneer at the sublime faith that is founded on knowledge, accessible only to those who have entered upon the epoch of ripening manhood.

Children are naturally and rightfully credulous; hence, superstitious. Young people are naturally and properly skeptical; middle-aged people are naturally

and necessarily philosophically religious. By this rule all are properly judged as to their growth, and the reader will find it easy to classify his acquaintances under the heads of childhood, youth and manhood.

"It is mind that makes the man;

The want of it the fellow."

The approaches to manhood are marked by the development of the mental faculties rather than by the growth of the physical body. The body may, and in many cases does, reach maturity, and, expending its energies, pass through the various stages of its existence, and die of old age, while the mind makes but little progress in development. The body is nourished by physical substances, the mind by intellectual food. This general statement will meet with acceptance. But when I assert that simple facts sustained by fable constitute the proper mental diet of childhood, scientific facts and logical deductions, the natural mental pabulum of youth and early manhood, and philosophic ideas the proper food for the reflective stage of middle-life, objections will be presented to my first and last propositions by the agnostic and the scientific skeptic, for both of these are materialists, and all classes of materialists sneer alike at the mythology of childhood and the philosophy of manhood. They have developed out of mental adolescence, but for the time they are in a state of suspended mental evolution.

A witty writer has said "All men are idiots at birth, fools at twenty, and philosophers, if ever, at forty." He should have said "scientists, if ever, at forty, and philosophers, if ever, at sixty."

My statements are both scientific and philosophical. They are sustained by phenomenal facts, logical deductions and metaphysical reasoning. The newly-born infant possesses the full complement of mental organs, but it presents no proof of mental action. Very soon the organs of observation show signs

of dawning activity; the child notices things brought within the range of its vision; but it only sees things, it does not reason about them, or even remember them. It sees only one thing at a time; the faculty of individuality is evidently the first to act. Then in regular order the other faculties of observation become aroused as the cerebral organs corresponding to them increase in size and strength. The child sees first the thing, then the thing takes shape or form, and then size, color, place, etc., etc. The organs of weight (control of motion), locality, number and speech one after another awake to action.

The law of mental development now begins its work on the faculties whose organs lie immediately above those of observation, and the child has at first faint, and afterward more distinct, memory of things it has seen. After a while observation and memory become strong and active. Children want to see new things, and delight in telling others of what they have seen. The child next manifests interest in events. The historical faculty is aroused; it listens with absorbing interest to stories and believes them to be true record of events. Fortunate would it be for the race if children were never told anything which is not true; nor allowed to see any books of fiction till their reasoning faculties were sufficiently developed to enable them to apprehend the truth that lies hidden in allegories and fables. Boys and girls would read history with interest and profit if books of romance were kept from them. The historical faculties demand food, and solid, healthful food, not stimulating condiments, should be furnished. Sunday-school novels and children's story papers divert the mind of children from instructive books and pervert their mental appetites, so that they have no taste for history, science or philosophy. The result is that mental dyspepsia is rapidly on the increase among the more civilized people, and

healthy, vigorous thought and practical common sense dying out.

As the youth approaches physical maturity the reasoning faculties become active, and if the organs of comparison and causality are large and healthy these faculties will assert themselves so vigorously as to dominate, as they should, the faculties whose organs lie below them—the faculties of observation, memory, etc. The young man is now developing into the epoch of his career in which, if ever, he is to be a scientist. The reasoning faculties demand the right to sit in judgment on all facts which have been or may be presented to the intellect to decide on their truth or falsity, and if true, on their value and relations. Memory protests against this assumption, and caution and veneration form an alliance with it for the protection of its store of facts, legends, myths, and fables, which have been received without question as to their truth, and many of which are regarded as sacred by association or venerable through age.

If reason triumphs, the young man comes a practical or a theoretical scientist. If reason is vanquished, he remains an ignoramus. His mental development is practically suspended, and he passes through the stages of physical existence and dies at last a gray-haired child. He may have been a successful business man, or politician, or a distinguished defender of childish faiths and illogical beliefs; or he may have achieved fame and wealth as an orthodox quack doctor, or a heterodox patent medicine vender, for the higher faculties of man are not necessary to success in such relations as bring success in these lines of activity. Success in the popular sense is more often achieved by those who stultify and starve their higher faculties than by those who give those faculties their fullest range of activity. Popular success is measured by reputation; true success by character.

T. A. BLAND.

STUDIES IN PHYSIOGNOMY FROM LAVATER, ETC.

THE EYEBROWS AND THE EYES.

THE eyebrow seems a defining border line between the higher dome of the head above it and the lower bounds of the face beneath. There is a sympathetic symmetry between the lines and arches of the eyebrows above and



AUGUSTE BARTHOLDI.

the lines and curves of the face below. The rising or drooping curves of the smiling or sorrowing mouth are retraced in the rising or drooping arches of the eyebrows above. This mysterious sympathy of features is seen most in those wonderful faces touched with the divinity of goodness, or crowned well the nobility of genius. We see it clearly in the faces of Tasso, Baptista, Boileau, Bach, Bartholdi, Beethoven, Handel, Mozart, Von Weber and Thalberg, and in all these the eyebrows are a most striking characteristic. In the face of Wash-

ington Irving we see great harmony of proportion. In the "full, long arching eyebrows, lowering down closely over the eyes" of Charles Darwin, we see great desire and strength and power of observation, as if intense thought were walled in, and the great world, with the exception of the one thing considered, shut out. In the faces of our friends we find no lines are more distinctive, none more deeply impressed upon our memories, none more expressive of mirth, vexation or sadness than the eyebrows.

There are many forms of eyebrows, of which Lavater gives these twelve, and all may accompany understanding; may, though 10 can with difficulty, 11 less difficultly, 9 more, 6 very difficultly, 4 most. 1, 2 and 3, on the contrary, scarcely can accompany folly; 12 is the form of understanding such as can scarcely be deceived.

"A clear, thick-roofed overshadowing eyebrow, with no wild, luxuriant bushiness, says Lavater, is a certain proof of profound wisdom, true perception, and a manly,

mature understanding. Horizontal eyebrows, rich and clear, always denote understanding, coldness of heart and



ELEVATED, CREDULOUS.

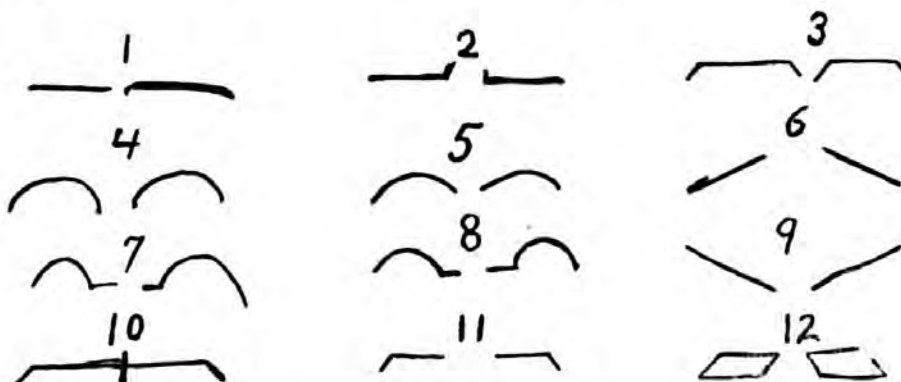


LOW, PRACTICAL.

capacity for framing plans. Angular, strong, interrupted eyebrows ever

denote spirit and productive activity. Wild eyebrows are never found with a mild, pliable character.

ter. Those who think profoundly and those equally firm and prudent in their conduct, never have high and weak



LAVATER'S TYPES OF EYEBROWS.

Eyebrows waving above the eyes, short, thick, interrupted, not long or broad, for the most part denote capa-

eyebrows; they are signs of debility and apathy. White eyebrows are demonstrative of weakness in the same degree



CHARLES DARWIN.

cious memory, and are found with ingenious, flexible and good characters. The nearer the eyebrows are to the eyes, the more earnest, deep and firm the charac-

ter. that the dark brown are of firmness. The ancients ascribed cunning to those whose eyebrows meet across the nose, but Lavater discovers them on the most

worthy and open countenances. Thick, black, strong eyebrows declining downward, appearing to lie closely upon the eye, shading deep, large eyes, accompanied by a sharp indented wrinkle in the cheek, which on the slightest motion manifests contempt, derision and disdain, shows a revengeful, brutal and



ARCHED.

selfish character. These eyebrows have above them usually a conspicuously bony forehead.

EYES.

Beautiful or noble as the eyebrow may be, it is only an archway over a radiant temple of beauty. Nowhere in the universe is found in so small a space so



SEVERE AND SHREWD.

infinite a variety of power, beauty and expression as in the human eye. A clear, bright eye ennobles and illumines the plainest face. It receives the best and brightest of all the world without, and gives forth all the best, brightest, dearest of the world within. Heart, soul, intellect, love, hope, faith, all thoughts noble and sub-

lime, beam forth through this glance of the human eye. How have we all seen one man's eloquent eye draw to itself the eyes and hearts of a great, silent, spell-bound crowd. The eye rules and reigns. It cheers and charms, comforts and caresses, and crowns the life it looks upon with beauty and blessing. How we prize its loving greeting, its glad good-morning, its peaceful good-night! How we grieve over its silent farewell!

Each great soul has its own peculiar look of the eye; none other can imitate or possess it. It is as much its own as the violet's perfume is its own; no rose or lily can borrow it. We can not explain how the violet hidden in the darkest corner of the darkest room can breathe forth such matchless sweetness; nor how the soul within can flash forth such glowing tenderness. The face



REFLECTIVE AND KIND.

without the open, beaming eye would be like a sky without the sun, like the green without the flowers, like a bird without the song. The beauty of the eye depends not solely upon its size or color, but upon its harmony with the other features.

Blue eyes in general, says Lavater, signify effeminacy and weakness; though many eminent men have blue eyes, yet strength and manhood more particularly belong to the brown. Very large, extremely clear blue eyes denote a ready and great capacity, and extreme sensibility.

Small, black, sparkling eyes under strong black eyebrows, deep sunken, denote cunning penetration, and artificial simulation. Men found with eyes inclining to green, have ardor, spirit and courage. People of phlegmatic

habit have clear blue eyes which never belong to those inclined to melancholy, and rarely to the choleric. Benevolence, tenderness, timidity are exhibited by the perfectly semi-circular arch formed by the under part of the upper eyelid. Persons of acute and solid understanding have a generous and open eye, composing a long and acute angle with the nose. An eyelid forming a horizontal line over the pupil is an indication of a subtle, able and penetrating mind. Eyes showing the whole of the pupil, and white below and above it, are found in restless, half-simple persons, never with sound understanding."

Artists tell us that on most faces one eye stands a little above or below the straight line; that a slight difference of elevation is found in almost all men distinguished by great intellect or genius. A very large eye, like the eye of animals, gives us an idea of brutal but not intellectual strength. In "birds of prey the eye is larger than the whole brains; in most of the larger mammalia it exceeds by far the proportion of the human eye." Long, well-opened eyes, with a great abundance of white and a small, dark pupil in the center the painters of the early days gave to all their saints and angels, and such eyes still convey to us an impression of great delicacy and purity. To-day seven-eighths of the world's inhabitants have dark eyes.

The eyes of mankind are composed of various shades of color; the most common are gray, mixed with white, gray

tinged with blue and shades of green, orange and yellow. According to Buffon, says Larretes, the orange and blue are most predominant, and those colors often meet in the same eye; those generally supposed to be black are not really so, and may be found on attentive examination and with a proper disposition of the light to consist of yellow, a deep orange or brown, which being violently opposed to the clear white of the ball, assumes a darkness mistaken for black. Shades of yellow, orange, blue and green are visible in the same eye, and when a blue, even of the lightest tint appears, it is invariably the predominant color, and may be found in rays dispersed throughout the iris. The orange is differently disposed; at a trifling distance from the pupil, is in flakes and round, but the blue so far overpowers it that the eye appears to be wholly that color. The fire and vivacity of the eye are never so powerful in those of the lighter tints. In the dark ones we look for the emotions of the soul; quiet and mildness and a certain archness are the characteristics of the blue.

Some eyes are remarkable for the absence of color, the iris is faintly shaded with blue or gray—the tints of orange so light they are hardly observable; the black of the pupil appears too conspicuous, and that is alone visible at a little distance, and the person has a ghastly and spiritless appearance. The iris in some very uncommon eyes is said to be almost green. L. M. MILLARD.

NOTABLE PEOPLE OF THE DAY.—No. 88.

THE REV. JOHN LOUGHLIN, D.D.,

Bishop of Brooklyn.

AN affair of much interest in church circles was the late celebration, in Brooklyn, N. Y., of Bishop Loughlin's semi-centennial of work as a priest of the Roman Catholic Church. This occasion drew a large assembly, not only of Brooklyn people, but also of repre-

sentatives of the Roman Catholic Church whose spheres of activity lie in other parts of the country.

When Bishop Loughlin began his work in Brooklyn thirty-seven years ago that city did not number a quarter of its present population, and the number of

churches there belonging to his denomination was but thirteen. A man of vigorous physical constitution, of much more than average executive capacity, and thoroughly in earnest, he put himself at once into the work of building up into a more effective form the Roman Catholic churches of Long Island. Their

shows a man of unusual temperamental harmony for one of seventy-four years. His must be a very compact and closely articulated constitution, nothing loose or flabby entering into its substance. The physical basis of his mind being so strong and enduring, he has been able to sustain an amount of work much be-



REV. JOHN LOUGHLIN, D. D.

rapid growth and the numerous additions to their number, and the many institutions connected with them of a charitable, social and educational character, attest the energy of this faithful servant.

The portrait, which is said to be a good representation of the Bishop's features,

yond the average of his ecclesiastical associates and keep in good condition. The fullness of the face, the clearly cut features, the firm poise of the head, the sharply alert expression, all intimate a mind still capable of doing and wearing for an indefinite time. There is no suggestion of weariness or feebleness

in that face; it carries a signal that the well-equipped frigate on occasion may display in distant waters, "Ready for action." The intellect intimates powers of perception, criticism and practical talent; capacity for organizing and applying measures of utility. He has the ability not too often found in the minis-

keep so close an eye to the results of effort, and who would accomplish as much as the Bishop of Brooklyn with a given amount of means.

According to one of our religious exchanges, the Rev. Dr. John Loughlin was born in Ireland in December, 1816; the exact place does not appear to be



CATHARINE BOOTH.

ter of religion to employ his resources with nice economical judgment. Under his administration there has been comparatively little waste or loss. Prodigality and extravagance are among the sins that come in for a share of his sharpest reprobation. There are few men among the clergy of any denomination who

known, but some claim that it was the parish Clanduff, County Down. His father was a farmer, who emigrated to America when John was about twelve, and settled in Albany, N. Y. Showing a preference early for the church ministry, the boy was educated in that behalf at Albany and in a Canadian boarding-

school, and later at Mount St. Mary's College, Emmittsburg, Md.

After finishing his seminary course he was ordained a priest at St. Patrick's Cathedral, New York, in 1840; then returned to Emmittsburg, where he taught for a while. In 1848 Bishop Hughes appointed him pastor at St. Patrick's, New York, and the next year made him Vicar-General.

When the first Plenary Council of Baltimore was called in 1852, he accompanied Bishop Hughes to the gathering. One of the outcomes of the Council was the suggestion to the Pope that several new dioceses should be formed, and the choice of the assembled bishops fell on Vicar-General Loughlin as the best fitted candidate for the proposed diocese of Brooklyn.

Later Dr. Loughlin was consecrated Bishop in St. Patrick's Cathedral, New York, on October 30, 1853, and entered upon the work that had been laid out for him, and in the prosecution of which, during the time that has elapsed since then, he has accomplished such large results.

CATHARINE BOOTH,

The "Mother" of the Salvation Army.

WHEN Mrs. Booth, the "mother" of the Salvation Army, as she was popularly called, was in the United States, she won the esteem of all who met her, and her death, announced in the beginning of October last, drew from thousands of Christian people, irrespective of sectarian connections, earnest expressions of regret. She was what the portrait well indicates, an earnest, devoted worker in the great field of philanthropy that the Salvation Army occupies. The importance of her relation to the peculiar work of that great association of religious and moral reformers was demonstrated in a most striking manner during the time her lifeless body lay in Congress Hall, London, and at the funeral. A constant stream of visitors for four days passed slowly by

the open casket, each eager for a momentary glance at the peaceful face. Not many years ago a plain, quiet woman, the wife of a Methodist preacher, moving in a very narrow circle—what had she done to acquire a popularity so extraordinary?

A writer answers the question thus:

"She had simply helped her husband in an organized effort to preach the Gospel to the poor. They who are disposed to sneer at religion must wonder at that scene. The reverence and love for Mrs. Booth which the people who thronged to see that dead face indicated was not the result of gifts, for philanthropy was only incidental to her work; all their emotions—they were deep and sincere—sprang from the thought that this woman had taken part in the work to which they owed the salvation of their bodies and souls.

