# MAGNET.

VOL. I.

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NO. 1

# PRELIMINARY.

It has been well remarked, that courage to think, is infinitely more rare than courage to act; and, yet, the danger in the former case is only imaginary, in the other real.

On no subject, perhaps, has the human mind manifested more want of courage, than in the pursuit of those inquiries which have had for their object the development of its own powers, and the laws by which it is governed.

It is intellect which distinguishes man above all the other works of the great Creator. To understand, therefore, the true philosophy of mind, is one of the highest and most noble objects that can possibly engage the attention of any human being.

It is not necessary for the attainment of our present object, to attempt an account of the different theories advanced, heretofore, by the learned, in relation to the philosophy of mental exercises. It would be much more easy, we think, to tell what they have not explained, in their theories, than it would be to show that any one of them has given a satisfactory account of that connection which exists between mind and matter, and the different ways in which one is affected by the other.

It is a humiliating fact, and one which shows the limits, and difficulties in the way of human knowledge, that the mind should be so slow in arriving at correct perceptions of its own nature. And the same remark, indeed, might be made of the human body. For, how many thousands of years had man existed before he discovered the circulation of the blood? And, when that discovery was first announced, was it received by the learned, the philosophers, and the conservators of knowledge? Did the multitude fall in with that momentous discovery, as a matter which promised any good to the human family? Not at all. It was ridiculed and opposed as a most dangerous error, and years passed away before Harvey's theory was generally received.

And thus of discoveries in Astronomy. Copernicus, it is said, was compelled, by public opinion, to keep his discovery of the true solar system to himself for more than thirty years. And Galileo, for avowing his belief in the same system, was cited to appear before the Pope, and condemned to prison, while his writings were publicly burned in the streets of Rome! The odium heaped on the characters of these luminaries of our world, by

those upon whose minds their light first began to shine, has been scarcely equaled, perhaps, by that cast upon the advocates of Phrenology, or the believers in Living Magnetism.

Indeed, it would be difficult to name any important discovery, ever made, in any branch of natural science, but which was, at first, most violently opposed; and it is worthy of notice, that each of them have been opposed on the same grounds—they have all been rejected as "false in philosophy, and contrary to the express word of God!" And the Bible has been appealed to, almost as often, to disprove Geological and Astronomical facts, as it ever was to establish any article of the Christian Faith.

Our Prospectus has already informed the reader, that the grand design of the Magnet will be, to call attention to such facts, connected with Physiology, Phrenology, and Living Magnetism, as may lead to the knowledge of those laws which govern the human mind. We shall call for facts; and shall attempt the establishment of no theory, till we are led into it by a sufficient number of facts, such as will bear the ordeal of the most rigid scrutiny.

The facts we have to present, under the head of Mental Phenomena, are numerous; and of their truthfulness there can be no dispute. These facts concern all who have minds to be enlightened. In presenting them, we have only to ask the reader, not to cry "murder," but to explain them. If you do not agree with us, in the inferences we draw from undisputed premises, very well. Draw your own inferences; or if you cannot agree with us, as to the manner in which certain phenomena should be accounted for, very well. If you do not like our explanation, give a better one of your own. But, it surely will not solve all the difficulties for an objector to answer, that all is empiricism, either because it is new to him, or he does not understand how the thing can be. Suppose I prove that the thing is, precisely, as I have stated it? If the phenomena exist, you must account for it as well

The better way, therefore, is, for us to come to the examination of this subject in the exercise of honesty and candor. No one can justly assume, that he has all the light, and all the truth, on this or any other subject. The light of the great luminary of day "shines for all." So of moral and philosophical truth. It is confined to no creed, nor sect, nor name. It shines for all. God is its

great author and patron. And he has endowed us with minds capable of investigation, and laid before us the means for acquiring this knowledge. And if "the proper study of mankind is man," it becomes every one to understand, as far as possible, the nature of his own being; the attributes and capabilities of his own mind; and the means by which that mind is enlightened, and made to subserve the great end for which it was created.

That our enterprise is new, and attended with many difficulties, we know. Nor do we anticipate a general credence in our statements, without investigation. Our object is investigation. All we ask is, that persons prepossessed against our assumptions, will lay aside their prejudices, and come to the examination of our facts with that candor which their importance demands.

We confidently believe, that we have the means of making this periodical one of the most interesting of any ever published. Give us sufficient patronage, and you shall see in these pages accounts of some of the most interesting mental phenomena which it ever fell to the lot of any one to record. Phenomena, so striking, so demonstrably true, so wonderful, so full of meaning, in the light which they shed on various states of the human mind, that we are positively at a loss for language to express our emotions in view of them.

It is now very generally known, both in this country and in Europe, that the editor of this work has been engaged, for some time, in a course of Magnetic cerebral experiments, and the promise was long since made, that a full account of their results should be given to the world, as soon as sufficient patronage could be obtained for this periodical, to warrant its publication. Gentlemen, whose names it would afford the editor great pleasure to mention, could he feel at liberty to do so, have suggested the propriety of this work. Having witnessed our experiments, they agree with us in the opinion, that their results give a most clear, philosophical, and satisfactory solution of *Dreaming*, *Monomania*, *Insanity*, and *Madness*.

Indeed, we are confident that no change was ever wrought in the science of Astronomy, or Medicine, more real than that which Phrenology and Magnetism will yet bring about in Mental Philosophy. And what can be more interesting than to see the human mind itself, as it were, dissected? To be able to look into its hidden recesses, and explore the sources of thought? To understand how it is, that the immaterial, conscious, self-determining principle controls matter, and gives expression through the physical organs to its own desires and emotions? To be able to show how it is, that the eyes, and the features of the face, speak out and manifest, as they do, the feelings of the soul?

The subject of Living Magnetism, we know, is destined to abuse and misrepresentation. Why not, as much as any other truth, or fact, in which the good of MAN has been concerned? Scarcely any matter of fact, now admitted by the scientific world, but was once a subject of ridicule. And what subject has been more abused than Religion? And yet, it lives, and spreads, and gives sure presage of its triumph all over the world:—

"TRUTH, crushed to earth, shall rise again, The eternal years of God are hers; But error, wounded, writhes in pain, And dies amid her worshipers."

It is a most interesting fact, that Phrenology, though now in its infancy, has well nigh lived down the ridicule and opposition which were formerly waged against it. And, had it not been true - had it not been founded in fact - the names, and talents, and wealth, which have been arrayed for its annihilation, would have proved successful long ago! But what a glorious triumph has Phrenology achieved over the world, in arms against it! Yes, its claims, as a science of the first importance, are not only now generally admitted, but the best minds in the civilized world are convinced of its truth. Not a class of the learned can be mentioned, not a party, in religion, medicine, or politics, but among whom you will find numbers who firmly believe in the truth of Phrenology; and many who will acknowledge themselves indebted to its light, as much, or more, than to any other science, for the knowledge they have of themselves, or the mental character of others. Indeed, we do not believe that any other science could boast of men higher in the scale of intelligence or learning, than are now the firm advocates of Phrenology.

And the learned Dr. Elliotson, President of the Royal Medical Society of Edinburgh, affirms that "the production of coma (sleep) by Mesmerism, independent of all mental impressions, is a truth now admitted by a very large number of the best informed, acutest, and least credulous men in England." And we venture to predict, that the time is not distant, when the fact will be generally admitted in this country. Hitherto, it has been stoutly denied; and all that we have seen in the papers, magazines, and quarterlies, on this subject, has been but little else than ridicule and misrepresentation.

But, it is not to be supposed that the claims of Living Magnetism will be generally admitted, all at once. As yet, but very little is known of its laws,—and this little will obtain credence by slow degrees, like other new matters of fact. However, if there be inherent efficiency in truth, or, if we may judge of the future by the past, then we may confidently anticipate the time when justice will be rendered to this subject. If it be true, it can bear all, and more falsehoods than have ever yet been reported against it. These, truth is able to bear. They will, of course, retard her progress for a while, but not forever.

It is in the nature of the human mind to progress in its investigations of whatever tends to illustrate its own susceptibilities and powers. It has not the power of originating faculties for itself, but it has the power to become familiar with itself; to know its own properties, and the nature of those exercises which distinguish mind from every thing besides. Like matter, when once set in motion, it continues, in despite of time's changes; and its great Author, himself, informs us that its motions are destined to continue,

"While life, and thought, and being last, Or immortality endures."

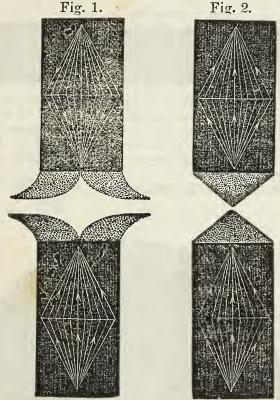
# TERRESTRIAL MAGNETISM.

# Written for the Magnet. THE MAGNETIC FORCES.

BY HENRY HALL SHERWOOD, M. D.

The action of the forces on which motion depends, is illustrated, in the most simple manner, by the magnet; for one of these forces repels and expands, as seen in the case of magnetized iron filings adhering to each other, and to magnetic poles of the same kind, as seen in iron or steel bars, fig. 1.

The other is an attractive force which contracts, as seen in the case of magnetized iron filings adhering to each other, and to poles of opposite kinds, as seen in iron or steel bars, fig. 2.



The pole to which the arrow head of the magnetic needle points, is called, for the sake of distinction, the negative pole; and that to which the opposite or tail end of the needle points, the positive pole. The arrow head of the needle being at the same time a positive, and the opposite end a negative pole, the negative pole of the magnetized bar attracts the positive, and repels the negative end of the needle at the same time; because opposite poles attract, and similar poles repel each other, as seen in the case of the iron filings.

In the case of the positive pole, in the magnetized bar, this order is reversed; for the positive pole of the bar attracts the negative, and repels the positive end of the needle at the same time, and consequently compels it to lie on the magnetic lines in the bars, as seen in the figures. These magnetic poles always have a magnetic axis on a direct line between them, and a magnetic equator equidistant from them, and at right angles with the magnetic axis, as is also seen in the figures.

These forces are innate in every kind of matter, and are uniformly found in a simple unorganized state in unorganized bodies, and in an organized or magnetized state, in organized bodics, as is well ascertained by chemical analysis; for, the decompositions and compositions in chemistry are well known to be produced by the action of these forces.

The amount of these forces in a given quantity of matter, is so great as to make its estimation very difficult. Some idea of its amount may, however,

be formed from the amount obtained in the decomposition of one drop of water, which is ascertained to be sufficient to charge a large galvanic battery. No doubt can, therefore, be entertained, that the amount of these forces, condensed in matter, is abundantly sufficient for all the purposes of motion.

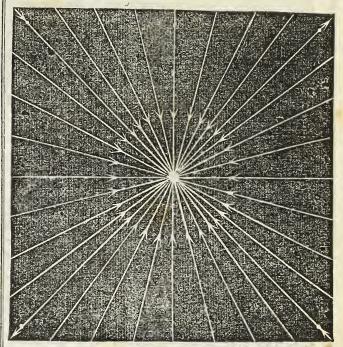
When an organized body is magnetizing another body, it is organizing the forces condensed in the unorganized body. To magnetize is, therefore, to organize the forces in the body magnetized; for, when one body is magnetized by another, the magnetizing body loses no appreciable power by its action on the body magnetized, as is well ascertained by numerous experiments.

The forms in which the forces are organized de-

pend upon a great number of conditions, which are apparently constant and uniform, among which, is the number of poles in the magnetizing body, the manner of magnetizing, and the form of the body

magnetized.

When a square piece of saw plate or sheet iron is magnetized by mere contact of its flat surface on one pole of a galvanic battery, one strong pole is formed in the centre of the plate, and a weak pole, or satellite of the strong pole, in each corner of the plate, as seen in fig. 3.



