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HOT WEATHER HYGIENE.

THE approach of warm weather renders it appropriate to present a few suggestions as to the laws of health, which it is important to bear in mind at the present season.

The hygiene of summer is, in many respects, opposite to that of winter. In cold weather the constitution is generally more robust, more food is consumed, and the waste of the constitution is greater; hence the leading object in winter is to furnish a generous supply of nourishing food, to counteract the greater waste of material, and to keep up the temperature of the body. In summer, on the contrary, the waste of material is much less, the temperature of the body is easily maintained, the demand for food is more moderate, and the constitutional sensibility and excitability are greater. Hence, while a generous nourishing diet is appropriate to winter, temperance is peculiarly necessary in summer. Articles of a heating and stimulating nature produce a grateful warmth in winter, but are highly objectionable in summer. Stimulus is less needed in warm weather, but much larger quantities of fluid are required to supply the waste of perspiration and mitigate our thirst.

Another important difference between summer and winter is to be observed in the fact, that cold exerts an antiseptic influence, while warmth promotes putrefaction and every species of decomposition of organized materials. Hence in winter we need be but little concerned about the purity of the air around our dwellings, while in summer it is a matter of vital importance.

The most rigid cleanliness should be observed as the weather grows

warm, by removing the decaying vegetable and animal matter from our vicinity. In cities and villages there is much neglect of these precautions. With a proper system of drainage, every rain would wash our streets entirely clean; but instead of providing iron gutters, into which the filth might run, and from which every shower would thoroughly remove it, a clumsy imitation of a gutter is presented in a small ditch paved with rough stones, on which the dirt and filth accumulate in offensive masses, and which nothing but a tremendous flood can remove. It is common to adopt some sanitary measures for the streets, etc., when cholera is approaching, but in reality there is greater necessity for general cleanliness, in seasons characterized by fever, than during the prevalence of cholera. Putrescent emanations do not specially excite cholera, otherwise than by their general influence in undermining the health. Such emanations are especially adapted to excite fever, and are doubly formidable in a season when fevers are prevalent.

As to the best methods of purification, to guard against the feverish attacks of summer, the only perfect plan is, to wash off the offensive materials by a storm of rain, or to bury them beneath the surface of the earth. As these methods are not always practicable, lime, and the chloride of lime are frequently sprinkled about, as purifying, antiseptic agents. Lime, however, is worthy of but little reliance, having but little, if any more antiseptic power than common clay. It can, however, be of some use in its unslacked and corrosive condition, to assist in decomposing and destroying vegetable and animal substances. The chloride of lime has some value, but is too expensive to be used over a very extensive surface. Chloride of zinc, nitrate of lead, arsenic, creosote, pyro-ligneous acid, etc., are useful in counteracting putrefaction and its effects, but are rather adapted to the purposes of the anatomist and chemist, than to the sanitary measures necessary for houses or for cities.

The great counter-agent of putrefaction, and absorbent of noxious gases, is charcoal, fresh from the kiln, not having been exposed to the atmosphere long enough to have absorbed impurities. Where very offensive substances are found, they may be rendered perfectly harmless by covering them with a layer of fresh charcoal. Even the carcasses of domestic animals, might be permitted to decay in our vicinity, without contaminating the atmosphere, if covered with a layer of charcoal. The same charcoal may be repeatedly used by subjecting it to the same heat by which it was first charred, whenever it is necessary to renew its purity. This may be done by throwing it into the fire, and then extinguishing it with water, or by subjecting it to an intense heat, in a stove or oven. A very expeditious method of purifying air in unwholesome apartments, when the ventilation is not sufficient, is by placing grains of coffee, or spoonfuls of ground coffee upon a red-hot shovel, allowing it to be burnt to a coal, and the fumes diffused through the apartment. Thus, while

it purifies the air, it substitutes the pleasant and wholesome aroma of the coffee, for its previous contamination.

But we should not rely upon any such measures, if the apartment can be ventilated by opening the doors and windows. If a free current can not be thus introduced, a satisfactory ventilation may be caused by producing an upward draft in the chimney. To do this in warm weather, it will be necessary to kindle a blaze in the fireplace or flue, and thus create an ascending current. A slow ventilation may be produced, by placing a lighted lamp or candle in the fireplace, which will cause a slight ascending movement of the air. When a current is thus established up the flue, any offensive substance in the chamber should be deposited in the fireplace, that its emanations may pass up the chimney, and not contaminate the air of the apartment.

Having attended to these external precautions, we should bear in mind that similar principles are applicable to our own constitutions. Under the antiseptic influence of winter, we may consume animal food largely with impunity, but in summer the tendency to decomposition is so great, that the liberal use of animal food tends very strongly to the development of fever. The chyle formed from animal food, putrefies much sooner than that from vegetable food, and hence may introduce into the system that decomposing tendency which is the essential characteristic of fever.

Thus, in accordance with the wisdom usually displayed in the arrangements of Nature, our appetites in warm weather become indifferent to flesh while they are attracted to fruits and vegetables. The acid and saccharine elements of fruits, not only reduce the feverishness produced by a flesh diet, but counteract putrescency by their antiseptic influence, purifying the breath and all the secretions.

Our instincts, therefore, are apt to guide us right, teaching us to diminish our consumption of animal food, and to partake liberally of ripe fruits, which are the most wholesome, as our taste pronounces them the best. If, however, we deem a small portion of animal food desirable, to renovate our exhausted constitutions, we should recollect that the same chemical principles are applicable to food, when taken into the body, as previous to its ingestion. The salt, vinegar, and pepper, which make our best antiseptics for the preservation of oysters, beef, ham, etc., are equally applicable to animal food when taken into our bodies. It is therefore necessary that such condiments should be freely used in summer, by those who adopt a rich diet, in order to guard against the development of fever. Some very groundless notions, in reference to the use of salt, have recently been set afloat, by certain advocates of hydropathy. This necessary condiment they seem to regard almost as a foreign or medicinal substance, not legitimately belonging to a correct system of diet. Such an error, based upon hypothesis and ultraism, is calculated to do much mischief. It is true that salt, when used to excess,

becomes injurious, as does every other article of food with which we are acquainted. But chemical and medical experiments show that salt is an essential element of the human body, is an indispensable ingredient of the blood, an active promoter of digestion and nourishment, and an efficient counter-agent of both fever and consumption. If the consumption of salt as an article of food were diminished, there would be a great increase of mortality from consumption and fever, and a greater liability to many other forms of disease. The use of salt is especially necessary in summer, when feverish and putrefactive tendencies prevail, and when the proper amount of salt in the blood is so rapidly reduced by perspiration. With children it is also necessary to counteract the development of worms.

I must therefore insist upon the importance of a free use of salt, in the summer months especially, as a preservative of health. It has been shown by the experiments of Plouviez in France, that salt materially enriches the blood, and promotes the general vigor of the constitution. It has been shown by the experiments of other physicians, that it is one of the most efficient agents in counteracting the development of intermittent fever, and reducing the congestion of the spleen, by which it is accompanied. Popular experience, in malarious districts of country, is equally decisive—salt meat and coffee being considered more wholesome than fresh meat and milk.

Above all, let no one with a pallid countenance; with a scanty supply of blood, and a feeble constitution, think of dispensing with salt, which is one of the most necessary agents for the nourishment of the body and enrichment of the blood.

The morbid tendencies of summer are chiefly developed in the digestive organs,—those of winter in the breathing organs, kidneys, muscles, and fibrous structures. Hence it is necessary in summer that we should watch with jealous care the condition of the appetite and the bowels. The exhaustion or failure of the digestive apparatus, may bring on a fever insensibly, while we are scarcely aware of our danger.