"How much Mrs. Booth did to help her husband in planning and executing the movement which has grown to such enormous proportions, was not generally known until after her death. That she was always at his side, shaping and directing operations is now declared, and more than one person familiar with the history of the movement has said that but for her the Salvation Army could not have become what it is to-day. A prominent journalist remarks: 'To her extreme shrinking from publicity was added her physical weakness. It seems almost incredible to read what she accomplished with such a constitution. To rear eight children is in itself the work of a lifetime, but she combined with this an infinite amount of labor and private counseling, of which few have an idea. Frequently after a great public meeting she would spend hours laboring with penitents, and then go home to writhe in agony from spasms of the heart.

Always active, but never giving way, faint but persevering, she was a brilliant example of faith that laughs at impossibilities, and says It shall be done. There was an intense humanity about Mrs. Booth. She could smite and spare not the sinner. But when once he showed signs of turning from his evil ways, no one could be more compassionate or tenderly kind."

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]



SHAPES OF HEADS, NO. 3.

WE now call attention to another type of heads—that in which the organs of aspiration, located about the crown of the head, are strong or weak.

trary, are low. The distance from the opening of the ear to the crown is, in some cases, an inch or an inch and a half more than it is in other heads of the same general size.

The organ in the center of the crown, or rather, on each side of the center line of the head—the organs all being double, and those that are located along the middle line of the head really being two organs lying side by side—the organ in question is Self-Esteem, which gives the feeling of personal character and consequence—a desire to be master of one's own nature and fortune. A man possessing such a sentiment is a leader—not that he knows more than others, but whatever he *does* know he is willing to put forth, and to impress it upon other people's consideration.

A proper development of this sentiment gives a trait of character that ennobles the individual. It commands re-



FIG. 1. SELF-ESTEEM, LARGE

In taking a profile view of heads, it will be seen that some rise very high at the crown, and that some, on the con-



FIG. 2. SELF-ESTEEM, SMALL.

spect, and inspires confidence everywhere. Those that have the spirit of self-trust are likely to be trusted; those

that think they are able to achieve are placed in the front rank, and much is expected from them. When a task that is difficult is to be undertaken in civil life, or in military, those that have confidence in themselves and feel that they are able to achieve the desired result, are the ones that are trusted and put forward. If a man doubts his own ability, it is generally left to chance or to time to develop his capacity. But those that are born with a strong development of Self-Esteem have a feeling that they can do anything that man can do; and they assume the position and endeavor to fill it. It has been a custom of mankind to praise modesty, and ignore and try to lessen independence of feeling. If the world understood the nature of Self-Esteem, there would not be such a tendency to curb and restrain that feeling in its early manifestations.

When the great Von Moltke was a boy twelve years old, we are informed that he was chosen by his associates on one occasion to lead one party of boys against another party in mimic warfare. Von Moltke had the leadership of the weaker party, but he led them bravely; and when he was compelled to retreat, he did it in good order toward a little lake, on the approach to which he gave orders to his followers to cross a plank that he had previously laid, and which led to a little island in the lake. When he got his command over, he hauled in the plank. Thus, by his strategy, he avoided defeat, as, by mere strength, he could not have won a victory.

He has been winning victories since, and now, in his ninetieth year, the world honors him as no other military man living could be honored.

Where Self-Esteem is wanting, the person undervalues his own capacities. Other men may believe he has power and talent, and may urge him to take and hold a place of trust and responsibility, but, if he accepts, he goes about it with misgivings, expecting to be defeated or fail.

The difference between two such persons as we have supposed is about equal to that of two apprentice boys, whom we later happened to know. When they had fulfilled their indentures, they proposed to go into partnership for the conduct of business. Finally, one of them, doubting his capacity to take such responsibility, told his friend that if he would start the business, he, the doubtful one, would work for him and do the nice work. And when we knew them, one of them had been for twenty-eight years in the shop, and the other had been behind the screen for the same period of time making fine boots for the best customers. One had large Self-Esteem; the other small. Yet the man without Self-Esteem had the best intellect; but he lacked push and pride; he was satisfied just to get a living and run no risk. The other pushed ahead, employed fifty men, and got rich.

Our great surgeons generally have large Self-Esteem; our great engineers and contractors are largely endowed with that feeling: the crown of the head is highly and strongly developed. Our leaders in statesmanship are men that believe in themselves; our leaders in large enterprises in business, such as railroading, navigation, commerce, have ample Self-Esteem. They believe themselves to be leaders, and dare undertake to do, with very little money, that which a diffident man with twenty times the capital would not venture upon.

Another faculty which lies alongside of Self-Esteem and helps to make up the height, the fullness of the crown of the head, is called *Approbateness*. The nature of the faculty is to give sensitive regard for public sentiment. It makes one anxious to secure the praise of his cotemporaries. Its excess tends to produce vanity, craving for praise and flattery. Men with it large are very apt to praise themselves, and many people erroneously suppose that a person has large Self-Esteem because he shows his talents and endowments and possessions.

calls attention to his achievements, and is anxious to be elected to places and positions of honor and respectability.

When the faculty of Approbativeness is united in its action with the higher feelings, its ambitions are elevated and honorable; when combined with the lower feelings, it seeks reputation in the lower line of achievement. One boy is ambitious to get the best lessons, stand highest in his class; another boy wishes to be the best runner, the best wrestler, the best jumper, or the best fighter. Ambition does not lift him, but rather leads him to a low line of effort; nevertheless, it seeks praise and applause; it seeks to win victory and stand at the head somewhere.

Its activity extends through the ranks of society; the general who is victorious is elated by the applause of his countrymen; the artist who attracts attention and wins admiration and fame rejoices through this faculty. Persons on the stage are generally well endowed with it. It is an inspiration to effort and to success, and persons that hang on public opinion crave applause as a gratification not only, but they use it as a means of future success.

These feelings, especially Self-Esteem, ought to be cultivated. Young people should be taught to aspire to rank and standing and power and influence; and a habit of self-reliance should be a matter of assiduous training and culture. There is not enough of the spirit of honor; men permit themselves to do mean things, and are not ashamed of them from the lack of these elements of honor and aspiration.

Honor should be to man or woman as the apple of the eye. Faithful performance of expected duty should be an inspiration, and then every rank in life could have the sense of honor and exemplify it, and thereby honor God and command the respect of men.

Those that lack these feelings are ignoble—are willing to take a low place and do mean things in order to secure success and prosperity. A man that has ambition and dignity, if he were offered success at the expense of honor would be led to say, "Is thy servant a dog that he should do this thing?" Though we often hear tirades against pride and vanity, which are, as we may say, nicknames for self-respect and desire for reputation, the world would be depreciated fifty per cent. in its tone of effort and in its aspiration, if the organs that

we have been discussing could be hindered in their normal activity. It is only the abuse of Self-Esteem and Approbativeness that people are inveighing against; the normal use of these faculties ennoble men and women: hence, their activity should not be discouraged, but cherished, and therefore developed.

We praise a noble and self-sacrificing deed, as, for instance, when a man presses through the crowd, rushes into a burning building and brings out the injured victims; and when a man goes to the rescue of the drowning; and when an engineer on a railway train performs some feat of masterly daring—takes his life in his hand in order to save others, and succeeds or perishes in the attempt, we delight to honor them with enduring memorials. We forget to ascertain that Self-Esteem, which gives the feeling of personal capability, was a prime element of the daring and of the success.

Interpreted properly, Self-Esteem says: I can do what ought to be done, and can be done. It does not say, "Send by whom Thou wilt, Lord, but send Thou not by me." It does not hesitate where manly duty begins, where, it may be, self-sacrifice is required.

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ADDRESS BY U. G. HURLEY, OF IOWA.

A MEMBER OF THE AMERICAN INSTITUTE OF PHRENOLOGY, CLASS OF 1890.

Mr. President, Members of Faculty, and Fellow Students.

Leaving behind us the pleasant associations of home and friends, we have gathered from near and far, from almost every part of the continent; we have gravitated to this, the metropolis of the New World.

Inspired with the love of knowledge, in the pursuit of which lives have been lost and fortunes spent, we have come together to add to our store of information. "Knowledge is power" and learning has multiplied since Mother Eve tasted the forbidden fruit in the Garden of Eden till the present time. And to-day we can only begin on a single course of the elaborate dinner of knowledge set before us in one short lifetime, while we see left enough to feed millions for ages to come. As such is the case, will we take only thin soup or something more satisfying?

Men choose differently. We will attempt to take the advice of Solomon, and "with all our getting, get wisdom," as to what is the best choice.

Some study the stars, the rocks, plants or animals that inhabit the earth, and I have read of a German scientist who spent thirty years in the study of the structure of a single species of worm. Others study art. If you are a lover of art, come with me to Rome, and there on the time-stained walls of an antiquated church hangs a canvas, painted by an artist whose ashes have been moldering in the grave for centuries.

Every year thousands of men and women from all parts of Christendom make a pilgrimage to that shrine of art, and as the monk draws aside the costly covering that protects it, reverentially speaks the artist's name, and says: "That was his masterpiece."

The artist himself was a work of art. Man is the crowning work of the Divine Artist, the Creator's master-piece.

A gold watch with its engraved or polished case, pleases the eye, but it is only when it is opened, exposing to view its delicate wheels and machinery, that we appreciate its completeness.

So man, though beautiful in form and in the "human face divine" excites new wonder when you go within the outer temple and study the tissues, organs and apparatuses and their various processes.

This is a part of our study, but we stop not here, though we exclaim, "Man is fearfully and wonderfully made."

We go to the brain, the temple of the mind, and study there the master of the man, from which comes every flash of genius, every scintillation of wit, every sentiment of love or hatred, hope or fear, of that most intricate and subtle entity, the human mind.

Our subject has no equal in earth or air or sky, nor in the secret chambers of the vasty deep.

Let us stand before the world with a full appreciation of the dignity of our subject. Let us teach the improbability of man and be living examples of it in our lives; clear ourselves from the deep ruts of the old way of vice and degradation, of talents misapplied and energies prostituted to mean purposes, and live up to the highest standard of manhood and womanhood.

With our course at the American Institute of Phrenology, our work is but begun. We must feed on the fertile fields of experience, put in our spare moments in the prosecution of the study of man, not forgetting physiology and

hygiene, the physical states of man, and the laws of health.

We should know and teach what the physician *should* know and too often keeps to himself. We should be able to see predispositions of particular persons to certain diseases and suggest the proper measures for prevention, and so obviate the necessity of a cure. In fact, we should be anthropologists in the widest and best sense of the term.

Our aim should be the improvement of mankind. Our science opens the well-springs of human enjoyment by showing the nature of happiness and success and how to attain them.

By the aid of this science we can take away the colored glasses by which we look at our own characters and the characters of others, and thus have the power that Burns craved when he wrote:

"O wad some power the giftie gie us
To see oursel's as ithers see us!
It wad frae mony a blunder free us,
An' foolish notion."

Phrenology shows the genius or frailty in every case on which it passes judgment and measures each in proportion to his natural endowments.

It points out the weak places and shows how they may be strengthened; it shows excesses and how they may be restrained.

It uncovers hidden talents and gives direction as to their employment. In short, it teaches how to make the most of one's self, rise in the world and make life grand, enjoyable, useful and successful; it comes with assurances to the troubled and doubting parent; shows how to train the turbulent and guide their energies in right directions; it disproves the adage: "Death loves a shining mark," and by its advice saves the precocious from a narrow home beneath a marble monument, with the inscription: "Whom the gods love, die young" to live lives of usefulness and success, and erect their own monuments in the affections of the people and at last go to their rest full of years and good works.

It puts youth in the right pursuit, discovers talents and the channels in which they should be employed, and brings forth to the world hidden genius.

To the voyagers on the rough and troubled ocean of single life, tired of the excitement of their journey, and longing for pleasant companionship, it is the chart and compass that will guide them into the harbor of conjugal felicity.

THE BEGGARS OF A GREAT CITY.

THE idea very generally prevails, especially in the country, that there must be a great amount of poverty in large cities, and that New York, being the largest city in the United States, must have more poor people than any other place in the Union. If anything is needed to confirm this opinion, it is supplied by occasional newspaper articles which picture in words calling

sight from a sickness and has three small children to support," or "I am paralyzed twelve years. Please help me support my family." Year in and year out the man with the three small children—and there were several of him—stood on some favorite corner; the children were always the same in number and never increased in size. The man who was "paralyzed" was indeed fre-



for unbounded sympathy the poverty and suffering of some unfortunate. The stranger visiting New York several years ago would be confronted on many a corner by some poor decrepit old woman squatted on the sidewalk, playing a small hand-organ, or by a person bearing the semblance of a man with a large sign on his breast saying: "Please have pity on a poor man who lost his

quently found in that condition, but always with drink.

Persons who gave but a superficial thought to the subject formed their opinions of the poor from seeing these creatures on the streets, from the beggars that appeared at their doors, and from newspaper articles, often instigated by persons who used the press as a means of preying on the public. Others were

inclined to criticise the city for not providing places for its unfortunate, not being aware that most of the beggars were impostors who would refuse to work, and who would not submit to the regulations of well conducted institutions, choosing rather the excitement of life on the streets with the opportunity to get whiskey and to pamper their passions.

The number of beggars was very large, and people with tender hearts looked on with pity at what they deemed the outgrowth of nineteenth century life and the aggregation of enormous wealth by the few. Some gave liberally to these creatures whenever opportunity offered, with the sincere desire to do them good; others gave their pittances to get rid of the beggars and their importunities. Societies and churches emulated one another in the work of aiding the poor, feeling happy if they had large numbers of applications, and could show at the end of the year that they had aided many persons at small cost, unmindful of the fact that the average amount given each applicant, not exceeding twenty-five or fifty cents, would be practically no help to him. Soup-houses and coffee-houses were established where the poor could get a cup of coffee or plate of soup, and tickets were sold to the benevolently inclined at twenty-five tickets for twenty-five cents. These tickets were given to beggars when they asked for alms. The eating-houses did a thriving business, and that free meals and free lodgings were appreciated by the pretended poor, and that they informed one another of such kindly disposed persons was often shown by the appearance of several in succession at a house where tickets were given away.

But the number of beggars increased. How could it be otherwise when no discrimination was made between those who would not work, those who could not work, and those who would if they could? Individuals were generous,

churches were anxious to do good, the public authorities were disposed to aid all who were reported as deserving. Trades unions assisted members out of work, and benevolent associations sought for those who needed care and attention. Under these old systems many impostors lived in luxury, and the poor often suffered for the necessities of life. Men were paid for begging; they were persistent, because they got good returns for their efforts; some of them were members of several churches; in other instances different members of a family were members of different churches and got aid from them all; the crippled and maimed increased; if having a deformed child helped to secure money from others, it was easy to find one or have one made a cripple to order. Such a loose system made it possible for much wrong to be perpetrated; often the city coal failed to reach the needy, and if did, it operated to make them dependent instead of self-supporting. Impostors became founders of relief societies or charitable associations, and while pretending to collect money for the poor, pocketed it themselves. A woman solicited money for a pretended hospital, and even worked the drug stores for medicines for those she represented as in her charge; these she disposed of in Brooklyn in lots that brought her from forty to fifty dollars at a time. Even Sisters of Charity were personated (and this was a very successful role); failing to get money, they would take anything—a hat, a pair of trousers, a pair of shoes—representing that unless they came back with a liberal collection, they would be most severely reprimanded by the Sister Superior. The superfluities thus gained were easily disposed of at the pawnbrokers.

But it was only occasionally that much originality was shown by this class in their appeals to the public. A peculiarity of the business was that many had practically the same story to tell. Thus, when it seemed to have good effect,

many a woman would beg for money to help bury a dead child. If there was a semblance of originality about any of the appeals, persons familiar with beggar life would generally recognize an old story revamped and know what was coming before the applicant was through. It is not always true, but in very many cases bluntness of intellect accompanies bluntness of conscience, and almost always there will be some-

enough to convince any person that some of those children would be old enough to make their own living and help take care of the old folks ; but the generously disposed would see only occasion for pity, when, if the story were really true, and the children only equal to the average, the beggar might be congratulated on having that number.

Such in brief is a picture of beggar life as it was in New York city twelve or



thing in a story that will betray its lack of genuineness. Take the respectably dressed man who has lost his overcoat, and who represents that all the money he had was in its pockets. It so happens that few persons are so foolish as to carry money in their overcoat pockets, so the story has an element of improbability at its very commencement. Again, take the beggar who is the father of "twelve children." A second's thought would seem to be

fifteen years ago. The visitor to the city to-day will seldom see a beggar on the streets. If there is one, he keeps a sharp lookout for officers of the law, and does not attempt to have a permanent stand. He will walk the streets as if he had business and step occasionally into a store to ask for alms, or he will have a few lead-pencils or trinkets which he makes a pretense of selling. On an elevated train he will have a cardboard on his head displaying the word "Blind"

in big letters, and, after preying on the sympathy of the travelers, he will put the "Blind" in his pocket, don his cap, step off the train, and go down to the street with as clear seeing eyes as the next man. At dusk, when they stand less chance of being noticed, some will go out on the streets, and often half a dozen of them will call at a store in the course of an evening. A man will want money to help get a night's lodging; a woman will solicit alms to aid her in procuring delicacies for a sick child or friend; a man or woman will be just out of the hospital and need a few cents to buy something to eat until work can be obtained—always the same old excuses, worn threadbare by long usage, and always for the same purpose—to get something to drink; for men and women are alike intemperate and taint the air wherever they go with the alcoholic fumes in their breath and clothing.