If the plate is magnetized on the positive pole of the battery, the pole in the centre of the plate will

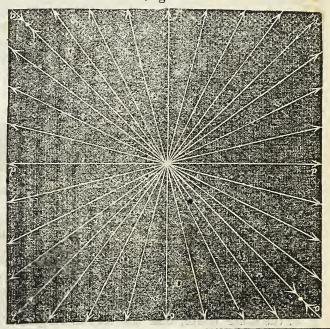
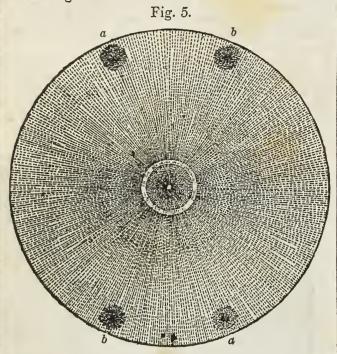


Fig. 4.

be a negative pole, to which the positive pole of the needle points, as in the above figure; but when the plate is placed on the negative pole of the battery, this order is reversed, when the negative end of the needle points to a positive pole in the centre of the plate, as seen in fig. 4.

Circular plates, magetized in the same manner, present the same phenomena, and when they are made with a round hole in the centre, the strong pole is always found in the centre of the space, in the centre of the plate. If we place a piece of white paper over such a plate, and then strew fine iron filings over it, the forces in the plate will arrange the magnetized iron filings over it, in the manner seen in fig. 5.



The forces from the strong pole in the centre, overcome the forces from the weak poles in the circumference of the plate, at comparatively small distances from them, and, consequently, arrange the iron filings around them in a circular manner. The iron filings around them in a circular manner. poles in the circumference of the plate, as well as those in the corners of the square plates, are of opposite denominations in the order of the letters a, a, b, b, which are always changed with the order of magnetizing on the different poles of the battery.

When square bars of iron or steel, (fig. 1, 2,) or plates of iron or steel, in the form of parallelograms, are magnetized in the common manner, by drawing them across the poles of a battery or magnet, two opposite poles are formed, having a magnetic axis in a direct line between the poles, and a magnetic equator at right angles to it, as seen in the plate, in the form of a parallelogram, fig. 6.

Fig. 6.



The magnetic axis in these forms is never on a line drawn through the centre of the plate, but are always at a greater or less angle from it, in direct proportion to the width of the plate. On measuring this angle in a parallelogram, six inches long and one inch wide, it amounted to 2° 30'; in one six inches long and half an inch wide, it amounted to 1° 15', and in one six inches long and a quarter of an in thimbles, in which mercury is placed to co inch wide, it amounted to 37' 30". Parallelograms of the same width, and one foot in length, would poles of the battery, BB, are made of roun

make angles of one half of these amounts. amounts of these angles were determined with great accuracy, and are of great importance to navigators, as they are supplied with compasses having needles of the above form, and, generally, from half an inch to one inch wide, and from six to ten inches in length, and are, therefore, well calculated to deceive the navigator in his course from 1° 15′ to 2° 30′. Many a ship, and an immense amount of property, has, no doubt, been lost from this cause, which may hereafter be avoided by suspending these needles on their edges instead of their flat surfaces, or, by using needles of another form, in which the magnetic axis corresponds with lines drawn through the centre of the needle, fig. 7.

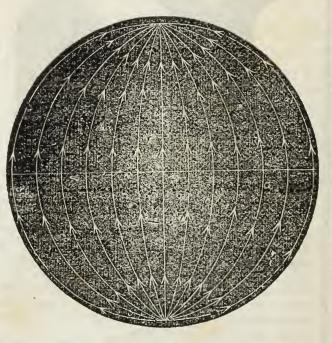
Fig. 7.



It should always be broad in the middle, and very narrow—at a distance of from half an inch to an inch from each end, in needles of a length varying from six inches to a foot; because the forces in the needle will attract the poles about that dis-

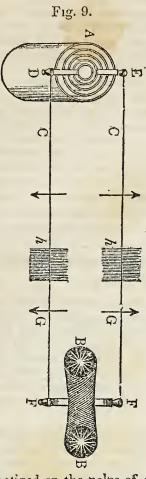
In plates of the form of a ring, or of a disc, fig. 8,

Fig. 8.



magnetized on both poles of the battery, the magnetic axis corresponds with a line drawn through the centre of the ring, or disc, and when meridian lines are drawn over the disc, the variation needle lies on those meridian lines, as seen in the figure, while the dipping needle dips around it on the opposite sides of the equator, or in the different hemispheres, with geometrical precision.

The galvanic battery was first constructed by Galvani, to concentrate the magnetic forces evolved in the decomposition of metals, and hence called a galvanic battery. It is in two parts, fig. 9. A is the battery, and B B the poles connected with it by two copper wires, C C. The battery is constructed with alternate circles of sheet copper and zinc. The circles of copper are connected at D, and the circles of zinc at E. These connections terminate in thimbles, in which mercury is placed to connect poles of the battery, BB, are made of round soft



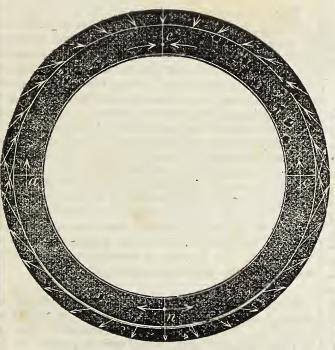
iron, bent in the form of a horse shoe, and then wound with six coils of copper wire, covered first with oiled silk, and terminating in thimbles, as seen at FF; hh, direction of the resultant forces, from magnetizing the copper wires.

If the battery A, thus constructed, is placed in a jar of water, in which a mixture of nitric and sulphuric acids has been poured, the acid will begin to act upon the circles of copper and zinc, and the two latent forces condensed in the metals being liberated in the process of decomposition, are attracted separately along the opposite wires to the different poles The pole of the battery. connected with the copper circles being a positive, and that connected with the zinc circles a negative pole.

Iron or steel rings, discs, and iron or steel of any other form, can be mag-

netized on the poles of such a battery; and one or more poles communicated from them to these metallic instruments, and from these to others. The forces are organized geometrically in the magnets, and in the magnetized ring, (fig. 10,) and produce,





by their combined action, geometric motions of the needle, by attracting one end of it, and repelling the other at the same time, as before described. The ring has two poles and a magnetic axis, e n, and a magnetic equator, a c; and the needle which lies parallel with the axis on the equator, a c, dips with geometrical progression to the magnetic poles in the northern and southern hemispheres of the ring, e n, and corresponds with the dip of the needle in the northern and southern hemispheres of the earth. The ring is a middle section of a hollow sphere,

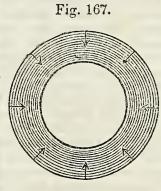
which I magnetized in the first attempt I made for that purpose, by moving it from the equator, at a, around to the equator, at c, successively on the different poles of a galvanic battery, and then drawing it across the different poles of the battery along the line of the magnetic axis, n e, when the needle cipped around it in the manner seen in the figure, and presented the most perfect and important instrument ever invented for demonstrating the natural laws of the mechanical forces.\*

The pole e, to which the three arrow heads point, is a negative pole, because it attracts the positive and repels the negative end of the needle. The same, or positive end of the needle, is attracted, and the opposite or negative end is repelled from the equator to the pole, with forces which increase inversely as the squares of the distances from the equator to the pole; while the pole n, to which the tails of these needles point, is a positive pole, because it attracts the negative end of the needle, and the opposite or positive end is repelled from the equator to the pole, with forces which increase in the same manner from the equator to the pole.

The negative pole, and the negative or northern hemisphere of the ring, have two forces like the magnets, one of which attracts the positive at the same time the other repels the negative end of the needle. The positive pole, and positive or southern hemisphere of the ring, have also two forces, one of which attracts the negative, while the other repels the positive end of the needle; and hence the cause of the reversed order of the geometrical arrangement of the needle, in the different hemispheres.

I magnetized a ring for the first time, in May or June, 1837. Every attempt by others to do so had failed, and Dr. Peter Mark Roget, of London, who wrote the articles on Electricity, Magnetism, and Electro-Magnetism, in the Library of Useful Knowledge, founded a mathematical theory, conformable to observation, on the assumption that it could not be magnetized so as to affect the needle, as will be seen by the following extract from that work.—

"If a steel bar, instead of being bent in the form of a horse shoe, be formed into a complete ring, (fig. 167,) and then magnetized, it exhibits no magnetic



properties as long as the ring is entire; but when broken into any number of portions, each part has two poles, and possesses all the properties of an ordinary magnet. This experiment suggested the theoretical investigation of the properties of a system of small circular currents, situated in planes, perpendicular to another circle, passing through all

cle, passing through all their centres. The result of the investigation of this problem led to a mathematical theorem exactly conformable to observation: a ring so constituted, or an electro-dynamic ring, as it has been called, being found, both from theory and experiment, to exert no action upon a voltaic conductor or magnet, at whatever distance from it, or in whatever situation it may be placed."

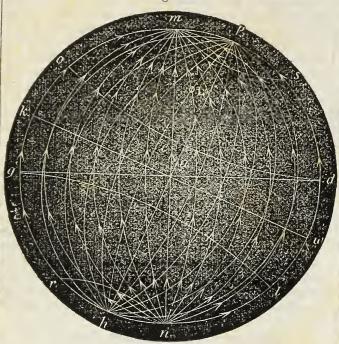
When the ring is moved over one or both poles of

<sup>\*</sup> The same result is obtained by merely placing equal parts of the ring on the centre of the poles of the battery.

the battery in a circular manner only, it exhibits no magnetic properties, because the forces condensed in the ring, although excited, are not polarized by these circular motions in an entire circular form like the ring, and it has, consequently, no more effect upon the needle or magnet, after such an exhibition of the art of magnetizing, than it has before such an attempt is made.

The earth is magnetized geometrically, and has two magnetic poles, m n, (fig. 11,) a magnetic axis,

Fig. 11.



e, and a magnetic equator, g d; p, the north, and h' the south pole of the earth; a, the axis of rotation k w, equator; g l, tropic of Capricorn, and o d, tropic of Caprer.

The magnetic poles are in the arctic and antarctic circles, and move around the earth from east to west, at the annual rate of 32' 26", and perform an entire revolution in 666 years, and are the cause of the variation in the declination of the needle, over every part of the earth.

## SOUNDING THE SEA BY ELECTRO-MAGNETISM.

Electricity is daily extending its sphere of operation, and is becoming more and more extensively applied to useful purposes. We have this week seen an ingenious apparatus contrived by Mr. Bain, the inventor of the electrical clock, for the purpose of taking soundings at sea by the Electro-Magnetic power. At present great difficulty exists, when taking the sounding in deep water, in ascertaining the exact time the weight strikes the ground. The object of Mr. Bain's contrivance is to obviate this difficulty, and he accomplishes it in the following manner. To the bottom of the hammer of a bell is attached a piece of soft iron, which is placed opposite an electro magnet, and it is so arranged that when the communication between the coils of wire round the magnet and galvanic battery is completed, the magnet attracts the iron and holds back the hammer. As soon as the connection is broken the Magnetic power ceases, and the hammer acted on by a string strikes upon the bell. This part of the apparatus is intended to remain on the deck of the vessel when the soundings are made. The insulated wires from the galvanic battery, properly protected from the action of the water, serve for the cord to which the weight is fixed, so as to complete or break the connection between the ends of the wires is extreme-When the pressure of the ly simple and ingenious. weight bears on the hook, the electric current is uninterrupted, and the magnet keeps the hammer from the bell; but when the weight rests upon the ground, connection is broken; the attraction of the magnet instantly ceases, and the hammer being thus liberated, is forced against the bell by the spring. It would thus indicate with the utmost precision the moment the weight reached the bottom of the sea. The apparatus is to be added to the numerous curiosities at the Polytechnic institution. Its efficacy has been tested in the deep reservoir in which the diving bell descends. The inventor has been prevented from protecting his property in this invention by the expense of obtaining a patent, but, we trust, if his plan be found to succeed in practice, of which we have no doubt, that he will not go unrewarded.

Inventor's Advocate.

LUNAR PHENOMENON.—The Sandusky Clarion of January 29th contains the following:—

"On the night of Tuesday, the 25th instant, our attention was called to the extraordinary appearance of the moon. It was truly a singular, but most beautiful sight. The moon was at the full, or within a few hours of it. At the time, there was a thin haze in the atmosphere, and there were seven distinct circles around the moon, displaying all the colors of the rainbow, with nearly if not quite equal brilliancy.

"It is not easy to designate the different colors of the circles with exactness, but we made the following note at the time: 'Within the inner circles, a bright white, (or rather a dead white,) then a brown (circle,) then a green, then a faint blue.' The last was discernible. This appearance lasted ten or fifteen minutes after we first saw it, and it is said that a similar appearance was presented about half an hour afterward."

