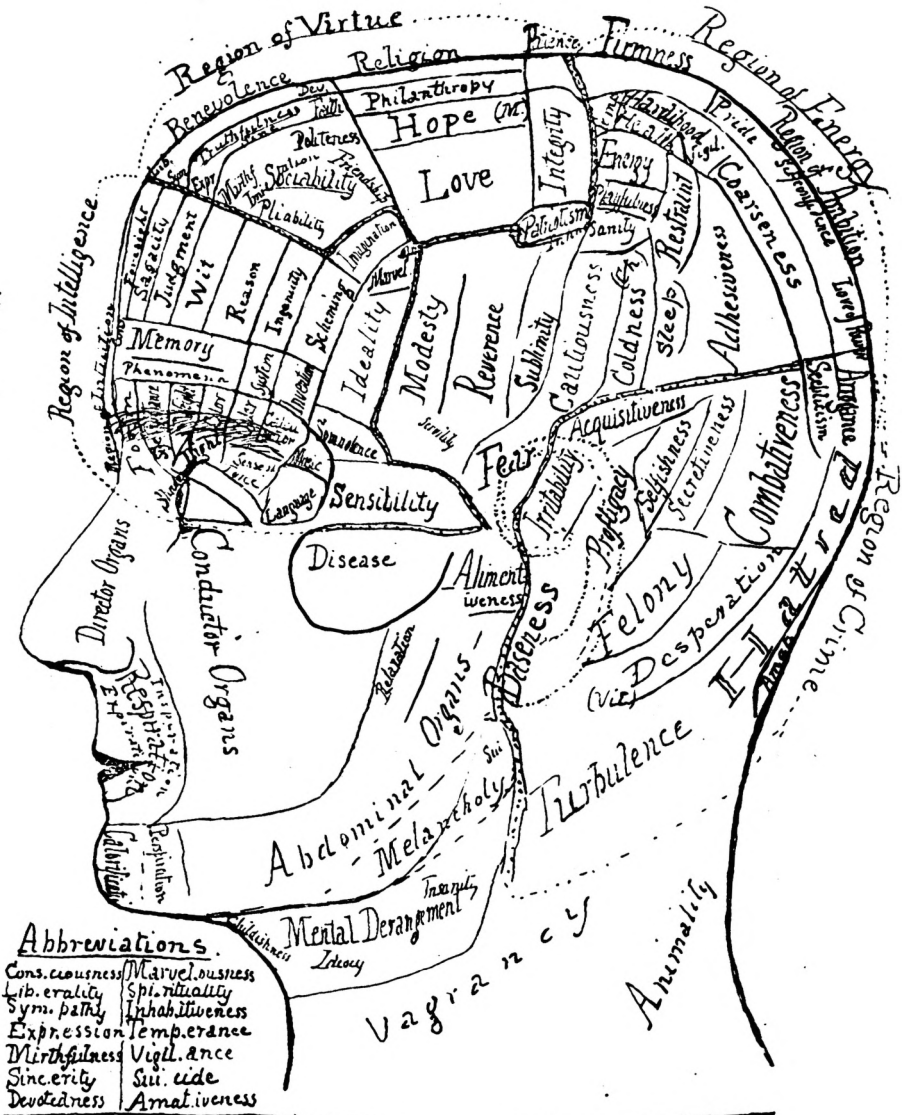
Neurological Diagram

Exhibiting the localities of the cerebral organs as taught in the lectures of Dr. J. R. Buchanan



Abbreviations.

Cons. ciousness	Marvel. ousness
Lib. erality	Spi. rituality
Sym. pathy	Inhabitiveness
Expression	Temp. erance
Mirthfulness	Vigil. ance
Sinc. erity	Sui. cide
Devotedness	Amat. iveness

Antagonism of the Cerebral Organs.

Intellectual Organs – Sleep, Adhesiveness, &c.
Liberality – Acquisitiveness
Benevolence – Selfishness
Truthfulness – Secretiveness
Sociability – Combativeness
Love – – Hatred
Hope – – Desperation
Philanthropy – Felony
Religion – Profligacy

Integrity – Baseness
Patriotism – Turbulence
Firmness – Fear
Hardihood – Sensibility
Temperance – Alimentiveness
Health – Disease
Energy – Relaxation
Playfulness – Melancholy
Sanity – Ment. Derange.
Restraint – Conductor Organs
Reverence – Modesty &

Ideality – Coarseness
Imagination } Scepticism
Spirituality }
Marvelousness
Somnolence – Vigilance
Amativeness – Chastity (Ch)
Calorification – Coldness
or Arbor – –
Animality – Sublimity
Vagrancy – Inhabitiveness

BUCHANAN'S

JOURNAL OF MAN.

Vol. 1, No. 9.—DECEMBER, 1849.

ART. I.—BRIEF OUTLINES OF NEUROLOGY.

(PART I.—PRACTICAL PHRENOLOGY—CONTINUED.)

CHAPTER II.—CORONAL REGION.—ORGANS OF THE VIRTUOUS OR AMIABLE FACULTIES.

The superior portions of the brain manifest faculties of an amiable or disinterested character. The organs of this region are not merely moral, as they are commonly called, but are positively pleasing, attractive, and delightful in their manifestations. They tend to secure universal respect, affection, and admiration for the individual.

This superior or coronal region of the head manifests a more energetic character in its posterior, and a more yielding and amiable character in its anterior portion. An elevated development in the anterior part of the coronal region, just above the forehead, would indicate an obliging, liberal, friendly, and social disposition. A development in the middle of the coronal region, running across the top of the head from right to left, indicates a most admirable character, in which religion, love, and universal kindness are sustained by a happy and serene enthusiasm.

A development in the posterior part of the coronal region, running across the organ of Firmness from right to left, indicates a strong, firm, honorable, and high-toned character.

The Benevolent Region, lying upon the frontal bone, just above the forehead, presents many and important subdivisions. First, a development just above the forehead, on the median line, indicates Liberality. A development a little farther back indicates what is commonly called Benevolence or friendly good-will to others. The most posterior portion of Benevolence manifests a more intense feeling and may be called Devotedness. This produces what

is sometimes familiarly called a "whole-souled" character—warm, generous, and disinterested.

It is easy to determine the amount of Benevolence at a glance, by observing the height of the forehead above the brow, or by placing the hand upon the top of the head, with the fingers descending upon the brows, so as to observe the elevation under the hand. But before deciding positively upon the character, we should estimate the breadth of the head behind the top of the ears, to ascertain the amount of selfishness. The relative development of the benevolent and selfish regions will indicate their relative influence upon the character.

THE SOCIAL SENTIMENTS.— Parallel to the organ of Benevolence, along the temporal arch, we have the region of Imagination, Ideality, and Modesty. Between this region and the organ of Benevolence, lies the group of organs which render man a social, harmonious, and pleasant being, full of sympathy, frank, confiding, animated, sportive, and gay, polite and friendly, imitative, accommodating, gallant, attractive in his manners, and ever ready to appreciate and do justice to the merits of others. We may say, therefore, that a full development of the region between Benevolence and Ideality, produces a social being, and that the general prevalence of these organs in society is the foundation of social harmony. This Social Group is balanced by the Hostile or Combative Group, lying behind and a little above the ear, which are designated by the general term Combativeness.

The latter is the source of the discords and harshness of social intercourse, of those selfish, stubborn, and irascible passions which render families unhappy and nations turbulent. If the head be very narrow in the combative region, the social organs will predominate; but if full in the combative region, it will require a large development of the social region to give pleasantness to the character. A predominance of the social group is generally accompanied by a bright and pleasing countenance, full of expression and often wreathed in smiles.

We find immediately adjacent to Benevolence, the region of Frankness or TRUTHFULNESS, comprising:

EXPRESSION, SYMPATHY, SINCERITY, AND FAITH.—The organs of Sympathy and Expression, lying above Sagacity and Judgment, indicate a sympathizing, communicative disposition, fond of interchanging thought and emotion with others, and eager for the contact of mind with mind. There are many whose benevolence is real who are but poorly qualified for acts and expressions of sympathy. There are others in whom the organ of Sympathy is larger than that of Benevolence, who can console and assist by kind sympathy, who have not any intense feeling of benevolence, and who might not do much for a friend, although they might, by their manner, give them much pleasure.

The organ of EXPRESSION is the source of the disposition to be

communicative, but not of the propensity to talk, which is found among the animal or physiological organs.

The organ of SINCERITY, just behind Sympathy, not only desires social intercourse, but desires frankness and truthfulness in every expression. It causes us to look with impartiality upon whatever subject is brought before us, and to desire with the utmost earnestness the discovery of truth. This fact appears to be independent of the organ of Conscientiousness or Justice, which has more to do with integrity of action than with the investigation of principles. Where the region of sincerity is deficient, we find duplicity, intrigue, prejudice, falsehood, and general unfairness in the modes of thought.

Between Sincerity and Religion, we find the organ of FAITH, which produces the confidence of man in man—the desire to trust and believe in all. It makes us unwilling to suspect others or to be on our guard against them. Upon this organ, government, commerce, and all the relations of society are materially dependent. All religious, historical and scientific knowledge depend upon it for their preservation and diffusion. In fact, without this faith, we should sink into the most bestial barbarism, as each man would be limited to the results of his own sensations. An enlightened faith is of the utmost importance, not only to the religious, moral, and social character of man, but to his progress in science and truth. When narrow-minded suspicion and jealousy predominate, men are incapable of progress in science or in virtue. An excessive development of Faith, unaided by the intellectual organs, produces blind credulity, eager to trust, and incapable of profiting by repeated errors and disappointments.

The region of Faith, Sincerity, Sympathy, and Expression, comprised under the general term Truthfulness, is antagonistic to the Secretive Region, in which we find Reserve, Deceit, and Jealousy or Suspicion.

MIRTHFULNESS.—A love of the ludicrous or humorous is indicated by the development above the organ of Wit, located vertically over the pupil of the eye. The organ of Mirthfulness lying at this point produces a keen sense of the ludicrous, with a disposition to laugh. It does not produce the animal vivacity or playfulness which is found in the Energetic Region of the head. It has a pleasing, animating, and intellectual influence, but does not promote our physical vigor. In conjunction with the neighboring organs of Wit and Imitation, it gives a talent for creating amusement and laughter.

IMITATION.—Just behind Mirthfulness we find the organ of Imitation. When Imitation predominates there is an involuntary habitual inclination to adopt the manners, habits, and sentiments of those around us. This organ exerts an important influence over the intellect. It does not impart the vivacity that belongs to Mirthfulness, nor the clearness of conception that belongs to Sincerity,

nor the brilliancy which belongs to Imagination; but it gives a high degree of docility and tact in acquiring information from others, and profiting by the superior cultivation of mind or manners which may exist among our companions. It is especially important in cultivating the affective organs, as there is no method for the cultivation and development of any of our passions and emotions so efficient as the imitation of good examples. Its exercise, in this respect, is much more important than in the efforts of the orator or tragedian. It has also a very happy influence on the character by leading us to conform to the views and feelings of those around us, instead of warring against them and making our own peculiarities offensively conspicuous. Imitation is thus essential to the perfection of the manners and character. There are many who, from a deficiency in this organ, retain all their lives the rude and unpleasant exterior of their earlier manners, from lacking the power to improve.

Politeness.—The fibers of the brain between Imitation, Hope, and Philanthropy exercise a still more pleasant and benevolent function, which may be called Politeness. In combination with the pleasant and friendly emotions, and imitative tact of the neighboring organs, it produces the most agreeable or polite address. When this organ is deficient, even great benevolence combined with dignity of character, friendship, and reverence, are not sufficient to produce the proper character of manners. The various attentions, pleasant expressions, kindly intimations, and direct acts of deference, which give a charm to social intercourse, will be overlooked, or will become irksome, when Politeness is deficient, and a rude, offensive deportment adopted.

Friendship.—Between the Regions of Imitation, Politeness, and Love, we find the organ of Friendship. This is not the gregarious impulse of Adhesiveness, nor is it the more general sentiment of Benevolence. It is exactly that which is expressed by its name, Friendship,—a sentiment more intense and less intellectual than those of the organs lying anteriorly—but less delicate and concentrated than love,—less diffusive than benevolence.

Admiration.—Anterior to the proper location of Friendship, we find emotions of a less intense and more intellectual character, which may be expressed by the terms Esteem and Admiration. The organ of Admiration, lying between Imitation and Imagination, produces a brilliant and complimentary style of thought and conversation. Those in whom this organ predominates are continually indulging in eulogistic and flattering expressions. They look upon the bright side of everything, and hence are enabled to pay compliments with sincerity. When it is deficient, everything appears in a plain, sober, and matter-of-fact light; compliments are unpleasant, and Combativeness generally prompts to sneers or sarcastic language.

Pliability.—The organ of Pliability, just above that of Rea-

son, indicates a yielding character, capable of changing with great facility, to follow the dictates of Intellect or the influences of surrounding society. It is opposed to the stubborn, stern, and unyielding disposition which belongs to the upper portion of Combativeness. It is rightly associated with the organ of Reason, thus qualifying us to obey implicitly the dictates of our best intelligence. In the same region, a little exterior to Pliability, we find a more intellectual manifestation of this trait of character, which may be appropriately called Versatility. Those in whom this organ is large (just above Reason and Ingenuity) are remarkable for the facility with which they change their pursuits, habits, modes of thought, etc., and concentrate all their powers upon a new line of action.

The above ten social organs, lying intermediate between the organs of Intellect and those of the stronger emotions, possess a semi-intellectual character, and add to the power of acquiring knowledge, improving the character, and imparting our knowledge to others or exerting a beneficial influence upon society. The social organs generally produce a popular character.