But, notwithstanding the fact that there are still a few beggars to be met in a city of nearly two million population, they are surprisingly few in proportion to the number of people and in comparison with the number years ago. Obviously there must have been a very effective handling of the beggar question of late years to have made so favorable a change, and until one examines into the causes that have brought this result about, he will never know the significance of a sign which may frequently greet his eyes in prominent places of business: "This office refers to the Charity Organization Society all applicants for relief." The supposition that this society has effectively relieved both the beggars and an importuned public will not be amiss.

In 1881 the State Board of Charities, in view of the fact that there were in New York city a large number of independent societies engaged in relieving the poor, with no system of co-operation by which they could receive definite information in regard to the work of one another, and that without some such

system it was impossible that much of their work should not be wasted and even do harm by encouraging pauperism and imposture, appointed the Commissioners of the city a committee to inaugurate a system of co-operation. This action resulted in the formation of the Charity Organization Society. This society is not, as many might suppose, a relief society. Its constitution prohibits it from directly dispensing alms in any form. Its work is also completely severed from all questions of religious belief, politics and nationality, and persons representing the society in any capacity are prohibited from using their positions for the purpose of proselytism. The objects of the society are stated as follows in a charter granted it by the State, May 10, 1882:

1. To be a center of intercommunication between the various churches and charitable agencies in the city. To foster harmonious co-operation between them, and to check the evils of the overlapping of relief.
2. To investigate thoroughly, and without charge, the cases of all applicants for relief which are referred to the society for inquiry, and to send the persons having a legitimate interest in such cases full reports of the results of investigation. To provide visitors who shall personally attend cases needing counsel and advice.
3. To obtain from the proper charities and charitable individuals suitable and adequate relief for deserving cases.
4. To procure work for poor persons who are capable of being wholly or partly self-supporting.
5. To repress mendicancy by the above means and by the prosecution of impostors.
6. To promote the general welfare of the poor by social and sanitary reforms, and by the inculcation of habits of providence and self-dependence.

The work of the organization is done on the principle that charity must do five things:

1. Act only upon knowledge got by thorough investigation.
2. Relieve worthy need promptly, fittingly, and tenderly.

3. Prevent unwise alms to the unworthy.
4. Raise into independence every needy person, where possible.
5. Make sure that no children grow up to be paupers.

With the advent of this society the first recognition was had of the actual condition of applicants for aid. An investigation was made and a record kept of each person soliciting help. If the person proved needy, an inquiry was made into the causes that produced the unfortunate condition. This work has continued until the society now has on its records the names of 133,750 persons living in 33,274 houses. If these houses were on both sides of one street, side by side on lots twenty-five feet in width, allowing for the usual streets, they would make a street over 100 miles in length.

These investigations revealed peculiar things: One beggar, for instance, who had been on the streets for years, with a sign on his breast "My dog leads me. Blind," was found to have \$18,000 in cash and bonds, and a wife and two daughters who were each receiving \$25 a week for making artificial flowers, at which they were very skillful. Others were found who made money every day and squandered it at night in the lowest dives of the city. In one instance a firm who was contributing to twenty-one charitable organizations was informed that ten of them were fraudulent. The surprising part of the investigations was the small per cent. found who were actually deserving of relief. Over half needed work more than anything else, and others needed to school themselves out of bad habits; an alms to such persons was productive of positive injury.

The society sought to understand the physical and mental capacity of each applicant. That was the first step—a step which phrenologists know to be of supreme importance in every phase of life. Then study was made of the causes which led to a condition of beggary. Many of the persons were found to be faint-hearted and needed simply encour-

agement and help into places where they could make use of their native talents and thus help themselves. Some were poor from having never learned habits of providence; they did not know the virtue of saving pennies in prosperity to tide over times of adversity. The society found there were no savings banks in the city to receive deposits of less than one dollar, and to supply a want the necessity for which was more apparent to it than to others, it established a penny provident fund. The aggregate deposits of this banking department of the society's work approaches \$5,000, and of the nearly 12,000 depositors, 472 increased their accumulations in 1889 to sums large enough to open regular accounts in savings banks, thus taking an important step toward independence, and demonstrating the necessity of such institutions for the wage earner.

The records of the society's investigations into the needs of applicants are kept on cards, each card representing an individual. The name, residence, etc., are on the face of the card, the society investigations on the back. Reports of associations working in harmony with it are received on cards and attached to the society's card by a rubber band. One hundred and twenty drawers are required for these cards. They are arranged alphabetically, and if request is sent for information concerning a beggar, it is but a moment's work to see if he is on the list. If so, the story of his situation is forthcoming; if he is a new person, he receives immediate attention. The organization furnished information in 1889 to 1,000 private benevolent givers who wished to know the merits and needs of applicants before bestowing their alms. It also acts as a sort of clearance society for more than three hundred organizations, which are engaged, directly or indirectly, in relieving the distressed, promptly informing them who are reported to be deserving and who are not. It had 342 applica-

tions from newspapers in 1889, and a summary of reports furnished them shows that nine out of ten were wholly undeserving.

The society has sought, by throwing obstacles in the pathway of mendicancy, to make the life a hard one. Where warnings to desist were not effective, impostors have been arrested, and the work of the organization has been conducted so thoroughly that no person prosecuted has ever questioned the testimony submitted. The public officials respect the organization by not releasing persons who have been committed until their time has expired, unless with the approval of the society's representatives. On the other hand, men who are committed by justices for minor offenses are frequently released regardless of their deservings, especially if their votes are an object.

Generally speaking, statistics make dry reading, but they tell a story with an emphasis nothing else can. Thus it is interesting to know that with increased facilities and dealing with more persons, the Charity Organization Society finds the number of street beggars constantly on the decrease. This can not be made clear to the reader to better advantage than by comparing the work of 1886 with that of 1889 :

	1886.	1889.
Cases investigated for churches, etc.....	1,678	1,523
Cases treated and directed....	4,280	5,604
Times work was secured....	1,347	1,338
Number of street beggars dealt with.....	1,215	313

Of these street beggars 74 per cent. in 1886 were apparently able bodied, while in 1889 this was true of 44 per cent. only. The table classifying the industry shows that the business of the tramp has suffered the most extensively, although the result in other respects is exceedingly gratifying :

	1886.	1889.
Begging letter-writers.....	54	4
Sidewalk and house-to-house beggars.....	431	250
Tramps.....	526	2
Miscellaneous.....	204	57

It is a curious fact, and strangely at variance with the popular opinion, that Italy, the country credited with manufacturing large quantities of beggars to order, furnished but a little over three per cent. of the street beggars in New York, while the Irish and Germans, in the years above mentioned, contributed over fifty per cent. About half the beggars, in both years, made their homes in common lodging houses. The result of the two years is summed up as follows :

	1886.	1889.
Arrested and committed.....	662	93
Arrested, but not prosecuted..	21	11
Counseled, assisted, etc.....	442	209

Another curious fact in both years is that only six per cent. were deemed worthy of continuous relief. And, in the language of Mr. Chas. D. Kellogg, General Secretary of the organization, "these were simply almshouse cases, toward whom no greater indiscretion or cruelty could be exercised than to encourage or compel them to lead a life of street beggary, and so keep them from the more respectable and humane provision which the public has provided for them."

He also says : "Experience has satisfied the Central Council that there is ample provision in the public and private charities of the city, if properly systematized and co-ordinated, to suitably relieve all who through helplessness, accident, or emergency are entitled to it; and, therefore, that there is no excuse for street begging. Mendicants on our thoroughfares should be directed to our offices, and this society will undertake promptly to place any one of them to whom its attention is called in charge of whatever agency is best adapted to the case. We have had under ward 2,000 street beggars, but have not yet found one case in which the alms of a stranger would have been a humane gift, for the reason that it would interfere with a more adequate and effective provision ready somewhere to be supplied."

MATT. W. ALDERSON.

CHILD CULTURE.

CHASTENING OR REVENGE?

BY THE AUTHOR OF "AN AUNTIE'S NOTIONS ABOUT CHILDREN," ETC., ETC.

I SUPPOSE there scarcely exists the wide world over a mother so tender or so negligent that she does not, at one time or another, punish her child. It may be by means of the reluctant, forewarned deprivation of some anticipated treat, or, widely different! by the hasty blow of irritated temper. But all children do wrong, more or less, and all parents, except, perhaps, the very smallest minority, inflict penalties in consequence. The motive and spirit of such correction is a subject of vital importance, no less to the parent than to the child, so it can scarcely be superfluous to offer a few remarks thereupon.

It has been well said, "You should never punish a child while you are angry." The need for such an exhortation is proved by the half-astonished air with which many persons will reply in effect: "Why, if I did not punish while I was angry, I should not punish at all?" What does this reveal but that such chastisement is not true *chastening*—or purifying—but mere *revenge*? It sounds very ugly to speak of any grown person as being revenged upon a little creature not one-quarter her years or size, with perhaps not one-tenth her knowledge and experience; but if any mother will honestly recall and examine the feelings with which she administered the latest whipping to her six-year-old or an impatient shake to her twenty-months' baby, she will probably find that the truly corrective, the loving, yearning, teaching spirit which should predominate in all punishment was almost swallowed up in unacknowledged feeling of retaliation. Of course no one who reads this magazine would openly admit such a thing,

but there it must be, or why should the moment's exasperation decide whether or not the whipping or shake shall be given? And mothers of the less restrained classes frankly avow their sentiments in such commonly heard phrases as, 'I'll *pay* you when I get a hold of you!' "Let me catch you doing that. I'll make you sing for it. I'll make you smart!" Sorry, that is, for the pain of the punishment, not for the wrong done; this seems never to enter some people's minds. Granted that if the mother did not punish when angry she would not punish at all, then better not.

But children cannot be allowed to go on wholly unchecked, or in course of time they would make their own and other people's lives unbearable, and mere verbal remonstrance, couched in gentle terms, is frequently insufficient. Occasional castigation is a necessity to all. But it should be castigation indeed, and its sole end the betterment of the offender. How words become distorted in our imagination—how colored, or rather discolored, by ages of improper use! The verb to *castigate*, which now has come to mean little else in our ears than to whip or beat, is actually a derivation of the Latin *castus*, pure. A real bodily castigation, therefore, is not a flogging, but a bath! A making clean, a purifying. A moral castigation, even if necessarily inflicted through the medium of the senses, should be spiritual cleansing. That is the Divine, the only worthy idea. I do not think it exaggeration to say that more than half the punishments children receive do them positively more harm than good, simply because this essential principle is forgotten. Revenge

in any form is terribly hardening both to the inflictor and the victim. As a mere deterrent it may succeed. There is little doubt of that. But what loving mother would be satisfied to merely hold her child back from wrong-doing by fear of pain or loss while its heart remained in estranged revolt?

No chastisement is so impressive as that which is akin to the wrong done. To whip or condemn to "durance vile," for any and every offense, is a clumsy, uncivilized method of managing; and parents, who, unlike school teachers, have almost unbounded control over the events of their children's lives, should surely be able to find in most cases, some less arbitrary and more effectual plan. For unpunctuality, the loss of some promised pleasure dependent thereon; for quarrelsomeness, temporary separation from those quarrelled with; for greed or unfairness, restitution, with "damages," to the one wronged; for sins of the tongue, a season of enforced silence; for disobedience—the fore-front of most juvenile offending—simply its own consequences, an infliction which could surely be sometimes permitted without inconvenience to any but the one in fault, and not more so than should be proportionate and wholesome even for him.

I knew a lady who, in one instance at least, chastised in a perfect fashion and with perfect results, though the child corrected was under twelve months old. The baby had all a baby's inexperienced love for bright, *hot* things—the fire, the shining tea-pot, the lamp. "Burning—burning!" and "Baby mustn't!" were not enough, so baby was allowed to touch the hot tea-pot with the tips of those adventuresome rebellious little fingers; and it was sufficient. What baby thought about it, I cannot say, but never, as she grew older, was she known to attempt that fatal play with fire or light which has cost so many a precious little life. More; she became one of the most obedient of children,

with the intelligent, willing obedience born of perfect confidence in the reason and rightness of the maternal laws.

With children who are of an age to understand "moral suasion" explanation, a clear and patient setting forth of the wrongness of the naughty deed should surely first be tried, and failing that, to allow the evil which is persisted in to bear its natural fruit must be the most proper and efficacious penalty; only when such methods are impracticable should arbitrary inflictions be resorted to, and never without unmistakably showing that an unmixed desire to cure the erring tendency, and *not*, in the slightest degree, a spirit of retaliation for the annoyance caused by it, is your only motive.

That taint of vindictiveness which seems to have entered more or less into all human punishment since the earliest times has undoubtedly built up one of the greatest of existing barriers between the soul of man and his Maker. We finite beings have for generations upon generations avenged ourselves with bitterness in our hearts, calling it retribution, correction or punishment, hating, if only for a brief, blind moment, the creature that called it forth, until, as a race, we have rendered ourselves almost incapable of appreciating or benefitting by the loving chastisement of God. We think of Him as with frowning brow taking vengeance on our sins; we believe in troubles sent in wrath; in afflictions which are mere penalties having no natural connection either with our transgressions or our character, and we grow hopeless or hard. Even as our refusal to pardon the trespasses of others renders it morally impossible for us to receive the forgiveness of God—for this is a normal consequence, there is nothing despotic in the Divine retribution—so our habitual union of punishment with the idea of retaliation, revenge and dislove, has almost totally deprived us of the capacity for rightly responding to His holy rebukes. Could we but regard

chastisement as being inevitable as a crop of nettles from nettle seed, as beneficial in intent as the nauseous fever draught or the surgeon's knife, we should surely, with willing, docile, ay! and grateful hearts, set ourselves to discover and eradicate the evil cause. We should read Solomon's injunction "Chasten

thy son while there is hope" in the heavenly radiance of "As many as I love, I rebuke and chasten;" we should punish Divinely, sympathetically, and we should, ourselves, repent like good children; and the next generation would be eternally the better for it in every way.

A BIT OF SUGGESTION.

"YOU haven't blacked your shoes, Mark?"

"No, mother. I'm in such a hurry. They don't look bad."

"Have you changed your collar?"

"No; I forgot to; but this one will do. I'm sure I look well enough."

"Well enough for what?"

"Oh, for a boy."

"For a gentleman and a Christian?"

"Oh, you make such a serious thing of it, mother."

"But you aim to be both, don't you?"

"Yes, I really do," said Mark, more soberly; but do you think that has much to do with clean collars and blacked shoes?"

"You know all I would say about that. It is the part of a boy, as well as a man, to make the best of himself, even in small matters, in order to make himself acceptable to those about him. It's a great pity to just fall short of what one aims to be."

But in spite of his aims, and his being usually ready to agree with his mother on the question of small proprieties, Mark's shortcomings in the matter of well-brushed hair, clothes and shoes, and of faultlessly clean collars, cuffs and handkerchiefs, continued to be an offense in many eyes.

"Will you give me a sheet of letter-paper, please?" he said, coming one afternoon to the desk at which his mother sat writing. As he held out his hand she made a slight motion toward his uncleaned nails.

"Oh," he said, a little impatiently, "any one would think I was the worst

kind of a boy, just because I'm a little careless. Why, mother, I don't lie or cheat or disobey, or get storming mad, as some boys do."

"No, you do not," she said, handing him the paper he had asked for.

"This won't do," he said. "See, there is a blot on it. Please hand me another sheet."

"That's only a little spot," she said. "The whole of the sheet is clean except that."

"But you wouldn't have me write a letter on this?"

She smiled at his look of surprise as she said:

"Why, any one would think it was the worst kind of a sheet, just because it is a little blotted. It isn't crumpled or stained or dirty, as some paper is."

"Ah, mother, I see what you mean," said Mark, laughing, as she gave him another sheet. "I'll have to look after my little blot."

He meant it, but found, as we all do, that a bad habit once gained is a thing hard to lose. He was bright in school and a favorite with his teachers. Kindly and generous among his mates, he was a favorite with them. In short, he was such a very satisfactory boy, as boys go, that he failed to take to heart the breaking up of his ugly little fault.

"We are to spend the evening with the Morrows," he announced with great pleasure one morning.

It was a great thing to be invited to the Morrows. They were a family recently come to town, supposed to be all that was nice among themselves, and

very particular in the choice of companions for their boys.

"I've been telling father and mother about your declamation, Mark," said George Morrow, "and they want to hear something from you. They like things of that sort. Let us have that last piece you spoke in school."

Mark figured as quite an orator in his school. He enjoyed anything in the way of recitation and declamation, and was very anxious to do his best before the Morrows.

He was in good voice and spirits, found the large parlor an agreeable place in which to speak, and his audience attentive and appreciative.

Near the end of a second piece which had been demanded, in one of his highest flights in an invocation to the sun, he threw up his arm in a graceful gesture, his eye following his hand.

There was a slight interruption in the flow of oratory. The hand suddenly closed and the arm dropped at his side. The boys laughed good-humoredly, and

the older people politely repressed their smiles.

The piece closed without the fire and enthusiasm required by its subject, and Mark's face flushed with a feeling other than gratification as his performance was applauded. He kept his hand as far as possible out of sight the remainder of the evening, and when alone in his room stood before the glass and made the oratorical flourish which had proved amusing to his friends.