THE INFLUENCE OF CIVILIZATION UPON HEALTH and Disease.—Forrey, in his work on Endemic Influences, furnishes some interesting facts in reference to the influence which the progress of civilization has exerted upon health and disease among the population of various countries. Since 1650, all the countries of Europe, as well as the principal towns, present a gradual diminution of mortality. The value of life has doubled in London in the last century, and in many cities the probability of life to a citizen has gradually become five times greater. This increased salubrity is referable to various causes, the principal of which are the improved condition of the lower classes of society as regards food, clothing, and fuel, better habits as respects cleanliness, ventilation, and the use of spirituous liquors, and improved medical practice, especially in preventive means. The favorite opinion that poverty is conducive to longevity, is disproved by statistical investigations.

Magnetism in China.—At the last meeting of the Royal Asiatic Soclety, held on Saturday, it was stated by Sir Geo. Staunton, Bart., that a magnetic observatory had actually been erected and furnished by the Chinese at Pekin, on the same principle as those recently constructed by the British Government in different parts of the world according to the recommendations of the Royal Society. This is one among many other instances of the probable results that may be anticipated from throwing open an intercourse with this large, and, in many respects, intellectual country. Captain Blackwood, R. N., of her Majesty's ship Fly, 18 guns, who is about to depart in command of an expedition to Torres Straits and New Guinea, was formally introduced to the society.—English pa.

# THE MAGNET.

# NEW YORK, JUNE, 1842.

## PHRENO-MAGNETIC DISCOVERIES.

We can easily imagine how unwilling many intelligent Phrenologists will be, to see our favorite science connected, in any way, with the subject of living Magnetism. The former they believe to be true; of the latter they know nothing, except the stigma in which it has been involved by the ignorance of its friends, and the aspersions cast upon it by enemies who were unwilling to give this an equal chance with the claims of other branches of science. But it will certainly change the views of such believers in Phrenology, when they come to find, as they will, sooner or later, that, without Magnetism, Phrenology is no more than a body without a soul. For, what is the brain, or its various developments, without life?

We once had the same objections to Phrenology, that many Phrenologists now have against the claims of Living Magnetism. But the latter subject I never doubted. From childhood I had always felt a peculiar sympathy for persons laboring under what were called nervous affections, monomania, and insanity; and, if the testimonics of many intelligent persons, in different parts of the country, may be relied on, but few have been more successful in managing and assisting in these cases, though, indeed, until within a few years, I had never heard the name of Living Magnetism. My mind was first interested in this subject by seeing persons very strangely affected by religious excitement, when they were said to "lose their strength," and swoon away as in cases of catalepsy. In these cases I have frequently known the limbs and the entire system to become perfectly rigid, and sometimes, persons have assumed to have visions, trances, &c., and I have known them to lie in this state more than forty-eight hours at one time.

These phenomena led me, some years since, to suppose the existence of laws which governed the nervous system, or some other substance, identical with the living human body, which had not been understood, and which afforded the only true foundation which could be assigned for any thing real which has ever taken place under the name of Mesmerism. Accordingly, I determined on an investigation of this subject, for the purpose of sifting it to the bottom, and ascertaining how far the nervous system could be affected by the influence of the human will. The results of my first cerebral experiments were published in the New York Watchman, in the course of the past year, and excited the attention of numerous scientific gentlemen in this city and elsewhere, many of whom have repeatedly suggested to me the propriety of furnishing an account of them, as a service due to truth and the interests of science.

That it may seem presumptuous, for one of our claims, at this age of the world, to assume to have made any discoveries in Psychology, which have remained, hitherto, not merely unknown, but not even conjectured, we can easily foresee.

However, we wish it to be understood, that though we feel perfectly confident that we have found some of the most important laws which govern the mental or physical exercises of living beings; yet we desire to speak on this matter with becoming modesty. We do not set up for an oracle on any subject, and much less upon Magnetism. We think, however, that we should be permitted to state, plainly, the results of our cerebral investigations, and to do this without giving offence to any one. Is there any other person but who would, himself, wish to do the same? No matter how ignorant and uninformed on other subjects—no matter how much

contemned the question might be; the more so the better for the credit of him who, through so many obstacles, has been enabled to feel his way, in arriving at results as much more curious and astonishing than the discovery of the circulation of the blood, as can well be conceived.

And we have found it quite difficult to persuade ourselves, that all who shall read our accounts, will believe that we have not been deceived in these matters, and therefore are not to be credited in the principal facts. However, the writer is just as conscious that he has not been deceived, himself, as he is that he is not now deceived in the use of the pen with which these lines are written. And this is said in full view of those various ballucinations of which the human mind is capable, and the ten thousand chances for mistakes, in our attempts to analyze its untold and mysterious operations.

It might be expected, perhaps, that, in stating our own discoveries, we should first give a consecutive account of Magnetism in previous ages of the world, and point out distinctly the advances hitherto made in the principles of this science. But to do this at length, here, would leave no room for kindred subjects, to which it is necessary we should devote a portion of our work.

There are, certainly, good reasons for believing, that some knowledge of what is now denominated Living Magnetism, prevailed in Egypt more than three thousand years ago. Authors on Egyptian Antiquities describe paintings found in Thebes, and elsewhere, which represent a person in a sleeping posture, while another is in the act of making the passes over him! And it is said, the priests of Chaldea practised Magnetism as a medicinal agent, many years before the Christian era. Celcus, a philosopher of the first century after Christ, speaks of a physician, by the name of Asclepiades, who soothed the ravings of the insane by manipulations, and he adds, that his manual operations, when continued for some time, produced a degree of sleep, or lethargy.

Aristotle informs us that Thales, who lived some six hundred years before Christ, ascribed the curative properties in the magnet, to a soul with which he supposed it to be endowed, and without which he conceived no kind of motion could take place. Pliny, also, affirms the magnet to be useful in curing diseases of the eyes, scalds and burns, &c. And Serapon, a physician of the ninth century, speaks of its efficacy in extracting poison from wounds. In the thirteenth century, Platearius recommended the application of the loadstone to wounds: and, indeed, it seems to have been in considerable repute, some five hundred years since, as a medicinal agent. In 1638, Robert Fludd, an English physician, published a theory of the Universe, in which he attempted to account for its various phenomena by the attractive or magnetic power, and the antipathy of bodies. Man, he considered as the microcosm he held to be endowed with a magnetic virtue, subject to the same laws as those which governed the world; having his poles like the earth, and his favorable and contrary winds. He attempted to describe what produced negative or positive magnetism between different persons, and states, that when the latter subsists, diseases, and particular affections, and even the moral feelings, are communicated from the one to the other.

A work was published at Rome, in 1641, by Kircher, a German philosopher, in which the author describes the influence of this agency, not only as it is diffused throughout the solar system, but also as he believed it to exist in minerals, plants, and animals. We believe he is the first who made the distinction between vegetable, mineral, and animal magnetism. Similar views may be found in the "Nova Medicina Spirituum," of Wirdig, published in 1673, and the following

works:—"Medicina Magnetica," by A. Maxwell, in 1679;
"Philosophia Recondita, sive Magicæ Magneticæ Mumialis Scientiæ Explanatio," published in 1723; and Thouret's
"Recherches et Doutes sur le Magnetisme Animal."

Indeed, various authors, from the earliest ages, have referred to cases of disease which have been cured by similar means, and almost every sect of enthusiasts has its records of cures performed, not, indeed, by miracle, but, in some instances, it may have been, by the touch or friction of the hand; as it is well known that similar means were recommended for the cure of certain diseases long before the days of Mesmer. Nor do the people of this country seem to have any idea, how extensively the views of this French Magnetist have, since his day, excited the attention of the scientific, not in France alone, but, also, in Germany, Russia, Prussia, and other portions of the world. Among these nations, Living Magnetism has long been studied as a science, and numerous and able works have been published on the subject.

However, when we shall have become familiar with this vast subject in all its lengths and breadths; when we come to see that the Magnetic forces govern the solar system; that they explain the phenomena of light, colors, the growth of plants, and all living beings; that their all-pervading laws give the true solution of the phenomena of discase and health, of life and death; we say, when these things shall have become known, as we doubt not they will, in time, then it will be a matter of astonishment, that Man should have been so tardy in arriving at the true knowledge of his nature, and the principles of his own being.

It is now scarcely fifty years since Galvani first demonstrated the animal body to be a galvanic machine, and a far less number of years since the suggestion was made by Dr. Arnott, that the brain was an electric battery. And, yet, how little use has thus far been made of these important and truly philosophical suggestions! And this seems the more surprising, when we examine the evidence which every where meets our eyes, demonstrating the Magnetism of all living bodies.

Since our own Magnetic discoveries were made, we have seen and read with much interest two works, among others, which we cannot forbear noticing in these remarks, approaching, as their authors appear to have done, so very near the truth, on the subject of Magnetism; and we should add, they not only approach the truth, but in both we have much valuable matter, which goes very far towards demonstrating the identity of animal life and Magnetism. The first was written by P. Cunningham, (R. N.,) and published in London, in 1834, in which the author attempts to show that two simple elements, Electricity and Magnetism, not only produce all the revolutions and changes in the earth and the heavenly bodies, but, also, the conception, growth, and decay of every living animal, or vegetable substance, throughout the globe.

The other was published in Paris, in 1836, and is entitled, "Enquiry into the Nature and Effects of the Nervous Influence, and its Connection with the Vital, Moral, and Intellectual Operations." In this work, the writer, whose name is not given, assumes, and gives many plausible reasons to show, that the material agent upon which the immaterial spirit operates, is a subtle and mobile fluid, of an electric nature, of which the brain and the nerves are the conductors. And the author adds, "I am inclined to think that the means by which these operations are performed, may, perhaps, be within the reach of our knowledge, and be developed when the science of Anatomy, Physiology, and Chemistry shall have arrived at a greater degree of perfection."

One of the most important discoverics which we claim to have made, is the very mystery here referred to. The results of our experiments, as we think, give a most curious and satisfactory explanation of the manner in which mind acts upon matter, and how it is that the muscles and limbs are made to obey the human will. They do more; they explain how it is, that one mind acts upon another, and by what process one person is able to exert an influence, good or bad, over his fellow beings.

In 1838, Dr. Henry H. Sherwood, of this city, published an interesting work, demonstrating that motion is produced every where by the action of the Magnetic forces; and also, that one of these forces repels and expands, while the other attracts and contracts; and by magnetizing a steel ring he further showed, that the action of these forces is geometrical; and that the earth is magnetized geometrically, and has two Magnetic poles, one in the arctic, and the other in the antarctic circle, and that they move from east to west at the annual rate of thirty-two minutes and twenty-six seconds. He has also given some plausible reasons, showing the Magnetism of the Human system, and the polarity of the brain, which may be seen in his work entitled, "Motive Power of Organic Life," a new edition of which was published the past year.

Nothing, probably, has done more to bring the subject of Living Magnetism into disrepute, in this country, than the manner in which the subject has been treated by many of its friends. Public attention was first called to it under a most hateful name, and the many silly stories put in circulation about its wonders, could but arouse prejudice, and unfit the minds of candid people to give it a favorable reception. No one but a person of known and tried integrity should attempt to exhibit, or defend any science, especially if it be one of recent discovery. To say the least, it is extremely unfortunate for truth, when its claims are advocated by any but its real friends, those that are such in heart and life.

But we may be asked, we know, what shall be done? Ministers of religion and professed christians stand aloof, or oppose, and honce the characters of many who have engaged in the defence of Magnetism, have raised a false issue, and, of course, brought it into disrepute. It is a burning shame that candid people, who want to be informed in Magnetism, should be compelled to attend the public exhibitions of this abused subject, which are often got up for making money, and to gratify the idle curiosity of the gaping multitude.—But, for the benefit of truth and science, it is to be hoped, that the attention of intelligent people will soon be sufficiently interested in this subject, to be able to wrest it from these abuses, and place it where it evidently belongs, among the agencies which the beneficent Creator has ordained for the relief of suffering humanity.