Affection or Love.—Immediately posterior to the Social Group, lie the organs of the affections, generally called Domestic. To estimate their development, we should observe the height and fullness of the head on each side of Religion, near the Temporal Arch, at and behind the Coronal Suture. By placing the hands across the top of the head from right to left, and also in a line from front to back on each side of Religion, we may estimate the development of the organ of Love. This faculty, overlooked like many others by Gall and Spurzheim, is essentially distinct from that of Amativeness, and also from Adhesiveness. The word Love so fully expresses its function that no further definition is necessary. The anterior and exterior portion manifests the Conjugal Affection. What is commonly called *sentimentality* arises from the junction of the organs of Love and Imagination. The Parental Affection lies in the interior and posterior portion of the organ. That form of the feeling which is manifested toward animals and suffering beings, called "Humanity," lies at the posterior and exterior portion of the organ. The organ of Love, when largely developed, produces great loveliness of character, giving those intense and delicate affections, which constitute the greatest happiness of those who feel them, which are equally delightful to those to whom they are manifested and which inevitably excite a reciprocal regard.

Happiness.—The highest degree of happiness is found in the exercise of the amiable and elevated emotions. If we fail to cultivate those emotions we violate our own interest, for there is no other source of happiness which can supply their place. The highest degree of happiness is found in the organ which lies between the special organ of Love, and Philanthropy, or the organ

of the universal love of man. This organ has been called Hope, but it may with great propriety be termed the organ of Happiness. It is entitled to be called Happiness, because it produces that bright and happy condition of mind which looks on the favorable and lovely side of every object in nature; which is comparatively blind to evil and insensible to all the sources of unhappiness; and which recognizes in everything a tendency to good. It beautifies and elevates alike the past, the present, and the future. Strictly speaking, Hope, so far as it is an intellectual operation, depends on the organs of Foresight, Scheming, and Imagination; but, so far as it is a state of feeling which enables us to perceive and enjoy what is good, it belongs to the region which is marked Hope, between Philanthropy and Love.

The organ of PHILANTHROPY, occupying the exterior portion of the region formerly called Veneration, is an essential portion of the religious and moral constitution of man. Philanthropy differs from Benevolence, in being a more intense, enthusiastic, and hopeful feeling. It aims not merely to give or to assist, but to elevate and ennoble the human race, and inspires an unwavering confidence in the practicability of such elevation. It exalts our conceptions of the dignity of man, and enables us to look with confidence and hope on the most degraded of the race, and to cherish a familiar fraternal feeling for all.

RELIGION.—This organ, lying just behind Benevolence, upon the upper region of the head, tends to produce an elevated, serene, and benevolent character, devoted to excellence and holiness of life, attracted toward the Creator and the universe, and guided by the most elevated views of life and duty. Religion is an element of the character, an emotion of a somewhat intellectual cast, which may be exercised with or without a creed, or in connection with doctrines of an absurd and pernicious character. But the tendency of the true organ of Religion is to repel everything of a degrading, gloomy, morose, jealous, or fanatical character. It is entirely opposed to sectarian harshness and bigotry, and produces a happy, calm, spiritual, sublime development of character. Its influence is liberalizing, brilliant, intellectual, calmly enthusiastic, and full of warm, generous impulse.

PATIENCE.—Immediately behind Religion lies the organ of Patience, vertically above the cavity of the ear. This organ produces calmness and controls the temper, rendering us exempt from petulence and irritation. It greatly assists our Fortitude, Religion, and all the virtues, as well as promotes our physical health by preventing improper irritations. When excessive, it produces a monotonous quietness. When deficient it leaves us liable to bursts of passion in the slightest annoyance.

INTEGRITY.—Exterior to the organ of Patience, extending to the Temporal Arch on the Parietal Bone, we find a region which may be comprehensively designated by the term Integrity, because it

produces a certain steadiness, rectitude, and stability of character. This is the region which phrenologists have called Conscientiousness. The term Integrity is preferable, because all our moral sentiments contribute, so far as they are concerned, to render us conscientious; and there may be much conscientiousness in individuals deficient in the organ of Integrity. The predominant sentiment of this organ is to desire to be just, faithful, and stable in our moral character, to follow consistently the rule prescribed by justice, to fulfill all our engagements and contracts, to adhere to the course which we have marked out for ourselves, to be steady and unfaltering to those obligations which society, the family, or social intercourse may have devolved upon us. The Sense of Honor, or a disposition to fulfill, even at the risk of life, the obligations which a delicate sense of honor imposes, will be found at the anterior interior part of the organ, between Hope and Firmness. Fidelity and Gratitude occupy the anterior portion adjacent to Love. The Sense of Justice occupies the posterior portion adjacent to Energy and Patriotism. Perseverance occupies the inner posterior portion, connected with Firmness.

Patriotism.—At the exterior margin of Integrity, upon the Parietal Arch, we find the organ of Patriotism or Love of Country, lying between Sublimity and Justice. This emotion is very similar in its general character to that of Integrity. The sentiment of Patriotism differs from that of Philanthropy in having a somewhat more energetic, sublime, and martial character. The organ of Patriotism is closely connected with Inhabitiveness, or Love of Home.

ANTAGONISM OF THE CORONAL AND BASILAR ORGANS.

CORONAL.	BASILAR.	
Sociability, or Social Sentiments, ...	Combativeness,	
(Mirthfulness, Imitation, Politeness, Friendship, Admiration, Pliability,)	(Moroseness, Opposition, Rudeness, Hostility, Censoriousness, Stubbornness,)	
Truthfulness, ...	Secretiveness,	
(Expression, Sincerity, Faith,)	(Reserve, Deceit Jealousy,)	
Liberality, ...	Acquisitiveness,	
Benevolence, ...	Selfishness,	
Love or Affection, . . .	Hatred,	Region of Destructiveness.
Hope or Happiness, . . .	Desperation,	
Philanthropy, ...	Felony,	
Religion, ...	Profligacy,	
Patience, ...	Irritability,	
Integrity, ...	Baseness,	
Patriotism, ...	Turbulence.	

CHAPTER III.—POSTERIOR CORONAL REGION—ORGANS OF ENERGY AND HEALTH.

Force of Character does not belong to either the intellectual, or the moral faculties, or to the animal passions alone. It depends upon those organs which give strength of will, with the appropriate combination of intellectual, moral, and animal forces. These organs are found behind the line which runs vertically over the head from ear to ear. All the organs behind this line have an energetic character; all in front of this line have a feeble and even debilitating tendency. In the Occipital half of the head the lower organs have an excess of animality, and although they originate great physical powers, they do not by themselves constitute true force of character, because they do not give the strong will, the power of self-control, the intellectual ability, and elevation of purpose, necessary to a strong character. We should, therefore, look to the upper part of the Occipital half; or, in other words, to the posterior part of the Coronal half of the head, for a strong character possessing the elements of success.

Firmness.—Firmness of character, especially in resisting obstacles, may be said to belong in some degree to the whole Occipital half of the head; but true moral firmness, or a capacity to decide, maintain, and carry out our decisions, will be found on the Sagittal Suture, running back from the organ of Patience, occupying the highest portion of the head. The term Firmness might be applied to nearly the whole region between the posterior part of the Sagittal Suture and the Temporal Arch, but it is strictly applicable to a space of about two inches in length and two or three in breadth, lying upon each side of the suture.

Anteriorly Firmness connects with Patience, manifesting, adjacent and exterior to Patience, the character of moral courage. It connects through Perseverance with Integrity. Posteriorly it assumes a bolder and more efficient character, to which we may give the name of Decision. One may have great firmness, in the way of fortitude for patient endurance, who is yet quite deficient in the power of deciding promptly and acting boldly. The posterior portion of Firmness, upon the median line, at the site of Decision, running in between the hemispheres, corresponds to what is commonly called "the will." It gives the power of determining or willing. Those who have a large development of this organ, naturally gain an ascendency among their fellow-men, in consequence of greater strength of will or decision of character. Intrepidity,

or firmness in the presence of danger, the power of overcoming our fears, lies immediately exterior to Decision.

Hardihood.—Immediately exterior to the posterior portion of Firmness, lies the organ of Hardihood, the antagonist of Sensibility. A large development of this organ indicates a capacity to endure physical pain—a capacity which is quite compatible with acute sensibility. Its deficiency leaves us a prey to all annoyances and excitements depending on acute and morbid sensibility. Hardihood is essential to a strong constitution. It yields a powerful support to Health, Fortitude, and Intrepidity, with which it is intimately connected in the brain.

Temperance.—At the anterior edge of Hardihood, connected with Firmness and Integrity, lies the organ of Temperance, the antagonist of Alimentiveness. This organ gives a capacity to resist and control our sensual appetites. If largely developed in connection with large Alimentiveness, we may either feast or fast with impunity, the latter giving us vigorous digestive power, and the former, great powers of abstinence. This is remarkably illustrated among the Indians.

Energy.—Between the organ of Hardihood and the Temporal Arch, near the middle of the Parietal bone, lies the Region of Energy, just behind that of Integrity. A large development at this point indicates an indefatigable industry, an efficient character, averse to idleness, fond not only of employment, but of being efficiently and usefully employed, and disposed to do everything in an effectual or energetic manner. When the development falls off very much on each side of Firmness, there is a strong tendency to indolence and dissipation; useful and laborious pursuits, which require close application, are disagreeable; and the finest talents are sometimes allowed to go to waste for want of a desire or will to use them. A large development of Energy gives height to the head, just above the Temporal Arch, parallel to the posterior part of Firmness. The most internal portion of Energy, connected with Temperance and Perseverance, produces that quiet form of action which belongs to industry and steady application. The more exterior portions of the organ manifest more vigorous action, and the most exterior portion, just upon the edge of the Parietal Angle, produces a gay vivacious activity, which may be called Playfulness. When the Parietal Angle is very much depressed, lying much lower than the Region of Firmness, we find a lack of animation, a grave and sober dullness: that pleasant exuberance of life, which renders society cheerful and produces good spirits, is absent. When the organ of Playfulness is large, it produces a restless, frolicsome, gay, and animated manner, mirthful, not from the sense of the ludicrous, but from the exuberance of animal spirits.

Sanity.—The prominence of the center of the Parietal Bone, on the Temporal Arch, about two inches above the top of the ear, indicates a sound steady condition of the mental faculties. It in-

dicates that steadiness of the mind which may be called Sanity, in contradistinction to the morbid, deranged, or debilitated conditions which are called insane. When the Region of Sanity predominates, there is greater mental self-control, less liability to be carried away by external influences, and greater capacity for enduring concentrated thought or mental labor; the brain is not so easily overpowered, exhausted, and debilitated by excitements; and the excitements do not go to so pernicious an extent. A deficiency of Sanity gives a great liability to excessive mental excitements and derangements of the various organs.

Manliness, as contradistinguished from childishness, is also one of the effects of the posterior part of the Region of Sanity. Boys with this region large attain much earlier the rational, steady, and dignified deportment of the man.

Restraint.—Akin to Sanity is the organ of Restraint, lying just behind it, occupying a somewhat larger space, which not only gives power of self-control, but gives a disposition to restrain our actions and all spontaneous manifestations of our emotions. Restraint in excess produces a dry cold manner, a stiffness of movement, and a difficulty in acting out freely our impulses. When the organ of Restraint is deficient, we are inclined to follow the first impulse; we find it difficult to govern our passions; we are more excitable and less qualified for simply intellectual pursuits.

Health.—Between the regions of Hardihood and Restraint, Energy and Industry, we find appropriately located, the organ of Health: in other words, we find that this portion of the brain produces not only the hardy, vigorous, vivacious, and self-possessed action, which arises from its neighbors, but produces so happy a combination of all these qualities as to coincide with the proper standard of health. Persons in whom this organ is excited are not conscious of any irregular or extraordinary feeling, or any predominant emotion or faculty. They are simply conscious of a vigorous and pleasant action of all their bodily functions — of a proper excitability, and excellent capacity for the use of all their powers. When this organ predominates in development, it indicates a healthy condition of the whole constitution, and a remarkable capacity for resisting the morbid influences which produce disease.

Ambition.—The whole space from the organ of Firmness, half way down the Occiput, for more than an inch on each side of the median line, may be described by the term Ambition, which indicates the aggregate character of this region. The fibers of the brain in the Occipital Region, are believed to be coarser, and the organs occupy a larger space than their antagonistic organs in the anterior region of the head. Of the Ambitious Region, that portion adjacent to Firmness, has the highest character, manifesting itself in pride, self-respect, and dignity of character. Self-Esteem and Self-Confidence are found a little lower on the median line. Still lower we find the Love of Power, a bold and grasping dis-

position, which lower down the Occiput assumes the character of Arrogance and Tyranny, becoming, as it descends toward Combativeness and Destructiveness, an overbearing and violent trait.

About an inch from the median line, are manifested those traits which correspond more nearly to the common conception of Ambition—the love of a distinguished career, of rank, influence, and display. These ambitious inclinations are manifested in the upper portion of the organ by a desire to act and to attain eminence in something of an honorable, dignified, and useful character. The moral ambition of this region is an unobjectionable trait of character. The middle portion of the organ, being more selfish, cannot be called virtuous; while the lower portion, being overbearing, violent, vain, fond of military conquest, of luxurious ostentation, and of the relative rank which arises from the disparagement of others, must be regarded as decidedly vicious.

Pride and Vanity.—These faculties are often confounded in popular estimation. The feeling of self-respect, which produces dignity of character, is a much higher sentiment than that which leads to a vain display. The former lies in the upper part of the Ambitious Region, close to Firmness; whereas the latter will be found in the lower portion. Pride is a quality of dignified, self-possessed character. Vanity is obtrusive, restless, grasping, and often rude. Pride is generally accompanied by a greater degree of firmness and integrity. The proud man may be disinterested: the vain man is more apt to be selfish, and much more apt to disparage or underrate others for the purpose of exalting himself.

ANTAGONISM OF THE ENERGETIC AND DEBILITATING REGIONS.