His cheek tingled again at the sight of the unwashed hand and the remembrance of its display in the gaslight in the Morrow's parlor. Could the people upon whom he had so desired to make a good impression believe him to be a gentleman? Would they ever forget it of him?

"I sha'n't forget it myself, very soon," he said, turning from the mirror in great discontent. "Mother would say it was a good lesson for me; but I wish I had had sense enough to get along without it."—*Christian Register*.

THE MORALS OF CHILDREN.

A WRITER in the *Journal of Pedagogy* discusses this topic, and quotes Dr. Stanley Hall's views in an article published not long ago, entitled "Children's Lies."

"With most children, as with savages, truthfulness is greatly affected by personal likes and dislikes. In many cases they could hardly be brought to see wrong in lies a parent or some kind friend had wished them to tell. Often suspected lies were long persisted in till they were asked if they could have said that to their mothers, when they at once weakened. No cases were more frequent than were, in answer to a friend's question, if some thing or act they did not particularly admire, was not very nice or pretty, they found it hard to say no, and compromised on 'kind of nice,' or 'pretty enough,' when if a strange pupil had asked they

would have had no trouble with their consciences."

Dr. Hall also calls attention to certain familiar palliatives for consciences more or less hurt by wrong doing. Such words as "really" and "truly," and such phrases as "I wish to drop dead this minute if it is not so," solemnly repeated, greatly reduplicates the validity of the statement. Various mental reservations, as "in my mind it is not so," "I do not mean it," fall into this category. Then the act is charged to the instrument or agent, as, "my hand or foot did it, not I."

Commenting on this, he says: It will be seen that a large majority of the lies here enumerated are told to reach some direct object, as to avert evil or to obtain good. It therefore becomes a capital observation that the child shall not be allowed to succeed in reaching this end.

The lie must not succeed. One of the most marked characteristics of children is, to live in the present, to sacrifice the future, to merge the long run in the short run; and care must be taken to teach them to look before as well as after. Sometimes failure and consequent disappointment will be a sufficient punishment; but in not infrequent cases positive punishment of some sort will be called for. The causal connection between lying and its natural results must be progressively brought out. In due time, the truth must be brought home to the young consciousness, that whatsoever a man sows, that shall he also reap.

Waitz draws attention to the evil psychological results of the successful lie. Among other things it tends strongly to silence the conscience. It is impossible to imagine a worse course of life for a child than one in which successful falsehood habitually covers up wrong-doing. It destroys the idea that punishment and wrong-doing are bound together by a natural tie, it is a premium on wrong-doing and falsehood. Accordingly, it is extremely important for the parent or teacher to know whether the child is lying or not. But this is a most delicate and difficult kind of knowledge to obtain. Some useful hints bearing on this point could be made, but the most useful one would be that nothing can take the place of good sense, practical wisdom and intuitive insight. It is hard to say which is the more dangerous mistake, over-watchfulness or under-watchfulness; too little or too much confidence; an excess or a deficiency of over-sight. Nothing is so important as sensible attention, unless it be sensible negligence.

Certain sources of lying are numerous in schools. These, teachers must closely study, and as far as possible correct. Care must be taken to prevent an excess of emulation, and wisely to adjust all form of rewards and penalties.

Remembering the ancient maxim in relation to prevention and cure, the

writer has laid much stress on correcting the evils of lying at their origin. But work on the positive side of the character is equally as important. Indeed, such work is essential to drying up the fountains of the evil. Positive ideas of right and wrong, of truth and falsehood, must be developed. The moral sense, or the conscience must be trained. The moral judgment must be sharpened, quickened and strengthened. All men who think the place of habit in the moral life a large one, will agree with Radestock:

"Bad habits injure as much as good ones benefit. Education should, therefore, combine the positive requirements of good habits and the negative work of not practicing bad habits, and prevent the spoiling of the child by not permitting its wishes and wants to be fulfilled the moment they are expressed."

The time has come for the discussion of the whole subject of child morality in a more positive and scientific way than heretofore. The old-fashioned theological and metaphysical conscriptions have done much harm. Such inquiries as those of Perez, Radestock and Hall, that have furnished the material for the present article, can be strongly recommended to all intelligent moralists.

MY LESSON.

I TOLD a secret! It wasn't much
For a little one to tell;
And I only told it softly and low,
To my intimate schoolmate, Belle.

But the silly secret grew and grew,
And all around it spread,
Until at last it was hard to find
The thing I had really said.

And when I sat in mamma's lap,
With all my troubles told,
She said 'twas the "matter great" that grew
From the "little fire" of old.

So I learned a lesson well that night
Before I went to bed,
And mamma gave me a rule to keep,
And this is what she said:

"The only way is never to say
A word that can offend;
Not even close to the listening ear
Of the dearest intimate friend!"



THE METHODS OF "MEDICAL" IMPOSTORS.

ONE important duty of a publication that professes to have the welfare of the community in view is to protect its readers against the fraudulent practices of advertising quacks, especially pretended specialists. Among these the "catarrh curers" are very conspicuous. One of the writers on the *Times and Register* of Philadelphia lately made a visit to the rooms of some "doctors" in that city for the purpose of learning their method of treatment, and describes his experience in a vivid and instructive manner. The *Times and Register* is read chiefly by physicians, but the general population should have more need of the benefit of what was discovered by this inquirer after—humbug. He relates:

After having received a brass tag with the letter A stamped, he was shown into the rear waiting-room, where about a dozen sad-eyed men were already seated. There were about thirty chairs in the room, and a commodious spittoon allowed for every two chairs. Female voices coming from the front room suggested that this was reserved for women. The class of patients was decidedly poor, belonging mostly to the laboring class. An attendant in the hall called out a number every few minutes, and the unfortunate victim would rise and answer the summons. In about fifteen minutes he would return with a flushed face,

full of misery, make for a spittoon, and cough, sneeze, shed tears, blow his nose, gag, and expectorate to his heart's content. In about ten minutes later he would again be called out and given a few large bottles of medicine.

While enjoying these demonstrations, the participants in which were constantly increasing, our representative scarcely heard "Letter A" called by the attendant; but, stifling his emotions, went out, and was ushered to the second floor, where a physician with a smiling face was awaiting him. After having obtained a fictitious name and address and a correct age, the doctor asked whether the trouble was in the throat and nose. "Possibly it was," was the rejoinder; and then our representative gave the following symptomatology of coryza:

"Doctor, whenever I take cold, my head and nose get stopped up; I sneeze and my nose runs. At those times, if I lie on my right side at night, my right nostril will become stopped up, and if I lie on my left side, it will get stopped up. Then my head usually aches at the same time. Mind you, doctor, the funny part of it is that I'm not troubled all the time; but it's only occasionally, when I take cold."

This was delivered without a smile, and the "light of learning" wisely nodded his head.

Then the doctor turned up an Argand burner on a student's lamp on the desk at his side, and proceeded to insert a large nasal speculum in our representative's nostrils. No head mirror was used, and consequently no light was reflected into the nostrils. Then the throat was similarly examined without light, by aid of a tongue depressor, and the tongue inspected.

"You are in a bad way," said the doctor; you have a bad catarrh of the head, throat, and stomach, and your liver is in a bad condition. It will take eight months of our treatment for us to cure you. We will charge you \$15 for the first month and \$9 for each subsequent month. For this we will supply you with an inhaler and all necessary medicines. I advise you not to delay treatment, as yours is a condition that will go from bad to worse, and delay might prove serious. I should like you to take a treatment now. Every thing can be gotten ready for it down stairs in ten minutes. If you have not the money by you, I have blank checks right here."

It may as well be remarked here, that our representative was enjoying perfect health when examined; and that he neither has, nor ever has had, catarrh. At the time of examination both nares were clean and clear, and his throat per-

fectly normal. His tongue had been purposely slightly coated. His liver is far from faulty. After recovering from the shock of learning his moribund condition, he timidly asked the doctor if a cure were possible.

"I don't think there is a doubt of it, sir," said he, and then filled out a card with hieroglyphics that defied reading, and gave it to our representative, urging him not to wait, but to begin treatment at once.

About two weeks later another call was paid to the office. Again the same doctor was seen. The cost of the treatment was complained of and our representative's photograph was offered in lieu of compensation. The doctor seemed suspicious, and said this would be no inducement.

"Why, I assure you that there are quantities of persons who come and beg us to publish their photographs and statements."

After a little further talk, his fears seemed to abate, and he said:

"Well, if you wish to, you can give us your statement after you have taken the treatment—and your photograph; and I'll make the first month \$12 instead of \$15, and the subsequent months \$7 instead of \$9."

A new card was then made out and given the visitor.

BLOOD PURIFIERS.

THE literature of the age abounds in flattering testimonials to the incomparable value of each of a long catalogue of blood purifiers. Confiding in the competency and reliability of the many who have been saved—or who think they have been saved—from an untimely grave, by any one of these wonderful preparations, the conclusion must be that there is not the slightest necessity for the very general prevalence of disease and of premature death now witnessed in all parts of the hospitable world. The gushing philanthropy of

persons interested in the manufacture and sale of these unrivaled panaceas prompts them to use every available means to call attention to the merits of their respective drugs. Their zeal finds a limit, not when the nostrum fails to cure, but when the preparation and sale of it ceases to pay. They wish to secure the confidence of their patrons in order to pocket their cash and thus augment their available assets in bank or elsewhere.

With them business success is a primary consideration. Benefits con-

ferred are a minor matter, except so far as they contribute to the main object.

But is there no such thing as impure blood? Certainly there is. Then is there not a demand for its purification? Yes, an imperative demand for it.

Does not every one know that impurities in the blood are much like a newly arrived rat in a well stored kitchen cellar? If left alone the rat will soon collect a large colony there. So impurities neglected will form a nucleus about which others will quickly concentrate, hence it is inferred there is urgent need to resort at once to the use of these wonderful agents. Do you hesitate? Why should you? Read again the formidable array of testimonials. Is it possible that all or any of the writers have given countenance to an unreliable and unmeritorious agent? Don't look about for outside confirmation. You may discover that they who do not use them fare quite as well as they who rely upon them. Cases of blood impurity do not appear to be at all diminished in numbers or in gravity since these nostrums have come into general use. The cures of yesterday, last week, or last year, need to be made again to-day, this week, or this year. This constant recurrence of morbid conditions is the *beauty* of the thing. It keeps up the demand and prevents the profits from being cut off. What a misfortune that would be! and the burden of it would fall on the few and not upon the many. If the theory upon which so many people confidently rely, without critical examination, could be harmonized with nature's indications, it would be easy to account for the ready and rapid sale found everywhere for this class of reputed remedial agents. But, really, the mass of buyers and consumers trouble themselves very little about theories. They read. They confide in what they read. "It was in the papers, and I reckon they dassent print lies," said a simple-hearted farmer, speaking of an incredible sensational story in

the public prints. Such credulity may be laughed at. But is it any more worthy of ridicule than the unquestioning confidence of people in this class of medicines?

J. S. GALLOWAY.

A CAROL OF COOKERY.

My face is sadly wan and pale ;
My wasted cheeks are haggard ;
My trembling limbs their office fail,
And make me seem a laggard.
My wonted grace is gone indeed,
My smile is now sardonic ;
In short, I seem in grievous need
Of some effective tonic.

My friends who in the days of old,
When I was stout and healthy
Admired me, now have all grown cold,
As if I were not wealthy.
You ask to what this change is due ?
(A very natural question)
I answer, I'm a victim to
Most dreadful indigestion.

Some young acquaintances, you see,
Some homely, some good-looking,
Have organized, quite recently,
A ladies' school for cooking.
To cook well is their fondest wish,
And, as they are not wasteful,
They have me try each novel dish
To see if it is tasteful.

Their doughy cake, their pale puff-paste,
And all suspicious viands,
Are not allowed to go to waste.
All find their way to my hands.
Ah, woe is me ! I've learned with pain,
That when girls make a custard,
The useful egg they quite disdain,
But put in *lots* of mustard.

They've done their best to make of me
A useful kitchen fixture,
I know the taste of wedding cake,
When flavored with cough mixture.
There's Charlotte, sprightliest of girls,
Whose cooking dress so spruce is ;
I've learned to flee when she unfurls
Her subtle "Charlotte" russes.

They're always in a broil or stew,
When anything they bake ;
Their pounds have ounces thirty-two,
When they turn out pound cake.
Although I love without demur,
Each culinary fairy,
A hotter place I would prefer
To this place cool an' airy.

BARBARISMS OF FASHION.

(IN YE OLDEN TIME.)

ALTHOUGH at the present time "Fashion in Dress" appears to tyrannize over woman more than over her helpmate, man, history teaches us that there have been long periods when both sexes were alike subject to its sway. In England, from the fourteenth to the termination of the seventeenth century, noblemen were not unfrequently beggared by the cost of their court dresses, and the ridiculousness of their costumes was generally equal to their extravagance in price. John Rous, or Johannes Rossi, as he latinizes his name, one of the most eminent English historians of the fifteenth century, gives the following descriptions of the dresses worn by the dandies of that period :

"Nowadays our beaux and fine gentlemen cannot walk, until the points of their shoes are fastened to their knees with chains."

This fashion was not confined to England, but was general throughout Europe. It was condemned by papal bulls, and by the decrees of councils, yet it prevailed for nearly three centuries. In A. D. 1463, an act of parliament was passed in England prohibiting the use of boots or shoes with pikes exceeding two inches in length, and forbidding cordwainers (as shoemakers were then called) to make shoes or boots with longer pikes under severe penalties.

The same historian tells us that other parts of the costumes of the dudes of his time were equally ridiculous. He says :

"On their heads they wear bonnets of silk, cloth, or velvet, adorned with pearls or precious stones. Sometimes their mantles are so short as to be quite indecent, and sometimes so long that their sleeves touch the ground as they walk."

Occleve, a poet of that period, satirizes the last mentioned fashion in the following quatrain :

"Now hath our land lyttell need of broomes
To sweepe ye fylthe out of ye streete ;
Sin syde sleeves of ye penillesse groomes
Will yette uplicke, be it dry or weete."

Historians also tell us that when Henry Prince of Wales waited on his father Henry the Fourth to make his peace, he was dressed in a mantle or gown of blue satin, full of small eyelet holes, with a needle hanging at every hole by a silk thread.

One fact will suffice to show the extreme length to which the ladies carried the adornment of their heads at that time. When Isabel of Bavaria, wife of Charles the Sixth, kept her court at Vincennes in the commencement of the fifteenth century, it was found requisite to make all the doors of the palace there both higher and wider to admit the head-dresses of the queen and her ladies. To support the same they had a kind of a horn on each side of the head, bending upward, on which ribbons and other ornaments were suspended; the English historian, Robert Henry, D. D., thus describes the use of one of them :

"From the top of the horn on the right side a streamer, of silk or some other light fabric, was hung, which was sometimes allowed to fly loose, and sometimes brought over the bosom and wrapped around the left arm."

Such were some of the barbarisms of fashion in the time of the dark ages. We can well compare our modern styles of dress, both for males and females, with our more immediate progenitors with advantage, but it will not answer to measure our modern fashions with those that were in use during the classic age. In order to prove the correctness of that statement it is only necessary to point to the costumes of the ancient Grecians and Romans, as depicted by themselves, in marble, which are indisputable evidences of our degeneration in regard to our taste in dress.

It is considered a very bold act now for a sculptor to dare to chisel the statue of a modern hero or philosopher in the garments now usually worn, and one intruding swallow-tailed coat or stove-pipe hat would destroy the beauty of a landscape in the eye of an artist. Judgment, therefore, in the latter case would be given against us, we ourselves sitting as the court and rendering the decision.

SENEX.

PURE WATER BETTER.—Prof. Swing, writing to the *Chicago Journal*, says:

“‘Bottled goods’ are dependent for their existence upon the general ignorance of the human race as to the reason and value of water. Not all men, women and boys would ask much happiness or profit from bottled goods did they know the goodness and absolute joy of water. Even ginger ale and apollinaris are poor, false, painted creatures compared with good, pure water. When the English, German and Ameri-

can physical machinery has become clogged with the sediment of all kinds of alcoholic and diabolic drinks it is taken to some natural springs to be washed out. Gallons of water will sometimes wash clean all the human filters and send back the machine to new life and new happiness. When the old lady in the dimness of her eyesight oiled the kitchen clock by means of a feather dipped in the gum-arabic jug, the pendulum felt fresh for a time, but the false oil soon closed in on the wheels and the timepiece ceased to mark the hours.

When the old lady’s son, home from college, learned all the facts of the case he took down the machinery and soaked it for two hours in a tub of warm water. Thus men, half-dead by means of ‘bottled goods,’ can often have life extended by means of most copious draughts of good water. The water washes the soiled fabric of the flesh.” His conclusion of the whole matter is that “Water is the best thing.”

IMPROPER COOKING AND INTEMPERANCE.