The editor of this work believes himelf to have been the first in this, or any other country, to use Living Magnetism as a means for Physiological and Phrenological discoveries .-And, though almost any other person might have found out the same results had he made use of the appropriate means, yet many will doubtless turn up the lip at our statements, who, themselves, would have considered it an immortal honor to have enjoyed the facilities which have so richly crowned our humble inquiries after truth. And, if we feel thankful for any thing, we are grateful for that knowledge God has brought within our reach of the human mind. And hence, we are not at a loss to account for the views which prevail against what we have already published on this subject. We are not surprised, nor mortified, when we meet with contumely instead of thanks; nor when we see a sneer where we might justly expect a word of approval and encouragement.

We have lived long enough to understand the true causes which bring about these results.

The details of the interesting and curious phenomena produced by our experiments, will be given in the succeeding numbers of this work. It must suffice for us now, to state, that they demonstrate, as we believe, the following assumptions:—

# I. THE MAGNETIC NATURE OF LIVING BODIES.

That every living being possesses a Magnetic Nature, which constitutes its LIFE. This nature is not the Nervous system, but it is governed by the two magnetic forces, without which the nerves have no scnsation or motion, either physical or mental. The strength and proportions of these forces, in certain parts of the system, (other things being equal,) make the difference in the Temperaments, and, also, in the physical strength and mental exercises of different individuals. What is called instinct in animals and insects depends, wholly, upon the strength and proportions of these magnetic forces. For, as they increase in number and power in any living body, we shall find the mental developments and intellectual power increased accordingly. And it is a most remarkable and interesting fact, that two of the larger forces of the human brain have their poles located in the organs of Causality, those very faculties which not only distingush man more than others from all other living animals; but the size of these organs, (others in proportion, ) as is well known, distinguishes the intellectual performances of one mind from those of another. Franklin, Rush, and Newton had these poles very strong, and whoever has noticed the busts of these distinguished men, will have observed how prominent their organs of Causality are where these large poles are located.

The cut below gives the location of the two large poles in the front part of the brain; and by fig. 5, on a preceding page, (4,) the reader will see a representation of the corresponding poles in the cerebellum, as also the great pole in the centre of the brain.



II. POLARITY OF THE MENTAL AND PHYSICAL ORGANS.

The brain has five large poles, corresponding with five others in the heart. And, with these large poles, there are consecutive poles throughout the entire system, connected with every mental and vital organ, and with every muscle and portion of the body which is concerned in the production of voluntary and involuntary motion.

All the organs and muscles of the system are connected with the magnetic forces from the brain, so that while the heart is the great fountain of vitality to the system, the brain is the organ of thought for the mind. And each vital and mental organ has its corresponding pole, positive and nega-

tive, and these sympathetic points from the different organs are all located in the face and neck, so that by operating either on these sympathetic points in the face, or the poles of the organs in the brain, I can excite any mental or physical action, and remove it, at pleasure, as the condition of the patient may require.

For instance, by operating on one portion of the brain, I produce, in the mind of the patient, the feeling of Self Esteem; by operating on another portion, I produce the feeling of Gratitude; on another, the feeling of Joy; on another, the feeling of Filial Love; and so of every emotion or sensation which is peculiar to the human mind. And thus, also, of the physical organs. The sympathetic points, corresponding with the lungs, are located in the face, where you will see the hectic flush, in cases of pulmonary consumption.—The points (or poles, it may be,) of the organs of smell, are located at the lower part, each side, of the nose, and by operating here, I excite the corresponding organ of Smell. The sympathetic points of Mirthfulness are located in the corners of the mouth, and when I operate on these points, they are drawn up in the act of laughing.

This discovery gives the only true foundation for *Physiognomy* and *Pathognomy*. It shows how it is that the MIND excites the organs, and, also, how it is that the mental faculties excite one another, and when they are in exercise, it shows how it is that they produce the appropriate expression in the eyes, and features of the face. Think of it, reader! And then say what could be more interesting than a knowledge of these laws, which, as it would seem, have remained hidden for six thousand years, by which the MIND looks out in the face, and expresses its emotions through the organs of clay!

This discovery enables us to tell you how it is that the feelings of the mind are conveyed in the tones of the voice; and by what process the health is affected by the exercise of the intellect;—in a word, it gives the only true and satisfactory account of the manner by which mind and matter are connected, and reciprocally act upon each other. And thus I am able, by operating on the poles of the organs, to cause the patient to feel the strongest emotions of Hope, Fear, Courage, Mirthfulness, or in fact, any feeling appropriate to the human mind.

I have, times without number, produced Sleep, Somnambulism, Monomania, Insanity, or Madness, and removed the excitement at pleasure. By operating upon the sympathetic points in the face, I have produced, or suppressed action in the heart, lungs, liver, spleen, kidneys, stomach, larnyx, &c., or any muscle or limb in the system; and by the same means I have found the nerves of sensation throughout the system may be excited or paralyzed, and to a degree truly astonishing to such as have never seen these most interesting phenomena.

I have often removed, in a short time, great nervous excitement, and by the same means *relieved* persons who have suffered for years from troublesome dreams and a want of refreshing sleep.

## III. GROUPS AND PAIRS OF ORGANS.

Another most interesting discovery I have made, is, that the Phrchological organs not only exist in groups, corresponding with the nature of their functions, but most, if not all of them, in double pairs, and some in triple and even quadruple pairs; and the uniformity and beauty of the groups, corresponding, as they do, with the consecutive sympathetic points in the face, is more interesting than I can find language to describe. Never was I so profoundly impressed with a sense of the wisdom of that great and good Being, as on finding the location and grouping of the different pairs of organs, with their corresponding sympathetic points in the face.

Thus, for instance, I find in one group those which relate to Attachments; in another, those which relate to Home and Country; in another, those which relate to Will, Decision, Justice, and Government; in another, those which relate to the Deity and a Future State; in another, those which relate to the defence of ourselves, and the preservation of our own lives. And all the corresponding poles of the perceptive faculties, together with Sublimity, are located in the eye; and the poles of the affections are located around the mouth!

There are two pairs of Individuality, one taking cognizance of things and the other of persons; two of Eventuality, one pair taking cognizance of recent, and the other of ancient events; two of Comparison, one pair for ideas, and the other for things; two of Benevolence, one for giving, and the other for pity; two of Veneration, one for the Deity, and the other for man; two of Firmness, one relating to conscientiousness, and the other for perseverance, etc.; two of Self Esteem, one for the Human Will and self government, and the other for the government of others; two pairs for Fear; two for Music; two for Place, and so of the organs of Conscientiousness, Belief, Gratitude, Amativeneness; three of Marvelousness, one for Faith, one for Human Credence, and another for anticipating future events; and three for Secretiveness, one for Disguise, one for Keeping Secrets, and the other for Cunning, as is seen in the cat and fox; in the group of Acquisitiveness there are three, one giving a desire for Money; one for Keeping, and one giving a disposition to Traffic; in the group of Approbativeness, there are four, one giving a regard for Character, one giving a desire for Praise, Notoriety, one giving a sense of Ridicule, and another giving a desire for Show, and when large, giving Vanity.

# IV. OPPOSITE ORGANS-POSITIVE AND NEGATIVE.

Another important fact, deeply interesting to Phrenologists, which is demonstrated by my discoveries, is the opposition of the different mental organs. My experiments have proved that the organs are balanced by positive and negative poles; and that their functions are in opposition to each other is certain. As, for instance, one organ is for Joy; another for Sadness; one for Love, another for Aversion; one for Self Government, another for Submission; one for Forgiveness, another for Retribution; one for Patience, another for Discontentment; one for Courage, another for physical Fear; one for Confidence in man, another for Suspicion or Jealousy; one for Ancient, another for Recent Events; one giving a desire to see Old Places, another for New Places, or traveling; one for Destructiveness, another for Preserving; one for Keeping Secrets, another for Loquacity; one for Opposiveness, another for Suavity; one for Self Esteem, another for Humility; one for Praise, another for Censure; one giving a sense of Dependence, and another giving a sense of Independence; &c., &c.

This discovery gives the true solution of various shades in the characters of different individuals, which have never been explained, either by Phrenologists or in any system of mental science heretofore offered to the world. And how beautifully this fact agrees with the arrangements of nature, to which we have before referred. There are two magnetic forces, positive and negative; one repels and expands, the other draws and contracts. And by these forces all the functions of the human system are carried on, not excepting the exercises of the mental organs. For how else could these organs be exercised at all? Should they be subject to one motion, merely, only in one direction, it would be iusanity, or madness. The organ of Joy, for instance, is counterbalanced by an organ of Sadness. Were one of these organs to be exercised without another to check it, Monomania would be the result, and so of the others.

V. CORRESPONDENCE IN THE POSITION AND FUNCTIONS OF THE ORGANS.

It had long been known to Phrenologists, that the lower the organs in the head, the more their functions corresponded with the propensities common to the animal creation. But my experiments have demonstrated, that one pair of the same organs is more elevated and refined in its functions than the pair below it. Thus, I find, the first pair of Amativeness are common to animals; the pair above are appropriate to intellectual enjoyment. The lower organs of Comparison take cognizance of things, the upper ones compare ideas; the lower organs of Causality are exercised on things, the upper on metaphysical subjects. And it is a remarkable fact, that from mere animal instincts, which relate to the preservation of life, and selfish gratification, the organs not only ascend in the head, but also in the nature of their functions, till we come to the highest, which take cognizance of our relation to the Deity, and a future state, not excepting one which is appropriate to calculating, or perceiving future contingencies!

#### VI. NEW PHRENOLOGICAL ORGANS.

While our experiments have, in a most remarkable manner, confirmed the discoveries of the immortal Gall, they have brought out and demonstrated the existence of new organs, among which are the following, viz.:—Humility, Joy, Gratitude, Patriotism, Jealousy, Modesty, Aversion, Smell, Taste; Pity, Cheerfulness, Weeping, Contentment, Wit, as distinguished from Mirthfulness; Melody, as distinguished from Harmony; Retribution, as distinct from Destructiveness; Method, directing as to the Manner in which things should be done; Regularity, as to time and order; Disguise; Praise; Filial Love; Love of Pets, as distinguished from Philoprogenitiveness; besides the pairs of the organs already described, which, as will be seen, more than double the number heretofore supposed by Gall, Spurzheim, Combe; and others.

Thus I have given a concise account of the results of the first cerebral Magnetic experiments, so far as I know, ever attempted in this or any other part of the world. These discoveries are real, and founded in the nature of man, and they will ultimately be admitted and advocated, as their importance demands. And to have been an humble instrument in first making these facts known to the world, affords me more pleasure than I could ever derive from silver or gold, or all that this earth can afford.

No accounts of any similar discoveries, as far as we know, have ever been published, in this or any other country. Our experiments have been so often repeated, and for such a length of time, upon different subjects, that we now feel fully authorized to assume the above positions.

After commencing my Magnetic experiments, I proposed to two scientific gentlemen,\* of this city, to assist me in conducting them, and it gives me pleasure to acknowledge the aid which their kindness has afforded me in this interesting work. And the results with which these experiments have since been repeated by others, in different parts of the country, have, I think, sufficiently confirmed these assumptions, and left no room to doubt as to the influence which Magnetism is destined to exert, in exhibiting and proving the true Science of Human Life throughout the world.

In future numbers of the Magnet, we shall give full descriptions of the particulars here alluded to, accompanied with plates showing the location of the mental organs, and the poles or sympathetic points of the human system.

<sup>\*</sup> Dr. H. H. Sherwood, and Mr. O. S. Fowler, Phrenologist.

## ELECTRO-MAGNETIC PHENOMENA.

There is no phenomena, but which if properly understood, would lead to a knowledge of the magnetic forces. That they pervade all matter, is susceptible of the clearest demonstration. Indeed, it is worthy of notice, that some of the most learned and scientific, have long since explained various natural phenomena, by the laws of magnetism, or electricity; and, from the attention already given to this subject, there can be no doubt but the time is near when it will be turned to some of the most useful purposes of life.

Out of a large number of facts of a similar kind, we have selected the following, with a view of calling that attention to the subject, which may assist in settling the laws which govern the electrical or magnetic forces, in the cases to which reference is made; for we have no doubt, but there are yet many useful discoveries to be made, in connection with this subject, which will confer lasting benefits upon the human species.