The loss of appetite in summer is a very serious symptom, indicating often the approach of fever; hence the common and agreeable condiments, salt, vinegar and pepper, by which the activity of the digestive organs is maintained, should always be at hand, ready for use, when the appetite is failing. The proper use of these simple condiments would entirely prevent, or cure the majority of the attacks of diarrhœa and cholera. A teaspoonful of salt, and another of black pepper, with a table-spoonful of strong vinegar, diluted to suit the taste, is a prescription that ought to be familiar in every household. If this prescription were freely used, in cases of deranged or inactive digestive organs, with another of different character for irritations of stomach and bowels, there would be but little practice for physicians, in a large portion of the diseases of sum-

mer. For irritations and disorders of the bowels, there is nothing better than what is commonly called the neutralizing mixture, or neutralizing cordial, which has been so extensively brought into use by Eclectic physicians. Equal parts of rhubarb, saleratus and peppermint plant pulverized together, make the neutralizing mixture, which is made into the neutralizing cordial by the addition of loaf sugar and brandy. The mixture in powder may be taken in doses of from one sixteenth of an ounce to the eighth of an ounce, according to the circumstances, and repeated, if necessary, two or three times a day. A teaspoonful is generally a sufficient dose, and twice daily a sufficient repetition, unless in some very active diseases. This composition exerts a soothing and healthful influence over the irritated bowels, and restores them to a healthy condition without becoming actively cathartic. It is one of those mild and safe preparations, which ought to be possessed by every family for domestic use. It is largely manufactured by Eclectic druggists, and sold in four ounce vials, in the liquid form, as the Neutralizing Cordial.

Of all forms of disease, however, hot seasons are especially apt to produce disorders of the liver. Against these we should especially be on our guard. To ward them off it is necessary to understand that hepatic diseases may arise from two causes, a state of congestion, or a state of inanition of the liver itself. The state of congestion occurs whenever, owing to a weakened action of the heart, or sluggish habits, venous blood is allowed to accumulate in the liver, and when, at the same time, an unusual amount of blood is sent to the liver in consequence of indulgence in high living. When the fulness of the liver, thus produced by gluttonous and intemperate habits, is not counteracted by an active circulation, or when the weakened state of the heart prevents it from depleting the liver, a congested condition of the latter is produced, which necessarily runs into disease. This condition is also greatly aggravated by exposure to cold, when in a feeble state, driving the blood into the interior, and oppressing all the interior organs.

The opposite condition of inanition may be produced by a life of incessant excitement, activity and abstemiousness, in which the increased action of the heart depletes the liver, while owing to abstemious habits its natural supply of blood is greatly reduced. In either case the functions of the liver are impaired or suspended. In the former case, when the liver is suffering from intemperate indulgence, and the consequent congestion, the remedy is to be found in a more active and temperate life; alcoholic drinks must be rigorously forbidden; animal food laid aside, grapes, peaches and other fruits and vegetables freely used, and habits of activity adopted. In the opposite condition, accompanied by a feverish state of the circulation, and a contracted, inactive condition of the liver, we should seek rest and quietness, cultivate the appetites, and endeavor to promote a healthy digestion. If,

however, the exciting cause be found in the malarious atmosphere of a district where fevers are prevalent, our only safety is to escape to a healthy atmosphere, where putrescent emanations, and the various forms of hydrogen gas are not exerting their contaminating influence. If we cannot escape the unwholesome atmosphere, we may guard to some extent against its effects by careful regulation of the diet,—using ripe and wholesome fruits, and not neglecting the antiseptic condiments of the table, salt and vinegar. If, with all our precautions, we still have reason to believe that an attack of fever is probable, a moderate use of the tonic bitters, such as hydrastis, columbo, and quassia will do much to fortify the constitution against fever, by their tonic and antiseptic power. If our sensations warn us that our health is not entirely secure, and that an attack of fever is highly probable, we should not delay our active resistance until the attack is actually commenced. Quinine taken twice a day, in two or three grain doses, in advance of any anticipated attack, will generally prevent its occurrence, and preserve us in good health, when a much larger quantity would be necessary if taken at a later period. By this prophylactic plan, we not only save time, money and health, but preserve the constitution from the destructive undermining influence of successive attacks of disease. The true hygienic principle, which I have been advocating for many years, is, that we should never be cured of diseases, but should always meet them by prevention instead of cure.

There is a still higher hygienic principle to be impressed upon the public mind, a truth of which our moralists have not been aware. Man should never be a victim of disease. He should regard all diseases as punishments for some violations of the natural laws. He should receive his punishment meekly, and profit by the lesson. The time may come when a well educated man will be ashamed to acknowledge that he was ever sick.

PROGRESS IN PHRENOLOGY.

In our article upon the "Back Door Entrance," were sketched the ungracious reception, and the dilatory recognition with which all great truths must meet, from authorities, learned societies, and the mass of the professions. The history of the progress of Phrenology, is a remarkable illustration of the steady and stolid resistance to truth, which has been made, especially by the medical profession. At the present time this resistance is rather of a passive and negative character, as but few

are conspicuously engaged in the promulgation of the science. In reading the London Lancet for 1837, I find a lecture from Dr. Elliotson, which is worth publishing as an illustration of the progress of the science nearly twenty years ago, at a period subsequent to the death of its founders, while Dr. Elliotson himself was still at the zenith of his reputation, and but a short time prior to his professional overthrow. At that very time he was signaling his professional liberality, by introducing mesmeric experiments in the University College Hospital, which turned the current of professional influence against him, and deprived him of that commanding and honorable position which he occupied at that time.

Possessed of wealth, talents, and learning, with a professional reputation of the highest character, having published works of high reputation upon the practice of medicine, and upon physiology, his defeat, of course, was not ruinous as it might have been to one in less independent circumstances. Had Elliotson confined himself to the advocacy of phrenology, the profession might have tolerated his liberality; but as he considered the profoundest and most marvelous truths in nature, the legitimate subjects of scientific inquiry, he was discarded by the profession. The illustrious Caldwell, in our own country, was, for a similar reason, deprived of his just influence in the profession, and finally robbed of his position in the very College he had founded and guided to an unexampld prosperity.

It would be wrong to overlook or forget such examples of ingratitude, united with bigotry and persecuting illiberality: they have an immense influence in retarding the progress of truth. They are held up, *in terrorem*, over the young men of the profession, as a warning against being too bold, or too honest in the pursuit of truth.

Still more recently, Judge Edmonds of New York has been driven from an eminent judicial position, for his honesty in recognizing facts occurring under his own observation; and if the venerable Dr. Hare of Philadelphia, has not been disturbed in his well merited honors, it is simply because they are beyond the reach of opponents, being merely the records of his past life, and the honorable position which he has filled, before retiring to the tranquility of private life.

It is incumbent upon every friend of truth and human progress, to take especial pains to honor that class of enterprising pioneers in science who thus place themselves, by their devotion to truth, in opposition to those powerful influences, which are fatal to their worldly prosperity.

To return to Dr. Elliotson, the lecture in question was delivered by Dr. E., at the meeting of the Phrenological Society of London, (75 Newman Street), Monday evening, Nov. 6th, 1837, and was as follows:

ON THE IGNORANCE OF THE DISCOVERIES OF GALL EVINCED BY RECENT PHYSIOLOGICAL WRITERS: BY JOHN ELLIOTSON, M. D.