IN the *Woman’s New’s* this subject receives attention in a practical style:

Spices and condiments in the seasoning of food also lead to intemperance in the cultivation of an abnormal taste for hot, smarting substances. They create a craving for more food than can be digested, and for liquors as well. Persons who do not know how to cook, seek to make their cookery palatable by using spices and condiments to hide defects. Good cookery consists in increasing the digestibility and improving the palatableness of food. Bad cookery ignores the natural flavors of foods and adds a variety of high seasonings which render it still more indigestible than the unskilled preparations would be without them. The more serious reason why high seasonings should lead to intemperance is in the perversion of the sense of taste. Certain senses are given us to

add to our pleasure as well as for the practical use they are to us. For instance, the sense of sight is not only useful but enables us to drink in beauty without doing us any harm. The same of music and other harmonies which may come to us through the sense of hearing. But the sense of taste was given to distinguish between wholesome and unwholesome foods, and cannot be used for merely sensuous gratification without debasement and making it a gross thing. An education which demands enjoyment or pleasure through the sense of taste is wholly artificial; it is coming down to the animal plane or below it, for the instinct of the brute creation teaches it merely to eat to live.

How widespread is this habit of sensuous gratification through taste. We call upon a neighbor and are offered refreshments, as though the greatest bless-

ings of life came from indulging the appetite. This evil is largely due to wrong education which begins in childhood. When Johnnie sits down to the table the mother says, "Johnnie, what would you like?" instead of putting plain, wholesome food before him, expecting him to eat it and be satisfied. It sets the child to thinking that he must have what he likes whether it is good for him or not. It is not strange that an appetite pampered in this way in childhood becomes uncontrollable at maturity, and the step from gormandizing to intoxicants is much shorter than most people imagine. The natural, unperverted taste of a child will lead him to eat that which is good for him. But how can we expect the children to reform when

the parents continually set them such bad examples in the matter of eating and drinking?

The cultivation of a taste for spices is a degradation of the sense of taste. Nature never designed that pleasure should be divorced from use. The effects of gratifying the sense of taste differs materially from those of gratifying the higher senses like sight and hearing. What we see is gone, and the same is true of the sweetest sounds which may reach us through the ear. But what we taste is swallowed into the stomach, and what has thus given us brief pleasure through the gratification of the palate, must make work in the alimentary canal for fourteen hours before it is finally disposed of.

"A COMFORTABLE SORT OF A WOMAN."

"**I** T COMFORTS me," said the bent little old man as he spoke tenderly of his dead wife, "it comforts me to know that Sally would allus lie down every afternoon an' sleep a bit. Some folks tho't 'twas a dretful lazy habit, and 'twas no wonder we didn't get rich faster, but she suited me jest as she was. Sally was a comfortable sort of woman to have around, never frettin' at a feller or faultin' him when things didn't go right. When feelin' troubled she'd often say, 'Father, I believe I'll lie down for a few minutes;' then back she'd come spry and chipper as a canary bird. Sally didn't drive and scold, but she wasn't lazy, an' she brought up the youngsters to do their part. I don't see that drivin' women get on one mite better than she did. It does comfort me to know that Sally would take her rest."

A good many women who are overworking to do things which are not half as necessary as a live mother is, might well take a lesson from this "comfortable sort of a woman" and "lie down for a few minutes," and take their rest. And if mothers would bring up "the youngsters to do their part," instead of

working themselves to death while sons are lying in bed and daughters are playing the lady, we might have more healthy, cheery grandmothers than we now have, and their children, when arriving at the years of discretion, would be thanking God for mothers who *taught them to work*, instead of mourning over the graves of mothers who worked themselves to death instead of laying a part of the burden on the shoulders of thoughtless children who were much better able to bear it.

LIFE HISTORY IN THE HANDS.—We must never forget that, artistically speaking, the hands are really among the most significant and expressive indexes of human disposition and temper. Even fitful flashes of feeling, and sometimes the deepest wrestlings of emotional delight or distress, will manifest their force in the tremulous quiverings of the fingers. Life evidences itself and perpetuates itself in these pliant members of our bodies. Hands often proclaim a biography, fix an origin, exhibit a pedigree, show an occupation. A Christian

friend, while passing the common greeting with an old man the other day, noticed that some of his fingers were quite out of curve, bent inward, and he had not the power of straightening them. He was on such familiar terms as that he could allude to the peculiarity without offense, and he asked how the slight disfigurement came about. The aged millionaire said frankly: "In these crooked fingers I think I could find a good text for a talk to children. For more than a score of years I used to drive a stage with four horses in hand and over difficult hills, and such bent joints prove the effect of youthful habits, which fix themselves in our bodies as well as in our souls. The fingers you

see are all awry because I held too tight reins on others; perhaps other children's fingers are crooked because some mistaken men keep holding too tight reins upon them." Then the cheerful old coach-driver went on his way chuckling with gentle complacence to think such a witty thought had come to him when he was driven for an answer; for it was a good thought full of suggestion. Is it not true that repeated acts become a habit, and habit is our second nature? Once acquired, a gait, a twitch, a turn of the head, a cast of the eye, fixes itself, and so indexes a peculiarity of either history or mental bias. Crooked fingers are only a sign, like crooked tempers of men and women. C. S. ROBINSON, D.D.

THE INTEGRITY OF AMERICAN PHYSICIANS.

IN his well prepared and common sense address before the Medical Society of the State of New York, this year, Dr. Daniel Lewis made the following statement:

I hazard the opinion that you can find no other 80,000 men in America of any class among whom occur so few scandals affecting their integrity. Doctors are not found upon the scaffold, or in our prisons, or sojourning in foreign States, and yet we are constantly tempted by such schemes as I have mentioned. It should be our aim to place ourselves squarely upon the dignity which belongs to us, and teach the people that there is something in the profession of medicine besides the pecuniary rewards which it brings. In fact, it has always seemed to me that the most successful disciples in the science and art of medicine were those who did not consider as in any sense important the pecuniary or business part of the profession. It is commonly remarked that we are not business men. I am glad of it. Whenever we see a physician who has the business faculty unduly cultivated and exercised, we find one whose professional opinions are not always

safe or reliable. It is not easy, perhaps, to give an opinion which carries with it the refusal of a thousand dollar fee, when a contrary opinion would bring it in, and the safety of the people against such impositions rests largely upon the fact that we are not business men. How can we be? Devotion to a scientific calling is not calculated to develop business tact. We have never heard of Gallileo placing any pecuniary price upon his knowledge; neither did Galen give to the world his splendid descriptions of the anatomical constituents of the human body for a price; nor have we heard that Sir Isaac Newton kept his wonderful discovery until he could find what kind of a dicker he could make with it in the stock market. It is a satisfactory thought that medicine has always had, and we trust always will have, solid ranks of men who are devoted to the science itself, whose best endeavors are given to its perfection in theory and application, who consider a professional reputation of more value than any other honor or emolument, and so long as these ranks are full, the profession of medicine will receive the esteem which its position rightfully commands.

NOTES IN SCIENCE AND INDUSTRY.

Aluminium as the Coming Metal.—The present age has been called the age of iron, and with good reason. Iron is used for everything, enters into everything. But it has its disadvantages, though, for most things that demand strength and durability they are less serious than those of wood. Wood is an organic substance, and though it may resist for a long time the action of the atmosphere, eventually perishes by exposure to water or to the attacks of insects. Iron is also perishable. It is easily oxidized, and its elements pass into the earth, air or water. In the course of time, like wood, it returns to dust. It is difficult of extraction, heavy and of long and troublesome manipulation. It exists in deposits that we are wont to think inexhaustible, but are not so. A man need not be a confirmed pessimist to be convinced that the time will come when iron will only be had in insufficient quantities and at a price that will practically exclude its general use. But even if that were not to be the case a metal that will supply its place is greatly to be desired, and there are scientists who think that it has already been discovered, and that it is aluminium. Aluminium is found in common clay. It was discovered in 1827, but owing to the difficulties of its extraction and its high price it has only been put to comparatively trivial uses, such as the making of tubes for field and opera glasses, and similar objects requiring only a small quantity. Constant efforts have been made by chemists for the last fifty years to find processes that would cheapen its extraction, and alloys that would be of practical use in mechanics. One of these alloys with bronze is in use in the United States navy as a substitute for steel in the making of screws, and is said to be much more durable. There is a manufacture of aluminium at Frankfort in Germany, but the processes are kept secret. It was not until twenty-seven years after its discovery that a French chemist succeeded in producing it in a form that gives it its present practical value. Its price in Europe has never been less than \$3 a kilogram (two pounds), but if

it is true that an American has discovered a method of extraction and working that will enable it to be sold for a few cents a pound the discovery is destined to work an industrial revolution. Aluminium is credited with the most surprising qualities. Its weight as related to silver is only 3.56. Its resistant power is said to be equal to that of iron. It is elastic, and therefore easily worked. It can be used for soldering with itself or with cast or wrought iron. It does not oxidize, and is not affected by water or by sulphuric acid or sulphureted hydrogen. It is only slightly susceptible to the action of azotic and hydrochloric acid, all of which means that it is practically indestructible. Used in the form of a thin plating it protects other metals from destruction, and it is possible it would protect a ship's bottom from barnacles, though that point is merely theoretical. As clay is a substance universally disseminated over the surface of the globe in deposits of indefinite extent and thickness, which are constantly and will forever be in the process of formation, the supply of aluminium is absolutely inexhaustible, even if it were used as an ordinary building material and for the construction of ships. In certain ways its lightness would be of the greatest advantage; in others, of doubtful utility. Houses built of it could not easily resist a high wind unless securely anchored to solid foundations, while a lofty structure like the Eiffel Tower would seem to be entirely impracticable. These are points, however, which only practical experience can determine.

Electrical Devices for Medical(?) Purposes.—The number of electrical appliances for wearing upon the human body are almost numberless. There are many people who believe that electrical belts, brushes, combs, etc., have a strong curative power. There are also found people who will carry a piece of potato in their pocket as a cure for rheumatism. The latest fad in this line is to carry a bit of electric-arc-light carbon that some of the electricity left over from last night's lighting may soak

into their bodies and ease up on the pain a trifle. All these notions have not the least foundation; a person may stand between the poles of the most powerful magnet yet invented and strong enough to lift hundreds of pounds of iron and never feel the slightest magnetism, either for good or for ill. A theory is in existence that the magnetism attracts the iron in the blood and thus starts up a better circulation. All the iron that exists in the human system is combined with hydrochloric (muriatic) acid, and is in the form of the oxide of that metal and in this form the magnet has no power over the oxide of iron, and if a person's blood does not circulate until it is started up by magnetic effect upon iron contained therein, it would not circulate more than once during the coming century.

There is a great deal in the use and abuse of imagination, and people who are taken violently ill after riding a few blocks on the electric cars are ready to be rated as first class cranks as far as imagination is concerned. A current of electricity passing through the body may benefit by agitating and perhaps decomposing certain portions of the tissue, but magnetism has no effect whatever upon the human system. A little electricity goes a great way in this respect; physicians, in giving electrical treatment, use from one to five one-thousandths of an ampere. From two to four amperes passed through the vital parts of the human body is sure death. The tissues cannot stand so violent an agitation. The resistance of the body is so great that hundreds and perhaps a thousand volts pressure is necessary to force this amount of current through the body.

The Drumming of the Ruffed Grouse.—Mr. W. H. Gibson says: "In the so-called 'drumming' of the ruffed grouse, that soft murmurous tatum by which his ardent lordship musters his little company of willing captives, we have another familiar sound as yet as much wrapped in mystery as the 'boom' of the night-hawk.

What is the origin and nature of that 'drum' which has so long puzzled the world?

Many naturalists have definitely located this mysterious drum, the hollow 'drumming log' having long been con-

sidered an necessary adjunct to this muffled roll. Such has been the most commonly accepted theory, seemingly abetted by the bird itself, from its singular preference for a fallen log as the seat of the musical performance. Brewer claims that the bird "beats its sides and the log" simultaneously; a belief which is shared by Samuels and many others. Against this I would oppose the witness of an unprofessional but close observer—the writer, in truth—who deposes and says that the bird does nothing of the kind; that in the one instance, though brief, when its movements were observed by him, the clearly defined limit of the visible whirr of the wings seen from behind demonstrated that no feather of the bird's wing touched the body, or the log upon which the bird stood; while, upon the other hand, the feathery halo almost merged over the back, suggesting a new possibility in the resonant source.—*Harper's Monthly*.

Best Material for Banking.—We keep out cold by preventing the escape of heat. Of all non-conductors of heat, air that is kept motionless is best. The materials that contain a large amount of fixed air are classed as good non-conductors of heat—such as down, fur, feathers, wool, etc. These are called "warm" because they prevent escape of heat from a warm body; they might be "cold" when they prevent passage of heat from external sources to a cold body within. A lump of ice wrapped in fur or a feather pillow may be kept for days from melting. "Wrap up the baby to keep it warm: wrap up the ice to keep it cold." For banking a building the material that will keep the largest amount of air motionless will serve best. Straw and hay will be better than soil, because they hold more air in proportion to solid matter. Chaff and sawdust will be better still, for the same reason. Whatever the material used, the more porous it is, without permitting the motion of air as wind the better the protection afforded from cold. If earth is used for banking it should contain a large amount of vegetable matter. Swamp muck is good for this purpose, because it is so loose and spongy. I have seen compact sand frozen four feet deep where muck did not freeze two inches, under the same circumstances.

DR. R. KEDZIE.

Slips of Tongue and Pen.—Do not use *anticipate* for *expect*.

Do not use *aggravate* for *irritate*.

Do not say *ad-dress* for *ad-dress*.

Do not say "His *antecedents* are bad."

Do not use *appreciate* for *value highly*.

Do not say "I am *afraid* it will be " for "I *fear*."

Do not spell *benefited* with two *t*'s.

Do not use *banister* for *baluster*.

Do not speak of *collecting* a bill.

Do not use *claim* for *assert*.

Do not call one horse a *team*.

Do not use *citizen* for *person*.

Do not use *couple* for *two*.

Do not use *embrace* for *comprise*.

Do not follow *else* with *but*.

Do not use *excessively* for *exceedingly*.

Do not use *going to* for *about to*.

Do not say *have got* for *have*.

Do not use *grow* transitively.

Do not use *invest* without an object.

Do not use *idea* for *opinion*.

Do not use "&" in your correspondence.

Do not abbreviate names as "*Phila.*," "*Balto.*," "*B'way*."

Do not use *lit* for *lighted*.

Do not use *at length* for *at last*.

Do not use *over and above* for *more than*.

Do not use *partially* for *partly*.

Do not use *persuaded* for *convinced*.

Do not use *remit* for *send*.

Do not use *settle* for *pay*.

Do not say *later on*.

Reduction of Ores by Electricity.—The immense value of a successful and economical method of treating ores, and the excellent promise given by magnetic separators in this country seem to have acted as an incentive to European inventors, and a patent for the electrical treatment of ore has just been taken out by Siemens & Halske, of Berlin. After being pulverized the ore is poured into cylinders filled with a solution of sulphate of iron, which is kept in constant motion and subjected to steam heat. Copper cylinders, partly placed in mercury, are revolved in the well, an alkaline cyanide solution being in most cases added to the electrolyte, and a current is passed through the whole. The metal is deposited on these cylinders. After the operation the dissolved copper is recovered in the usual way. The process is said to be

applicable to the treatment of copper and zinc ores, and that of precious metals. The amount of wealth which is now lying idle on the surface of the earth in the shape of huge mounds of imperfectly worked ore, and which will soon be made available by means of electricity, is almost incredible.

A Good Method of Copying.—

A correspondent of the *Writer* advises: Buy a piece of common factory or cheese cloth, or as many pieces as may be necessary to make the desired number of copies, each the size of the letter book page. When about to take copies wet the cloth, or several pieces if necessary, so thoroughly that there shall be no dry spots. This done ring them out as dry as possible with the hands. Now place the oil sheet in the book and the cloth thereon, and the leaf of the copy book on this. Next lay the letter or manuscript on this, and if another sheet is to be copied add another oil sheet, a wet cloth, the tissue leaf, and so for as many sheets as there are.

By this process as many as twenty sheets may be copied successfully at the same time, while the most expert with the brush, or any similar device for moistening the tissue leaves, will sometimes fail on a single copy. We retired our hair and felt brushes to make place for the cheese cloth a number of years ago. For type-writer work nothing excels the cloth. Clear copies may be procured as long as there is enough ink left on a ribbon to make an impression.

A Fact.—There is a very convenient, strong and graceful bit of cabinet work hanging by its two big screws on our wall. We find it so useful that we wonder there are not more of the kind in the homes of our neighbors. They who have seen it express a lively admiration and ask, as soon as courtesy will permit, "Where did you get it?" We answer promptly, "From the Cortland Desk Company, of Cortland, N. Y.," and it is a specialty that the company turns out.—EDITOR P. J.

High Meteorological Stations.—

The highest point at which regular meteorological observations are made is on a 14,800 foot peak of the Peruvian Andes. Harvard College maintains an observatory in Colorado at an altitude of but 200 feet less than the above.



NEW YORK,
December, 1890.

CHARACTER AND EVOLUTION.

WALKING through the streets of a large city, we pass many places of common resort for drinking and low amusement, and near some of them, perhaps over the way, we notice a police station or house of detention. The idea may force itself upon the mind at such a time that modern civilization is working at cross purposes. It tolerates, nay more, is instrumental to, the existence of numerous methods for the production of evil and evil-doers, and supports at enormous cost institutions whose province is the suppression of evil and the punishment of evil doers. Then a question comes—Can not one whose life is clean and pure regard the claim for a high civilization in any community where these antagonisms are presented as unwarranted if not quite absurd? In answer to this a theologian might admonish us with regard to the broad contrast of high integrity and great mental capacity with reckless vice and ignorance, that are seen wherever people are largely aggregated, and allege that it is indicative of the inherent weakness of human nature, and designed, in part, at least, to check the tendency to pride, presumption and excessive reliance upon one's personal ability.