A very interesting case of poisoning is reported from the Middlesex Hospital in the London Lancet. A man was admitted a short time since into that hospital about six hours after having taken an ounce of laudanum, containing twenty-six grains of opium. At the time of admission he was apparently lifeless, the surface of the body was cold, countenance pale and livid, lips purple, pupils contracted to a mere point, respiration was scarcely perceptible, pulse hardly to be felt. The laudanum was removed by the stomachpump, but, in spite of every exertion, the pulse became more unfrequent, and was at times imperceptible, when recourse was had to electro-magnetism, which was applied by means of a small battery, with coil and contact breaker. One wire was applied to the neck and the other to the region of the heart, or epigastrium, and by these a succession of very powerful shocks was given. The good effects were very apparent. The muscles of respiration were set in action, and the diaphragm contracted powerfully; the chest was more fully expanded, respiration was more perfectly carried on, and a corresponding improvement was observable in the countenance. The pulse improved and became more powerful, becoming steady when the current was interrupted for a few minutes. This application was continued for several hours, and was finally successful—thus clearly establishing the influence of electro-magnetism under circumstances hitherto considered hopeless.

It has, for a long time, been a standing opinion among medical men, that the lungs of living beings generate heat by the chemical action supposed to occur during respiration, of an absorption of oxygen and an expulsion of carbonic acid gas. Among the many innovations, in these times of new and strange things, is that of a denial of the old, and long-considered fundamental doctrine of the generation of animal heat. Mr. Macilwain, in a recent work published in England, "On Respiration, and its relation to Animal Temperature," from many experiments and known facts, comes to the conclusion that the theory cannot be sustained. Professor Miller, of Baltimore, has for some time entertained views peculiar to himself on this subject, or rather upon the arterialization of the blood, the change of which from venous to pure blood is in consequence, he says, of a magnetic action. From experiments, he finds that a stream of electricity passed through dark venous blood, will change it at once to a rich colored arterial fluid. Highly important deductions rest upon the satisfactory explanation of these phenomena. If animal heat is not derived from the absorption of oxygen during respiration, from whence is the constant supply which must go to make up the unremitted escape of it from the body?

And, the same remark might be made, concerning animal

strength. How shall we account for its increase and diminution in given cases, but upon the supposition that it is subject to similar laws? Why is it that an expenditure of physical strength usually increases the action of the lungs?

It is stated in a foreign paper that M. Fourcault, a French Physician, has recently made some important discoveries and experiments, which go to show that an important means of preserving or restoring health is, a due attention to the access of air to every part of the external surface of the body. He succeeded in producing at pleasure, in animals, before healthy, suppression of perspiration, conjections of the blood, the derangement of the internal organs, affections of the heart, and the foundation of aggregation of matter in the lungs, analogous to the tubercles in pulmonary consumption, and even death itself as the consequence.

The means by which he arrived at these results was the simple prevention of the access of air to the skin, which, by checking the functions of perspiration, caused the matters usually carried off through their agency, to be thrown back upon the internal organs.

It has long been known that a stream of water issuing from a vessel, has a spiral motion, which, it is believed, is attributable to the mysterious laws of magnetism. And if water be permitted to run out through a hole in the bottom of the vessel that contains it, a vortex will be formed in a direction contrary to the course of the sun. This is said to be invariably the fact; and if the water be forcibly made to whirl round in the opposite course, yet as soon as the opposing power is removed, it will begin to turn contrary to the sun. And a scientific gentleman who recently noticed this fact, imputes it to the rotation of the earth on its axis, and deduces from it a method of finding the latitude of places.

The spiral motions of vines and certain kinds of beans are well known; and many persons have noticed, with what regularity certain flowers follow the sun, without ever suspecting the true cause of the phenomenon.

Although philosophers, as Brougham remarks, are not agreed as to the peculiar action which light exerts upon vegetation, and there is even some doubt respecting the decomposition of air and water, during that process, one thing is undeniable—the necessity of light to the growth and health of plants; for without it, they have neither color, taste, nor smell; and, accordingly, they are for the most part so formed as to receive it at all times when it shines upon them; their cups and the little assemblages of their leaves before they sprout, are found to be more or less affected by the light, so as to open to receive it. In several kinds of plants this is more evident than in others; their flowers close at night and open in the day. Some constantly turned round towards the light, following the sun as it were, while he makes or seems to make his revolution, so that they receive the greatest quantity possible of his rays-thus, clover in a field follows the apparent course of the sun. But all leaves of plants turn towards the sun, place them how you will, light being essential to their well-being.

Indeed, this winding motion may be seen in other things. A celebrated æronaut, (Mr. Wise,) who recently made a successful ascension from Danville, Pa., says, that he found the atmosphere much colder in crossing the mountains than at the same height in crossing level and cultivated land. When sailing along with a steady current, when the balloon is in equilibrium, it revolves slowly; and on this occasion he observed particularly the regular pulsation that it moved with. The less motion he produced in the car the more regular were these vibration: whenever the balloon, by the discharge of ballast or gas, would ascend or descend, the pulsation was sufficiently arrested not to be observable. They worked at intervals of two and a half seconds, and made a

revolution in fifty seconds. The cause of dizziness, he says, is destroyed by isolation.

This winding course of the electric fluid has been often noticed. The Rutland Herald, (Vt.) gives an account of a thunder shower, when a very tall pine tree was struck in that vicinity. The fluid struck the top of the tree and descended in a winding course to within about 20 feet of the ground, where it was completely severed and the upper part fell to the ground in as perfect and perpendicular a position as it stood in the first place, and penetrated so far into the ground as to give it the appearance of firmness sufficient to withstand a heavy gale. The part standing was nearly 100 feet high. The stump was rent into many pieces, and strewed in every direction, some to the distance of near 40 rods, others, perhaps 20 feet long with parts of the roots, and of immense weight, several rods. The diameter of the tree where it was severed, was near three feet, and near the ground probably four feet.

It is now some time since it was discovered that electricity accompanies the generation of steam; and the Newark Daily Advertiser speaks of a gentleman in that city who has made a series of experiments, and registered observations, which go to show that the generation of electricity constantly attends the generation of steam, and that it is the presence of this agent which produces explosion in a great majority of instances. The application of this discovery to the protection of boilers is, it is said, perfectly simple, all that is necessary being a conductor to carry off the superabundant electricity. His experiments, we understand, are of a most curious and interesting kind, in a scientific as well as in a practical and beneficial light.

In our future numbers we shall give some accounts demonstrating the polarity of the rays of light. For, that this earth is magnetized by the sun, is as susceptible of demonstration as any problem in the works of Sir Isaac Newton. Nor can there be any doubt but that Magnetism, or Electricity, gives color to every thing.

We see it stated in a recent English paper, that Mr. Baggs, a gentleman well known in the scientific world for his researches in electro-chemistry and other branches of electrical investigation, has discovered a method of applying the oxides of various metals to the purposes of dyeing cotton cloths, by the agency of electricity, and in such a way that economy, rapidity, and variety of pattern and tint, are all allied to the ne plus ultra of the art—fast colors.

We have time, now, merely to call attention to facts like the foregoing. We hope to receive communications from some of our intelligent correspondents, detailing others of a similar kind, for our future numbers.

CORRESPONDENTS.—We are happy to hear from the friends of science in different parts of the country; and it affords us equal pleasure to give information, whenever it may be desired, when it is in our power to do so. But it will occur to any one, on reflection, that it will scarcely comport with justice, for us to be taxed with postage on letters, from day to day, on business which is of no possible profit to us, but which is for the sole benefit or gratification of others.

We have received numbers of letters, asking for advice and information on the subject of Magnetism, on which the postage was not even paid, to say nothing of the tax which it would be on our time to answer them all. We must, therefore, adopt it as a rule, hereafter to take no letters from the Post Office which are not paid. And, where advice or information is desired, it will be given in the columns of this work, except in special cases; and in these cases compensation will be expected, in proportion to the time and attention given to them.

Communications for the Magnet.—Articles for this work are earnestly desired from those who have important facts to communicate; and we hope for assistance of this kind from different parts in this country, as well as from Europe. All well authenticated facts connected with the causes or cure of Insanity, and other mental phenomena, and such as show the efficacy of Magnetism as a medicinal agent, will be acceptable. We hope that Physicians, and others, will give such accounts of cases of nervous disorder as may tend to shed light on the pathology of Living Magnetism, and assist in ascertaining the laws by which it is governed.

THE MAGNETIC FORCES.—We ask the special attention of our readers to the article with this title, on the preceding pages, from the pen of Dr. H. H. Sherwood, of this city. It is a subject with which Dr. H. has been quite familiar for some years, and we are authorized to promise our patrons a number of other articles from him, in which he will adduce some interesting facts demonstrating the Magnetism of the human system.

To Navigators, especially, and all who wish to understand the mysterious forces which govern the Magnetic needle, these articles must be exceedingly attractive.

OUR TERMS.—When it is considered that each of our numbers will contain a greater or less number of plates, it will be seen that our terms are extremely low. These cuts would very much increase the price of the Magnet, as they have our expense in getting it up; but we look for a sufficient number of subscribers to meet this extra cost.

To the Friends of Science.—The circulation of this periodical must, necessarily, depend on the co-operation of the few. You know how difficult it is to get persons to read on the subjects to be discussed in these pages. You know how deep rooted and wide spread the prejudice is which we shall have to encounter. What is done, therefore, to extend our circulation, must be done by the few, who have eyes to see, and hearts to appreciate the importance of this work. May we not hope, then, that all such who may obtain any knowledge of this undertaking, will immediately commence the work of procuring subscribers. Give us the patronage which the importance of our object demands, and we promise a monthly, filled with more interesting matter, than it has entered into your heart to conceive.

DATE OF THE PRESENT NUMBER.—We have issued our first number in advance of its date, for two reasons:

- 1. To afford the necessary time for getting out the plates, and making the necessary arrangements for going on with the work.
- 2. To give all concerned sufficient time to procure and forward to us, the necessary number of patrons. Thus far we have received many good wishes; and as we have now made a beginning, we hope, forthwith, to receive a large list of paying subscribers.

THE NAME OF OUR WORK.—We have called this periodical the Magnet, because we find no name, which, on all accounts, seemed quite so appropriate as this. We design it shall be not merely Anthropological in the strictest sense of this word, but, as will be seen, it will include the interesting and important subject of Astronomical Magnetism.

Physiology and Phrenology are but branches of the same great subject to be discussed in our columns. But Magnetism is the all-pervading soul of the whole. There is no life in Phrenology, or Physiology, or any thing else, without Magnetism. Hence our name, "The Magnet."

NEW DISCOVERIES .- Though the editor of this work believes himself to have been the first who ever made use of Magnetism for the purpose of Phrenological discoveries, yet it would seem, that quite a number of others are somewhat anxious to share this honor with him. We have seen the names of two different persons, referred to in an exchange paper, as having been the first to discover the connection between Magnetism and Phrenology! And this, too, for the first time, nearly one year after the accounts of our own Magnetic cerebral discoveries had been published to the world! Of course, it is an easy matter for one to find gold, after the mine has been discovered and opened by another. But, before it can be consistently assumed, that similar Magnetic discoveries to our own, were previously made by another, it must be shown that the accounts of them were previously published, and at the time they were made. This is what we did, about one year ago. And, we are confident that nothing of the kind had ever been heard of till long after our experiments were commenced, which resulted in the discoveries described in this work. In the New York Watchman for August and October, 1841, were published the accounts of the first Magnetic cerebral experiments, as far as we know, that ever were performed, in any part of the world. What discoveries may have been made by others, since, (and following in our wake,) we, of course, do not know; nor indeed, are we anxious to deprive another of the credit of having made a discovery of the same thing, a year or more after we had published the account of it to the world. For notices of our discoveries have appeared in more than one hundred different papers, in every part of the country, and they have also been published in France and England.

We have seen allusions in the papers to some experiments in Neurology, as it is called, which Dr. Joseph R. Buchanan, of Louisville, Ky., performed more than a year ago. As far as we have been able to learn, Dr. Buchanan's experiments have merely demonstrated the excitability of the different organs; and it should be added, that he disclaims having done any thing by the influence of Magnetism. The following is from a letter we received from him, and which was published at the time in the New York Watchman:—

"I have not been engaged in making experiments upon subjects in a magnetic or somnolent condition, but solely upon persons in their natural condition.

Those who know me will not suspect me of endeavoring to avoid any stigma which an unenligtened and tyranical public sentiment may fix upon the votaries of science for seeking prohibited knowledge. I honor the cultivators of Animal Magnetism as the intrepid leaders and benefactors of their race; and had I not a peculiar line of investigation for myself at this time, I would be actively engaged in the daily investigation of that subject.