FIRMNESS.	FEAR.
Hardihood,	Sensibility,
Temperance,	Alimentiveness.
Energy,	Relaxation,
Sanity,	Insanity,
Manliness,	Childishness,
Restraint,	Conductor Organs,
Health,	Disease,
Ambition,	Reserve and Modesty.

It is difficult to express perfectly, by any system of nomenclature, the antagonism of cerebral organs. The words Firmness and Fear, for example, do not express an exact antagonism, because they do not perfectly express the true character of these two antagonistic regions. Fear is the most striking function of the region which bears that name, but such a name does not express fully the various traits of indecision, terror, anxiety, cowardice, melancholy, and petulance which belong to that organ.

ART. II.—SYMPATHETIC IMPRESSIBILITY.—(Continued from page 368.)

Such are the best modes of testing Impressibility by the organs. A simpler method may be practiced, which gives a less decisive test. Ask your friend to hold out his hand, and when it is open before you, pass your own near it without touching. The inner surfaces of your hands being together, or the tips of your fingers pointing to his hand, this proximity produces a peculiar effect. If he is very sensitive, he will feel the warmth of your hand distinctly as it passes, or he may feel a thrilling, prickling, or tingling sensation. But if he is impressible, he generally feels a sensation which cannot be accounted for upon any physical principles. Your hand may be warmer than his—may pass with the utmost gentleness, or may be held at one spot; yet, instead of perceiving the warmth, he feels a cooling sensation as your hand passes, or at the spot in his hand near which your fingers are pointed: yet your hand is actually radiating caloric to his, and may be actually warmer. In all cases it is warmer than the air, and ought to produce a sense of warmth upon the usually known principles of physics and physiology. The production of cold demonstrates some new power or principle not "dreamed of in our philosophy," and it is Impressibility which renders us susceptible of this peculiar influence.

Another mode is to transmit the nervaura from your hand through a conductor. Take any metallic instrument—your pencil-case, the poker, a pair of scissors, or anything else which you may find convenient, will answer the purpose, and grasp it in your hand firmly, in order that the nervous energies of the arm may be called into requisition. Let your subject hold the other end, but keep his hand relaxed and in a passive condition. The influence emitted from your hand now travels up his hand and down through the conductor, producing sensations which become successively obvious higher and higher up the arm until they reach the body. When these sensations were felt and described by Dr. C. (professor of chemistry), he recognized the influence gradually reaching the shoulder and then diffusing itself through the body. What these sensations are, I need not now describe, but will leave them to gratify your curiosity when you make the experiment.*

* I have made a number of experiments upon the conducting powers, animal, vegetable, and mineral substances, in the laboratory, and with the assistance of Dr. D. D. Owen, the geologist and chemist—but the manuscript record of our experiments was lost soon after by a robbery in Ohio.

It is not indispensable that you should use a metallic substance, for there are few substances which are not conductors of the nervaura, but the metallic bar is one of the best and most convenient.

These methods of determining Impressibility, by the rod, or by the hand, are not conclusive, and are recommended only by convenience. It is necessary still, to touch the cerebral organs, before we can speak in a positive manner.

Perhaps the most convincing method of displaying Impressibility is by means of *attraction*. Let your subject stand erect before you, in a natural position, perfectly at ease. Place your hands gently upon, or very near, the anterior half of his head, and then gently withdraw it. All the organs anterior to the ear are favorable to impressibility; consequently, whether you touch the top, front, or side of the head in this experiment, you gently excite organs which render him more impressible. As your hand is withdrawn, you will observe, in a great number of cases, that the head is gently attracted and disposed to follow it. As you continue the process, the attraction becomes more visible, and often the head may be drawn forward until the subject will be compelled to advance a step to avoid falling over. Under very favorable circumstances he may even be drawn so far as to be prostrated to the floor, if you give the experiment that direction, and thus completely overcome and paralyzed. Such experiments succeed best under the agreeable influences which promote the action of the intellectual and sentimental faculties—as in agreeable society, or at the close of an interesting lecture which has roused the intellectual and moral organs. I have sometimes observed that the attraction in such cases appeared to be strongest, when the hands were applied upon the largest and most active organs.

Another method of testing Impressibility is that (described in my essays upon Psychometry) by coming in contact with medicinal substances. Impressible persons, after holding any medicinal substance in the hand, for a short time (generally five or ten minutes), become thoroughly affected by its influence. Those of a high grade of impressibility, are capable of feeling the characteristic influence even when the medicine is enveloped in paper or contained in a glass vessel hermetically sealed. In such experiments, the muscular system should be kept relaxed, and the arms lying at ease. In some instances the effect will be imparted so slowly as not to be recognized until half an hour or an hour afterward.

Having ascertained that a sufficient degree of impressibility exists, our object will be to investigate the functions of the brain, and learn its mental and physiological powers. We will seek the most intelligent, candid, and trustworthy persons that we can find for our course of experiments, and treat them on all occasions with kindness and perfect sincerity. They will become cordially interested in these wonderful facts, and will freely contribute their aid

in developing the exact truth. I have never found it necessary to hire any person for such purposes—the love of truth and knowledge I have found a sufficient motive, and the course of experiments may be made agreeable as well as interesting to the subjects. They often suggest, themselves, that they wish you not to mention in any way the names, or functions, or locations of the organs which you are to excite, that their minds may be entirely uninfluenced by any prepossessions on the subject. But, if your manner and bearing indicate that you suspect delusion and imposture, they are too sensitive not to feel it, and you will find your whole intercourse cramped, unpleasant, and unsatisfactory; you will find it difficult to persuade any one possessing self-respect to submit to your course of experiments, and will be obliged to employ the class of persons in whom delusion and imposture are most apt to be found.

The mode of experimenting on the brain, is simple to a fault. It is difficult to believe that a mere touch of the finger can produce such effects. If we brought to bear upon it a great quantity of electric, galvanic, and magnetic apparatus, no one would find it difficult to believe that the convolutions are excited. I have often been tempted to illustrate the science in this manner, for the sake of those who must be appealed to through the senses and not the reason, but I dislike any departure from the calm simplicity of truth.

There are two modes of conducting cerebral experiments. In one, your subject is active; in the other, passive. The latter is the style commonly adopted in the illustration of Neurology. Mesmerizers, too, who have learned the simple processes of exciting the organs during somnolence, operate upon a passive subject. Indeed, they keep the subject entirely too passive for the proper illustration of Neurology.

In the passive mode, your subject submits to be acted upon. You touch the organs upon his head for a short period, varying from a few seconds to ten or twenty minutes, according to the degree of impressibility, and request him to watch closely all the phenomena and report the effects produced. If he is not accustomed to accurate observation, you question him and direct his attention to the functions which you wish him especially to observe. Sometimes, if you have one of rather dull conversational powers, it may be necessary to cross-examine him closely, and occasionally ask misleading questions, to discover whether he is liable to be deceived or misled. But do not be hasty in taking it for granted that he is. The soundest and most candid minds may at first be confused in the attempt to describe novel sensations, when the experiment itself has diminished their intellectual clearness, and the phenomena of experiments are so very numerous and singular that it would really be arrogance to pronounce any symptom feigned or fan-

ciful, until we have had extensive experience of the varieties of the phenomena.

In the active mode the subject is made the investigator under your guidance. He explores the bodily and mental functions to report the results. This mode is more wonderful than the other, and more difficult of credence to the infidels. Even when they see it, they scarcely believe their own senses. But there is a great deal of honest infidelity in the world; men do not believe, because they cannot; their minds have been contracted by their pursuits, and when they are compelled, by often-repeated experiments, to accredit Neurology, they feel like one who has been thrown into deep water for the first time, without knowing how to swim. Such men have their proper place in the routine of life, but they cannot tread the higher walks of philosophy. They may even attain professional eminence, but when they approach the philosophy of science and the higher departments of Anthropology, they find themselves out of their proper sphere. Let them go their way undisturbed, and do not demand what they have not to give.

Do not obtrude your facts upon those who have no cordial desire to examine the matter seriously. Do not, when you make the experiments, invite the idly curious to be present, or surround your patient with persons whose every look is a silent insult. Impressible persons too often yield to injudicious persuasion and suffer themselves, for the sake of science, to be made the subject of painful and injurious experiments, for the gratification of those whose gratitude is manifested only by peurile remarks, or vulgar, thoughtless ridicule. I know of nothing which looks more like sacrilege than this desecration of the sublimest mysteries of Nature.

Let your experiments be private—let none be present but friends—none but the pure and true—the manly and enlightened—then will your subjects be surrounded by a pure and vivifying moral influence, which will greatly increase their intellectual capacities and accelerate your progress.

In making your experiments in the active mode, you proceed upon the fact, that the brain is constantly emitting the nervaura, or nervous influence, as well as the body. When the hand is applied to the brain, either the influence of the hand may excite the subjacent brain, or the influence of the brain may be transmitted into the hand, if it be the hand of an impressible person, or both may be equally affected when both parties are impressible. If the one touching be impressible, the aura of the organ which he touches is felt passing up his arm, and recognized by a peculiar sensation, until it has gradually reached the brain. The influence of an organ, passing along the arm of another person, is the same kind of influence which it exerts in its own proper body. Each organ of the brain is a kind of magazine of particular influences, which it diffuses throughout the body, and the influence of these organs (Disease, etc.), which spread a morbid diathesis throughout the

constitution to which they belong, is equally morbid when it is introduced into another body. There is nothing incomprehensible in this. The brain, we know, elaborates and diffuses through the body a set of peculiar influences; to the heart and other muscles it sends the aura, producing contraction; to the viscera, that of secretion. This influence is essentially the same in different constitutions; why, then, cannot the energies of one brain be transferred into another body, if we have the appropriate means? The muscles, for instance, have no inseparable alliance with the brain. When the motor nerves are severed, they may act under the stimulus of a galvanic current, and, I have little doubt, that, if the muscles of one animal could be, by a surgical operation, brought into connection with the spinal nerves of another animal, they would obey the brain with which they were thus connected.

The influence of each organ of the brain requires no especial conductor to the impressible, as it is continually radiating from the head. When the impressible individual places his hand upon any organ, he receives its aura into his arm, which gradually diffuses itself throughout his whole frame. But when it reaches his brain, a more powerful effect is produced.

Thus, if an impressible person touches the organ of Alimentiveness, he feels the sluggish, relaxing effect of the gastric functions. The muscles of his arm are debilitated; when it reaches his brain, his own Alimentiveness is greatly increased by this accession; and as he continues to hold it, he is more and more brought under the influence of digestion, until he is indifferent to everything but the gratification of his appetites, and presents but one all-absorbing faculty or propensity.

Partly, I suppose, by the transmitted influence of the operator's brain, and partly by the sympathetic excitement in the brain of the subject, Alimentiveness is thus made the ruling organ. Or, if the subject touches your intellectual organs, he feels, in a short time, a clearness and predominance of intellect, which enable him to display an unusual subtlety of perception. In some cases he will catch so much of your peculiar mental influence, as to show the predominant turn of your mind, and to converse upon your favorite subjects. I have no doubt, that hereafter, impressible persons will be found who will place their hands upon the forehead of any one who may offer and bring forth their most secret thoughts. Some of my experiments already are little short of this result.

If you would see your better nature—if you would have your moral powers displayed—let the subject touch any of your moral organs, and describe his emotions when he is under their influence; then you will see an expression of countenance all calm and lovely—whatever of noble promptings and high enthusiasm you may have felt occasionally—will now be embodied as in a daguerreotype sketch. The exercise will have an elevating and refining influence upon yourself, as well as your subject, and the emotions

will be of the most delightful kind. He will look upon life with different eyes—he will form virtuous resolutions—will see good in all things—will discard prejudices—and will arrive at high moral truths, of which, in his ordinary state, he has but a faint conception. Thus, touching each of the moral organs, the function will be brought out with perfect distinctness of outline and fullness of description. Your subject becomes a philanthropist, a pietist, a patriot, a lover, etc., and thus makes a perfect personation of the virtues.

In like manner, you transform him into any other character that you wish, by making him embody any of your passions or faculties. You may make him a perfect hypochondriac, coward, braggart, servant, gambler, drunkard, profligate, thief, liar, murderer, suicide, miser, brawler, traveler, savage, etc., etc., by giving him the influence of appropriate organs. Whatever the function of the organ may be, let him continue awhile in contact with it, and he will embody its functions, whether you are able to give them a name or not. Thus, you estimate each organ and study it by itself—you take it out of the brain in which it is acting amid a variety of counteracting influences, and give it the command of another constitution in which to display its full powers. Then the organ displays itself on a gigantic scale, like the objects of a solar microscope spread out on a large canvass, you may observe and understand it thoroughly, without confounding it with any other.

This is the active mode of investigation—simple in means, grand in its ends, limitless in its value.

Your subject, placing his finger in succession upon each point of the surface of your head or body, states what are the effects he feels; or, if unable to state them at the time, lives them, acts them before you, and describes them when he is restored to his natural balance. There are many of the excitements which entirely disqualify him for description while he undergoes them, but he will recollect every thought and feeling when he is relieved from the oppressive influence.*

The same power which is thus applicable to the investigation of the normal functions, is equally applicable to the abnormal. When feeling the influence of any organ, a highly impressible person will recognize distinctly the amount, as well as the kind, of influence, he will catch a distinct and powerful impression from organs that are active, and will be conscious of a much slighter impression from organs that are inactive. He will appreciate justly the

* While Col. B. was touching the felonious region, it was almost impossible to get an answer from him to any question; but the expression of his countenance was such as to convey to an intelligent observer the idea of a very dangerous character, whom he would fear to meet where there was any opportunity of assassination. After he was relieved from this influence, being asked why he had refused to answer, he referred to his bad temper, and confessed that he had a strong propensity to make some insulting reply, which he had sufficient self-control left to suppress.

exact degree of activity of each organ, and will, therefore, be able to describe your predominant faculties, character, habits, thoughts, and opinions, with a minuteness perfectly astounding. In fact, an examination by an intellectual impressible person, is a perfect microscopic survey of mind and body.