“Every phrenologist will agree with me that he never met a disbeliever in phrenology who showed the least acquaintance with the science and the endless and diversified facts upon which it is founded. The absurdity of the objections to which we are compelled to listen, is not less wearisome than the ignorance of the facts amassed by Gall, and surrounding us on every side, is disgusting. Having adopted certain opinions upon the mind and brain, without any examination, they reject phrenology, justifying Locke’s accusation, that few people have any solid reason for the ‘doctrines they keep such a stir about.’ [‘Human Understanding,’ iv. 21.] Not a single objection to the principles of phrenology is ever adduced that was not urged in the time of Gall, and amply refuted by him. But then, none of these objectors have studied Gall. I have met with many disbelievers who had read Dr. Spurzheim and Mr. Combe, and been unconvinced; but how any one, who has studied Gall, and examined for himself into the facts of the coincidence of development and character, can doubt the truth of phrenology, I cannot imagine. Indeed, I am satisfied that it is impossible. The greatest misfortune that has ever befallen phrenology has been the want of an English translation of Gall’s works; the consequence has been, that nearly every one in Great Britain and Ireland, who has bestowed a thought upon phrenology, have contented themselves with learning it second-hand from Dr. Spurzheim, or third-hand from Dr. Combe. In these works, some find things of so questionable a character, that I have known many confess that they have closed the books in disgust, and so never proceeded to examine the evidences of organology; and the facts of organology displayed in the works of these two writers, not being comparable to the splendid array in the volumes of Gall, converts have been made in far smaller numbers than if Gall’s works had been studied. As to those organs, the discovery of which Dr. Spurzheim claims as his own, scarcely a fact is adduced in their support, and little more than bare assertion is made. An English translation of Gall has recently been made in America, but I am happy to say that our Secretary is preparing one in which the splendid section on *amativeness* will be translated, like the rest, into English, and not left in French, and in which those parts of the large work which are not to be found in the octavo edition, will be inserted, many of which are very fine. Gall’s works are clear, flowing, full, at once rigidly philosophical, and rich with profound thoughts and glowing illustrations. I never take them up without finding something fresh, and feeling that I am with one of that band of mighty minds to which Bacon, Shakspeare, Milton, etc., belonged. They speak for themselves, and are totally different from the writings of Dr. Spurzheim; and yet Gall’s writings are unknown to the great

er part of the physiologists of the present day. This assertion may startle, but it is true. The British Association of Science assembled at Cambridge, in June, 1833, published a report by Dr. William Charles Henry, on the 'Present State of our Knowledge of the Nervous System,' in which not only was phrenology entirely passed over, but the following declaration was made:—'That the brain is the material organ of all intellectual states and operations, is proved by observation on comparative development, as well as by experiments on living animals, and by the study of human pathology; but there does not exist any conclusive evidence for referring separate faculties or moral affections to any distinct portions of the brain.' Nothing was advanced in support of this strange assertion, the name of neither Gall, nor any other phrenologist was mentioned, and the inevitable conclusion is, that neither the writer, nor those who ordered this report to be printed, could have ever opened Gall. The arguments and facts displayed by him must have attracted at least a passing notice, had they been known. I defy the Association to pass over Gall's writings in silence on another such occasion, if they condescend to open his volumes. In one of his beautiful passages he says: 'All the doctrine is now consecrated to the public; judgment cannot long remain doubtful, personal feeling will disappear, the passions will calm, and criticism will have only its due weight; posterity will not fail to contrast the point with which I started, with that at which I stopped. My adversaries have but too distinctly displayed the state in which the objects of my labors were, for it to be difficult to know what improvement these have derived, and will derive from my discoveries.' If the errors and ignorance displayed by Gall's adversaries, during his career, served clearly to mark the accession of knowledge for which the world is indebted to him, the total ignorance of phrenological facts, set down in legible characters for the gaze of posterity, in the report of the British Association, will serve to establish to future ages, when phrenology shall be, as it will be, universally received, that for the whole of the first and only true doctrine of the mind, and its various faculties, we are indebted to Gall alone.

"The first great principle is, that the brain is the organ of the mind. Although no rational being now doubts this, and it is admitted by the British Association, it was denied by a large number of writers, and by a large number of persons at the time Gall wrote. Hippocrates and many able writers acknowledged the brain to be the organ of the mind, but Gall had a host of adversaries when he maintained this opinion. On account of it he was called a deist, an atheist, a materialist, and other opprobrious names, which, from being so lavishly bestowed on men of sense by those who differ from them in opinion, serve at present only to excite laughter with those who love truth and good action.

"The second principle of Gall was, that distinct parts of the brain had

distinct offices; that each primitive faculty was possessed by a particular part of the nervous system. This principle was maintained many years ago, with regard to the powers of sense and motion. Erasistratus, from the fact of paralytic limbs being sometimes deprived of sensation only, sometimes of motion only, or even, in the latter case, becoming more sensible than previously, — supposed that there must be distinct nerves for sensation and motion. Galen taught his contemporaries that one set of nerves went to the skin for sensation, and another to the muscles for motion. Sir Charles Bell found that in dividing the posterior spinal nerves no motion ensued; but that, on touching the anterior, the muscles of the back were immediately convulsed. He concluded that the anterior only were for motion. He thought, however, that they might be also for sensation, and that the posterior might have other functions altogether, since he found that the division of the posterior nerves did not impair motion at all; and, he adds, that the pain attendant upon the experiment, prevented him from judging how far sensibility remained after the division of the posterior nerves. It was M. Magendie who proved that the division of the posterior nerves deprived the corresponding parts of the animal of sensibility, and that the division of the anterior deprived them of motion only. Sir Charles Bell, therefore, made but a portion of the discovery. M. Magendie cleared up what he left in doubt. But, after all, the discovery was merely the proof of an opinion entertained for ages, down to the most modern times; and there was no new principle in it, since it was an established fact that certain nerves, such as the olfactory, acoustic, and optic, are for sensation only, and others, as the common motor, the external motor, and the internal motor of the eye, and the lingual, are for motion only. Again, this was but a single instance in regard to individual nerves, of Gall's great general principle, that distinct offices are performed by distinct parts of the nervous system. Yet Dr. William Charles Henry ventured to state, before the assembled Association, not only that the honor of the discovery belonged exclusively to Sir Charles Bell, but that it is 'doubtless the most important accession to physiological knowledge since the time of Harvey;' an accession of knowledge which is simply an individual example of Gall's great general principle in the nerves.

[Dr. Elliotson here criticises certain pathological facts adduced by Dr. Carlisle, and by Dr. Graves of Dublin, showing that their statements do not, as they pretend, refute the phrenological doctrines. In the first case adduced by Carlisle, a female was found upon *post-mortem* examination to have a very small cerebellum, while in the other case, one half of the cerebellum was deficient. In the case of Dr. Graves the state of the cerebellum was not ascertained. These authors, he says, only displayed their ignorance of the science, by attempting to overthrow it with facts, which, when carefully examined, proved nothing at all against it. Dr. E. remarks, "The true friends of Dr. Graves must regret that he has ad-

ded these to the many former silly remarks which he has made upon Phrenology.”]

“In the third volume of his large work, printed in 1818, and some years before this in his lectures, Gall declared, from numerous observations, that the nervous fibres from the organs of generation ascend from the genital parts, till they reach the cerebellum, where they decussate exactly like the anterior pyramids. MM. Serres and Flourens made the same discovery some years afterwards, and contended for priority between each other, not mentioning Gall’s name.