Disregarding the very meaning of the word Neurology, and probably unacquainted with its derivation, ignorant scoffers would repeat that this science was nothing more than the old story of Animal Magnetism, clairvoyance, &c.; others will assert that it was totally unlike—both confounding the *science* of Neurology with the experiments by which it was demonstrated. Some, by a singular combination of scepticism and credulity, were even led to adopt the laughable theory that I produced the wonderful results of my experiments by the mere power of my will, controlling every one whom I approached! and compelling them to feel such emotions as I willed them to experience!!

The experiments which I am performing are different, as they are simply designed to illustrate the ordinary or normal functions, and the pathology of the human mind and body. My operations aim at utility by explaining the machinery of life and the powers of each organ; those of animal Magnetism develop extraordinary or tran-

cendental phenomena by the joint influence of two or more individuals. The phenomena thus developed are mysterious and wonderful; and indeed we seem in a fair way to realize through these operations, that "truth is strange—stranger than fiction."

To all who are engaged in this great work, I would say, the field is ample enough for a million of laborers; and should our countrymen take the lead, and maintain it as we have begun, we may make the amplest return for the stores of medical and philosophic knowledge which we have derived from the land of our ancestors.

Jos. R. Buchanan.

Louisville, Kentucky, Feb. 22 1842.

P. S. I am desirous to keep distinct in the public mind, the principles of Neurology, and the experiments, by which they are produced, which bear some resemblance to those of Animal Magnetism. I hope you will keep your readers clear upon this point."

That Dr. Buchanan has made a discovery of what he calls Neurolvgy is clear; and while he disclaims having done so by Magnetism, it was desirable, certainly, that he should have stated by what means his experiments were performed.

When we first operated on the seperate organs by Magnetism, we had not heard of any thing of the kind, in any other part of the world, and even now, it does not appear that Dr. B. or any other, has had any idea of the results of our Magnetic experiments described in this work. True, we have excited the organs, when the person was awake; but we did it by Magnetism, and not by operating on the nerves, as Dr. B. affirms he does.

And here we draw the line of distinction between our own discoveries in Magnetism and Phrenology, and the mere excitement of the separate cerebral or physical organs, as it seems Dr. Buchanna and some in England have done, together with myself, nearly simultaneously. But Dr. Buchanan's experiments and our own, need not be confounded. His, according to his own account, are confined to the nervous system; ours have to do with man's magnetic nature, and the laws by which it is governed, the plurality of the pairs of organs, and the magnetic poles, the opposition of different organs, etc., and not merely to the possibility of exciting the organs, and as to their precise number, though indeed, we have demonstrated, as we think, the existence of a number not before discovered, as stated in a preceding article.

EXPERIMENTING.—It occurs to us, that we ought to suggest a caution to persons who may feel anxious to witness the experiments referred to in the preceding pages of this work. We give it as our serious conviction, that they should never be attempted, except for good and justifiable reasons; and then only by persons who are familiar with the nervous system. That some of them are attended with danger, we know. Even Somnipathy, (the Magnetic sleep) should not be attempted from curiosity, merely, and especially not by one who is unacquainted with the subject. We have know serious results to follow, when persons have been operated on, from curiosity. And, some of the experiments to which we have referred, if continued a moment too long, and not conducted properly, might occasion instant death.

THEORIES.—Let it be borne in mind, that the grand object of the Magnet is not the establishment of theories of any kind, but to elicit truth—to gather and make known such facts as may enable the intelligent inquirer to decide for himself as to what the laws of Terrestrial and Living Mag-

ne tism are. True, we think we have discovered a few of them, but there is much yet to be done; years of investigation will be necessary before we shall find this subject generally admitted among the exact sciences.

The subject is profoundly interesting, and embraces matter enough to employ the most acute and able minds for ages yet to come.

Public Exhibitions.—We cannot approve of public exhibitions of the magnetic sleep. They are liable to serious and insurmountable objections; and many of them, we know, have done much to bring the subject of Magnetism into disrepute. And, it should be known, that the most intelligent of all clases, who know any thing of this subject, never did approve of persons traveling about the country, carrying subjects with them, or when they attempt to operate for mercenary purposes, or to afford an object for the multitude to gaze at.

The wonder is not, merely, that any person of good character could adopt such a method for making moncy, but that any should be found willing to be operated on in this way.

But it unfortunately happens, that this is not the worst side of the picture; for we speak what we know, when we affirm that some, who have gone about the country, pretending to exhibit this subject, have been scarcely at all acquainted with its first principles; and we are sorry to feel compelled to add, that one whom we could mention, has more than once, used the grossest deception, under the name of Magnetism. And we feel it our duty to let the world know, that we have no connection with such proceedings, and sincerely regret the great mischiefs which have been done by them to the cause of truth and humanity.

# CORRESPONDENCE.

## LETTER FROM REV. C. H. TOWNSHEND.

Dresden, (Saxony,) Jan. 14, 1842.

My Dear Sir:—Your flattering and interesting letter, has, at length, after many wanderings, found its way to me; and I thank you, sincerely, for this kind proof of your good opinion. It is quite delightful to find a person really interested in so debated a subject as Mesmerism, and bold enough to carry on researches into the nature and principles of this new agency. All that you have communicated is, indeed, of high importance, not only as tending to corroborate the observations of other friends to Mesmerism, but as containing some new facts which are fraught with interest. I allude, especially, to a blind person—blind from birth—having actually read, when in the mesmeric slumber, and afforded other proofs of vision. On this point I should extremely like to receive some additional particulars. Has the lady in question learnt to read by means of those raised letters, which guide the touch of the blind? Can she, when awake, distinguish colors by the touch, as some blind persons have been known to do? Does she, in the mesmeric state, employ contact in order to distinguish objects, which ordinarily fall within the province of vision? I am the more anxious on this question, because it seems to me to involve the whole of mesmerism. If a person born blind can give only one well attested and accurate proof of vision, then have we indisputably an inner sense, independent of any external mechanism of sensation; then must even Materialists confess that man consists of something more than mere organs that may be felt and dissected.

Hitherto, this power of clairvoyance, as it is called, has been the great stumbling block of the sceptical and the scientific. I am convinced of it myself; (I mean of the existence of this power,) but to all my affirmations on the subject the answer is,—"Show us a person born blind, who gives proof of vision under Mesmerism."—This seems, now, to be the experimentum crucis, on

entific will mainly depend. It is to no purpose that I have shown to many persons a somnambulist reading, apparently by the forehead, while the eyes were covered with bandages, and secured in every possible way. Still, even candid inquirers will ask whether some rays of light may not find their way to the retina-in fact, create vision in the usual manner. Of course, if a person born blind shall be found to read even the shortest written word, the question is set at rest for ever. It is clear that, in such a case, the eyes take no part, whatever, in the apprehension of the visual object. Would it not be desirable, in so important a matter, to have a decisive experiment made upon your very valuable patient, before some scientific men, who would give a statement to the world signed with their names? Perhaps, however, this has been already done, and if so, I must beg pardon for suggesting what perhaps has obviously occurred to yourself. You speak, indeed, of publishing the whole series of experiments on this blind lady, and no doubt the experiments on vision will occupy an important place in these very interesting documents. May I hope to receive such copies of your delightful journal as contain an account of these experiments? In making this request, I must not omit to thank you for the numbers already received, and for the favorable mention of my work which appears in them. I have read the whole series with great interest.

I was not aware that two editions of my book had been published in America. Of one I had already heard, and it gave me great pleasure to think that my work should become known to an intelligent and thinking people.—Since the publication of the "Facts in Mesmerism," I have had many interesting cases fall under my observation, all tending to confirm the great outlines of the pathology of Mesmerism, and yet exhibiting variations in each particular development. A medical gentleman here at Dresden, the Baron Szapari, has just published a very interesting account of a well attested case of natural sleep-waking, which exhibited all the phenomena of induced Somnambulism. In short, I think that this new series of facts relative to man is becoming daily more studied and comprehended—even in England, where prejudice was at the highest.

I must, again, thank you, both in my own name and in that of Mesmerism in general, for the service you are rendering to the science (for science at length it will be,) and beg you to believe me, with feelings of gratitude and esteem,

Dear Sir,
Yours, very faithfully,
CHAUNCY HARE TOWNSHEND.

## REV. C. H. TOWNSHEND.

It affords us peculiar pleasure in being able to lay Mr. Townshend's interesting letter before the readers of the Magnet. He is an intelligent elergymen of the Establishment in England, and the author of a work, reviewed by us last fall, entitled, "Facts in Mesmerism, with Reasons for a Dispassionate Inquiry into it;" a work which has, certainly, done more than any other in our language towards recovering this much abused subject from that obloquy into which it had become sunken by previous abuse and misrepresentation. As the inquiries of Mr. Townshend will naturally excite in our readers a desire to see the answers we might give to them, we may briefly state:—

1. That the blind lady referred to, has been taught to read by means of raised letters, though she knows nothing of the shape of our ordinary letters. But I have known her to read scores of names, in the sleepwaking state, without the sense of touch, or sight, or hearing; and she has done this in the presence of scores and hundreds of people, physicians and elergymen.

- 2. She cannot, and never could, distinguish colors by the sense of touch, either when awake or in the magnetic sleep. But, I have known her to distinguish colors, merely by the will of the operator, times without
- 3. She describes things in the magnetic sleep, correctly, without the sense of hearing or touch. This I have demonstrated many times, and in innumerable ways ..-But I should add, perhaps, that her powers of clairvoyence are not equal to those of ordinary sleepwakers who have the organs of natural vision unimpaired. And we should state further, perhaps, that she does not read, or describe what is altogether unknown to the operator, except in cases of sickness, or when she has been requested to describe the anatomy of the human system; and this she has done, when I had put her to sleep, in the presence of medical and scientific gentlemen, and she has done it in her own case with an accuracy which could not be counterfeited, and, indeed, not to be equaled, in some respects, by any physician on earth. This may seem strange to those not familiar with this subject, but I speak what I know, and testify what I have seen.-Often when I have put her to sleep, she has given the most minute and accurate discription of the vital and mental organs, and their various functions, and I know that she gave these descriptions without any direction from me, or any other person, and without even having had any previous knowledge of the things she described. She has described things to me, in the presence of competent witnesses, which she could not have known before the moment when her attention was called to them.

But some of my readers will naturally enough ask, "How can these things be?" To which I answer, you will find accounts in different works on Human Physiology, of similar phenomena, which have taken place in cases of natural sleepwakers. We have all heard of persons talking, singing, preaching, praying, reading, running, leaping, and even fighting, in their sleep. Do you ask, how can these things be?

I have before stated, that a knowledge of the laws of the magnetic forces would explain the phenomena of clairvoyance. These forces pervade creation, and with out them the mind cannot have knowledge of anything. but with them, other things being equal, the mind may take cognizance of things as distant as the extent of these This I have demonstrated by repeated trials; and other phrenologists and believers in human magnetism will think as I do on this subject, when they shall have satisfied themselves, as I have done, of the existence of the magnetic poles in the human system, and seen the evidence by which we have demonstrated that these forces are the means of sensation, motion, and knowledge. To destroy the polarity of the brain is to produce death; and to derange the magnetic forces, in that important organ, is to produce insanity. I speak confidently on this matter, because I speak of matters that I know, just as well as I do that the paper on which I am now writing is white, or that the ink which flows from my pen is jet black. I am not more conscious of the one than of the other.

The experiments referred to by Mr. Townshend were published last fall, in the New York Watchman for Nov. 9th and 13th. And, recently, our own experi- Rev. La Roy Sunderland.

ments have been of a still more interesting and important character, as we have operated on different persons, both when awake, and in the magnetic sleep; and the results have brought us to the conclusions we have before stated in detail to our readers, demonstrating, as it seems to us they do, the number and functions of the different physical and phrenological organs, with their different poles, the manner in which they may be excited, and unfolding the mysteries of man's magnetic nature; and explaining the various mental phenomena which have hitherto so much embarrassed and perplexed the scientific world.

## LETTER FROM DR. J. S. DOUGLAS.

Hamilton, Mad. Co. N. Y. April 8, 1842.