He is enabled to determine your health, to locate and describe your diseases, and often to appreciate the morbid train of causes by which the present condition is produced. He appreciates recent lesions, and sometimes goes far back into your physiological as well as psychological history.

Thus, we have a most important means of diagnosis for the investigation of disease, and but for the injurious effects of the examination upon the subject, the method would undoubtedly become one of general application. Unfortunately, their sympathetic constitutions realize too vividly the symptoms of disease, and although we may very promptly remove whatever injury is thus produced, the frequent and long-continued repetition of such examinations must ultimately harass and exhaust the vital powers.

Still we may resort to this *sympathetic diagnosis* with comparatively little injury, and I would be disposed to keep it as a very important dernier resort in many baffling cases of disease. When our patient is an infant, or *non compos mentis*, when he is deaf or dumb, when he has lost his voice, when he is too far gone to converse, when he is in trance or delirium, when he is in any way incompetent to give a correct idea of his case, or when the symptoms themselves are obscure and equivocal, then we may resort to the *sympathetic diagnosis* with benefit.

We have now surveyed the general character and peculiarities of the impressible constitution. We find that there is a class of beings abounding in every community, who offer to our inspection the most wonderful phenomena that can be conceived short of a Divine miracle. Indeed, many of the facts which we may develop in our experiments are of such a nature, that we may sometimes find a routine practitioner of medicine, or a dogmatic philosopher, who will pronounce them in advance to be miraculous, and, therefore, impossible, since, like Galileo's wonderful telescope, they reveal so much that they are not even entitled to be looked into by a respectable professor of *Philosophy, as it has been*. But these wonders are open to all.

We find that a great and wide-spread fact exists—one of the most benevolent arrangements of Providence for the purpose of revealing man to himself—a fact which has been hitherto unknown, not because it was at all concealed—not because it was difficult of observation, but because the proper spirit of inquiry has been absent—because that sublime philosophical and religious faith, which opens the mind to the limitless wonders of this fair universe, has not been present to point us upward and onward from the depths of our ignorance in the noble career that lies before us.

Men still shrink back—are appalled with superstitious awe before the wonders and mysteries of Nature. They recoil from the wonderful as if from instinctive love of darkness and hatred of progress and discovery.

I, too, in one way, dislike the wonderful. I dislike that any of the great important laws of Nature should be so entirely unknown as to be accounted incredibly wonderful. I dislike that the facts which lie about us on every hand should be so little known as to be accounted incomprehensible mysteries. I dislike that the highest departments of science should be given up as wonders and mysteries, because we are too indolent or too narrow-minded to explore them. In short, if wonder begins where reason ends, I am its resolute foe; and, so far as I am concerned,—so far as I am capable,—I am determined, that whatever of wonders or mysteries we may grapple with in man, shall be carefully examined and reduced to simple familiar forms, by tracing out the dynamic and hydraulic laws of the body, and the organic connexions of the mind, until the greatest wonder shall be, that a being, so "fearfully and wonderfully made" as man, should be so perfectly intelligible, so beautifully simple in the mode of his structure and the laws of his nature.

In continuing the subject of Impressibility, let us briefly recapitulate what has already been advanced. This may be condensed into twelve propositions:

1. We rely upon human impressibility for a knowledge of the functions of the brain.

2. Impressibility, in a general sense, is that sensibility which necessarily accompanies life, and is proportionate to its evolution. In a technical sense, it is the sensibility to the Nervaura.

3. In the impressible, every function of mind and body is under the control of the Nervaura of the operating hand.

4. Impressibility may coexist with perfect health, with great bodily and mental vigor, and with a cautious skeptical character.

5. Impressibility is beneficial by contributing to the harmony of society, the happiness of domestic life, and the tact in estimating or appreciating character. It enables the impressible to enjoy uniform health by means of manipulations easily learned or practiced by any one, and to regulate their mental faculties or emotions in the same manner. It tends, also, to render diseases contagious, and to increase the power of example and sympathy, either for good or for evil, but most frequently for good.

6. Impressibility supplies a key to the whole science of Anthropology. It gives us a Dynamic Anatomy—Psychological and Physiological.

7. The number of impressible constitutions is amply sufficient everywhere for the demonstration of the laws of Anthropology,

and in southern climates the number is sufficient to render the manipulations highly important in the practice of medicine.

8. Impressibility is promoted by all intellectual, refining, moral, or debilitating influences, and counteracted by hardships, cold climates, selfish and stern passions.

9. One of the best indications of Impressibility, is the large size of the pupil of the eye. The best mode of testing it, is to touch the organ of Somnolence in the temples, one inch horizontally behind the brow. The organ of Relaxation produces a very visible effect by the debility it induces. The most painful and injurious effects are produced by touching the region of Disease (at the cheek-bone) and the organs just behind it. The simplest test of Impressibility is the cooling sensation imparted to the hand of the subject by proximity to the hand of the operator. The most striking and convenient method of illustration is by placing the hand upon the forehead, and gently withdrawing it, to display the attraction between the hand and head.

10. The operator can easily produce whatever result he pleases, and, therefore, must consider himself responsible for all the consequences, where he has free control of the course of experiments. Excitements should be removed by dispersion from the spot touched, and the subject should be left under the influence of the region of Health.

11. The subject may be made either active or passive. In the passive mode his own organs are touched—in the active mode he feels the influence of another's organs by touching them, and may either feel the influence so as to appreciate and describe the action of the organs, or may be so powerfully affected as to be entirely overcome. By proper experiments in the active mode, a diagnosis of mind, character, physiology, or disease may be made, which will be wonderfully exact.

12. In some instances this diagnosis will not only evolve the actual condition of the organs, but will distinguish their congenital power and the influence of education or disease.

In these experiments, you perceive, the formula of Mesmerism are laid aside; there is no fixed gaze, no concentration of the attention of the operator — no exercise of the will, no putting to sleep in the outset—no attempt to gain an ascendency over the subject or to deprive him of his independence. Operator and subject preserve an entire independence, and mental or physical sympathy is avoided as much as possible. If differences of opinion arise, each has a fair exercise of his reasoning powers, and if any effect is recognized by either, he is indebted for his knowledge to his own independent consciousness.

Thus discarding volition, faith, and sympathy, we operate upon the simplest possible principles. The hand, we know, has an exciting power, and does excite the brain of the impressible constitution whenever brought within sufficient proximity. It is, then, a

stimulus to the brain. If this stimulating influence be applied upon any organ, that organ, being more excited than any other, receives a greater increase of its functional activity. The arterial blood is supplied to it in greater quantity, according to the old physiological axiom, "UBI IRRITATIO IBI AFFLUXUS." Thus, predominating over all opponent or interfering organs, it takes the lead and controls the whole character, just as it would under a natural excitement of similar energy. Combativeness, for instance, when powerfully excited by the hand, acts precisely as if excited by an insult or a blow. Its action is as vivid and effective—it produces the same influences over the heart and all parts of the body, and lasts just as long as if excited in the natural way. Mirthfulness thus excited differs in nowise from the Mirthfulness produced by hearing a good anecdote or witnessing a practical joke; and as we are sometimes in a sober mood, in which the gayest company or brightest wit would produce little effect, so an impressible subject might not always laugh when Mirthfulness is touched, although it may produce some pleasant cheerful influence.

The excitement of an organ, then, is merely an evolution of the faculties which the individual possesses and exerts under their appropriate stimuli. Our experiments may be said, in this sense, to develop nothing new. They merely excite organs in a peculiar manner, which have always heretofore been excited and manifested in the natural way under the influence of their appropriate objects. Whatever, then, has been developed in the course of experiments upon impressible persons, is but an exhibition of some faculty common to the human race and capable of being displayed whenever the proper conditions are afforded, without the assistance of the operator's influence. Somnambulism, for example, is one of the most familiar facts of Anthropology; clairvoyance and prevision have often been observed in dreams, in the Scotch second-sight, in remarkable presentiments, and in the responses of the ancient oracles. Our phrenological and physiological excitements, in the main, have neither novelty nor wonder, except in the fact that they can be produced without any appropriate object, merely by touching the organs.

This tactile excitement may be concentrated into a very small space, so as to evolve the function of a small portion of a convolution. When the end of your finger is in contact it appears that the subjacent fibers of the brain alone are distinctly excited. If the finger is not in actual contact, its influence is diffused over a circumscribed space, and a specific local excitement is not produced. The farther the finger is held from the head, the more equally its influence spreads over the hemisphere near which it is held, and the less does any organ preponderate over the others; consequently, it is only in absolute contact that a specific local function can be excited and made predominant without any interference or confusion from the excitement of others.

But why, it may be asked, should any organ be excited without actual contact of the hand (the supposed stimulus)? How can the mere proximity of the hand produce any effect? Actual contact is a thing that never occurs even in the experiments of the chemist and the mechanic. Particles of matter, it is believed, cannot be brought into *actual contact.* Mechanical action commences when a certain *approximation* has been made and forcible pressure is exerted. Chemical action requires a certain approximation but a less forcible connexion than the mechanical. Vital action requires still less of force and less of contact than either. A very small portion of medicine lightly touching the foot, or the epigastrium, affects the whole body powerfully. The magnet and the galvanic wires do not require even apparent contact to produce their effects upon us, and the human hand operates at still greater distances. Even when touching the head, it is separated from the brain by the scalp, the skull, and the membranes. If it can operate through these—through a fourth or a half of an inch—it may as well operate at greater distances, through the thin air or through the bone and muscle of the neck or the face.

Such is the fact. The hand affects the brain whenever brought into proximity. It is continually emitting the nervaura, which is also evolved from all parts of the body, and this nervaura may be regarded as an efficient stimulus, subject to the common laws of conduction and radiation which belong to the imponderable agents. This aura, if it enters the brain of the impressible, must, of course, produce its principal effect at the point of its application. (In certain subjects, who have been accustomed to be mesmerized, the influence of the hand appears to be diffused throughout the system and no local effect is produced. I do not recollect to have observed this result except in mesmeric subjects.)

The influence of the hand, however, is peculiar, and its nervaura differs widely from that of the other parts of the body. The hand (as we shall observe hereafter) corresponds by its inner surface to the organ of Adhesiveness in the brain. The nervaura of the inner surface of the hand is the same which is evolved from the organ of Adhesiveness itself. Consequently, the influence of the hand is powerfully attractive, for personal attraction is the function of Adhesiveness.

Apply your hand to the hand of one thoroughly impressible, and you will observe, as you withdraw it, that his hand has a slight tendency to follow yours. Apply your hand upon his forehead and gently withdraw it, after having excited the frontal organs, and you will perceive that each time, as you withdraw, he bends forward slightly as if attracted toward the hand. Some may thus, at your first interview, be drawn several steps in spite of their resistance, or attracted in different directions. As a test of impressibility, this may be considered one of the best, although it does not prove certainly that special organs can be distinctly excited. Excitement of the organs

requires an influence concentrative—not diffusive—and in some, diffusion seems the predominant tendency.

The influence of the hand being then an attractive influence—a psychological and physiological attraction—it attracts toward the point touched the nervous energies—the excitement, nervaura, circulation, etc., for the circulation of the capillaries is easily modified by any vital force. The stimulus of the inner surface of the hand is, then, a special stimulus of attraction or concentration. The back of the hand is repulsive, and any portion of it applied to the cerebral organs will generally diminish rather than increase their activity. The different portions of our body, head, and limbs affect the organs differently by contact, but the hand alone possesses the power of concentrating excitement in any region of the brain.

There are, however, some singular exceptions to our rules. There are highly impressible persons in whom the brain has a very peculiar impressibility. The contact of the hand, instead of exciting appears to benumb or paralyze the organs, and thus we may make as satisfactory experiments upon them as upon the regularly impressible class. Applying the hand upon the forehead stupefies them—upon the top of the head, produces harsh and unpleasant feelings—upon the lower occiput, produces an overflow of good humor, destroying every violent or hostile passion. In these cases, the antagonists of those organs which are benumbed are displayed immediately, as they are left uncontrolled.

The only perfect example of this peculiarity that I have ever found, was in a young member of the bar, a gentleman of clear intellect, in whom this reversal of the functions was perfectly uniform. Touching the organ of Mirthfulness, produced a very unpleasant expression of countenance; but touching its antagonist, produced the most violent laughter. Touching the region of Health and Energy, was very prostrating; but touching the region of Disease and Relaxation, relieved him. The aggregate effect of the experiments upon his head was oppressive, for every organ touched was benumbed, and hence I made few experiments upon the brain. But upon his body I more frequently made experiments, and found them to follow the normal rule. Supposing that this peculiarity of his brain might be owing to some relation between my temperament and his, I tried him with other persons, and found, that although their influence was in most cases equally or more oppressive to him, there were a few whose touch agreeably excited his organs and produced the functional manifestations of each.

The peculiar relation of temperament between the operator and the subject, is one to which much more importance is usually attached than it deserves in our experiments. In mesmeric operations, the relative powers of the operator and subject are quite important; but, in exciting the organs for our dynamic anatomy, no extraordinary power in the operator is required. An extraordinary impressibility in the subject is required, and when the instrument

is thus supplied, any one may become a performer upon it. Even children, who can be taught to apply their hands properly, may become operators upon adults. Such is the general rule. Almost any one can operate upon a properly impressible subject. No one can operate upon the man who is deficient in impressibility. But sometimes, when there is too much sympathy and diffusiveness, or, in other words, a tendency to the mesmeric relations, the comparative energy of the operator and subject are very important. Where mesmerism has not been practiced we do not find such cases.

The effect produced at the point of contact depends upon the stimulating qualities of the hand, and these are in proportion to the aggregate energy and vitality of the temperament, for every portion of the human frame partakes of the qualities of the predominant temperament.