“My excellent friend, Dr. Bostock, in the edition of his ‘Physiology,’ which has just appeared, shows himself very unacquainted with phrenological writings. In his chapter, upon the ‘Hypothesis of Cranioscopy,’ as he calls it, he begins by stating that the connection of character and disposition, with the peculiar shape and organization of the brain, was first placed in a phrenological point of view by Drs. Gall and Spurzheim, who, in consequence of their accurate dissection of the brain, and their mode of separating its different parts from each other, were led to conjecture that these parts were appropriated to distinct mental faculties.’ Now Gall had lectured and written upon his discoveries long before Dr. Spurzheim knew anything of them, and Gall had established a great part of his doctrine before he began to dissect the brain at all. Dr. B. then says, ‘it is by an appeal to experience that the supporters of cranioscopy, and Dr. Spurzheim in particular, attempt to establish their opinion, and they have accordingly brought forward a number of facts of this description, which are supposed to form a sufficiently firm basis for their system.’ Now, so far from Dr. Spurzheim in particular, producing facts, it is Gall’s works which teem with them; indeed, they are a series of inductions of facts innumerable. It was Gall’s facts which made Dr. Spurzheim a phrenologist. Dr. Bostock says, ‘the position that the size of an organ is an indication of the degree of its power or its capacity—a position which may be regarded as almost the fundamental principle on which the whole doctrine rests, is in direct contradiction to fact.’ Now, if Dr. Bostock had studied phrenology, he would have known that Gall, and after him Dr. Spurzheim, Mr. Combe, and every phrenologist disclaims such doctrine. It is not size, but size and quality, upon which strength of a faculty depends. Gall knew, and says that an organ may be very large, and the faculty weak; that a brain may be very large, and the person imbecile and passionless; that the same organ may display great power at one time and little at another. At p. 57, of his sixth octavo volume, Gall says, ‘imbecility is not only the result of a defective developement, the functions of the brain may be impeded by other indispositions; idiotism is frequently met with even from birth, when the organization is apparently perfect.’ Dr. B. says that for the full establishment and clear demonstration of the decussation of the fibres of the anterior pyramids we may consider ourselves as indebted to Gall and Spurz-

heim. It was known of old, as Gall remarks in his demonstration of it, and cannot be disputed; but Gall established it, in opposition to Prochaska, Barthez, Sabatier, Boyer, Dumas, Bichat, Chaussier, Magendie and Desmoulins, and taught it before Spurzheim was his pupil; and though, in his 'Anatomy of the Brain,' p. 148, Dr. S. says, 'Modern Anatomists, before Gall and myself, were divided in opinion on the subject of the decussation,' at p. 11 he confesses that, having completed his studies, he was associated with Gall in 1804, 'and at this period Dr. Gall, in the 'Anatomy,' spoke of the decussation of the pyramidal bodies.' Dr. B. states 'that Sir Everard Home anticipated Drs. Gall and Spurzheim in what has been supposed the most novel of their doctrines,' viz., that the convolutions of the brain are unfolded in hydrocephalus. This Sir Everard Home published in the 'Philosophical Transactions' for 1814; but Dr. Gall had already published this in his 'Anatomy' several years before. It will be found in the first volume of his large work printed in 1810, and he had stated it previously in his account presented to the Legislature in 1808, and before that in his lectures. This Dr. Spurzheim shows at p. 53 of his 'Phrenology.' In one part of Dr. Bostock's 'Physiology' we read that 'The conjecture of Sir Everard Home is not without plausibility, that the fluid which the ventricles contain, varying in its quantity, may serve to equalize internal pressure.' This conjecture was published in the same volume of 'Philosophical Transactions,' for 1814. Now, Dr. Spurzheim distinctly says at p. 46 of his 'Phrenology,' 'before Sir Everard Home, Ackerman in Heidelberg, published the same statements.

"I should weary the society were I to lay before them other recent instances of this lamentable unacquaintance with the labors of phrenologists; but these examples of ignorance of mere phrenological principles and history, will show how little weight can be attached to the opinions of antiphrenologists on the endless evidences of the science."

CEREBRAL HYGIENE.

CHAPTER I.

[Continued from page 101.]

All exercise is beneficial to the mind by strengthening the occipital organs, which improve the entire temperament, and thus give additional firmness to the structure of the brain. But to produce these effects, our exercises should be temperate and pleasant. Fatiguing labor is one of the most efficient means of diminishing the powers of the brain and benumbing all the faculties of the Nervous System. Great fatigue is always injurious, and generally injurious in proportion as it is oppres-

sive and painful. Nature wisely annexes to excessive muscular exertion this penalty of fatigue, to prevent us from brutalizing ourselves by excessive toil. It is a safe practical rule for our mental and physical improvement, to follow the guidance of pleasure in reference to exercise. The wild sports of the hunter, the prolonged amusements of dancers and the powerful efforts of fencers and gymnastic competitors give a robust and symmetrical development to the constitution far superior to what is obtained in the monotonous drudgery of repulsive toil.

It is greatly to be regretted that the dignified habits of manhood prevent a continued indulgence in boyish sports, that false ideas of dignity interfere with athletic amusements, and that pharisaical notions of religion interfere with the delightful exercise of dancing.

When exercise is not presented in an attractive form it is apt to be neglected. Men will not resort to monotonous drudgery for the sake of physical development, and especially those whose muscles are enfeebled, and whose animal spirits are exhausted. They need every attraction that can be presented, to encourage them in taking exercise. Even during collegiate education, the plan of procuring physical development by manual labor has not met with any gratifying success. Such labor as is commonly introduced is too monotonous, too uninteresting, and is quite unfit to renovate the delicate muscular system of the student, or counteract the effects of hard study. Even if it succeeds in maintaining the muscular development, it fails to sustain the elasticity and vivacity of the character, upon which our happiness and usefulness to a great extent depend. Hence all thorough educational establishments should be well supplied with gymnasiums, play-grounds and apartments for dancing and calisthenics. To such establishments, all persons of sedentary pursuits should regularly resort.

Having settled the fundamental principle, that exercise should be of a brisk, animating and interesting character, the question as to different modes of exercise, is of minor importance. Exercises of the lower limbs, such as running, walking and leaping are beneficial in the way of counterbalancing the over-activity of the brain. Such exercises are therefore highly appropriate to persons of intellectual pursuits, and if not carried too far, so as to produce dullness and confusion of mind, are very beneficial. The exercise of the lower limbs also deepens the respiration and greatly increases the vital force of the constitution. Such exercises, especially in the way of running and leaping, are especially important to those in whom the vital force is comparatively deficient, but very delicate constitutions, and those predisposed to mental derangement or any oppression of the brain, may easily be injured by excessive exercise of the lower limbs.

The exercise of the arms has a more tonic and sustaining influence than that of the lower limbs, and this influence is especially displayed in

reference to the lungs, heart, stomach and liver. Hence exercises of the arms are especially desirable for those in whom disordered digestion, heart-disease, or pulmonary attacks are to be apprehended. To the sensitive, timid and diffident, the exercise of the arms is highly beneficial, as it tends to give strength to the character, and overcome their infirmities. The arms sustain the same relation to the stomach, which the lower limbs sustain to the lower bowels; hence, while those who have dyspepsia and palpitation, should resort to exercise of the arms, those who are accustomed to rely upon the use of purgative medicines should rather change their sedentary habits for active exercises on foot.

Another important philosophical principle in adapting the character of the exercises to the character of the constitution is to be deduced from the cerebral law, that vehemence and excitement belong to the basilar organs; calmness, steadiness and firmness to the coronal region. Hence, in proportion as we wish to cultivate our basilar forces, and give the greatest stimulus to vitality, our exercises should be more violent in their character, calling forth the utmost exertion of our strength. Such exercises are especially necessary to the sedentary student and artisan, whose occupations through the day are of a calm and patient character. Running, leaping, gymnastic sports and hunting, are far more beneficial and restorative to them, than any exercises of a less forcible character. Dancing, when conducted in a sprightly style, is remarkably well adapted to the demands of delicate persons of sedentary habits, and may be considered in many cases the best exercise that can possibly be devised for delicate constitutions. The pleasant stimulus of the music, and the happy social influences with which it is connected, so renovate our spiritual forces, as to enable the delicate individual to perform a much greater amount of muscular exertion in dancing, than in any other less delightful exercise.