Dear Sir:—I know you will excuse my troubling you with an inquiry upon a subject in which you are so deeply interested as that of Living Magnetism. I have practised this science, more or less, for about four years, and have seen, often repeated, the ordinary phenomena mentioned by others, with clairvoyance and somnambulism. In the last half year I have been more particularly interested in its application to disease. For months past, scarce a day has passed in which I have not employed it in the treatment of disease, and the more I employ it, the more I am convinced of its inestimable value.

From my own experience, I take it to be a law, that Magnetism annihilates susceptibility to pain in the whole system, or in the particular part to which it is applied. I have performed a great many very painful operations under its influence, and have never yet found an exception to this law. I have repeatedly entirely removed great tumesaction, tenderness, and pain of the bowels from inflamation in a few minutes, as well as swelling of joints from rheumatism; hoarseness and oppression of the chest from cold, the pain of pleurisy, after-pain from accoucehment, the most acute tenderness of the spine from spinal inflammation, so as to allow the free application of cups without pain, neuralgic pains, &c. In all local affections, I usually act only, locally. there is a local action spoken of in your account of one of your cases, which I do not understand. That account is one of exceeding interest, and the inquiries respecting it which I wish specially to make are, if the susceptibility of having an insulated portion of the system so magne-tized as to deprive it of its power of motion or action, is common to persons who can be magnetized at all, and more especially that of having insulated portions of the brain thus magnetized? Or, whether it is among the more extraordinary susceptibilities seldom met with? Secondly, what is the method of exerting this insulated influence? Thirdly, My own experience in one respect, does not seem to correspond with that of those whose works I They state that a patient, on awaking from the magnetic state, has ordinarily, no recollection of what has passed during that state. My own patients, though clairvoyant and somnambulic, have, generally, a clear recollection of all that has transpired. In the late learned work of the Rev. Mr. Townshend, it is remarked, that those who are imperfectly magnetized remember what passes while in that state. If this is the case, my patients must be generally imperfectly magnetized, though they manifest all the phenomena of the magnetic state.

But is it this ordinary profound state of unconsciousness or forgetfulness into which insulated portions of the brain are put when their functions are suspended? If so, I suppose the operation has nothing peculiar, except in confining it to the part to be acted upon. I have, in a great number of cases, relieved local pains and removed local swellings, but I have never so affected a single limb, or other small portion of the body, as to deprive it of the power of performing its functions, without acting upon the whole system.

By giving me information on these points, you will confer a favor.

Yours, very respectfully,
J. S. Douglas.

#### ANSWER.

- 1. Though there is a great difference in the results of the induced Magnetic sleep, in different patients, yet, we have never known one, who could not be paralyzed, in any portion of the system, so as to deprive it of all sensation and the power of motion. We say, paralyzed, for we have often rendered the limbs as riggid as though they were perfectly frozen.
- 2. There are different methods of producing these effects. Much depends on the temperaments of the patient and operator. Sometimes I have produced it, merely by my will, without touching the patient; and, at other times I make passes over the part, in the usual way, for this purpose. To prevent action in any portion of the brain, my usual method is to reverse the passes, over that part.
- 3. As to what patients remember, no one rule holds good, in all cases. The results depend on their susceptibility brought on by repeated magnetizing. I magnetized one recently who, when asleep, did not know that she was ever in any other state; she did not know my name, nor her own friends, even when she was put in communication with them! And yet she was the best clairvoyant we have ever known.

## FROM REV. T. PACKARD, D. D.

SHELBURNE, Mass., April 20, 1842.

Dear Sir:—Your paper of the 2d of April fell under my eye, and I read it with interest, particularly what it contained pertaining to Magnetism. I have taken pains to investigate this strange subject, myself, and to apply its agency for the benefit of the sick and suffering. I am gratified to perceive that one paper has moral courage enough to speak out the reality, the facts, the usefulness, and the improving state, of this novel science, (I venture to call it so.)

I am gratified to find that the Magnet is in near prospect of publication. Please send me the first number. I think I shall like to subscribe for it; and probably may procure some other subscribers in this vicinity on some terms, suited to encourage and promote what I consider, after some careful examination, an unpopular and important science. In this work I wish you success, as I doubt not but it will promote knowledge, for practical use, in doing good to our fellow beings.

Yours, with due respect,
THEOPHILUS PACKARD.

# LIVING MAGNETISM.

## MAGNETIC PHENOMENA.

We have determined on devoting a few columns of each number of this work to such details of facts as will properly come under the head of Magnetic Phenomena. We have an abundance of these facts, but we are not so clear as to the selections we should make from them for publication.

Every person at all familiar with Living Magnetism, knows that no two patients are always affected precisely alike, under the same operator. Nor, indeed, is it always the case, that the same patient is always similarly affected by the same person. And, it is frankly acknowledged, that these facts render it quite difficult, frequently, to deduce any law or principle from the results of the Magnetic sleep.—For, though we believe our experiments have clearly and sufficiently demonstrated, that every living body possesses a Magnetic nature, which is governed by laws of its own, the same as Terrestrial Magnetism, or Electricity, yet it may not be so easy to determine, exactly, what these laws

are. A few of them have long been known, it is true, without a knowledge of the nature which they governed.

But when it is considered, that the Magnetic forces are innate in matter, and that they are organized in all living bodies—that they are the means by which the mind moves the muscles to action—that health and disease, the growth and decay of the human system, depends on these forces, we must see how immensely important it is, that all the laws by which they are governed should be well understood, especially by those who practice medicine. Nor by them alone, but by every professional man, every parent, every teacher, every one who has a MIND, and who sustains important relations to other minds, whom it is his duty to influence to good, should be familiar with the laws of Living Magnetism.

But how shall these laws become known? Undoubtedly, by comparing facts connected with this subject. There is, there can be no other way. Give us the facts. What is the age, health, and temperament of the patient? Is there any thing peculiar in his Phrenological developments? Is he a natural somniloquent, or somnambulist? How is he affected by the approach of any sharp metallic substance when in the Magnetic steep? Is he affected in the same manner by the contact of metallic substances of any kind? What account does he give of his own or another's disease? What directions for its cure? What means were used for his relief? Were they successful? &c.

We say, then, give us all the facts in the case. Let us compare notes. Let us see how one Temperament affects another, and whether the supposed rule operates in all cases. In this way we shall be able to form a correct judgment of the laws which govern Living Magnetism, and to explain the various phenomena which have hitherto so much stumbled and perplexed the scientific inquirers after truth.

## CEREBRAL EXCITEMENT.

After discovering that separate portions of the brain could be operated on, and the patient, when asleep, could be made to feel any passion or emotion, appropriate to the organ excited, I soon found that the same results, in a less degree, could be produced in persons of the right temperament, in the waking state, and accordingly I have produced them in a large number of persons at different times.

When the parient is in the Magnetic sleep, I have, sometimes, merely to point my finger at the organ without touching it, and at other times by merely willing it, the excitement follows. However, much depends on the Magnetic relation between the operator and the patient, the proportions of the Magnetic forces between them, &c.

To give our readers some definite idea of these excitements, we will here add the following brief account, as we cannot now spare the room for many details of this kind. The reader will bear in mind, that this patient, as far as I could learn, had no knowledge of the location of the Phrenological organs; and not one word was said, by any one present, by which the thought could have been suggested to her mind. We will merely state the name of the organ, and then put down what was said by the patient, immediately on its excitement:—

- 1. Individuality.—"O, I'm thinking of all the individuals I ever knew. O, I have known more persons than ever you did."
- 2. Size—[Holding up her hands,] "This is so big—this is so small," &c.
- 3. Color.—"O, I want a beautiful pink shawl. O, those beautiful colors."
- 4. Eventuality—Ancient—"I remember—O, I remember every thing that ever took place in my life."
- 5. Number.—[Holding up her fingers she commenced counting,] "One, two, three, four," &c.

6. Calculation.—This excited, she commenced enumerating—"Ten times ten are one hundred," &c.

7. Tune.—She commenced singing; and never did I hear singing in which there was so much real musical expression, as I have often witnessed from persons in whom these organs had been excited.

8. Comparison.—"These hands are both alike. O, I'll tell

you whom you are like," &c.

9. Causality.—[The head bent forward.] "Why is it that this subject is so much misunderstood? O, I can tell you, 'tis because they do not understand it." And various other expressions in which "why" and "because" were used.

10. Supplication.—"O, you must pray, I cannot—I want to pray, but I cannot."

11. Self Esteem.—[Lifting the head up, and bringing it back in a haughty position.] "I am the greatest person living. I am better than any of you. Yes, indeed I am." We never heard the emphasis put upon the pronoun "I" so to the very life, as when this organ is excited, in the Magnetic sleep.

12. Wilfulness.—"I will have my way—O, I don't want to be crossed by any of you—I will have it," &c.

13. Physical Fear.—"O, I am afraid, I shall fall—help me,—see there, I am afraid — will come and kill me."

14. Moral Fear.—"O, I am afraid to pray to God! He is angry with me," &c.

15. Gratitude. "O, I am so thankful—you have been so kind to mc—O, I do feel grateful."

16. Conscientiousness and Acquisitiveness.—"O, I want some money—is it right to love money? O, no, I know 'tis not right—but what shall I do?"

17. Veneration and Combativeness.—[The head was immediately thrown back, and then forward, the hands clasped, as in the act of prayer, and then jerked apart again.] "O, I want to pray,—but I am mad with you all—O, I feel so mad, and yet I want to worship."

18. Hope, Joy, Veneration. and Faith.—[The head was slightly bent forward, and the hands clasped, as in devotion.] "O, I am so happy! I do hope to be saved—yes, I believe in Jesus Christ. O, I am perfectly happy—O, I am in heaven," &c.

19. Imitation and Mirthfulness.—She immediately commenced mimicking different persons, with an immederate fit of laughter.

And so of the other organs. In each case, it must be borne in mind, that the excitement was removed from one organ before it was extended to another. And these excitements, we should add, are not natural, but morbid, as in cases of insanity; hence, they should be attempted with the greatest caution, and even then, only by physicians, or those familiar with the nervous system, and for the best of purposes; for we must repeat what we have stated, elsewhere, that we have known great mischief to follow attempts of this kind, when undertaken merely from motives of curiosity.

MAGNETISM AS A MEDICAL AGENT.—It is our design to give special attention to this subject, in the succeeding numbers of our work. We have some facts bearing on it, which will be read with deep interest. The object of all who undertake the investigation of this branch of science, should be the mitigation of human suffering, and not merely the gratification of an idle curiosity.

POLARITY OF THE HUMAN SYSTEM.—Though we are not perfectly satisfied with this term, yet we use it, for the want of a better. We simply mean by it that there is a most remarkable identity in the laws which govern Living and Terrestrial Magnetism.

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Our first experiments convinced us that there was some similarity in the poles of Terrestrial and Living Magnetism. And all that we have since heard or witnessed on this subject, has but served to strengthen this impression. We found a patient of ours most singularly affected, in the magnetic sleep, by the approach of a thunder cloud. The chest began to heave, and the limbs were convulsed, considerably, before we had any suspicion as to what the cause could be. We have known other patients who were not affected in any way, when in the magnetic sleep, during a thunder shower.

One of our patients is sensibly affected in this state, by the mere turning of an electrical machine in the room, at a few feet distance. Turning the machine, she says, gives her "shocks," and increases the action of the lungs. By operating on the nerves of sensation, we have frequently produced shocks, similar to those of a galvanic battery, when the fingers would stand out, distended, as if giving off the electrical fluid. At one time we held a large magnetized steel ring over the head of the patient when awake; she immediately became affected, and went into a sound magnetic sleep, and was so much attracted by the ring, that we had to remove it to a distance. Often when asleep, the approach of the ring would draw her in any direction, when she has exclaimed, "That thing wants me!"—" it wants me;" and we have frequently drawn her out of her chair by it. And, indeed, it generally affects her so much that it has to be removed in a few moments.

The approach of any sharp metallic instrument to the body of this patient, produces increased breathing, and apparent distress. But she is attracted (at times) by any kind of metal, which is not pointed. Once she seized a knife, and grasped it with such force that we had to request assistance in order to get it from her.