It may, then, be *possible* to find persons whose temperament is of so low a grade in energy as to be positively sedative, instead of stimulant to the organs which they touch, and to find others who will be prompt and powerful stimulants, when in contact with the impressible. Two young ladies were brought before me (June 12, '44) to have their impressibility investigated, and the results were curious. Miss B. placed her hands upon the region of Stupidity and Sleep on the body of Miss A., who had frequently been mesmerized. The latter was greatly enlivened, her countenance showing increased intelligence and animation, while the former, by her dull, blank, and stupid looks, showed that the effect of stupidity, etc., was as fully produced in herself, as it was suppressed in Miss A. Miss B. then placed her hand upon the intellectual region of the chest, and regained all her activity of mind and brightness of countenance, while the intellectual vivacity of Miss A. was proportionally diminished. A still greater effect was produced, when Miss B. touched the forehead of Miss A.

It is important to bear in mind that the predominant qualities of the temperament characterize the whole constitution. The hand, thus participating in any species of excitement which predominates at the time, or which habitually rules the constitution, its influence may at times be very greatly modified. Thus, when Disease is the predominant influence, as during an attack of fever, the hand of the operator would, of course, transmit a very morbid influence; or, when in a violent fit of anger, the influence would, no doubt, become very exciting and unpleasant. These secondary effects, produced by the sympathy of the hand with the whole constitution, are sufficient to make it desirable that no one should operate, who is not in a healthy and agreeable condition, for the infirmities of the operator may easily be reproduced in the subject without any expectation thereof, if his hands are long held upon any of the frontal organs. If the operator wishes to avoid transmitting his peculiar influence, he should be as little in contact with his sub-

ject as possible, and especially avoid the regions of Sensibility and Consciousness, through which impressions are most easily made.

On the other hand, the operator himself is liable, just in proportion to his impressibility, to feeling the peculiar influence or condition of his subject. Some operators are so impressible as to catch from the patient nearly as much disease as they remove, and others being highly impressible would feel a greater amount of morbid effect on their persons than would be removed from the patient. In other words, they would lose more health themselves than they would succeed in imparting to the patient.

(*To be continued.*)

Neurological Experiments.—A course of Neurological lectures, which I am now delivering at the Eclectic Medical Institute, is accompanied by experiments of such a character as easily to be imitated or repeated by any one interested in the science. The first experiment attempted upon the class was that of ATTRACTION, by applying the hand to the head and gently withdrawing it.

About four-fifths of all upon whom this was tried, manifested a most decided and unequivocal attraction toward the hand—the head advancing several inches as the hand was withdrawn. In three instances, the experiment was prolonged until the head was drawn forward and the individual placed in the attitude of a most profound bow, after which, the application of the hands being continued, they were drawn still lower, and compelled to fall upon their knees with the head near the floor. The bending of the knees was not produced by the depression of the head, but required additional manipulations at the knees to procure their flexion. After they had thus been prostrated, a reverse movement attracted them up, and a few dispersive passes over the front of the head completely removed the influence.

Several of those who felt the attraction upon the head distinctly, were tried by the application of hand to hand, and recognized an attraction in that manner—the hand of the subject following that of the operator when their palms were near together. Among others, Mr. Vaughan, the ingenious chemist (who has furnished another essay for this number of the Journal), perceived a very distinct attraction both by the head and by the hand.

The next experiment attempted was that of controlling the muscular system by the cerebral organs. One of the class was requested to hold out his arm horizontally, pointing steadily at a candle. Having performed this in a firm steady manner, I applied my fingers upon the region of Relaxation (on the head) for a few minutes, after which he was unable to maintain his position firmly, and would stagger or recede in attempting to point steadily as before. The hand was then applied to the organs of Energy, and Firmness, when he maintained his position erect and steady while pointing.

ART. III.—RESEARCHES IN ORGANIC CHEMISTRY.—(CONTINUED FROM PAGE 383.)

BY DANIEL VAUGHAN.

To show that the changes which continually take place at the surface of our globe are the natural result of galvanic action, it will be necessary to consider the nature of the substance generated, when carbonic acid is decomposed in the manner described in the last article. The gas being deprived of a large portion of its oxygen, the residue must combine with the elements of the water in which it is dissolved, especially with the hydrogen, which, on a decomposition of the water, will be liberated at the same electrode. In electrolysis by feeble currents, the elements separated at the negative electrode generally unite, even when the affinity between them is very feeble; and they sometimes form compounds which cannot be produced by ordinary means. It follows, that, in the present instance, the resulting compound must consist of carbon, oxygen, and hydrogen; and experiments prove that this is the composition of humus or vegetable mold. The several varieties of this substance differ very much in the proportion in which these elements are combined; and it is found that this difference of constitution has scarce any connection with the species of plants from which it is commonly supposed to be produced. It evidently depends on the extent to which the deoxydating process has been carried. The surface where this vapor is formed, is the focus of galvanic action; and the carbonaceous compound which is generated by this force, in bodies of water, becomes less soluble as the oxygen is separated; removes from the scene of decomposition, and is replaced by fresh portions of carbonic acid from the atmosphere. On moist surfaces no such displacement can occur, and the evaporation not only decomposes carbonic acid, but causes a continual deoxydation of the carbonaceous matter which results from the decomposition. In this case, the quality and quantity of the humus must depend on the rapidity and the constancy of evaporation, the temperature at which it is conducted, and the supply of carbonic acid which the air affords.

The force of chemical affinity being in this manner controlled by the agency of electricity, it is evident, that whenever the latter power is suspended (or whenever vapor ceases to be formed), affinity must exercise its influence, and tend to resolve humus into carbonic acid and water. Hence proceeds the fermentation so frequently going on in the organic matter of the soil. Similar phenomena may be witnessed in inorganic bodies. Metals, from which oxygen has been separated by galvanism, will begin to oxydize

whenever the galvanic current ceases to act, if they are susceptible of easy oxydation. A peculiarity may be noticed in organic bodies. Pure charcoal, notwithstanding its affinity for oxygen, shows no disposition to unite with it at common temperatures; but a union will readily take place when the carbon is combined with a considerable portion of oxygen and hydrogen. Indeed, the tendency of all vegetable bodies to ferment, principally depends on the amount of oxygen they contain, and will be diminished or annulled as the quantity of this element is reduced. This fact, which shall be accounted for in another place, furnishes a clue to the most important changes in the organic world. When formed in large bodies of water, the humus, containing a large portion of oxygen, must possess a great tendency to oxydate, and to pass into carbonic acid. On moist surfaces, where the deoxydation is carried to a greater extent, it possesses more stability, undergoing these changes very slowly; and, in swamps, where evaporation is seldom interrupted, we find formations of coaly humus and peat, which resist the decomposing influence of several ages.

The experiments of Berzelius and of other chemists, have proved, that nearly all stagnant and running waters contain a large portion of crenic acid, a variety of humus which is very soluble, and very readily converted into carbonic acid. This fact is, however, controverted by Liebig, on the ground that the humus of the soil is quite insoluble, and, consequently, that water could not obtain a trace of it from this source. From these observations, apparently so contradictory, yet undoubtedly accurate, it is evident, that the crenic acid must have a different origin and be produced by the decomposition of the carbonic acid of the air. On this principle we may account for the great tendency of crenic acid to ferment, the putrefaction of stagnant water, and the emission of carbureted hydrogen which it so frequently evolves.

On land, the organic matter obtained from the atmosphere must have more stability, as it contains less oxygen; and it, consequently, accumulates as a reservoir of nourishment for plants. It is easy, therefore, without excluding the organic matter of the soil from the office of sustaining vegetation, to account for the perpetual source of fertility in arable lands, the augmentation of carbon, notwithstanding the waste to which it is continually subject, the formation of an arable soil on islands recovered from the sea, and on the lava ejected from volcanoes. We can also understand why seeds and plants should increase in weight, while, at the same time, they cannot arrive at maturity in the absence of organic matter; and, indeed, the several facts adduced to sustain the conflicting theories which have hitherto prevailed, will be found to accord with the principle which has been explained for the formation of humus.

The quantity of carbon, in soils, must depend on the conditions which they afford for the continued formation of vapor. This inference is confirmed by observations. The surfaces of clayey soils

generally contain a large amount of moisture, as the rain they receive, instead of penetrating the earth, is, for the most part, evaporated. Hence, they contain a large amount of organic matter, and are not injured by the application of lime, which so frequently impoverishes sandy soils, by exhausting the scanty supply of vegetable mold they contain. This is not to be ascribed to a disposition which (according to Thaer) clays have to retain their humus. When entirely free from organic matter, clays will become capable of sustaining vegetation sooner than any other kind of earth, if exposed to the air; a change evidently due to the formation of a small portion of humus. The materials used for the manufacture of porcelain contain a greater proportion of clay than is found in any arable lands. When the water in which they are kneaded is expelled by evaporation, and when the earth is removed to a damp cellar, the presence of organic matter is indicated by a fermentation which takes place and by the odor which is emitted. If these changes were caused, as some suppose, by any humus in the water, which fermented when combined with the clay, what becomes of the theory which assigns to clays a disposition to retain their humus? We must, therefore, recognize the existence of a power, by which this substance is produced with unusual rapidity, and this power increases its stability. Hence all varieties of coaly humus, and all accumulations of peat, rest on clays; and even the floor or pavement immediately under coal beds is, almost without exception, a grayish slate clay, which, when made into bricks, strongly resists the fire.—(URE.)

The conditions for continual evaporation are wanting in sandy soils, which allow the rains they receive to penetrate the lower strata of the earth, and seldom present a moist surface to the atmosphere. Accordingly, they contain, in general, a scanty supply of carbon. An abundant supply of water from rains, or other sources, often compensates for these unfavorable circumstances. The large amount of vegetable mold in the plains of Russia, and on the prairies of Illinois, is due to the presence of water, which is usually found a few feet below the surface, and which furnishes the means for the continued formation of vapor.

The causes which promote the rapid accumulation of humus, tend to diminish its fertilizing properties. Organic substances are found to be beneficial to plants, in proportion as they are disposed to ferment; and this is to be ascribed (as I shall afterward prove), not to the carbonic acid which is produced, but to the vigorous galvanic action which is generated along the growing plants by the fermentation. Accordingly, the humus formed in clayey soils is very deficient in fertilizing properties, and in swamps and bogs it is still more unsuitable for the purposes of vegetation. In sandy soils, the deficiency of humus is, in some degree, compensated by its tendency to undergo fermentation. But these conditions exist, in a greater degree, in crenic acid (the humus formed in bodies of water), and hence proceed the immense advantages resulting from irrigation.

Vegetation is, accordingly, dependent on two operations, the formation of humus and the appropriation of it to plants, which is attended with the fermentation already noticed. As these two operations must be, in a great measure, consecutive, we may understand the rationale of several plans of culture, sanctioned by experience. It is known, for instance, that the irrigation of meadows must be performed, not in summer, but in winter when the growth of plants is suspended, and that, if performed in summer, the advantages will be apparent only where the water is withdrawn from the land. The greatest advantages are also found to result from draining lands which are irrigated. In this case, the transition between the two operations is as speedy as possible, and the nutriment which is prepared, is speedily appropriated to the purposes of vegetation.

The present theories on agriculture do not enable us to account for the benefits resulting from irrigation. According to Johnston, it washes from the soil all "noxious ingredients;" but it is more reasonable to suppose that the fertilizing ingredients should be washed away in a larger proportion, as they are much more soluble in water. We are told by Liebig, that if humus were soluble, it should be withdrawn from the land by water, and that irrigation which is fertilizing should be injurious. But why was he not alarmed on account of the waste of the alkalies, to which he assigns so important a part in vegetation, and which, from their great solubility, must be more liable to be carried away by all the waters which the land receives?

The restorative effects of fallowing, which have given rise to so many visionary theories, evidently result from the continual acquisition of humus from the air, in the manner already noticed. The absence of vegetation diminishes the consumption of the humus, but is not necessary to its formation. On the contrary, the increased amount of moist surface, which the leaves of plants present to the air, must cause the absorption and decomposition of a larger amount of carbonic acid.

The same principle will conduct us to an explanation of the system of culture known by the name of Gurneyism. A covering of straw is spread over a pasture; and this is found to cause the grass to grow with very great rapidity. The same covering is successively applied to different portions of a field, and in all places its influence is visible. To ascribe this effect to shade is absurd, as an effect cannot be produced by the absence of a cause. The beneficial results are manifestly due to the increased amount of moist surface presented to the air, when the land is thus covered, and the consequent formation of a larger quantity of humus. The circulation of electricity along the growing plants is also promoted by the evaporation of the moisture which the straw receives.

Other proofs and illustrations shall be give in a future article.

ART. IV.—MESMERISM IN INDIA.

BY JAMES ESDAILE, M. D.

CHAPTER III.—(CONTINUED FROM PAGE 136.)