A practical economist would be likely to attribute these differences of mental expression to differences of birth, environment and education, and read us a homily on the necessity of disseminating a knowledge of the principles of physiology and hygiene among the masses, if we would have a solid and steady improvement in all that appertains to human affairs. A healthy and clean body, says the sanitarian, conduces to intellectual balance and moral sobriety.

The theologian and the economist are both correct in their views, one supplementing the other's partial survey of the wide field. This muddle of inconsistencies, antagonisms, and incongruities which we call civilized life is but the variant manifestation of organization and development according to their quality and degree, as the phrenologist asserts. The laws of God are equal—the vine bears grapes, the thistle briers, the tree is ever known by its fruits; and the better the soil and the more skillful the nurture the larger the product and the higher the quality.

At the present stage of human development there are phases of utility exhibited by vice, a utility which instructs the philanthropic observer and furnishes him with needed material for his work among the wretched. In thus supplying instrumentalities for its own repression vice can not be regarded in the light of an unmixed evil, and the idea of the theologian finds thus a rational basis. We never witness a hasty growth in moral excellence that is substantial and permanent. Character unfolds in accordance with the laws which govern physical growth. That which is stable, enduring, thoroughly sound is of slow development. The

yearly accretions of the oak, maple and box are almost too small for notice, but each new fiber adds strength to the trunk, and as time advances the tree rises in beauty and power. Does the builder require wood upon whose strength he can rely? He looks for the dense-grained oak, or maple, or ash—not to the coarse hemlock or spongy cottonwood or poplar, woods of rapid growth. Thoroughness in study demands time. The well-grounded scholar is he who laboriously acquires the deep significance of principle after principle and mounts step by step toward his object. So, too, moral growth is no easy, rapid transition, but a matter of careful, earnest, and, sometimes, painful culture. It is no easy task to eradicate tendencies to irregularity and impropriety of thought and action, to weed out old habits born of convention and sensual indulgence. The youth has enough to do usually in combating baneful characteristics inherited with his likeness to father or mother, and does well if year by year he indicates a closer approach to a consistent and noble integrity. But he who has grown up in habits which mar both heart and body finds the work of reform in himself one which at first tries all his powers, and whatever there is of improvement seems the slow product of incessant struggle. His reward is greater finally; for as the giant oak has become more deeply rooted because of the storms that have shaken it, year after year, so moral integrity becomes more steadfast by resisting trials. We have no confidence in quick "conversions." The backslider is never more than half won from his selfishness, if that, and he is the "convert" whose declarations of penitence are the loudest.

WOMAN IN THE CHURCH.

WE are asked our opinion with regard to the great question now discussed in the Methodist Church whether or not women shall be admitted to equal representation with men in the conventions or assemblies of that church, and so take part in its government? In reply we would say that it seems to us that if woman's title to an equal consideration with men were denied in any other sphere it certainly should be accorded in the religious. One of the great features of difference between the pagan religions and Christianity is the status of woman. In the pagan woman occupies a very low plane; her admission to the privileges of the spiritual world being denied by the tenets of some—while in others she obtains a right to immortality by most humiliating services. The position of women among the Mohammedans is a negative one; they are not permitted to enter a mosque when men are at their devotions, and have but little influence in religious affairs. In the Christian churches, especially those of the Reformed or Protestant order, women are the leading factor, their number and service contributing most to growth and power. We believe that three-fourths of the churches would be closed if it were not for the women who attend them. Take New York City, we believe that inquiry among the clergymen would elicit the general answer, "We could not get along without the women; their zeal and fidelity sustain our work." In all the departments of church activity, the guilds, the missions, the social, literary, musical societies, etc., woman predominates. Many a

church boasting a large membership would have but a "corporal's guard" in attendance at its ordinary Sunday services were it not for the faithful women, a fact not over creditable to the masculines who arrogate to themselves the authority of "running" its affairs.

Men representing religious bodies get together in their conventions and plan measures of high importance and expect them to be carried out by the women, often quite ignoring the natural right of the latter in such cases to have somewhat to say concerning the way in which the measure should be executed. This should not be. The very spirit of religion means equality, if it means anything. The scriptural authority on which Christianity rests recognizes this. In the opening chapter of Genesis it is declared that "God created man in his own image; in the image of God created he him; male and female created he them." Expediency may have created distinctions of a civil or political character that it is well for society to observe, but so far as religious institutions are concerned the part of women in their promotion is so large and creditable that they can claim equal privileges with men, and lose nothing of their womanhood.

A CREDITABLE STAND.

WE learn that the United States Express Company has announced that its agents will not receive money, tickets, lists of drawings, or anything that will aid the Louisiana Lottery Company in the prosecution of its business. This is very creditable action on the part of the express company, and we heartily commend its managers for their

courage in opposing a great immorality, notwithstanding the considerable pecuniary loss which must follow. Since the enactment of the law forbidding the use of the mails for lottery purposes the business of transporting the tickets, lists, money, etc., of the ten thousand who seek their fortune in the turn of a wheel has fallen to the express companies, and if the good example of the United States were generally followed the lottery people would be seriously embarrassed, and a great number of the indiscreet and ignorant in different parts of our country would be spared the loss of dollars that could be used for useful purposes. Let the other public carriers follow the United States Company in this matter.

THE HEADS OF ROBESPIERRE AND MARAT.

THOSE two famous characters of the French Revolution, Robespierre and Marat, at once the product and expression of those dark days in the modern history of France, were strangely constituted. Their deeds were horrible, most horribly brutal, yet sanctioned by a great populace. The cry was "Heads, heads—more heads!" and the chiefs in the revolutionary government were compelled in answer to send the Girondists and the friends of the old monarchy to the guillotine or become victims themselves of the fanaticism of the time.

It must be admitted, however, that by organization they were apt instruments of violence and disorder. A writer in the *Contemporary Review* speaks of the indications of development as shown by the casts that were taken of their heads after death thus: "In both the cerebral

development is poor, particularly in the coronal region. The skulls, each of which goes up into a point, may have pressed there on the brain. Phrenological development or lack of development, taken with facial traits, betokens ill-balanced minds. Marat's face, in David's portrait of him, is in all but complexion that of a red Indian."

The conical structure of the skull in Marat's case consorted well with his

Indian physiognomy and furnishes a solution to the ferocious character of the man. Both he and Robespierre had the savage elements that are stimulated to action in the contests of reckless political factions. Such relics as these offer a most interesting study to the phrenologist and aid materially the student of history in his effort to unravel some of the mystery in that sombre page in the records of France.



To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.

ALWAYS write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also.

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE contributions unless the necessary postage is provided by the writers. IN ALL CASES, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed to the Editor in the professional capacity of a physician will also receive his early attention.

OIL UPON THE WATERS.—O. H.—The saying with reference to pouring oil upon troubled waters is of quite ancient origin, and shows that what science has been to some pains to demonstrate latterly was recognized as a truth ages ago. The venerable Bede in the eighth century gives an account of an incident of the kind:

A priest named Utta was sent into Kent to fetch Eaufried, King Edwin's daughter, who was to be married to King Oswin. He was to go by land and return by sea. Before his departure Utta visited the bishop, Aiden, and besought his prayers for a safe journey.

The bishop blessed him, and predicting for his return a great tempest and contrary winds that should rise suddenly, gave him a pot of oil, saying: "Remember that thou cast into the sea this oyle that I give you, and anon, the winde being laide, comfortable, fayer weather shall ensue on the sea, which shall send you againe with as pleasant a passage as you have wished." The tempest came as predicted, and when the ship and all on board were about to be lost, the thought of the bishop and his pot of oil came to them, when Utta, taking the pot in his hand, cast the oil into the sea, whereupon, as if by magic, it became quiet and calm, and the ship was delivered. Bede declares that he had it from a very credible man, a priest, Cymmund by name, who said he had heard it of Utta, the priest, by whom the miracle was wrought.

FEES FOR PHRENOLOGICAL ADVICE.—T. H.—Certainly your services should be fairly compensated. No one would consult a lawyer or physician or other professional man without expecting to pay a fee. A skilful phrenologist is skilful only after much study and experience, and his advice is inferior in value to that of no other counselor, whatever his name. Your advice may be worth thousands of dollars in its outcome to a man. In view of which, how petty the sum that he pays you at the close of an interview! Don't be afraid to charge.

NEURALGIA OF FACE.—S. T.—The seat of the pain under the eye suggests tooth decay. Have your teeth examined carefully. Some carious grinder may be at the bottom of the long-borne face-ache. A few years ago we were doing duty at a certain clinic in this city when a woman came in complaining of neuralgia of the side-face. She had visited several physicians and tried their remedies, but the torment kept up. "Let us see your teeth," we said, and using a mouth mirror soon found an upper back tooth in an advanced state of decay and very sensitive. "Go to a dentist," was our immediate prescription.

PERSONAL.

ALPHONSE KARR, the novelist, died at St. Raphael, on the Mediterranean, not long since. He was eighty-two, and for many years an enthusiastic florist and horticulturist. Over his door he had written, "ALPHONSE KARR, Gardener." Many of his experiences as a horticulturist were embodied in his *Voyage autour de mon Jardin*. M. Karr retired to private life at Nice at the close of the revolution of 1848. It was he who uttered the celebrated epigram on political history, "Plus ça change, plus c'est la même chose."

MRS. ANNIE A. DE BARR has received a license as mechanical engineer from the Chicago Board of Engineers, after a year and a half of taking sole charge of the engine and machinery in a large steam laundry. Dressed in a neat uniform, she appears to enjoy herself in her engine room.

LORD TOLLEMACHE, now over eighty years and in bad health, has achieved a singular fame for a nobleman. His Cheshire estate, 26,000 acres in extent, supports practically one of the most prosperous communities of agriculturists known in the British kingdom. In the last sixty years he has evicted nobody, has no vacant farm, and suffered no loss through non-payment of rents. All his tenants are prosperous and contented, and they owe their exceptionally fortunate lot to the wise administration of their landlord.

MRS. BETSEY AVERILL, of New Milford, Conn., is said to be the oldest pensioner on the list. Hale and hearty at the age of one hundred and three, she draws the pension due her for services of her young husband in the war of 1812.

WISDOM.

"Thou must be true thyself,
If thou the truth would teach."

If you succeed well, and act well, and be convinced what is God's interest, and prosecute it, you will find that you act for a very great many who are God's own.—*Oliver Cromwell*.

It is the surmounting of difficulties that makes heroes.—*Kossuth*.

If you wish to write well study the life about you in the public streets.—*Horace Mann*.

WHEN we see a special reformer we feel like asking him, What right have you, sir, to your own virtue? Is virtue piece-meal?—*Emerson*.

You can invent a falsehood, but a truth never.

WHOM the heart of man shuts out straight way the heart of God takes in.—*Lowell*.

"ALL the nations of the earth praise liberty, and still they seem to be uneasy until they lose it."

THOR is he armed that hath his quarrel just, and he but naked, though locked up in steel, whose conscience is corrupted.—*Shakespeare*.

INTENTIONAL wrong-doing, carelessness, thoughtlessness and ignorance can be more or less guarded against and corrected, and it's every one's duty to grow out of such habits.

WHENEVER there is a victory won, the first thought of the conqueror is that the reward is not worth the struggle.

SIN and hedgehogs are born without spikes; but how they prick and wound after birth we all know.—*Jean Paul Richter*.

MIRTH.

"A little nonsense now and then,
Is relished by the wisest men."

FRIEND—"What did the doctor say about your case?"

Invalid—"He said he didn't know what was the matter with me."

Friend—"Indeed? You evidently went to a very old and experienced physician."

WHY is a hammer like a good general? It drives ahead and settles the point of attack (a tack).

AN UNKIND QUESTION.—Litewayte—"It's very disagreeable, don't you know, to associate with one's inferiors."

Bronson—"How in the world did you find that out?"—*Life*.

MISS CHESTNUT: "Is it true that your marriage with Mr. Callowhill has been indefinitely postponed?" Miss Walnut: "Oh no, not indefinitely. Poor, dear Fido, you know, was attacked with la grippe and died, and of course I couldn't think of marrying for a year."

MATER: "Girls, we mustn't worry your father about going away this summer. His finances are extremely low, I know. I looked in his check book yesterday and saw he had only one check left."

MRS. BIBBS: "See here! Why are you unloading all those shingles in front of my door? We haven't ordered any."

DRIVER: "No, mum. They comes wid de compliments of the neighbors. You see, folks think from the way your boy acts that you can't afford to buy any."



In this department we give short reviews of such NEW BOOKS as publishers see fit to send us. In these reviews we seek to treat author and publisher satisfactorily and justly, and also to furnish our readers with such information as shall enable them to form an opinion of the desirability of any particular volume for personal use. It is our wish to notice the better class of books issuing from the press, and we invite publishers to favor the Editor with recent publications, especially those related in any way to mental and physiological science. We can usually supply any of those noticed.

THE NEW GYMNASTICS for Men, Women and Children. By Dio Lewis, A. M., M. D., Author of "Our Girls," "Chastity," etc., 12 mo, pp. 286. New York, Fowler-Wells Company, Publishers.

The book reviewers need not to say a word to introduce such an author as Dr. Lewis at this time. He had won a high reputation as a reformer and teacher long before the

book that lies on our table was written, and the book, like all the others from his facile pen, was the product of his own observation and excellent judgment. As a teacher, he early saw the need of systematic physical exercise to the proper development of the thousands of young people whose parents being well-to-do feel no obligation to work in the ordinary lines of manual industry. As a physician, he appreciated the want of physical training among the well-to-do, whether young or old, for the proper development and maintenance of physiological function. He sought in the system that he devised to furnish a series of movements that would be simple and natural yet thorough in their operation of the muscles of the body, and "calculated not only to impart strength of muscle, but to give flexibility, agility and grace." In this manual no fixed apparatus is suggested; light wooden dumbbells, or wooden rings, or a wand, being all that is required—while most of the exercises are performed with the hands free. This fact adapts the book to the use of schools. The movements are carefully illustrated by diagrams so that the trainer can easily follow them in the order given. For young people and families a large number of the exercises are made appropriate as a means of entertainment, as well as of physical development, where a number can join in a round of movements the effect will be enhanced. Dr. Lewis understood the value of the social element, and was one of the first to put it into a book on gymnastics, and no later teacher has made any improvement on his method. The exercises in a school may be done to the rhythm of a musical accompaniment, which, of course, always adds to the zest with which children enter into anything they enjoy.

ointments and OLEATES, Especially in Diseases of the Skin. By John V. Shoemaker, A. M., M. D., second edition, revised and enlarged. No. 6 in the Physicians' and Students' Ready Reference series, 12 mo, 298 pp. \$1.50, net. F. A. Davis, Publisher, Philadelphia.

This work offers as complete a survey as we have met with anywhere of the manner in which, and the purposes for which, fatty substances are applied to the human body.

It gives the official ointments used in the medical practice of the United States, Great Britain, Germany, France, Italy, Spain, Mexico, and other countries. The reader thus has, in a compact form, a conspectus of the whole subject of inunction as it exists to-day in the civilized world. The improved methods of preparation among experienced chemists and pharmacists in this country and abroad are described in detail, and the physiological and therapeutical action of the oleates receive due attention. An exhaustive index makes the contents of the work easily accessible.

EVELYN GRAY, or the Victims of Our Western Turks. A tragedy in five acts. By H. I. Stern. 286 pp. John B. Alden, Publisher, New York.

A tale of the time of the Mountain Meadow Massacre, representing the worst phase of Mormon life. It pictures the Mormon leaders as corrupt, hypocritical and wicked, the religion as rotten and its followers as degraded. The blind infatuation of Mrs. Gray, who, with her husband, has become a convert to this religion, leads her to leave home, wealth and social position in England to join a party of fellow proselytes for Utah. Fair Evelyn goes with her mother in the hope of disenchanting her, and is accompanied by her lover and his friend. The journey across the United States is made overland in wagons and Mr. Gray dies on the way from exposure and privation. The story culminates in the famous Mountain Meadow massacre, in which Evelyn, her friends and some dissatisfied Mormons and emigrants for California meet a terrible fate.

The writer represents Mormonism and its leaders at their worst, and it would be well for the reader to bear this in mind as he pursues the recital. Mormonism, we are sure, has other sides that attract as much as this side, as depicted by the author, repels.

HER MAD LOVE. A Psychological Novel of To-day. By Gerald Carlton. 282 pp. J. S. Ogilvie, Publisher, New York.

This is a love story of a rather peculiar plot, skillfully developed and embracing several situations of exciting interest. The moral elements are worthy some commendation, the lesson of wrong doing clearly indicated and not made a matter of immaterial

connection. There is little to admire in the subject of "her mad love"; on the contrary, one must sympathize with the poor suffering women who made him the object of their affections. Why they should have done so is a psychological puzzle that the author does not elucidate, but seems to leave to the intelligence of the reader in this age when hysterical phenomena and hypnotic fascination are so much discussed. The book betrays the hand of an experienced writer, and is much above the quality of the novels commonly found on the newsman's counter.

PUBLICATIONS RECEIVED.