The great majority of those, upon whom exercise should be urged as an important physiological duty, require vehement exercises of the lower limbs; yet there are many, for whom exercises of a much calmer character should be prescribed. Those in whom the temperament is passionate and excitable, who have had an excess of nervous excitement and restlessness, who are lacking in constitutional steadiness, tranquillity and self-control, and who are, what is commonly called *nervous*, should have exercises of a calmer character, and rather of the upper, than lower limbs. The developement of the arms, it is true, produces less vital force, than that of the lower limbs, but at the same time it produces more stability of health and equanimity of intellect.

We may therefore lay it down as a rule that whenever the region of Firmness and its neighbors, extending across to Cautiousness, and indeed the whole upper part of the occiput, have *not* a superior or predominant developement, exercises of the arms are especially indicated. *Sawing*

chopping and planing, dumb-bell exercises, fencing, climbing and other gymnastic exercises for the arms should be recommended for all of the nervous excitable temperament.

Vocal Exercises are also highly important as a means of constitutional and cerebral development.

The sound of the voice excites the brain, and a loud or vigorous delivery, which is commonly adopted by persons of energetic character, furnishes an important vital stimulus. The important principle, which should guide our physical exercises, is that our *inspiration should be deep, using the diaphragm*, and the voice should proceed from the depth of the chest, if we wish to cultivate our physical forces.

When the voice comes from a contracted chest, and is delivered in a feeble manner, the exercise is rather injurious than beneficial. But when a respiration is deep, giving the voice unusual depth, compass and power, our vocal exercises are animating and restorative to the entire constitution.

EVIL PASSIONS.

A friend of the JOURNAL writes as follows:—

“Some subscribers wish to know why you give such names as Hatred, Turbulence, Desperation, etc.¹ to some organs. They say that these names indicate something bad, and they think there is nothing bad in God’s works. They would be glad to see a word from you on that subject.”

Perhaps a standing explanation may be necessary for the benefit of those who have adopted erroneous views of Phrenology, which are not sanctioned either by the original teachings of Gall, or by the language of Nature, which he so successfully interpreted.

Evil and crime exist beyond all doubt. The most visionary Optimists and Utopians can not deny this. We have passions and crimes, disease and malaria, filth and stench, savage beasts, venomous serpents, earthquakes, plagues, pestilence and war. While these evils actually exist, it would be folly to overlook their existence, and it would be a superficial philosophy which did not observe and account for them. The idea that there is nothing evil in creation may be very comfortably entertained while discussing philosophy over a good dinner or reading romances on a sofa, but when we are bitten by musketoos, alarmed by a poisonous snake in our bed, distracted by the agonies of tooth-ache, overwhelmed by the failure of a crop, or tortured by some incurable disease, the idea that there is nothing evil in the world, sounds like an insult to our misfortunes.

The world is full of evil, and these evils have their causes. The ferocious habits of the tiger and the wolf, which become such terrible evils to their innocent victims, are due to their legitimate and predominant organ of Destructiveness; the ferocious crimes of human beings are due to similar organs in the human brain, operating in uncontrolled predominance.

Murder, theft, suicide, etc., are all the product of unbridled passions arising from large developments of the basilar organs uncontrolled by higher powers. This is the whole story as far as phrenology is concerned; certain large organs produce certain crimes whenever they predominate in development, and we name the organs from the crimes which they produce. When this is done, our task is accomplished.

If the objector affirms that such facts are not compatible with his theology, we can only reply, so much the worse for his theology, which should be made to conform to facts. If he supposes that God has created nothing evil, we can but point him to rattlesnakes, to earthquakes and to malarious districts, where men degenerate and die while they breathe the tainted atmosphere. It is needless to argue with an optimist who can not see such evils.

On the other hand, if it is simply affirmed that the plan of the human constitution is good and its ultimate design beneficent—that it is wisely constructed and that all its organs produce good results when acting in their proper sphere, such suggestions are readily admitted. The plan of the human constitution is sublimely beautiful and all its organs have their legitimate use, but the use of the basilar organs is to act in a subordinate sphere entirely imprisoned and controlled by the higher powers and never permitted to lead the character. Like a good fire, which is carefully confined to the fire-place and held in by iron bars, they diffuse warmth, life, and activity; but like that fire when unrestrained, they destroy everything around them. In giving names to such organs it is necessary that we should express their true character, when acting uncontrolled. It would give a very incorrect idea of fire to speak of it merely as a comfortable warmth, because it produces that effect when properly managed. To describe it truly we should speak of it as a devouring and destructive element.

In like manner, the fiery passions of man, if we would understand them as they really exist, must be described as they manifest themselves in uncontrolled development.

For a fuller explanation of these matters, I must refer to the *Outlines of Anthropology*, and especially to the lecture on normal nomenclature.

A SPIRITUAL PHYSICIAN.

(From the New England Spiritualist.)

The following statement is from a scientific gentleman, who, we are assured, is well qualified to observe and testify respecting such facts as he has here given.

MR. EDITOR:—I have been much interested with some facts connected with the practice of an excellent healing medium here, Mr. Jeremiah Carter. He has for many years been engaged as a clairvoyant Physician, and his business is quite equal to that of many of the most successful physicians in this neighborhood. There are some peculiarities in his case, I think, which may interest your readers.

Though he is consulted as a clairvoyant physician, by many who have no idea that Spiritualism has anything to do with his practice, he plainly assures his patients that it is a physician in the spirit-world who practices through him, and that he himself has no acquaintance with medical matters, except as he has learned through his spiritual friend, who was, when in the earth-life, an eminent, physician residing in this county—Dr. Hedges.

It is not necessary always for Mr. Carter to visit his patients to make his examinations and prescriptions. He, by means of a magnet, passes into the superior condition, and the spirit being informed of the locality, goes and examines the patient, when, through Mr. Carter, he reports and prescribes, to be written down by another person. Mr. Carter, himself, desires no information from the patient as to his symptoms, or disease, or previous treatment; the spirit learns all these facts for himself, *and has never once been mistaken in thousands of instances.* Mr. Carter is himself a plain, unlettered man, and does not, and cannot talk of medical matters in correct medical language; but not so with the spirit speaking through him. Having had a medical education, I am able to speak with some assurance in this matter, and I must say confidently, having listened with delight to many examinations made by the spirit of Dr. Hedges, through Mr. Carter, that many of them, if taken down word for word, as delivered, would do credit to any medical professor. He goes on each case *in extenso*, and gives, as it were, a lecture, in beautiful and appropriate language, touching the particular case, the disease, the causes, the treatment, &c. Though Dr. Hedges was an allopathic physician, his practice, now that he is in the spirit-world, is Eclectic, sometimes treating cases allopathically and then again homœopathically, or hydropathically, according to the case, and sometimes in combination.

CASES.—1. A child of Anson Reed of this village, was treated for an abscess in the side, and as a council of four physicians had decided to

operate, Mr. Carter was called to make an examination, and decided that there was no abscess at all, as the doctors had said, but an enlargement of the liver. This examination, however, was known to the family and one of the physicians only, which physician, Dr. White of Fredonia, who is a Spiritualist, believed the spirit-examination to be correct, and advised to delay the operation. The other physicians subsequently performed the operation, and found *no abscess*, and gave the child up to die. The spirit decided the case curable, and proved it so. The child is now running about here well. In this case it would seem, humanly speaking, that one dead doctor was of more value than four live ones.

2. During the past winter, Mr. Carter made an examination for a gentleman of plethoric habit, (Benjamin Hussey of North Collins, N. Y.) who to all outward appearance seemed perfectly healthy, but who was aware himself that he was somewhat diseased. The spirit decided that the patient had organic disease of the heart and bladder, and, to the astonishment of himself and friends incurable, and that in a few weeks at farthest, he would die suddenly. No prescription was made. Nearly all who knew the patient thought the examination incorrect, but in about three weeks, he died suddenly, as predicted.