HE accordingly wetted the end of the glass stopper with the acid, and touched the sore with it, and the woman, for a few seconds, did not show any signs of acute pain. There could be no doubt about it, she was found out! The arch deceiver, having set a snare and delusion for me, was now laughing at my beard; and I was not relieved from my thick-coming fancies by Dr. B. kindly suggesting, "that she was probably a very insensible person naturally." I was soon roused from my trance of bewilderment, however, by hearing the woman cry out, that "we had put pepper to her head!" and she sat up, showing signs of great pain; immediately after, she declared "her head was on fire," and got out of bed, walking about distractedly in great agony. I ordered her head to be bathed, and, as the best anodyne, threw her into the trance: the sore being surrounded by tubercles, which retarded its healing, I took the opportunity to pare them off; and to this she was perfectly indifferent. In half an hour, I awoke her with much difficulty, in order that Dr. B. might hear her first words, which were, that she knew nothing about what we were talking of, having even forgotten the burning; an invasion of the waking by the sleeping state, which will be seen in another patient, when Mrs. Clermont's case is given. So that if Mesmerism did not protect this old woman, we have the curious fact of muriatic acid, applied in large quantities, to a raw surface by Dr. Finch, acting as a direct anodyne and narcotic, calming at the same time the circulation, and revolutionizing the respiration, while a drop in the hands of Dr. Bedford causes the greatest suffering and general excitement!—"*Non nobis tantas componere lites.*"

Oct. 10th.—Beppo Dass, a prisoner, was entranced to-day; in the presence of Dr. Roer, Mr. Bradbury, Major Riddell, Mr. Higgins, Mr. Muller, Mr. Graves, Messrs. Savigny, Mr. Bartlett; and I operated on him for hydrocele. The injection was thrown in without his showing a vestige of feeling, and his arm, which I had placed in the air, on purpose, at the commencement, never moved, and had to be taken down after the operation: this was the second operation performed on the man during the last fortnight; and on both occasions he slept for two hours afterward, knew nothing of what had happened on waking, and felt no pain until the

artificial inflammation commenced at 9 o'clock at night; the operation having been performed at noon. This has been called a painless operation,

"They laugh at scars who never felt a wound,"

and I shall therefore transcribe a passage from a friend's letter, written shortly after the publication of my first case.

"When I was first operated on, some years ago, for hydrocele, and the injection was thrown up, the pain was like a coir rope, round my loins, being pulled at each end by some persons as hard as they could; and the perspiration ran down my head as if some one was sprinkling water on my hair; so this is what you have laid dormant by your Mesmerism."

But it is for the sequel of this case, that I here quote it, and in order to show the man's behavior in his natural and artificial states. On the day after the operation, the inflammation is usually high, and from the sensitive nature of the parts, pressure is excessively painful. Now, on both occasions, I have requested numerous gentlemen to press the part, and ascertain if it was *really* painful: "a question not to be asked," was always their reply. The man was then entranced, and the experiment repeated by the same persons, when he allowed the part to be pressed as if it was a bottle:—he was then awakened, and on being now pressed, showed all the signs of instant and acute pain.

The cases above cited, along with, if I may use the expression, very numerous *painless severe* surgical operations, might be safely adduced as demonstrations of the physical impossibility of imposture; but I shall now submit to the physiologist a series of facts which, to him, will be more convincing than all the cutting, tearing, and lacerating we can invent. For although we may pretty certainly conclude, that men will not exhibit insensibility to torture, without some adequate object to be gained, yet the incentive may escape our observation, or be unintelligible to us. It is, therefore, desirable to discover something which it was *impossible* for a man in a natural condition to do, under the influence of any passion, or under the temptation of the highest bribe. To perform the following feats, will, I imagine, be found above the power of the most accomplished impostor: to keep the pupils dilated, without the use of drugs, in passing from darkness into sunshine,—to lower the pulse at pleasure,—to breathe only by the diaphragm, for hours, and diminish the temperature of the body, at will. The dilation and insensibility of the pupil are recorded in my first case, and have since been frequently seen.

[Dr. E. next relates a severe surgical operation performed upon "Kaloo, a Fuqueer." He says: "I entranced him in a few minutes, on the first trial, and in the presence of Major Riddell, Captain Anderson, Mr. Rennett, and Mr. Jackson" performed an amputation of a degenerate cartilaginous structure, "after a long dis-

section." "He did not awake," until the principal part of the operation had been performed.—EDITOR.]

Wonderful to say he relapsed into the trance again in a few minutes, and remained for twenty minutes, quite rigid, and insensible, with his eyes wide open, and the pupils dilated, in a full noonday light, to which they were wholly insensible. This is not the only instance in which the eyes have been wide open during the trance, and would not remain shut when I closed them, showing, I conceive, the absolute extinction of muscular power. In most cases, the muscles of the eye-ball continue to act involuntarily, after the rest of the muscular system has gone to rest, and on opening the eyelids, the ball of the eye is seen rolling round the orbit, like an agitated magnetic needle. Under the most intense degree of the influence, the muscles of the eye, and iris also lose their contractibility, and the eye becomes as motionless and insensible to light as that of a dead man. That the second trance was not a feint, we all satisfied ourselves, not only from the general rigidity of the body, but from the regular *natural pulse*.

Sept. 17th.—In the presence of the Reverend Mr. Fisher and Dr. Heathcote, I to-day operated for cataract on a man while in the mesmeric trance. The pupil was so much dilated that Dr. H. asked if belladonna had been applied? After depressing the lens, and withdrawing the needle, the lens rose again, and such was the continued dilation of the pupil, that it passed into the interior chamber, and came in contact with the cornea; the man being insensible all the time.

Sept. 18th.—To-day, in the presence of the Reverend Mr. Bradbury, I entranced a man for the first time, in the hope of subduing an inflammation of one eye, by removing all pain and irritation, and thereby allowing the restorative powers of nature to act undisturbed; he was entranced sitting on a stool, in order to lessen the flow of blood to the head. We counted his pulse beforehand; it was 100 in the minute; respiration 20; thoracic movement natural; temperature higher than usual. After 20 minutes, his pulse had sunk to 70, his respiration to 18, and by comparing his chest with that of a man lying alongside of him, we ascertained that there was *not a vestige of thoracic movement*. All above the diaphragm was as fixed as the trunk of a statue, and the temperature of his body had become lower than natural.

If these tests are not considered an "*experimentum crucis*," I am at a loss to imagine what will be reckoned more satisfactory by the human physiologist. It appears to me, that when we see the *involuntary* organs of the body revolutionized, it is absurd to attribute it to the effect of the *will*.

CHAPTER IV.

Somnambulism.—Definition.—Singular Introduction to it.—Suspected Child-Stealing by its Means.—First Experiment in making a Somnambulist.—Trial of Mesmeric Skill in a Court of Justice.—Men stolen out of Court.—Truth of Mesmerism publicly proved.—Natural Sleep and its Varieties, can be imitated by Artificial Means.—Mesmeric Sleep.—Mesmeric Day-mare.—Mesmeric Sleep-walking.—Mesmeric Sleep-waking.—Mesmeric Dreaming.—How to make Somnambulists.—Imitative Stage of Somnambulism.—Communicative Stage of Somnambulism.—Mesmeric Catalepsy.—Mesmeric Coma.—Natural Clairvoyance.—Mesmeric Clairvoyance.—Nature of the Mesmeric Power.—Illustrative Examples.

Before submitting to the reader the results of my observations on somnambulism, I beg leave to prefix the following summary of the appearances recognized as distinctive of the somnambulistic state in Europe. It is given in the British and Foreign Medical Review, already quoted:—"Somnambulism is a condition in which certain senses and faculties are suppressed, or rendered thoroughly impassive, while others prevail in most unwonted exultation; in which an individual, though asleep, feels and acts most energetically, holding an anomalous species of communication with the external world, awake to objects of attention, and most profoundly torpid to things at the time indifferent; a condition respecting which, most commonly, the patient on awaking retains no recollection; but, on any relapse into which, a train of thought and feeling related to, and associated with, the antecedent paroxysm, will very often be developed."

I intended to have reserved this branch of the subject until I had examined it in all its purely medical bearings: but I was forced, by most extraordinary circumstances, to enter prematurely into this difficult and obscure field of experiment, in order to enable me to give my evidence in a court of justice; and in describing my experiments, I hope it will be borne in mind, that I had never seen a somnambulist, or thought of making one, up to this date. My first essay was as extemporaneous and accidental as the production of mesmeric coma, on the first occasion I tried to mesmerize:—the facts are simply these.

June 17th.—About a fortnight ago, I was driving through Hooghly Bazaar, and saw a crowd collected before the police office. On asking what was the matter, I was told that a man had been apprehended in the act of stealing a boy, and that the parties were inside the guard-house. Upon hearing this, I entered the house, and found a boy of ten or twelve years old, sitting on the lap of a man who was said to have rescued him. The boy was half stupid, and one of his eyes was swollen; I therefore ordered him to be taken to the hospital. The culprit was then shown to me. He said he was a barber; and a bundle containing his implements of trade, was produced: this I carefully examined, but only found the usual barber's tools. The boy soon recovered his senses, and told me, readily and consistently, the following tale, which I again heard him repeat before the magistrate, in a different sequence, but with-

out a tittle of variation. He said, that early in the morning he went into a field close to a house, and that shortly after, a strange man left the road, and came up to him: as soon as he was near him, he began to mutter charms, and then took hold of his hand; very soon after, he passed his hand across his eyes, and that thereupon he lost his senses, and only recollected that the man led him away, but without force, and that he felt compelled to follow him. When he came to his senses, it was at the gate of Chandernagore, two miles from where he had met the man; and this was all he had to say. He had not eaten, drank, or smoked, in company with the man; and his master and friends all said he was a clever, well-behaved boy, and had never been known to have fits or walk in his sleep. I then examined the man who was said to have rescued him: his evidence was to this effect; that on the morning in question, he saw the boy, whom he knew very well, following a strange man; that he stopped him, and asked what he was doing there? The boy made no answer and appeared to be idiotic: upon seeing this, he became alarmed, brought water to throw on his face, and used other means to revive him; in which he at last succeeded. On again questioning him, he said that he did not know why he was there; that he was obliged to follow that man, though he did not know him, and after saying this, he fell down, and bruised his eye on the ground. In the meantime, the man was making off, but was apprehended, and brought to Hooghly. I then called in the barber; and this was his story: he met the boy on the road crying and looking stupid, and on asking him what ailed him, he said that he had lost his way. Upon hearing this, he desired the boy to accompany him to the police station, and that a policeman would take him home. The strange nature of the transaction, whichever side was true, strongly arrested my attention, and the trade of the man roused my suspicions; as I had heard that barbers in this country, while performing their tedious processes, could put people to sleep; and reports are rife, all over the country, of people having been obliged to follow persons who had charmed them; and the victims are said to be usually women. The barbers, all over the world, are a shrewd, observing race; their occupation brings them into close contact with the surfaces most sensitive to the mesmeric influence; and they are, therefore, very likely to have become possessed of the secret of Mesmerism at an early period, and perhaps it has descended to them as a mystery of their craft. I could only see two roads out of the dilemma: it was either a case of natural or artificial somnambulism; and if the latter, how could it be brought about unless by Mesmerism? As accident had made me a witness in the case, I anticipated that I should be called upon to speak of the possibility of such a mode of abduction; and as I was completely ignorant of the subject, I determined to make experiments, to satisfy myself. I thought it probable, that if this could be done by Mesmerism, I should perhaps be able to imitate

it, as the greater power includes the less; and that I had only to stop short in the progress to insensibility, in order to produce like effects, if obtainable by this means.

I therefore repaired to the Jail Hospital, and mesmerized a man; in whom I had subdued inflammation of the eye, by entrancing him several times; but only went to the extent of inducing the cataleptic tendency, and leaving him the power of moving and hearing, but very imperfectly. At this point, I led him away, and then letting him go, he stalked to the other end of the inclosure, until brought up by the wall; being turned, he walked in a straight line until some obstacle obstructed him, and then stood helplessly still. If allowed to stand motionless for some minutes, the trance deepened, and he became insensible to sounds; by blowing in his eyes, and addressing him all the time, he revived, and repeated after me, with great exactness, both English and Hindostanee; on awakening him, he had no recollection of any part of his proceedings, and said that he had never stirred from the spot, although he was at the opposite end of the inclosure from where we commenced. Being summoned to the Magistrate's Court as a witness, I was asked, "if I thought it practicable to carry off a person in the way described in the evidence? I replied, that "I thought it possible, because I had just done something very like it, by making a prisoner follow me around the hospital inclosure, without his knowing it." The magistrate committed the case; but when it came to be tried before the judge, it was found to be utterly impossible to convey even a glimpse of my meaning in the minds of the native law officers who had to try the case; and the judge therefore asked me if I had any objection to show the Moulavies in court that it was possible for one person to make another follow him involuntarily, as I said. I answered, that I was willing to make the experiment, but would engage to do nothing: if he would order three men, whom I named, to be sent for to Court, I would try what could be done,—the men to be kept in total ignorance of our intentions.

In a day or two after, I was requested to attend the judge's court, which was crowded with Europeans and natives. Nazir Mahomed was brought in, and placed at the bar: I mesmerized him in a few minutes, and led him, with his arms catalepsed, out of the court, and set him walking down the road for some distance, making his arms rigid in any position, as long as I pleased. I then replaced him at the bar, where the judge and Moulavies all loudly addressed him, without his paying any attention to them; and they were obliged to ask me to awake him. This I did, and on being asked from the bench, if he had left the room since he first entered it, he confidently answered "No." While they were speaking to him in front, I approached, unperceived, behind, and entranced him on the spot, in the act of speaking. The words died on his lips, and he became insensible to all voices that addressed him; he was again

awoke by blowing in his eyes. Madub was put into the dock, and he did not see me on entering. The judge and Moulavies engaged him in conversation, and while he was speaking with animation and intelligence, I catalepsed him from behind, while in the usual praying attitude of a prisoner at the bar, and, in a moment, he ceased to speak or hear: I was told by those in front, that his lips moved as if in the act of speaking, after he ceased to be heard. He was so deeply affected that all motive power was nearly extinguished, and I had to push him from behind with my finger, to make him walk: he walked a few yards with difficulty, and then becoming suddenly rigid from head to foot, a slight push sent him down headlong upon the floor, in a most alarming manner: the fit of rigidity was so instantaneous that I was not aware of it. He was revived with some difficulty, and fortunately was not injured by his fall.

Sooroop Chund was next brought in, and, as I had not seen him for a month, I began asking him about his health, etc., mesmerizing him all the time. In a few minutes, he ceased to answer, and I took him out of the dock, turned him round like a teetotum, his arms rigidly fixed all the time, and then restored him to his former place in a state of complete insensibility: no one could make him hear, or show the slightest sign of life. When I blew in his eyes, he instantly recovered his senses, and declared he had never left the spot.