RESEMBLANCE TO PARENTS and How to Judge It, is the latest issue in the Human Nature Library. By Prof. Nelson Sizer.

It is a discussion in his always interesting vein of a live topic in sociology, and the numerous and original illustrations make the text clear and practically applicable. Price, 10 cents. Fowler & Wells Co., New York

REMARKS ON INSTITUTIONS FOR THE INSANE, with special reference to the most natural and satisfactory methods of serving food to their inmates. Reprinted from the *Alienist and Neurologist*. St. Louis. By H. A. Buttolph, M. D., LL.D.

Coming as this paper does from one of the most eminent of physicians to the insane, it speaks with authority on the subject of feeding those unfortunates that society places under bonds. Dr. Buttolph does not believe in mixing patients of all kinds in a general dining-room, but would have the several classes by themselves. An opinion we should incline to accept as at once logical and humane.

BULLETIN XX. of the Agricultural Experiment Station, Cornell University, treats of Cream Raising by Dilution and Variations in Fat of Milk served to Customers in Dipping from Cans.

Worthy of notice by the milk trade and the consumer of milk and butter.

FOURTH ANNUAL REPORT of the Training School for Nurses connected with the Post Graduate Medical School and Hospital.

A pleasant document this—giving a report of the interesting commencement of the late graduating class, and details concerning the useful services these intelligent women perform.

C. F. WELLS, NELSON SIZER, H. S. DRAYTON, ALBERT TURNER,
President. Vice-President. Secretary. Treas. and Bus. Manager.

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A Good Time.—The present is always a good time to do a good thing, so that now is a good time to subscribe for the PHRENOLOGICAL JOURNAL if you are not already a reader of it. Some times are better than others for some things, and this perhaps is the best time to take up the work of canvassing for our Publications, therefore we ask for agents who will take subscriptions for the PHRENOLOGICAL JOURNAL and push the sale of "NEW PHYSIOGNOMY," "COWAN'S SCIENCE OF A NEW LIFE," "THE EMPHATIC DIAGNOSTIC," "CHOICE OF PURSUITS," "HEADS AND FACES," "FOR GIRLS," in fact all of our Publications are available, some agents do well with one, and some with another book, but there can always be found something for everyone to sell to advantage, and the employment may be made "pleasant and profitable," and liberal terms will be made known on application. In every neighborhood somebody can sell some books to advantage, and we want to extend our agencies until the whole field is covered.

CURRENT EXCHANGES.

Harper's Magazine for July continues Daudet's serio-comic story of Port Tarascon, and 24 illustrations help the reading. A Famous Chapbook Villain is a vivid sketch of the notorious Jonathan Wilde. Texan Types and Contrasts, Social Life in Oxford, and Baltic Russia are also illustrated richly. The combination of features makes this number more than commonly inviting for a summer's day perusal. New York.

Medical Analectic for July is well filled with brief digests of medical and surgical cases in departments of practice followed by the physician. G. P. Putnam's Sons. New York.

The Treasury. For Pastor and People. Monthly. Well furnished as usual with religious matter. E. B. Treat. New York.

America. A Journal for Americans. "Devoted to Honest Politics and Good Literature." Weekly. Chicago.

Architecture and Building. Well illustrated and always handsome. Weekly. W. T. Comstock. New York.

Popular Science Monthly. Among the articles announced for the August number are Thunder Storms; A Queer Pet, by Miss E. W. Bellamy; The Uses of Animal color; Missions and Mission Indians of California, not over complimentary to the missionaries; Ancient and Modern Ideas of Hell, and Centres of Ideation in the Brain, an article that will surprise many readers of the *Popular Science Monthly*, and please some, we have no doubt. D. Appleton & Co. New York.

The Illustrated Catholic American. Weekly. New York.

Semi-Centennial Announcement of Lectures and Catalogue. Medical Department, University of New York.

The Arena. Monthly. Boston. Presents independent thought on all subjects.

Le Devoir Resne des Questions Sociales. Monthly. Madame Godin au Lamilistere. Guise (Aisne) still maintains the principles of co-operation with which it started.

The World's Progress.—Devoted to Art, Science, Invention, Discovery, Engineering, and Industrial and Manufacturing interests. Monthly. O. J. Bailey & Co., Cincinnati.

The Cultivator and Country Gentleman.—Old authority for the Farm, the Garden, and the Fireside. Weekly. Luther Tucker Son, Albany.

Leisure Hours.—Literary and Society monthly. Chas. A. Dixon, Philadelphia.

The Saturday Globe.—A Weekly Democratic Review. New York.

The Youths' Companion.—Weekly. Perry, Mason & Co, Boston.

Lippincott's for July, has a story by Oscar Wilde, and ten other names in its pages. Mr. Heron-Allen talks on Chironancy, and Felix Oswald, of the "Powers of the Air," in "Cyclonic" terms. Philadelphia.

The Century has Filippino Madonna and St. Bernard for a frontispiece; Joseph Fennell

illustrates a Provincial Pilgrimage, Kentucky Blue Grass is also the subject for fine illustrations. The Reign of Reason, The Women of the French Salons, Little Venice, Nathaniel Buem, Patriot of 1878. A Yankee in Andersonville, and Italian Old Masters, make the number a study in esthetics. New York.

The Brooklyn Medical Journal. Monthly. Med. Soc., Co. of King's, Brooklyn, N. Y.

The Literary News.—An Eclectic Review of Current Literature. Illus. Monthly. New York.

Good Health—Journal of Hygiene. Monthly. We note a stronger emphasis on hygienic medicine of late. Battle Creek, Mich.

The Western Rural and American Stockman.—Weekly. For the Farm, and Fireside. Milton George, Chicago.

On Trial.—A SPECIAL OFFER.—Being desirous of extending the subscription list of the PHRENOLOGICAL JOURNAL as widely as possible, we have decided to offer it on trial the last six months of the year at 50 cents. We do this, believing that when it has been read for this length of time it will not be ordered discontinued. Will not our friends take advantage of this proposition and make a special effort to induce others to become readers? It would certainly seem as though almost any person could make up a club of ten subscribers to the JOURNAL at 50 cents each, for six months. As a special inducement to an effort of this kind we will give as a premium for a list of ten "TRIAL TRIP" subscribers any \$1.50 book we publish, or books selected from our catalogue to this amount. For the sake of the JOURNAL as well as for the premium, will not many of our readers take this matter up in earnest.

The New Model Anatomical Manikin as announced in our last number, has been somewhat delayed in its publication on account of an imperfection in a part of the stock which had to be returned to the mill. It is now printed and in the hands of the binder to be mounted and put up ready for delivery, and we are prepared to say, from having seen the work completed, that it is unquestionably the best aid for Anatomical study ever devised. It is scientifically correct, and artistically handsome, and will certainly meet with approval. No teacher or physician can afford to be without it, and it should also be in every private family where it can be referred to for a proper understanding of the anatomy of the human body. The knowledge which is contained in the Manual explaining not only the Manikin, but the physiological functions of all parts of the human body, will certainly do very much to promote the laws of life and health. The price of this is not only moderate, but very low, and this can only be afforded by making a large edition and having large sales. It will be sent prepaid on receipt of price, \$12, and to agents who are in a position to canvas for this, we will make most liberal terms. See complete description on another page.

Fruits.—In a notice of *Fruits and How to Use them*, the *Milwaukee Sentinel* says:

"The day is long past when our only cook books were 'The British Housewife,' whose placid directions to 'take a salamander,' or a 'handful' of this, 'a spoonful' of that, unattainable or unknown ingredients, so tried poor Bella Wilfer's temper and patience, or the somewhat ponderous, but really valuable treatise upon cooking, of our Catherine Beecher, so familiar in the kitchens of our mother's time. Now, cook books are as numerous as cooks, and no one need complain that she fails to learn for want of teachers. It was left, however, for Mrs. Poole to compile a series of recipes entirely devoted to the preparation of fruits for table use, to preface her work with a chapter upon fruits in general, their culture, their value as food, as hygienic, temperance and curative agents, and to give a brief history of each fruit in particular as an introduction to the recipes for preparing such fruit; and she has acquitted herself of her self-imposed task in a manner to win praise and gratitude from the many sisters who will find their perplexities lightened by her thoughtful labors in their behalf. The book contains nearly 700 recipes, and many useful hints regarding the appetizing serving of uncooked fruits, and will without doubt soon become a highly esteemed assistant in many a well-regulated cuisine."

The book should certainly be in every household, and it will be sent by mail postpaid on receipt of price, \$1.00. Address this office.

The American Institute of Phrenology.

—It is time now for those who anticipate attending the coming session of the Institute to make their plans. We have already heard from a sufficient number of students to indicate a large class. Whether for the purpose of making Phrenology a profession, or as an accomplishment, it will certainly be found essential to personal success to have received the instructions and the advantages afforded by the Institute. The diploma will be an evidence of reliability and culture and even those who have already been in the field will find the course very profitable and that it will increase their success. As an accomplishment, what could be found more pleasant than an ability to properly read and estimate character. There are many who have taken a course at the Institute without any plan or intention of making Phrenology a profession, who have felt themselves amply paid. Circulars and announcements giving full particulars will be sent on application to this office in person or by mail. The session for 1890 opens on the 2d of September and continues for about six weeks.

Phrenological Examinations by Mail.

—We are frequently asked as to whether we can make Phrenological Examinations by mail, and in reply would say that this is done very successfully, when we have the properly taken pictures and the proper measurements given. For full particulars in regard to this, send for "Mirror of the Mind."

BUSINESS CARDS.

The Hammam, a Family Hotel with Turkish Baths, 81 and 83 Columbia Heights, Brooklyn, N. Y. Three minutes' walk from Fulton Ferry.

The New York Medical College and Hospital for Women, and Homeopathic Dispensary for Women and Children. 213 West 54th Street, New York.

Mrs. J. T. Campbell, M.D., 153 W. 128th St., New York.

OUR HEALTHFUL HOME. Invalids wishing real home comforts and superior methods of treatment, should visit our sanitarium. For circulars address, A. Smith, M. D., West Reading, Pa.

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SPECIAL NOTICE.—Readers will oblige the Publishers if they will state, when writing to any of our advertisers, that the advertisement was seen in the PHRENOLOGICAL JOURNAL.

A PRIVATE SANITARIUM completely equipped and now running with a large patronage, for sale; situated in a delightful region within 100 miles of New York; a rare opportunity. Price moderate and terms accommodating. Address, H. DRAYTON, M. D., 775 BROADWAY, NEW YORK.

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Clubbing for 1890-91.—For the accommodation of our readers and friends we have made arrangements for the combination of other publications with our popular and useful magazine as follows: The subscription price to the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH is \$1.50, and any of the following may be included with it at the prices given.

Names sent for the JOURNAL with either of these will count on Premium List, and to agents the same as though sent singly.

Eclectic Magazine.	\$4 25	Lays of Life.\$ 90
Atlantic Monthly.	3 40	N.Y. Evang'l.ist, new.	2 10
Lippincott's Mag.	2 25	Homiletic Review.	2 50
Harpers Monthly.	3 10	Am. Garden.1 65
Weekly.	3 25	The Pansy.85
Bazar.	3 25	Baby Land.45
" Young People.	1 70	Peterson's Mag.1 60
The Century Mag.	3 60	North Am. Review.	4 25
St. Nicholas.	2 60	Tribune, Weekly.	90
Popular Sci. Mon.	4 20	Times, Weekly.	95
Godey's Lady's Book.	1 70	Sun.90
Arthur's Home Mag.	1 35	World.90
Rural New Yorker.	1 60	Country Gentleman	2 00
Scribner's Mag.	2 50	Herald Weekly.	90
Cosmopolitan.	2 15	Illus. Chris'n Wkly	2 40
Demorest's Mag.	1 60	Weekly Witness.	90
Home Journal.	1 60	Poultry World.	90
Am. Agriculturist.	1 10	Herald of Health.	80
Wide Awake.	2 10	N. E. Journal of Ed-	
Our Little Men and		ucation.	2 15
Women.	85	The School Journal	1 95
Our Little Ones.	1 25	Christian Union.	2 60
Critic.	2 75	Christian at Work.	2 60
The Independent.	2 60	American Field.	4 10
Cassell's Fam. Mag.	1 25	Good Housekeeping	2 10
Babyhood.	1 30	Chicago Inter-Ocean	
Scientific Am.	2 60	Weekly.	85
Do with Sup.	5 25	Mag. Am. History.	4 20
Supplement.	4 25	The Homestead.	35
Phonographic Mag.	1 35	Magazine of Art.	3 00
The Forum.	4 25	Vick's Mag.	95
Observer, new sub.	2 35	Pop. Educator.	90
Galaxy of Music new	80	Youth's Companion	
Puck.	4 25	new.	1 35
Judge.	4 40	Scottish American.	2 00
Modern Priscilla.	40	Ill. London News Am.	
The Home Maker.	1 60	Edition.	3 50
Belford's Mag.	2 20	Frank Leslie's Pop-	
The Arena.	3 75	ular Monthly.	2 60
Am. Teacher.	90	New England Mag.	2 60
Am. Bee Journal.	95	Outing.	2 50
Forest & Stream.	3 25	Practical Farmer.	85
Ladies' Home Com.	35	Spirit of the Times.	4 65
The Nation.	2 80	Texas Siftings.	3 25
New York Ledger.	1 75	Woman's Ill. World,	
Young Ladies' Jour.	3 90	with Prem.	1 90
Isaac Pitman's		Farm and Fireside.	35
Phonetic Journal.	1 40	Current Literature	2 50
The Esoteric.	1 35	Short Stories.	2 10

The only condition for obtaining the above reduction is that the person ordering shall subscribe for, or be a subscriber to the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH; then any number of the above publications may be ordered. Make up your list and send on the amount, saving time, money, risk, and trouble. Agents can often offer the above combination to advantage. Address all orders to FOWLER & WELLS Co., Publishers, 775 Broadway, N. Y.

The New Model Manikin.—This is now fairly on the market, is being commended and praised by those who have seen it. Schools that are not already supplied with an article of this kind should examine the claims of this before taking any other, and in every health institution, in every physician's office, a copy should be found.

BUSINESS CARDS.

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The change of name involves no change in the nature and object of the business, or in its general management. All remittances should be made payable to the order of
FOWLER & WELLS CO.

The Subscription Price of the PHRENOLOGICAL JOURNAL AND SCIENCE OF HEALTH is \$1.50 a year, payable in advance, or \$1.65 when premiums offered are sent to subscribers.

Money, when sent by mail, should be in the form of Money Orders, Postal Notes, Express Money Orders, Drafts on New York, or Registered Letters. All Postmasters are required to Register letters whenever requested to do so.

Silver or other coin should not be sent by mail, as it is almost sure to wear a hole in the envelope and be lost.

Postage-Stamps will be received for fractional parts of a dollar. The larger stamps are preferred; they should never be stuck to the letters, and should always be sent in sheets; that is, not torn apart.

Change of post-office address can be made by giving the old as well as the new address, but not without this information. Notice should be received the first of the preceding month.

Letters of Inquiry requesting an answer should inclose stamp for return postage, and be sure and give name and full address every time you write.

All Letters should be addressed to Fowler & Wells Co., and not to any person connected with the office. In this way only can prompt and careful attention be secured.

Any Book, Periodical, Chart, etc., may be ordered from this office at Publishers' prices.

Agents Wanted for the PHRENOLOGICAL JOURNAL and our Book Publications, to whom liberal terms will be given.

Our premium List, giving complete descriptions of the Premiums offered to subscribers, sent on application.

Our Descriptive Catalogues or our new List of "Books for Women" will be sent to any address on receipt of stamps for postage.

On Trial.—We wish, for the coming year, to introduce as widely as possible the PHRENOLOGICAL JOURNAL among new readers, and for this purpose we have decided to offer it for the next three months ON TRIAL at specially low rates. To new subscribers we will send it from now to the 1st of January, 1891, at 25 cents, believing that when the JOURNAL has been read for a season, renewals will follow. We wish that our present readers would make a special effort in the direction of obtaining new subscribers. We ask this in the interest of a subject that a knowledge of it may be extended, believing a little missionary work may reasonably be asked for, and besides this, the larger the circulation of the JOURNAL and the larger the income, the better the JOURNAL can be made, as we propose to expend liberally in the making of it the money we receive for it. As a special inducement to those who will send to us subscribers on this "Trial Trip," we will give any one of our 25 cent books to any person sending only four "Trial Trip" subscribers with \$1.00; and we will send more costly books for a proportionately greater number of names, i.e., for sixteen subscribers we will send any \$1.00 book from our list. This is simply an incentive to right doing, and not with a view of paying specially for efforts made, as of course at this price there is no margin for large commissions; but may we not ask our readers to call the attention of their friends to the JOURNAL, and strive with us to more than double its circulation for the coming year? Let names be sent in at once, or at any time.

CURRENT EXCHANGES.

Architecture and Building.—Illustrative of the tendency of modern design, New York.

American Law Register.—Late numbers contain full reports of important decisions recently delivered—the original package case, etc. Also articles discussing live issues in National and State legislation. The D. B. Canfield Co., Philadelphia.