3. Last winter while Mr. Carter was sitting in a room in Buffalo, where several gentleman had been speaking of Spiritualism, the spirit of Dr. Hedges gave him his usual signal for going into the superior state. Mr. Carter's remarkable modesty was severely put to the test, and he started for the hall, begging the spirit to let him off, as the time and place seemed unsuitable, there being several strangers there and he feared that too much excitement might result. The gentleman, a stranger to Mr. Carter, who sat next him, seeing him go out hastily, had followed him to aid him if needed. The spirit persisted in gaining possession, and having returned to the room, addressed the stranger, telling him that his physician had been treating him for some time for a disease with which he was not afflicted, giving him wrong medicines, which were greatly injuring his system. The spirit then located the disease correctly, and beautifully and beneficently lectured him on health and the laws of life. This gentleman acknowledged that he was an invalid, had been under a doctor's care, as stated by the spirit, and constantly growing worse. He discharged his physician, used the prescription thus proffered him from a physician in heaven, and, after one or two examinations and prescriptions by the same physician, entirely recovered. His name is also Hedges, and he resides in Buffalo. "What's the use of Spiritualism?"

4. A young child of Mr. Sewell Clark, in this neighborhood, was very sick of an acute disease, not long ago, when Mr. Carter was sent for. He could not go immediately, as desired, and the case being urgent, the family sent for Dr. Smith of Fredonia. Mr. Carter having made the

examination *at home*, arrived at the house just as Dr. S. had made an examination and had decided that the child could not recover. But he asked if Mr. Carter wished to examine, when Mr. C. said he had made an examination before leaving home, had brought the medicine which had been prescribed, and that the child could be cured. Smith abandoned the case and the child was cured.

5. A daughter of Capt. Dewey of Sherman, in this county, had been treated unsuccessfully by a Dr. Fenner there, for a complication of diseases and derangements, and was, apparently, fast running into consumption. Capt. D. sent to Mr. Carter for a prescription. This brought from Dr. F. a load of abuse on the Captain, when Fenner, after having run up a bill of twenty or thirty dollars, was dismissed. By three examinations and prescriptions through Mr. Carter, at a cost of three dollars, the young lady recovered, and is now strong and healthy. A student of Dr. Fenner afterwards obtained, from Mr. Carter, on false pretences, the prescriptions in this case, since when, it is said, Dr. F. treats similar cases much more successfully.

Hundreds more might be given,—cases showing the spirit-doctor, with others in council, holding medical discussions with earth-physicians differing from him, beating them in argument on medical matters, and then curing diseases pronounced by them incurable; cases where the spirit took possession of the patient, and cured him as if by magic, &c.

REMARKS.—1. The grand practical point gained by employing a spirit-physician, is a correct *diagnosis*, which all medical men know, is, in many cases, perfectly unattainable by earth-physicians, while the *prognosis* must necessarily be more reliable with the former than the latter.

2. It must be very important for any clairvoyant physician or healing medium to have the aid of a spirit of a reliable "*natural physician*," that is one who, in the earth life, delighted in the healing art; otherwise the spirit of some old nurse, or which is but little better, the spirit of some physician who in the earth life practiced as a matter of form merely, may get possession of the medium and lead to great mistakes. This affords an explanation of the uncertainty of many pretended healing mediums, or clairvoyant physicians.

3. The above, with other analogous cases, prove the truth of Spiritualism more clearly than almost any other evidence. The great spread of Spiritualism here is clearly attributable, to a very great extent, at least, to this kind of medical practice.

4. There is clearly no such thing as absolute independent clairvoyance, without the agency of a departed spirit.

Yours for truth and humanity.

O. S. LEAVITT.

Laona, Chataouque Co. N. Y., March 31, 1855.

[We do not see that our correspondent's last conclusion, as a general statement, is deducible from the facts he has given. If in the case of Mr. Carter, information is derived wholly from disembodied spirits, it by no means follows that spirits in the body may not have some powers of the same kind.—Ed. Spiritualist.]

DEMONOLOGY.

For some few years past we have heard much said upon the subject of "Spiritual Manifestations," but have seen nothing until recently. We have not, indeed, taken much pains to witness the phenomena, nevertheless we have occasionally happened to be where the spirits were wont to manifest themselves, but for some reason that we do not pretend to understand, never a spirit manifested himself in our presence, by so much as a rap upon a table. We had almost come to the conclusion that we were so inconvincible that the spirits were determined to leave us without evidence of their presence or power. But we have seen the elephant. A few days since a friend called at our sanctum, and informed us that a spirit friend of his was visiting him daily and treating him with a course of PATHETISM, for disease with which he has been suffering. The spirit, as he believes, takes possession of his body and "puts him through a regular and violent exercise," which, by the way, he says is fast restoring him to health. We were talking upon the subject, when we noticed a sudden spasmodic movement of the arms, much like that produced by a shock from an electrical machine. We thought that our friend was going into a fit of epilepsy, but he quieted our fears by the assurance that it was a spirit. He quickly laid off his overcoat, and then the exercise commenced in good earnest. With both hands going as rapidly as drumsticks, he pummelled his breast and abdomen, swung his arms in all directions, and threw himself into all sorts of attitudes and contortions, for the space of full three quarters of an hour; and what is most remarkable, manifested at the end, no symptoms of fatigue, but said, on the contrary, that he felt rather refreshed and invigorated by it. We are a much stronger man than he is, and yet we are confident that one-half that exercise would have utterly prostrated us. We have no idea that our friend intended to deceive, nor do we believe that it would be possible for him, when he is in his normal state to go through the half of that performance without an entire prostration of his physical powers.

Well, what was it that produced these effects? Here you are too hard for us. Our friend said that it was a spirit: and the said spirit through him addressed us in complimentary terms. To us he was a very civil spirit; therefore we do not like to be uncivil to his spiritship. But we must say that we would not like such a pummelling as he gave our friend. There is a proneness on the part of many to refer all unaccountable things to the agency of spirits, and that too without very plain or palpable reasons. We saw plainly enough certain inexplicable phenomena, but that these phenomena were produced by the agency of a disembodied spirit of a man in the other world, is precisely the thing of which we did not see the evidence. If it had been said to have been the work

of some living Witch or Wizzard, the evidence would have been equally plain. We are a sad skeptic about these spiritual manifestations, and quite as skeptical about their legitimacy and utility, as their validity or reality.

Whatever it may be, it seems to us identical with the demonology of old. A demon in those days, was the spirit of a deceased person, good or bad as the case might be. A demoniac was a man into whose body a demon or departed spirit had entered. The presence of the demon was manifested sometimes by performances not unlike those of our friend.—*Gospel Herald.*

PRACTICAL ADVICE.

“Can you tell me,” said an intelligent German, “what will benefit a disorderly, unbalanced mind, the thoughts wandering upon a variety of heterogeneous subjects, and running into melancholy?” What is your situation? I enquired. Are not your associations uncongenial? I learned in reply, that his pursuits were sedentary, and his associations entirely uncongenial. He had no companions or friends, and his countenance indicated the inactivity of the Social Sentiments. The necessary advice was brief and simple, A more active life would be preferable to strengthen the character and mind, but the social influences are indispensable. You must seek society,—the society of friends, and make it your especial business to cultivate such society.

In this little incident is involved an important lesson. The adhesive or gregarious impulses are the antagonists of the intellect, and the social sentiments, which are the proximate neighbors in the brain of the intellectual faculties, furnish the readiest diversion from excessive intellectual excitement, hence when man violates his nature by a solitary life, or by isolation from his fellows, his intellectual faculties become excited into a disproportional and ill-regulated activity, the effects of which are exhausting, depressing and melancholic. Such too often is the case with students and men of intellectual pursuits; they become unfitted for society, and their intellect runs to waste in speculations without aim and in gloomy meditations.