Whether the barber stole the boy mesmerically or not, I will not pretend to decide, but it gave me an opportunity of proving, in the most public manner, that the thing could be done, and no one has ventured to deny publicly that I stole the men; and, with the facilities of a native barber, I could almost engage to steal a man, woman, or child, daily. From the moment that I witnessed the extreme degrees of Mesmerism, I became deeply impressed with a conviction of its power for evil as well as good; and I have driven it thus far, in the hope of rousing the public mind to a sense of the dangers, as well as benefits, that may be expected from it; and I trust the day is not distant, when public opinion will strongly condemn all those who practice the art, except for philosophic or medical purposes.

That the barber was in illegal possession of the boy's person, however obtained, was so clear, that he was sentenced to nine years' imprisonment, and labor in irons; and the sentence was confirmed by the superior court. But the government called for the proceedings, and thinking, I suppose, that the mesmeric experiments had made too deep an impression on the mind of the court, graciously pardoned the barber.

When puzzled by the unexpected exhibition of new and wonderful bodily, or mental phenomena, instead of solving our difficulties by denying the existence of the phenomena, or dismissing them contemptuously as the offspring of deception, or delusion, we shall

do much better, and generally be nearer the truth, if we suspect that we have overlooked some power of the human constitution, and resolve diligently to betake ourselves to the study of the nature of the new agent. Like the careless knitter, we find, at the end of our work, that some stitches have been dropped, and that we must recommence our work *de novo*. By a comparison of the effects of natural and mesmeric sleep on the human system, it will be seen, I think, that they only differ in degree, and in the greater command we have over the artificial than the natural state of sleep; and I feel disposed to think that extreme conditions of the nervous system, its exhaustion or repletion, and the irregular distribution of the nervous secretions, produce the same effects on the bodily and mental organs in normal and abnormal sleep.

I shall attempt to exemplify this, by instituting a comparison between natural sleep and its diseased varieties, and the mesmeric phenomena; from which it will be apparent that most of the latter exist in the routine of life, and that the novelty consists in our being able to produce and vary them, at will, by a new direction of the nervous energy.

Common Sleep.—In this condition of the system there is an absolute repose of body and mind; at least there is no consciousness of movement in either, on awakening.

Mesmeric Sleep exactly resembles common sleep, with added restorative and curative power, of which the following cases are examples.

[Dr. E. mentions the case of "Geereah, a Hindoo girl, aged 10," "suffering from suppression of urine for two days," in consequence of a severe perineal wound. She was mesmerized half an hour, slept an hour, and was immediately relieved—"she was cured without a dose of medicine."—EDITOR.]

July 10th.—Oboychurn Roy, a Hindoo land-owner: had his left arm struck off, twelve days ago, in defending his house against a gang of *dacoits*. There are two white rings on his arm, made by ligatures applied to staunch the blood; and it is wonderful that mortification has not been produced. Several pieces of bone required to be removed, and this gave him great pain: he was mesmerized, locally, with great relief, and afterward generally: he dropped asleep in half an hour, and slept the whole of that night; the only sleep he had had since the infliction of the injury.

2. *Night-mare.*—If the brain is disagreeably affected by internal physical impressions, such as an unequal distribution of blood, or nervous energy, then a confused train of painful images take possession of the mind, which is filled with causeless fears and shadowy horrors; and the sleeper struggles helplessly to shake off the incubus that oppresses him.

Mesmeric Day-mare.—This very much resembles *night-mare*, but with a greater tendency to walk and talk, and appears to depend upon the irregular distribution of the nervous power, and the

consequent derangement of the respiration and circulation. This is so alarming an effect of Mesmerism, that I do not envy the amateur who may produce it.

July 4th.—Bunnoo, a Hindoo girl; aged 15. She sprained her ankle, ten days ago, by a fall: the foot, ankle, and half the leg, are much swollen, infiltrated, and very painful. I mesmerized her for an hour, but she only slept for a few minutes, and little relief was given.

July 5th.—She was again mesmerized to-day, and in ten minutes she became much agitated; her chest was convulsed, and she showed all the signs of a violent attack of hysteria. The convulsions were soothed in a short time, by generalizing the mesmeric influence, and then she became delirious, crying out, that there was a man before her with great eyes, and desiring him to be taken away. Her eyes were wide open, but she said I was a Bengalee; thought she was in her own house, and did not know her own or her mother's name, who was standing by her. I placed her mother before her, whom she took for a man, and ordered away, covering him with the choicest flowers of Bengalee abuse. She was sitting up, and carefully protecting her leg all this time, answering all my questions about *it* quite clearly. As it was not in a comfortable position, I desired her to place it to her liking, as she would not allow it to be touched: this she did, and said it was now right. I then asked, if she would go to sleep: she answered "yes;" upon which I pointed my fingers at her eyes, and she fell back as if shot, and went into the trance.

The leg could now be freely pressed all over, without disturbing her, and I made my assistants apply their hands to it, to show them that the heat had also disappeared; the inflamed parts were now cooler than our hands.

This was not a case in which the mesmeric trance could rapidly subdue inflammation; it was of too long standing, and the ligaments had been too much injured, but local manipulations gave great relief, and induced sleep even.

Sleep-walking.—Sometimes from irritability of the muscular system, there is a craving for motion as the natural source of relief, and, volition sympathizing to the required degree only, the person gets up, and walks until tired: having thus exhausted the muscular and nervous irritation by exercise in the cool night air, he returns to bed, sleeps soundly, and, next day, has no recollection of his nocturnal promenade.

Mesmeric Sleep-walking.—July 18th.—I entranced five men to-day, in the presence of the Rev. Mr. Fisher, and Mr. Clint, Principal of Hooghly College: two of them awoke, on being pulled up, and set on their feet; the others slept standing.

No. 1 could not possibly open his eyes, though he understood my order to do so, and tried with all his might; nor could he walk when desired, but being set in motion, he poked helplessly forward,

until he came in contact with the wall, against which he bowed his head, and then stood motionless. Being relieved from his dilemma, and set a-going again, he slouched about, a most forlorn-looking wretch, until he got embayed between a window-shutter and the wall, and there he would have remained until the fit went off, if I had not taken pity on him.

No. 2, on being raised, and roused a little by rubbing, and blowing in his eyes, half opened them, and saw sufficiently to enable him to avoid obstacles. Being ordered to walk, he stalked out of the room like a walking corpse; descended four steps very cautiously, and continued his course in a straight line: when ordered to stop, he did so, and would never have moved again, of his own accord, until the unnatural state disappeared.

No. 3, being roused, opened his eyes wider than natural, but saw no better than the others. I think he even saw less, as he had to be warned of the steps, to prevent his falling: his pupils were dilated, and he never winked. Having got upon the grass, his actions portrayed the most helpless timidity: he walked as if upon glass, and stared intently at every tuft of grass in his way; sometimes turning aside to avoid what, to his disordered senses, probably appeared to be insurmountable obstacles. He turned, when ordered, and made toward the hospital again, picking his steps very cautiously, and never looking up until he came to the steps leading up to the verandah; he then stopped, looked up, carefully studied the nature of the impediment, and, seeing the mass of building before him, gave up the idea of ascending the steps as hopeless, and turned along the road running round the hospital, until he came to where we were standing. Here I stopped him, and very distinctly told him the nature of the obstacle; four steps, namely, and desired him to come to me. This he understood, undertook, and accomplished; being assisted by my warning him at each of the steps, and counting them. All the men, as usual, were unconscious of having left the spot where they went to sleep.

Sleep-waking.—At other times, one or more senses remain active after the others have gone to rest; the wants of the waking organ are transmitted to the sensorium, and are followed by an effort of the will to gratify them. The sleeper rises, and performs the actions necessary to satisfy his desires; eye-sight, to a small extent, usually assists; if not, hearing and touch come to his aid, and guide him with singular accuracy in known localities. I may here give an illustration, from my own experience, of the preternatural acuteness of hearing, developed to aid the somnambulist in getting out of his troubles. In my youth, I was an eager sportsman, by flood and field; and one night, after a fatiguing day's sport, I found myself in the middle of the room, and very cold, but could not possibly contrive to get back to bed again. My last waking impression was made by the ticking of my watch under the pillow, and this recollection came to rescue me from my diffi-

culties. After the most mature reflection, it occurred to me, that if I could only detect my watch by its ticking, I should also find my bed. Acting upon this happy idea, I hunted my watch by ear, until I actually found it; and got into bed again, as the reward of sound reasoning and perseverance.

(The exploits of somnambulists have often evinced a far higher power than mere acuteness of vision or hearing. The somnambulic state is often accompanied by true clairvoyance. This subject will be fully explained by—THE EDITOR.)

To be continued.)

ART. V.—PRESENT STATE OF MEDICAL SCIENCE.

OF all known sciences, none have been more unstable, confused, and contradictory in doctrines than Practical Medicine. Not only is it changing from age to age, and even from year to year, but on the very same day, if we pass from nation to nation, from city to city, or from one medical school to another, located in a neighboring street, we find the most contradictory doctrines taught with dogmatic confidence at the same hour, and the votaries of each expressing no little contempt for the others.

In matters of SCIENCE, which should be based upon positive observation and accurate induction, such extreme discrepancies and fierce collisions of opinion cannot legitimately occur. Hence, dispassionate observers have occasionally been tempted to deny entirely that *medicine is a science*, and to depreciate greatly its claims *even as an art*. Well-educated physicians have often expressed a doubt whether the practice of medicine was, upon the whole, a benefit or an injury to mankind, as the amount of injury inflicted appeared to equal the amount of benefit. The votaries of the water-cure treatment do not hesitate to pronounce the whole practice of medicine, by the administration of drugs, an immense evil—and the followers of Homœopathy pass a sweeping sentence of condemnation upon the whole practice of medicine by the use of potential doses of the drugs in common use.

Under these circumstances, intelligent men are losing their faith in medical colleges and medical systems, and waiting to see the results of practice, ready to adopt that system which is most successful. We observe, too, that those who have lost their faith in the old systems of government, philosophy, morals, religion, temperance, diet, education, and labor, are also disposed to distrust the old system of medicine, and to look for some radical change in the healing art. This change in public opinion is a well-known fact. Every medical journal in our country contains occasional allusions to the change in public sentiment, the disposition to favor new sys-

tems, and the lack of reverence for the authority of the medical profession.

During this progressive and revolutionary condition of the science of medicine, where can we take our stand with firmness, and obtain a just view of the permanent principles upon which the healing art must be based? I think it is almost self-evident that the foundation of a true and permanent medical science must be found in the *science of man* and his relations to nature. And as this Journal is devoted to that science, it will become necessary to include within the scope of its *future* labors, a sketch of our medical relations. This sketch I do not propose to undertake at present, but merely a few preliminary suggestions, which, as an Anthropologist, and as a medical professor, I deem it my duty to offer.

My own views of medical science have been derived partly from the experimental investigation of the human constitution in its relations to medicine, and partly from the investigation of medical systems and their practical results.

With those who believe that the fashionable and most prevalent system of practice is the most advanced form of human intelligence, and that it is satisfactory both in theory and in its practical results, I cannot coincide. Nor, on the other hand, can I coincide with those who pronounce medicine not a science, and who distrust the entire healing art. Every systematic collection of knowledge upon any important subject is entitled to be called a science. Medicine is, therefore, a science, or rather a collection of sciences. Anatomy, Physiology, and Pathology are sciences beyond a doubt. The doubtful and contradictory character of medicine attaches only to the other two departments, Therapeutics and Materia Medica. Our knowledge of the properties and value of medicines is very imperfect, as well as our knowledge of their proper application to the relief of disease; but we should not attribute the imperfections and fluctuations of these two departments to the whole science of medicine, and represent a change in the prominent features of our therapeutics as an entire change in the science. If the prescriptions of practitioners, in 1850, differ materially from those of 1820, this does not show a radical change in *the science of medicine:* on the contrary, the chemistry, anatomy, physiology, and pathology of these two periods are essentially the same, and differ only in certain additions or improvements of small magnitude in comparison with the bulk of the science. In like manner, two colleges, of opposite character, as Allopathic and Homœopathic, are commonly supposed to be totally distinct in their teaching, but in truth, at least two-thirds of the knowledge communicated by the two colleges are the same, and two-thirds of their chairs might be occupied by the same individuals. The pretended revolutions in medicine are, therefore, mere changes in the composition of medical prescriptions and in the principles of practice. Aside from the materia medica and therapeutics, medical science possesses as posi-

tive, accurate, and stable a character as other branches of physical science; and even in these more fluctuating departments of the science, there is a very large and constantly-increasing mass of well-established and incontrovertible knowledge.

The fluctuating and controversial departments of medical science would soon become stable and accurate, if the relations of medicines to the human constitution were accurately ascertained and made the basis of the healing art. This, I am inclined to think, will be one of the great results of Neurological science, for it enables us to ascertain with great facility the constitutional effects of any remedy by direct experiment upon the healthy subject.

There would be a much more rapid progress of medical science in the attainment of accuracy, were it not for the fact that so much party spirit has been excited among the votaries of different doctrines. In the present selfish condition of society, the members of the different professions and teachers of the different sciences have not enough of liberal sentiment and enlarged philanthropy to be prompt in recognizing improvements, or to be eager to advance in any course of investigation which does not promise to lead to wealth and fame. In medicine especially we observe this sluggish conservatism which has marked the whole history of the science, and which exists at the present time, to almost, if not quite, as great an extent as at the time when the discovery of the circulation of the blood was ridiculed and opposed.