The Popular Science Monthly for November has a discussion of "The Logic of Free Trade and Protection," "School Life in Relation to Health," by Prof. Key, of Stockholm. Other articles of value are "The Origin of Music," by Herbert Spencer, and Prof. Mendenhall's address on "The Relations of Men of Science to the General Public," etc. D. Appleton & Co., New York.

Cultivator and Country Gentleman is as vigorous as ever; weekly. Albany, N. Y.

The Globe.—A Weekly Saturday Democratic Review. Strongly political, yet independent in much of its averments concerning civil affairs. New York.

Boston Budget.—A society weekly. Boston.

Cincinnati Medical News and Clinical Brief and Sanitary News. J. A. Bracken, A. M., M. D., Editor; monthly. Chicago.

The Kindergarten.—Improves with age.

Vick's Illustrated Monthly for November has an instructive article on "Weeping Trees," nicely illustrated. Rochester, N. Y.

The Century for November is more than commonly of historical dealing with events within the last century from "Early Victories of the American Navy," to "Life in the White House in the Time of Lincoln," "On the Andersonville Circuit," the "First Emigrant Train to California," "Luca Signorelli," "Two French Sculptures: Rodin and Dalou," and "An American in Thibet," are worthy of special mention also. New York.

Quarterly Journal of Inebriety.—October number. A thick number and well filled with matter specially related to the topic which it is the function of the periodical to discuss. A work in the line of practical reform. Dr. T. D. Crothers. Hartford, Conn.

Harper's Monthly for November has a variety of topics—the old and new worlds being drawn for the material of type and pencil. "Our Italy" is a finely illustrated sketch of Southern California. "Der Meiskotrunk," the festival play of Rothenburg. "Urban and Commercial Chili," "Port Tarascen: The Last Adventures of the Illustrious Tartarin," are attractive features, and the three editors are in good form. Harper & Brothers, New York.

Medico-Legal Journal. The well sustained organ of the Medico-Legal Society discusses in the late number "The Proper Disposition of the Criminal Insane, and the Abolition of the Coroner's Office," besides other current matters. A full number. Clark Bell, Esq., Editor. New York.

The Champion of Progress.—This is the title of a weekly newspaper published by G. W. Dutton, of the class of 1880, at Sioux City, Iowa, in which he has commenced a series of articles on Phrenology. He will in this way attract the attention of the public to the subject on a right basis; we wish to thank him for taking advantage of his opportunity in this way.

Watch-Dial Portraits.—As will be seen by referring to our advertising pages, we have made a new premium offer for the coming year. Mr. George McDonald, the inventor of this process, is a graduate of the American Institute of Phrenology, thoroughly interested in Phrenology, which he has made a study for many years, and his love of the study of faces, undoubtedly led him to these wonderful productions. His "watch-dial portraits" are perfect gems, and only need to be seen to be appreciated. Of course the cut which we present conveys a very poor idea of the beauty and brilliancy of these portraits. What could be found more pleasing than to be able to have on the face of your watch, a portrait of those whom you love and wish to keep in remembrance. In case the dial is plain, as many as three portraits can be given. It should be understood that these are sharp, clear pictures, and under a magnifying glass appear perfect in all the details. We have arranged for the sending out of large numbers of these, and Mr. MacDonald's facilities are sufficient, so that there will be no delay in filling orders. Our plan is to send to our friends orders which they will transmit with the dials in accordance with instructions, direct to Albany, where the work is done, and it will be returned direct.

The Portrait Gallery.—We have been selling for the past year a very fine new line of life size Lithographic Portraits. In response to a number of applications we have had the set substantially bound in a large volume, twenty by twenty-six inches in size, and containing sixty-four portraits, which we are offering for sale at twenty dollars. We have decided to offer this free to anyone who will make up a club of twenty subscribers to the PHRENOLOGICAL JOURNAL, sending us thirty dollars. On another page of the JOURNAL, will be found a list of the portraits contained in this volume, and it will be seen that these will be attractive and a matter of very great interest to whoever may own them, giving a desirable opportunity for studying character, and there is not a reader of the JOURNAL who would not be greatly pleased in owning them. In view of the fact that there may be some neighborhoods in which an agent would find some difficulty in making up a list of twenty names, we have decided to accept orders for our own publications, equaling the same amount, and send the premium in cases where the list of names cannot be made up. If the books go by mail, then ten per cent. of the retail price must be sent to pay for the mailing. In this way the agent can offer a choice, either a year's subscription to the JOURNAL, or books to the same value, and it will count on the list for premiums. We are confident this will prove very attractive, and we will prepare to send out a large number of volumes.

Temperance Teacher.—This is the title of the new journal just started by our friend and co-worker, Miss Julia Coleman, 47 Bible House, devoted to educational phases of the temperance work. It is published at 60 cents per annum. We wish every one of our readers would send to the address as above for sample copy.

Our Premium Lamp.—We have just arranged with the Rochester Lamp Company of this city to offer one of their popular PIANO LAMPS as a premium for a club of subscribers to the PHRENOLOGICAL JOURNAL. This is very desirable, both on account of its usefulness, and as an article of furniture, especially for use in connection with the piano or organ, as it is of great value, and also as a reading lamp, as it can be moved in any part of the room, the same as a hand-lamp, and it will stand resting on the floor, therefore it is not necessary that a table or other support be used. An illustration showing the lamp will be found on another page of this number of the JOURNAL. It is made of brass, not cast-iron as so many of the cheap lamps are, and has the celebrated Rochester Burner. We offer it complete as a premium for ten subscribers to the JOURNAL, or we will send it to any of our readers on receipt of nine dollars, somewhat less than the manufacturer's catalogue price. In order that we may use a large number of these, we have decided to accept orders for our publications from any who are not successful in making up a club of subscribers necessary to secure it. For instance, you can send eight subscribers and order three dollars worth of books, and the lamp will be sent you by express as a premium. We prefer subscribers, and the books, if ordered, must be those published at this office, and if sent by mail 10 per cent. of the retail price must be sent to pay for mailing.

Our Clubbing List.—We publish again in this number of the JOURNAL list of newspapers and magazines for which we have made special arrangements for reduced prices, the benefit of which we give to the readers of the PHRENOLOGICAL JOURNAL, who send their orders through this office. In nearly all intelligent families a number of periodicals are now taken, and where all are ordered together the price of our journal can easily be saved in the reductions allowed, making the JOURNAL free. Look over the list, make up your orders, send all to this office and save time, money and trouble. All publications are sent directly from office of publication.

Our New Catalogue.—After much delay and a great deal of work on the part of engravers and printers, the New Illustrated and Descriptive Catalogue is ready, and it has been sent to all who have ordered it, and it can now be sent promptly to all who order it. It contains nearly twenty portraits and brief biographical sketches, including Drs. Gall and Spurzheim, Combe, Lavater, O. S. and L. N. Fowler, Mr. and Mrs. S. R. Wells, Prof. Sizer, Dr. Drayton, Dr. Trall, Dr. Dio Lewis, Sylvester Graham, Dr. Shew, Mesmer, Dr. William Aikman, Dr. Geo. S. Weaver, etc., with illustrations showing the style of covers of many of the works, with full titles, descriptions and notices of the press, and will be found of much interest. It is printed on fine super-calendered paper and handsome cover, and will be sent to any address on receipt of 6 cents in stamps.

Our Manikins.—We wish to call attention again to the two manikins which we are now publishing. The *Man Wonderful*, issued two years ago, is very complete and comprehensive, and unquestionably the very best that can be made for this price, which is much less than any ever before offered. To make it still more popular the price has been reduced from five dollars to four. We make a special club offer, sending it with the PHRENOLOGICAL JOURNAL at \$4.50, or as a premium for four subscribers to the JOURNAL, or for six dollars we will send the manikin and JOURNAL for four years. This places it within the easy reach of all of our readers.

The New Model Anatomical Manikin is just ready.—This is two-thirds life size, being double the size of the *Man Wonderful*, and presenting a much larger number of views or charts of parts of the human body than is found in any other, more than one hundred in all. It is, in some respects, more comprehensive than the largest manikins that are made, and sells at less than one half the price, only twelve dollars. We will give this as a premium for ten subscribers to the JOURNAL, at \$1.50 each, or for fifteen dollars we will send the JOURNAL ten years and the manikin as a premium. On either of the above offers, if for any reason, the necessary number of subscribers cannot be obtained, we will accept orders for our books at the regular list prices to make up the balance; that is, you may send five subscribers, and order \$7.50 worth of books and the manikin will be sent. If the books are sent by mail, add ten per cent. of the retail price to cover the cost of sending.

A Good Hotel.—Among all the first class hotels in this city, there are none that in all their appointments afford more of comfort, that which we want in a hotel, than the "St. Denis," located so many years at the corner of Broadway and 11th street, only one block from the office of the PHRENOLOGICAL JOURNAL. It has just been enlarged and refitted throughout, and the capacity of the Dining Room doubled. It is a popular resort for ladies out shopping.

To Young Men.—We wish to call the attention of young men and our readers who are interested in young men to this new work by Dr. George S. Weaver, which is now on press and will be ready for delivery about the time this number of the JOURNAL reaches our subscribers. It is a grand book, and no young man who aims at the highest degree of success can afford not to read it. It will contribute in many ways to all that makes up the best success in life. It is handsomely printed on fine paper, beautifully bound, and suitable in every way as a gift-book. It is hoped the class for whom it is intended may have the opportunity of being benefited by the reading of it. With this end in view the price has been made but one dollar, on receipt of which amount it will be sent by mail, postpaid.

The Reminiscences.—The following letter from the Rev. Geo. S. Weaver speaks for itself:

DEAR MRS. WELLS:

I hope you will excuse me if I express my very great, great pleasure in your biographical articles now being published in the PHRENOLOGICAL JOURNAL, on George Combe. In my early days I admired all I knew of him: read with pleasure and profit his "Constitution of Man" and his works on Phrenology, and have always counted him as one of the great lights of Phrenology; but I have been left till now to really know the man and learn to love him for the greatness, goodness and harmony of his character and life.

And for this I am indebted to you. I count it as a treasure found when I find a man or woman whom I can unreservedly honor and love. My life is enriched thereby.

The biographies of the truly noble have come to be reading in which I have great delight and profit, and this delight and profit are increasing with my years.

A good life is a lived poem, which it is a joy, and inspiration to read.

I cannot but feel that you are having admirable success in rehearsing the story of Mr. Combe's life.

Accept my thanks for my enjoyment of it.

Yours very truly,

GEO. S. WEAVER.

Our Almanac.—For a number of years we have issued almanacs or annuals, and there has every year been more or less of inquiry for them many of our friends having learned to look for and prize them. We have now in preparation the Fowler & Wells Almanac for 1891, which, in addition to the regular monthly calendars, has a rich variety of interesting reading matter on various topics, including, "Timely Suggestions for each Month," "Talent and Occupation," "Physical Signs of Longevity," "How to Keep the Baby Happy," "The Story of My Cow-Boy Brother," "H. M. Stanley," etc., etc., with a number of, 64 in all, advertising pages, all of which will be found of interest. It will be sent to any address on receipt of price, 10 cents.

The Bust and Chart Premium.—We shall continue for the coming year to give a choice, either the Phrenological bust, or the Phrenological chart, as a premium to new subscribers. We continue these offers because they really supplement the JOURNAL, and are so necessary to a proper understanding of the subject. Of course no subscribers need two of these, but it is our desire that all shall be possessed of one. In each case fifteen cents extra in addition to the subscription price must be sent to pay the cost of packing and boxing the large bust, which is sent by express at the expense of the subscriber; either No. 2, the smaller bust, or the Phrenological chart, will be sent by mail, postpaid. These premiums are given to subscribers sent by agents as well as those sent with the regular price.

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Eclectic Magazine.	\$4 25	Garden and Forest.	3 25
Atlantic Monthly.	3 40	Teachers' World.	45
Lippincott's Mag.	2 25	Christian Herald.	1 10
Harper's Monthly.	3 10	St. Louis Magazine.	1 00
" Weekly.	3 25	Leslie's Illustrated	
" Bazar.	3 25	Weekly.	3 40
" Young People.	1 70	The Voice, new.	90
The Century Mag.	3 60	Literary Digest,	
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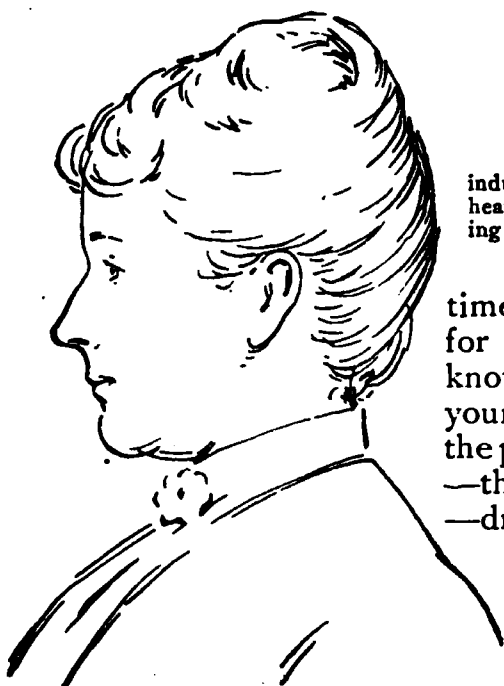
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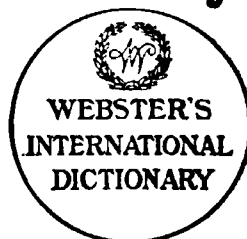
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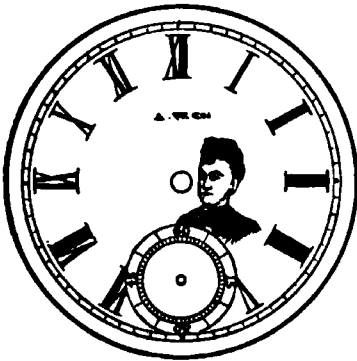
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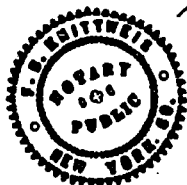
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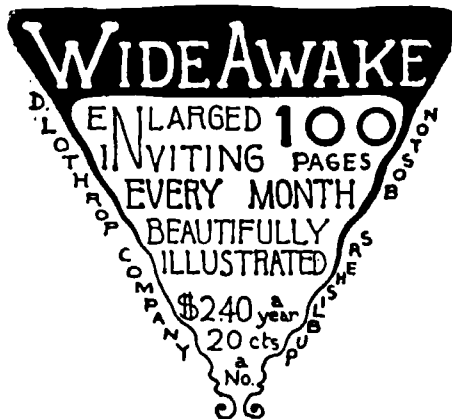
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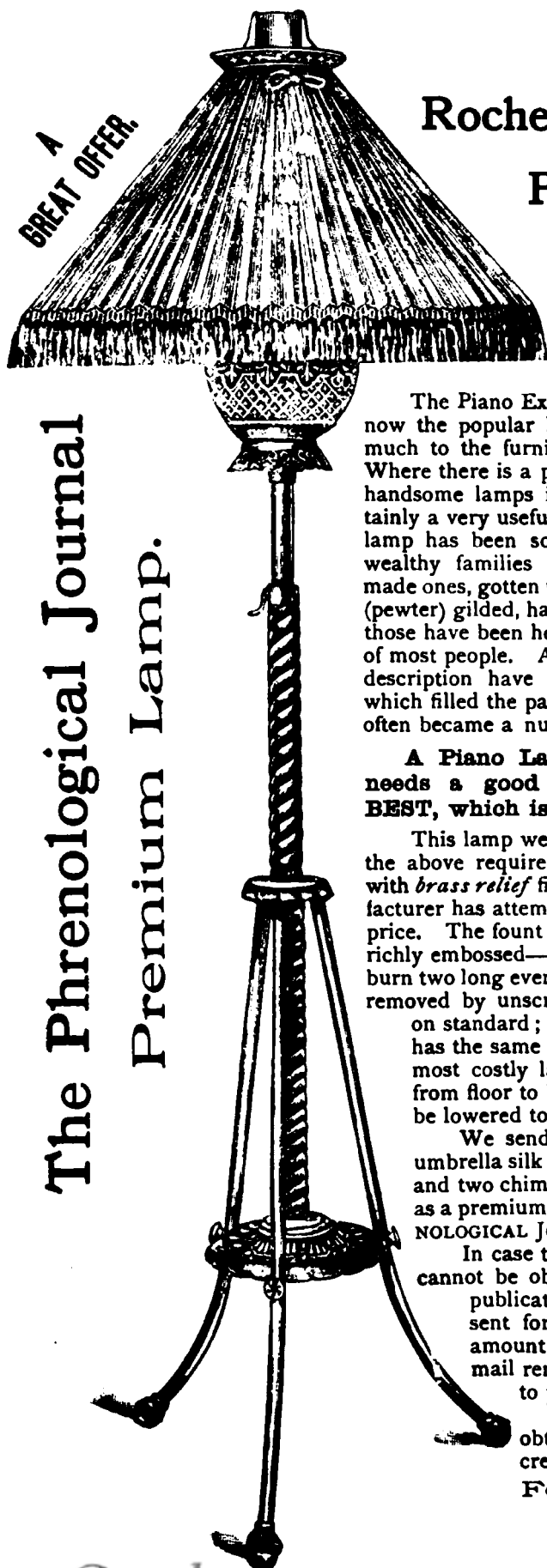
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