The Social Influences are necessary to preserve our efficient control over the operations of the intellect, and to prevent its restless activity from exhausting our energies. These influences are necessary to give cheerfulness and elasticity, and to sustain that practical energy in the mind which accomplishes useful results.

Social enjoyment is therefore essential to the mental balance, and although to the mass of mankind whose habits are gregarious, this admonition may be unnecessary, it is *not* an unnecessary admonition to students, writers, artists, and to many artisans of sedentary pursuits, whose business deprives them of opportunities for social enjoyment, and whose circumstances are unfavorable to obtaining the pleasures of cultivated society.

SPIRITUAL THERAPEUTICS.

The following interesting narrative is copied from the editorial columns of the Cincinnati Daily Times of May 8. The gentleman alluded to, Mr. H., was formerly a very successful operator in the old mesmeric fashion. Since he has become a medium, he says that the phenomena are somewhat different from what they were formerly—the patient generally passing beyond his control as if under some foreign power, and his own energies being less taxed.

The co-operation of spiritual force is certainly a very important assistant in the healing art, for the chief objection to nervauric manipulations, in the treatment of disease, lies in the fact that the operator himself is too often injured and reduced in his vital force, in proportion to the amount of benefit received by the patient. The spiritual energy appears to relieve the operator from this heavy tax upon his health:—

“SPIRITUALISM—A CURIOUS INCIDENT.—Visiting the ‘Home of the Friendless yesterday, we gathered the following particulars in regard to a wonderful cure lately performed there by a ‘healing medium,’ or a Spiritualist. It is certainly a wonderful occurrence, and we give it as a matter of news, without expressing any opinion upon the spiritual theory, which has so many ardent believers in the United States.

“A short time ago, Frances Jane Price, a native of this city, and an orphan, in very destitute circumstances, came to the ‘Home of the Friendless’ for assistance.

“She is 17 years of age, and had been, previous to the occurrence, in the City Infirmary, a poor, sick, friendless creature. For eleven years the sight of one eye had been entirely lost, and a celebrated physician of this city had pronounced it beyond remedy. Another physician had given it as his opinion that she had the consumption, and in decided terms predicted that her days were very few. She was confined to her bed at the ‘Home,’ when it was suggested by some persons who felt interested in her case, to call in Mr. H——, a gentleman of this city, who through

some mysterious power, has lately performed several wonderful cures.

“Mr. H., in company with Rev. J. H. Fowler, accordingly called on the sick girl, whom they found in a very weak condition, scarcely able to sit up. Mr. H. seated himself by her side, took her hand; and after making a few ‘passes’ over her head and neck, pronounced that her lungs were in no manner affected; that they were very susceptible, but yet perfectly sound. He then continued his manipulations a short time, and without giving one particle of medicine, or leaving any prescriptions or directions took his leave. From that time the girl commenced improving. Her cough stopped at once and she appeared stronger. Mr. H. came again the next day, and repeated his passes over the girl’s head and neck, and took his leave as before. Strange to relate, a dim, pale light began to appear in the eye, which for eleven years had been rayless as a stone. It increased surely, but slowly, to the astonishment of every one in the house, and to the great joy of the poor girl. Again Mr. H. performed his manipulations, and stronger grew the eye, until it was *perfectly restored!* And this cure was performed within the space of eight days. Not only was the eye rendered perfect but the girl was restored to good health, and has left the ‘Home’ for a place in the country.

“All the above statement is well authenticated and true. Every person in the ‘Home’ is acquainted with the circumstances, and can testify to the condition of the girl when she entered and when she left. Mr. and Mrs. Cathel, the Superintendents, will also give affidavits, if necessary, of the remarkable cure performed. They were not believers in spiritualism, and at first looked upon the efforts of Mr. H. with much doubt. However, they must believe their own senses, and in such a plain and simple case it is difficult to be mistaken. Who can tell whether, if Mr. H. had not been called to attend the girl, she might not have languished in partial blindness, or under the pressure of her sickness, been shrouded for the tomb.

ATMOSPHERIC PRESSURE.

§ The pressure of the atmosphere has an evident influence upon animal life in modifying the state of the circulation, and the general nervous energy of the constitution. When we ascend in the atmosphere, its diminished weight or pressure as we approach the upper regions, causes a marked acceleration of the pulse, which has been observed to take place at the rate of about one beat per minute for every 100 yards of ascent. Thus ascending 1000 yards in the atmosphere might raise the pulse from 70 beats per minute to 80.

Any lofty situation, therefore, tends to produce a greater excitability and activity of the heart; on the other hand, by descending into the lower strata of the atmosphere, the excitability of the circulation is diminished, and the muscular system receives increased tone at the expense of the nervous system. In short, a condensed or heavy atmosphere has an important influence in strengthening the constitution and overcoming nervous excitability.

The variations in the weight of the atmosphere, between a mountainous elevation and a valley or sea-side residence, are vividly experienced in traveling. Persons living in different localities have their constitutions accommodated to the condition of the place where they live, but the variations which are caused by the state of the weather, are practically more important, because they are continually occurring, and producing effects more or less marked, according to the delicacy of the constitution. When the pressure of the atmosphere is greatly diminished, the mercury in the barometer sinks, which always happens at the approach of changeable, rainy, or stormy weather. This sinking of the mercury, and lightening of the atmosphere, are accompanied by a slight exhilaration of the pulse, which is favorable to the development of fever, or to the aggravation of fevers which already exist, and also by diminishing the pressure of the blood-vessels, accelerates the impulse of the blood, and increases the danger of hemorrhage in organs of delicate or morbid structure. Hence the sickly and delicate, and especially those who are liable to hemorrhage, or to profuse evacuations, should be especially on their guard at the approach of changeable or stormy weather. After the rain or storm is over, when the weather has recovered a stable condition, the mercury rises higher in the barometer, and the fortifying influence of a better state of the atmosphere is perceived. In the lectures of Dr. Sigmond on *Materia Medica*, are found some interesting facts which are corroborative of these views.

He says, "Dr. Pitcairn's case of the effect of the atmosphere, is the most remarkable we have on record, both in regard to disease and its concomitant circumstances. Being at a country seat near Edinburg, in February, on a fairer day than usual at that season, the sun looking reddish, he was seized at nine in the morning, at the very hour of the new moon, with a sudden bleeding at the nose, with an uncommon faintness, and the next day on his return to town he found that the barometer was lower at that very hour, than either he or his friend, Doctor Gregory, who kept a journal of the weather, had ever observed it, and that another friend of his, Mr. Cockburn, Professor of Philosophy, had died suddenly at the same hour, by an effusion of blood from the lungs, and also five or six others of his patients were seized with different hemorrhages."