The opposition, jealousy, and ridicule which are arrayed against every remarkable innovation upon the doctrines and practice of the healing art, have the effect of preventing the majority of practitioners from giving any attention to the proscribed doctrines; while those who do investigate and become convinced of the truth of the new suggestions, find themselves slighted and opposed by the opponents of innovation, and thus compelled to stand apart in a distinct party. In this position they necessarily reciprocate some portion of the contempt which is showered upon them by their opponents, and thus each party is gradually led to regard itself as the sole possessor of truth and philosophy, and to regard its opponents as mere propagators of falsehood and delusion, from whom no good whatever can be expected, and whose suggestions are entirely unworthy of notice. Such relations as these have, to a considerable extent, arisen between the medical parties of our own country. The old school, or Allopathic party, and the Homœopathic party are separated not merely by a difference of practical doctrines, but by a rancorous party spirit, which leads to gross denunciations, bitter invectives, and even violent personalities. A similar relation exists between the old profession and the hydropathic or water-cure physicians. They, too, are denounced as quacks and impostors. A third party—the advocates of simpler treatment and botanic remedies—are equally assailed by the scorn and denunciation of the principal medical journals and influential practitioners. The germ

of another party not yet developed, is found in the chrono-thermal system of Dr. Dickson, of England; and in this last instance we find the same vindictive spirit between the old and new parties as in all the other examples.

That all this party spirit is wrong—that it is the disgrace of the medical profession—is too obvious to need any proof. That the different cultivators of the healing art ought to co-operate in an amicable manner, to learn from each other, to profit by mutual consultation, and to recognize each other as professional brethren co-operating for the relief of mankind, is almost self-evident to any unprejudiced mind. Each class of physicians, by pursuing a peculiar course of practice, becomes acquainted with important remedies and methods of practice not so well known or understood by the other classes, and hence the members of each class would be capable of imparting much valuable practical knowledge to those of the other classes. Nor is there any controlling reason why such suggestions should not be received, but the force of party spirit, jealousy, prejudice, and professional vanity—motives which should never be allowed to influence a well-regulated mind. It is true, the practitioner of one school may regard all that comes from other schools as false and injurious; but this is generally because he has not consulted their authors and practitioners, or because he is too scornful to pay any regard to their assertions and the results of their experience. Each ultra partisan demands credence for his own statement, but entirely discredits the assertions of gentlemen as learned and respectable as himself, and often refuses even to hear or to read their statements. It may be said, therefore, that the wide separation and discord of our schools of medicine or medical parties arises from the most unworthy motives, and demands the stern reprehension of every friend of humanity.

The selfish and combative spirit which now prevails, not only separates practitioners of different schools and produces continual discord in society, but so perverts the intellectual faculties as to disqualify them for perceiving the harmonies of truth. A physician is often led to affirm that a doctrine or plan of practice differing slightly from that which he adopts, is irreconcilably antagonistic, and that if one is true, the other is necessarily false, when, in reality, both may be essentially true, and each, when rightly understood, perfectly compatible with the other.

It is very common for the champions of the different systems of practice to affirm, that if their own system is true, all the other systems are false—that if one advances, the others must recede—that the physician who adopts one must necessarily reject the others,—and that he who has become aware of the merits of their favorite system, could not make any use at all of other systems, without professional dishonesty. All such remarks spring from narrow minds and false philosophy. One fact cannot be incompatible with another fact—one expedient in the treatment of disease

may be better or worse than another, but there is no inconsistency in believing that each expedient succeeds to the extent claimed by its friends, and in being ready to make use of each if it should promise a satisfactory result. A fever may be cured, as the followers of Hahnemann affirm, by little globules or powders containing the right specific medicine according to the Homœopathic rule, but in so small a quantity as to be almost or quite imperceptible. It may also be cured by bleeding, mercury and tartar emetic; or by a nauseant cholagogue cathartic, and a proper course of bathing; or by cold water alone.

An intelligent medical man should understand all these plans, and should be competent to avail himself of them when proper, instead of adopting one and refusing even to examine the others. He may discover by experience, or otherwise, the greater value or success of one of these plans, and adopt it; but if he finds a particular case, in which, for some peculiar reason, another plan would be preferable, it is his duty to adopt that other plan, without any regard to the bigotry of his associates. And, far from condemning a practitioner of one school for resorting to the agencies of other schools whenever he thinks proper, we should applaud his liberality, intelligence and independence of mind.

Public opinion *should demand* of every educated physician a knowledge of *all the resources* of the healing art, and a readiness to employ any and all means required to save life and health. If such a requisition is made by an enlightened public sentiment, the medical profession will lose its factious, and partisan character, and at the same time become vastly more successful in the thorough cure of disease.

The responsibility for the present factious condition of the medical profession rests, I believe, mainly upon its older and more conservative portion. The various innovations have been so rudely repulsed,—the followers of Hahnemann, Gall, Mesmer, and Priessnitz, and the medical reformers of America, have been so contemptuously treated, that they must have been something more than human not to have resisted and resented such injuries. The parties of innovation and reform being weak and obscure in their commencement have been conciliatory in their course, and would never have assumed any hostile relations had they been permitted to occupy a friendly position. But the dominant party, being in the possession of power with an aristocratic organization, tolerated no difference of opinion, and in America, as well as in Europe, has denounced and excluded from all professional fellowship and respect those who adopt any of the new systems of medical practice. This intolerance is the great cause of professional discord, and when that cause is removed, the effect will cease.

No direct measures have been taken for the abolition of medical parties, or rather medical intolerance, except in the United States, and during a comparatively recent period. There has not been

sufficient liberality elsewhere to recognize the great principle that all systems adopted and sustained by intelligent men must contain valuable truths, and that it is our duty to seek these truths and adopt them.

Upon this principle is based the great American medical movement, which assumes the title of ECLECTIC. This movement, while it aims to destroy the bigotry and intolerance of the profession, aims still more earnestly to increase the efficacy, safety, and success of the healing art, and to bring it nearer to the condition of an accurate science.

The principal representative and supporter of the Eclectic movement, at the present time, is the Eclectic Medical Institute, of Cincinnati, with which I have the honor of being connected as a professor. The medical doctrines of this school are not a mere selection and compilation from other schools—on the contrary, it has its own distinctive doctrines and system of practice, which differ materially from those of all other schools. Its Eclecticism consists in the fact that it looks upon other schools with a liberal spirit, is ready to co-operate with all, and ready to profit by a hint from any source whatever. The Eclectic school teaches that system of practice which experience, observation, and reflection induce its professors to regard as the best, and this differs widely from the system taught in other colleges; but, at the same time, it teaches that medical science is still imperfect, and that we should ever be vigilant in the discovery of new remedies or new methods of practice. Its great aim is *continual progression*. Hence, the practitioners of this school are encouraged to make innovations and improvements, instead of perpetuating a monotonous uniformity, and it is expected that each succeeding year shall give additional new and valuable features to the system.

As an illustration of the liberality of this school, I would mention, that although it teaches a distinct American system of practice, it has never condemned the Homœopathic system as false or unworthy of notice (which has been done in all other medical colleges, with few if any exceptions), but has ever extended a friendly recognition to the system and its practitioners, recommended its study, and presented the evidences of its success. Within the past twelve months, a still more decided step has been taken by establishing a regular and full course of instruction in the Homœopathic system, by an experienced professor, who was recommended for the position by a convention of Homœopathic physicians. Those only who are acquainted with the violence of medical party spirit, and who know how Homœopathy has been denounced as an absurdity, a falsehood, and a fraud, in our medical schools, and how extensively these denunciations are believed by physicians, can appreciate the liberality which oversteps the barriers of prejudice to espouse the interests of a persecuted truth.

In establishing this professorship, the Faculty have taken a

manly stand in favor of a broad, liberal, encyclopediac system of study. They expect their students to be something more than mere passive recipients of their ideas, or zealous partisans of some exclusive theory. The thorough Eclectic graduate is expected to be acquainted with the chemistry, anatomy, surgery, obstetrics, physiology, pathology, therapeutics, and materia medica, which are taught in the old medical schools, but also to be thoroughly acquainted with the improved methods of practice which characterize the Eclectic system, and to have a more thorough and valuable knowledge of the materia medica than is commonly required—including not only medicinal plants and compounds, but the immense power and utility of WATER, as established by water-cure practitioners. He is also expected to understand the Homœopathic system, and the new discoveries in the *physiology* of the brain, which will hereafter be developed in the pages of this Journal. He is, moreover, earnestly impressed with the duty of continually seeking truth in a liberal and hopeful spirit, and keeping up with the most advanced condition of science.

A school established upon principles so liberal as these, requires an enlightened liberality in the public mind to support it in a successful career—a degree of liberality, of which perhaps the present generation affords the first example. It is a gratifying fact, that the Eclectic college has met with a remarkable success, and occupies, at the present time, a prominent position. The present is the fifth winter since the commencement of its lectures, and although there are two other medical schools in the city, one of which has been established thirty years, and liberally endowed by the state, the class of the Eclectic Medical Institute is much the largest in Cincinnati, and numbers at the present time one hundred and sixty-two.

The friends of phrenology, of animal magnetism, and of MEDICAL REFORM, have great reason to rejoice, that after so long a period of darkness and oppression, during which the most important and elevated truths have been spurned from our medical schools, all the bold, liberal ideas of the age have at length been cordially received and successfully maintained in one of the largest medical schools in our country. This school not only supports the most liberal ideas which have obtained currency, but is actively engaged in originating and propagating scientific discoveries which are far in advance of contemporary knowledge.

The peculiar system of practice taught in this school (aside from Homœopathy) space does not permit me to discuss. Suffice it to say, the leading principle is to preserve the vital powers uninjured and to avoid all means or measures which exert a permanently debilitating influence.

Familiar Table-Talk.

CONDITION OF EUROPE.—HUNGARY has been terribly crushed by the brutal power of Austria. The heavy exactions, oppressive outrages, and legal murders of the government have reduced the whole country to poverty. A correspondent of the Kolnische Zeitung (of Nov. 19) says: "Landed property in Hungary was formerly cheap, it is now almost given away, merely to escape taxation, and because there are no means of the minute cultivation necessary for a crop." "A farmer in Odenburg, when I was there, offered his vineyard for twenty florins an acre, but could not find a purchaser. In the most blooming district of Hungary, the vine-covered soil is of no higher price than the primitive American forest." Of the inhabitants, he says: "The appearance of these unfortunates strongly reminds me of the scenes of Irish wretchedness. They are only old men, women, and children. The youths and men have either fallen in battle, or have been pressed as soldiers. It is a part of the re-organization of Haynau, to place in uniform the few powerful hands who would again cultivate the land to some extent, and support their families, 'in order,' as he says, 'that the spirit of insurrection may disappear from this generation.' Certainly, the best means of doing this is to make the whole generation disappear." "Regions of several square miles in extent are deserts, the population has generally died out, and if it were possible to take a census, the deficit would cause the greatest astonishment."

ROME.—The great change in religious sentiment at Rome, produced by the war of the Pope against liberty, is forcibly illustrated in the letters of the Catholic priest, Father Ventura, who says:—"The churches are deserted, and for want of hearers there is no more preaching. And all this is the result of the hatred, the contempt, the execration which the priesthood has incurred. What is still more astonishing is, that the women, even of the lower classes, who were formerly so religious, are the first to repel the priests, and have given up all religious observances. I say it with tears in my eyes, and with a heart broken with sorrow, real Protestantism, which consists in faith without works, in the profession of the Gospel without the ministry of the priesthood, is actually established in the central city of Catholicism! Out of a hundred persons, I doubt if ten can be found who have remained Catholics. They will have *nothing but the religion of the Gospel*, and you know what that means. Thus, our twenty years' labors for kindling a livelier faith, and a more durable attachment to the Church,

are lost in seven months. And if this goes on, if an apostate priest can be found bold and impious enough to constitute himself the head of the religion of the Gospel, Protestantism will soon be installed at Rome as the religion of the state. There is no doubt about it.'

PARIS AND LONDON.— One of the most important movements of practical philanthropy is now in progress in Paris and London for the amelioration of the condition of the poorer classes, by means of erecting superior lodging-houses, bathing and washing houses, accessible to all upon remarkably low terms. The London Morning Advertiser says: "The journals in the French metropolis are just now devoting a considerable part of their space to the particulars of a joint stock scheme, for providing the poorer classes of the inhabitants with comfortable lodgings, at a much cheaper rate than the wretched, unhealthy abodes in which they at present drag out a miserable existence. It is proposed by this company, that the capital shall be 6,000,000 francs, or £240,000 sterling, and that houses, for the accommodation of the poor, shall be built to the extent to which this amount of capital will go. The shareholders, we are told, include all classes of the Parisians, from the highest to the humblest. In order to admit the working-classes into the list of proprietors, the shares are as low as 25 francs, or £1 each."

IRELAND.—A large portion of the distress of Ireland is due to her ignorant, indolent, and reckless population. Still we must mourn her oppression by an arbitrary government, exacting absentee landlords, and an oppressive church, as illustrated in the following newspaper paragraph, which I presume is correct:

"EPISCOPACY IN IRELAND.—The Archbishop of Armagh receives £12,067 per annum. The Bishop of Glogher receives £10,000, and the Bishop of Derry £8,000, annually. In this calculation, no reference is made to the enormous amount of church lands, glebes, and other property, possessed by the clergy, averaging about 770,304 acres. The number of benefices possessed by the Irish Church is 1,643, and between 2,207 clergymen is divided annually the sum of £680,000. The ministers, in many instances, preach to empty walls, and with difficulty obtain their subsistence by the help of bayonets, producing twice as many riots as conversions."

EGYPT.—Under the ignorant despotism of Abbas Pashaw, Egypt is retrograding from the enlightened measures of the late ruler Ibrahim. Meanwhile the people are becoming more liberal toward foreigners, and his probable successors (his brother Said and the two sons of Ibrahim) are men of enlightened minds, imbued with the intelligence of Europe.