The exhilarating effect which many experience at the approach of a

storm, which has the effect of diminishing atmospheric pressure, indicates merely a pleasant nervous excitement which is rather at the expense of the muscular stamina. The influence of such weather, especially when accompanied by a moist or sultry state of the atmosphere, and the oppressive influence of heat, is highly favorable to the development of low fevers, and tends to give a typhoid or sinking character to the prevalent diseases. On the contrary, in a dry, cool atmosphere with a high pressure, indicated by the elevation of the mercury in the barometer, the constitution is braced and resists with greater success the influence of morbid causes, poisons and drugs. Dr. Sigmond, in illustrating the impressibility of the human constitution to the influence of mercurial remedies, remarks: "During moist states of the weather, mercurial preparations should be sparingly prescribed, and when from a diseased state of the system, they can not be dispensed with, very great attention should be paid to the clothing, as much mischief has arisen from the want of proper precaution; as from large doses, females of a delicate, nervous, excitable frame, are rendered languid, peevish and incapable of fulfilling their usual duties. They feel chilly, they easily shed tears, are sometimes almost hysteric, and though they have no actual suffering to endure are almost as miserable as if they had it to encounter. On the other hand, the stout, robust, plethoric individual, who has to bear very great pain from the nature of his disease, seems quite insensible to any unwonted effect. The inhabitants of this country are very little influenced by it, comparatively speaking, from their high mode of living and from their being so much habituated to the changes of climate, but the foreigner is not so fortunate nor can he bear a dose, which in his native air he could take with impunity; indeed, they have a horror of blue pill and of calomel, and I certainly have witnessed their greater incapability of bearing it here, than in their own climate. I have seen the practice of the continent, and I held the station of physician to the King's Theatre for three or four years, yet under the administration of Mr. Eber, and I was uniformly struck with the singular change that climates and habits of life produced upon the effects and operations of medicine. Those who could swallow full doses under ordinary circumstances, could not submit to much smaller ones here, nor could they bear in any shape or form the administration of mercury. The annals of practice in India likewise show that doses of mercurial preparations are very much influenced by a dry climate. Some very highly intelligent men there, have prescribed quantities and their repetitions, which in our moist, uncertain atmosphere would very quickly injure the constitution."

It is not merely the moisture or the changeableness of climate which renders the constitution more accessible to the influences of medicines. Mercurial remedies, it is true, produce more formidable effects in a cold, raw, changeable climate, which drives the circulation inwards, tending to

oppress organs upon which mercury acts most powerfully; but heat is an efficient agent in increasing the sensibility of the nervous system and rendering us more liable to feel the influences of small doses of medicines or poisons. Hence the constitution is much more susceptible of disease in hot weather, and needs more carefully to be guarded against the impurities of the atmosphere and every other cause of disease.

The maximum of the relaxing, sensitive and depressing influence is found in hot, sultry weather, when the barometer is low; in other words, a very hot, sultry summer, accompanied by frequent rains and a great amount of lowering, stormy weather, is productive of the greatest depression of the vital forces and the greatest susceptibility to the attack of dangerous diseases.

JESUITISM AND GREAT INTELLECT.

BY THEODORE PARKER.

“Look at the Catholics of the United States in comparison with the Protestants.” In the whole of America there is not a single man born and bred a Catholic distinguished for anything but his devotion to the Catholic Church. I mean to say, there is not a man in America, born and bred a Catholic, who has any distinction in science, literature, politics, benevolence, or philanthropy. I do not know one; I never heard of a great philosopher, naturalist, historian, orator, or poet, amongst them.

“The Jesuits have been in existence three hundred years; they have had their pick out of the choicest intellect of all Europe—they never take a common man when they know it; they subject every pupil to a severe ordeal, intellectual and physical as well as moral, in order to ascertain whether he has the requisite stuff in him to make a strong Jesuit of. They have a scheme of education masterly in its way. But there has not been a single great original man produced in the company of the Jesuits from 1845 to 1854. They absorb talent enough, but they strangle it.

“Clipped oaks never grow large. Prune the roots of a tree with a spade, prune the branches close to the bole, and what becomes of the tree? The bole remains thin, and scant, and slender. Can a man be a conventional dwarf and a natural giant at the same time? Case your little boy's limbs in metal, would they grow? Plant a chesnut in a tea-cup, do you get a tree? not a shrub, even. Put a priest or a priest's creed as the only soil for a man to grow in; he grows not. The great God provided the natural mode of operation—do you suppose He will turn aside and mend or mar the Universe at your or my request? I think God will do no such thing.”

ANTIQUITIES.

We have now in our possession, for safe keeping, and as a nucleus of a collection of curiosities, some very curious and singular articles made of copper. They were found near the west shore of the river, about a mile above the mouth, at a place where now is a brick-yard, and these were disinterred by those digging in search of good brick clay. After taking off from the surface of the ground about two feet of sand the clay was exposed and the stump of a tree was discovered. Digging still lower, about six or eight inches into the clay and overturning the stump, these articles were brought to light.

First, a copper spear, about fourteen inches in length, and at its base a groove or dovetail is made in which to insert a wooden shaft or handle, two other spears, each about twelve inches in length, and similar to the first. Third, two pieces of copper that had evidently been very nicely forged, but for what purposes they could ever have been applied is by no means plain, and it is quite difficult to give in writing a clear description of them. As good an idea of their shape, however, can be got by supposing them to be the matrix in which was cast one of the spears. This is not, however, the purpose to which they were applied. It is far more likely they were used as cutting tools but then there is no means apparent by which the implement can be held, no place for fastening it to a handle. These are about fourteen inches long and two inches wide; upon one end there is the appearance of an attempt to make a cutting edge. They weigh about three pounds each, and are specimens of good workmanship.

The question naturally arises, who made these things? Did the earliest French discoverers make them; or are they the work of a race long ago extinct, the same who first opened these mines?

It seems to us—for we can only indulge in speculation on the subject—that these tools could not have been the work of the Europeans who came here, for they would not have made a tool like the last two, about the use of which we should be ignorant. They are made of copper, a material not nearly so good as iron or steel for cutting purposes, the manufacture of which they were familiar with and would most likely bring with them.

Our Indians do not, nor have they the skill or implements to work so well any metal, and they all are ignorant of the use of such tools. They have among them traditions of the existence of a race of men to whom they ascribe all the skill necessary to accomplish these workings we find at the mines and make the tools we now find.

That these tools are the work of those who lived here years ago seems more likely from the place and position in which they were found, being

in the strata of clay lying under the roots of a stump, and about forty feet above the present level of the river and lake. The tree had grown up since these articles had been put there, and the deposit of sand made above the clay to the depth of two feet. To do that, the river and lake must have been forty feet higher than its present level. This of course was years ago, before the memory of the present races now inhabiting this country.—*Lake Superior Mining News.*

AGITATION OF THOUGHT.—The public mind for three months past has been considerably agitated in Cincinnati, by public discussions, etc. The Rev. Mr. Dearborn first delivered a series of lectures, in which he related many of the common facts of spiritualism, as occurring under his own observation, and unquestionably true; but concluded with a denunciation of the whole as belonging to the sphere of evil spirits and diabolic influences. President Mahan a few weeks afterwards addressed an audience at the Melodeon in opposition to the doctrines of spiritualism, but like Mr. Dearborn, he *admitted all the facts*. Instead, however, of adopting the diabolic theory, he attempted to group together such theories of electricity, animal magnetism, odic force, etc., as would explain the phenomena without spiritual agency. It is a remarkable fact that in so short a time the leading opponents of spiritualism should surrender the whole question of fact, renounce the stale notions of imposture, and (thus conceding the whole matter in dispute) confine themselves to questioning the source of the phenomena or their utility.

Several lectures were given by Rev. Mr. Fowler in opposition to Mr. Dearborn, in the course of which a very good anecdote occurred. Mr. F., in presenting a large number of well attested facts, showing the power of the spirits and mediums, introduced one of the miracles of Christ, speaking of him as a young mechanic and healing medium like the rest, without giving his name. A medical gentleman of the audience expressed his very positive disbelief of any such miraculous cures by spiritual power, and declared his determination to examine the case if the lecturer would give the necessary references. The necessary Scriptural references to "Matthew, Mark, Luke and John," having been given—the audience became exceedingly merry at the unexpected success of the stratagem in catching a skeptic.

Mr. Finney, a remarkable medium and public lecturer, has been engaged in a series of lectures during the present month on the spiritual doctrines. In addition to this he has held a public debate, for six nights, on the divinity or authenticity of the Bible, with the Rev. Mr. Pryor. As a debater, Mr. F. was considered fluent and impressive.