Another patient of ours is attracted by the approach of any kind of metal, and the hands follow it invariably. When questioned, she did not seem to know what she was doing. In her waking state she had no knowledge of Terrestrial Magnetism; but on applying the point of a pen knife to the organ of Causality, over the left eye, she said it stuck to her; but on applying it to the same organ over the right eye, she said it "pushed it off." And precisely the same results followed, when we applied the point of the knife to the supposed corresponding poles in the cerebellum, thus showing, that on the opposite sides of the front and back part of the head, the poles were positive and negative; and by other experiments we think we have demonstrated, that there is a large negative pole in the centre of the brain, where all the magnetic courses, from the different cerebral organs, concentrate; and by a similar process, we have found evidence to satisfy ourself, that every organ, mental and physical, has its pole, or a point, where there is a maximum of the magnetic forces, which extend to corresponding places in the face and neck, and by operating on these points, these organs may be excited to action, and vice versa.

We have, in another article, given an account of a natural magnetic sleeper, in Alton, Illinois, in whom this state was induced by an electrical discharge from a thunder cloud. And the same writer further states, that she has since fallen into this state again during a thunder shower. On the approach of a thunder cloud she becomes agitated, very nervous, and suffers under a peculiar pain in the head. These symptoms all increase in violence until the cloud passes over, when they gradually disappear; or else, if the cloud is low, and is highly charged, she goes to sleep.

Since the account of our Magnetic cerebral experiments were first published, one year ago, we have heard of their having been repeated by persons in different parts of the country; and we hope to receive some details of the results which will be highly gratifying to the readers of the Magnet.

# INVOLUNTARY SOMNAMBULISM.

The following is an account of a lady who had been put into the magnetic sleep by an electrical discharge from the clouds. It is letter from the person who first magnetized her to his brother, in this city, whom we have seen, and from conversations with him we have no doubt of the truth of what is here stated

The manner in which this account is given, shows the concern which the writer felt, on finding, like the magician's pupil, that he had waked up a spirit which he does not know how to manage. Accordingly, in another letter from him now before us, he solemnly warns his brother not to meddle with this fearful power, advice which it would be well for all to take heed to, who would not involve themselves or others in mischiefs which they may finally find it difficult, if not impossible to control.

In saying that we believe in the truthfulness of the following account, it must not be understood, that we vouch for the reality of the lady's clairvoyance in every respect. For, though we have had repeated demonstrations of this power, in cases of our own, and though we believe it to be explicable according to the laws of the magnetic forces, yet we know, further, that great allowances should be made, often, for different patients. We never depend upon these accounts which are given of distant things, without we have evidence of their truth besides that usually furnished in the statements of the patient. We have known cases, where persons in the magnetic sleep had been requested to describe things at a distance, and the descriptions did not agree, at all, with the facts in the case.

# ALTON, Ill., Feb. 28, 1842.

Yours of the 11th inst. is received, which I will hasten to answer. First, as to Animal Magnetism. You were right in supposing the communication in the Louisville Journal was from me. There is nothing in that letter but what was clearly within the truth. The whole truth would have developed other facts still more "passing strange." The fact is, I am now at G.'s, where I am under the necessity of a washing. The state of the state o awaking Miss E., the subject of my experiments, from what is called the Mesmeric state every morning, and often several times during the day. She falls into it involuntarily, and at times in opposition to my will. If allowed to remain long in that state, she becomes alarmingly nervous and convulsed. In what, or how, or when it will end, time only can de-We do, however, think it is gradually termine. wearing off, and that her inclination to relapse into the sleep is not as irresistible as it was. Most of her sleep for the last six weeks has been of this character. Thus much as to her present situation; and now, a few lines on Animal Magnetism, its causes and effects. Of course, as soon as we discovered the tendency to fall involuntarily into this strange state, all further magnetizing processes were stopped, and this sleep which she now falls into is only of a partially magnetic character, devoid of most of its strange features, excepting the facts that I alone can wake her, and that she will converse freely and rationally with me, but cannot see or hear anything or anybody else. I agree with you, that there is something connected with it not at all understood or to be accounted for by any known course of reasoning, and fur-ther, I doubt whether man can ever satisfactorily establish any philosophical solution of its causes how mind can thus act on mind, or mind on distinct matter; for when in this sleep, I can by my will power of perceiving what is occurring at a distance.

cause her arm or hand to rise to a horizontal or any other position, and then remain stiff and inflexible as the limb of a corpse. This appears some like the action of the mind on matter. The first time I magnetized Miss E. I could not get her to speak—the second barely to answer yes or no-the third time she would talk a little, and so on till perhaps the tenth time, when she would converse freely, and began to exhibit her marvelous clairvoyant powers. From this time until we were alarmed by her falling into this state herself, you may well suppose we were deeply interested. I say we, for it was confined to the knowledge of cousin G.'s family, and one neighbor. I will now state a few facts, which we all think were evidenced beyond the possibility of a doubt.

Nobody but myself is capable of waking her. She would talk with no one but me, except I had first willed that she should, and also placed the third person in contact with her, as placing their hands toge-ther. She could hear nothing but my voice or a noise made by me. I have seen G. fire a gun within a foot of her head without her showing any signs of hearing it. Her eyes closed, she will tell when I eat and drink, will tell accurately when I left the room, and when I returned. You may bear in mind that none of us had seen anything of the kind, and were

unprepared for most of the phenomena.

One evening while she was in this sleep, some apples, raisins, and walnuts were passed round. I commenced eating an apple, when she remarked, "These are good apples." I then took up some raisins, and asked her what I was eating. She told me correctly. G. handed me some vinegar, which I tasted, when she exclaimed, "What do you want of this sour stuff?" G. next handed me some sugar, and so on, until we were satisfied she was conscious of whatever I was eating-she tasted whatever I tasted. Her position was such that she could not have seen what I was eating if her eyes had been We next discovered that, although herself insensible to corporeal pain, she felt sensibly any pain inflicted on me. Prick my hand, for instance, and she would jerk her's back, and perhaps rub it on the spot where mine was pricked. Pull my hair, and she would say, "Who is pulling my hair?" I next discovered that she would often speak of subjects on which I was thinking, and finally, one evening, when we were testing her strange powers, I put a piece of apple in my mouth and remarked, "These are good raisins that I am eating." She replied, "You need not attempt to deceive me-I know your motives and thoughts—yes, I can see your every thought." I then directed a third person to write on paper several questions, on what subjects they chose, such, however, as she would naturally be capable of answering. I then took the paper, and sitting by her side, put each question to her mentally; that is, without speaking or making any noise whatever. As I read the questions to myself, she would speak out and answer them, one after the other. Mind, I did not speak a word from the time of receiving the paper until she had answered the last question. such and other experiments, we were convinced that she was truly aware of whatever was passing in my mind. One evening when I had placed her in this state, I was laboring under a slight cold, attended with a cough. She was asked what would cure my cough. Her reply was, "You must be careful, or your cold will be settled on your lungs, for I see they are inflamed." On questioning her farther, I was fully convinced that she was conscious of seeing and knowing my, as well as her own, internal organization.

Now I come to what to many appears the most extraordinary phenomenon, I mean clairvoyance, or the In this faculty, or in the exercise of it, she appeared to improve at each sitting, the same as a person will excel in anything by practice; and our experiments in clairvoyance had not advanced much at the time when she commenced falling into this sleep independently. Enough, however, was elicited to prove that she could tell what had transpired in an adjoining room, and at a distance of two miles; and if at the distance of two miles, why not at a much greater distance? Those trials which afforded the most positive evidence of this power, were like the following:—Cousin G. or L. would go into another room and disarrange the furniture, upset the table, or place chairs on the bed, and make other changes from the usual position of affairs. On being asked to look into the room, she would exclaim, "What are those chairs on the bed for?" "Why are things in such confusion?"

On being questioned further, she would describe the exact situation of things. Again I took her to my room, at the hotel down town, about two miles, and she described its contents, even a painting that is hanging on the wall. It was a room in which she had never been. Many trials of this kind have satisfied us that she in some way became conscious of things of which the natural perceptive faculties or the senses could not have informed her. In repeated instances she has informed me what was going on at father's and Captain W.'s; would tell it in a manner as natural as if she had been there. We had not, however, entered into any arrangement with any one, then, to ascertain whether she told truly, there-

fore have no positive evidence.

On Chrismas eve, however, I directed her to go to W.'s; she immediately began as follows: "Almira is sick." On being asked how she seemed, and whether very sick, she replied, "she had a cold and some fever, but is better, and is not as sick as I at first thought." On being asked what they were doing, she says, "Father W. is sitting before the fire, with his shoes off, warming his feet; mother W. is also sitting there, holding the babe, and Eliza is up stairs dressing or undressing." This must have been about nine o'clock in the evening then. I have never asked any questions to learn the truth or falsehood of all this; but I received a letter on the 7th or 8th of January, from mother, dated December 24th, (day before Christmas,) in which she says, "Almira has had a slight attack of fever, attended with the rash, but is now much better." On being asked whether she saw these things, she would say, "it does not seem as if I saw them with my eyes, but I know them. How it is that I know them, I cannot tell."

Thus, you have briefly the result of my experience in Animal Magnetism. I am convinced that this case is one of the most sensitive, one of the most perfect, in the powers and faculties developed in this state, that has ever been known. I am almost inclined to believe, if it had not assumed its present or any other alarming appearance, I should soon have been able to have opened a daily corres-

pondence with you.

If I had nothing else that demanded my attention, I should like to pursue the investigation farther. What a field it opens for contemplation on the qualities and nature of mind and matter! And I wonder it has not been brought into view more, in aid of some of the theories relative to mind and matter, especially Idealism. Now you can make what you can from the facts that I have given you. That they are facts, and no humbug, you can rely upon it. As for myself it is completely enveloped in "shadows, clouds and darkness," and even G. is for once bewildered.

## PHRENO-MAGNETISM.

The experiments described in the preceding pages have been successfully repeated, as we learn, in different parts of the country, as in England, also. The following account is from the Washington Banner, edited by Mr. W. H. Burleigh, an intelligent young man, well known for his poetical talents:—

One of the most interesting discoveries developed by this science, is the fact that distinct portions of the brain may be separately excited, so as to produce distinct manifestations of mind, almost at the will of the operator. This, it seems to us, furnishes the most irresistible proof ever yet offered of the truth of Phrenology.

We first saw the fact noticed in the New York Watehman, that the several organs could be thus separately magnetized—but it had never occurred to us to repeat the experiment, until a lucky accident convinced us that it could be done. We had been making several passes with the finger only over the organ of Tune, (without even knowing its position,) when we discovered a glow of pleasure light up the face of the patient, and she instantly commenced running her fingers along her lap, as if over the keys of a piano. The experiments of the editor of the Watchman were suggested to our mind, and upon inquiring of a phrenological friend, we found, as we suspected, that the organs of Tune and Time had both been magnetized. The success of this accidental experiment induced us to try others, with what results the reader shall be informed.

We have tried these experiments upon several individuals, neither of whom knew any thing of Phrenology. Generally, we magnetize the organ without contact, though sometimes we lay our finger slightly on it—the results produced, in either case, are, of course, the same. After having magnetized a particular organ, our first question to the patient generally is—"What are you thinking of?"—for a question put in this form could not suggest the desired answer, since it gives to the patient the widest possible scope for his imagination, if the answer were to be arrived at by a guess. With one patient, the answers were so prompt that it was unnecessary (except in a single instance) to ask the

question at all.

For instance, we passed our finger over Mirthfulness—and although he had previously complained of sadness, (the complaint, in fact, induced us to magnetize that particular organ,) he immediately burst into laughter, which seemed almost irrepressible, and commenced making humorous remarks, which produced corresponding mirthfulness in others. He was, in short, full of what may be appropriately termed fun. Passing our finger over the organ of Tune, he instantly ceased laughing, and with a rapt expression of countenance, as if listening to some heavenly harmony, exclaimed—"Music! music!

'Oh, why should feeling ever speak, When thou canst breathe her soul so well!'"

We magnetized the organ of color, and he threw up his hand with delight, as if gazing upon some beautiful vision, and said—"Oh, I see before me the most gorgeous combinations of colors that imagination ever conceived—if I were only a painter, what a splendid picture I could give you." We magnetized form, and he cried out that the beautiful colors which had floated before his vision like a radiant mist, were taking to themselves shapes—forms—some square, some circular, etc. We passed our finger over the organ of Language, hoping to hear

an extempore oration, but he disappointed us by immediately commencing the declination of a Greek noun.

Passing from the intellectual and perceptive organs, we magnetized Alimentiveness, and waited for an answer, expecting that, as usual, it would be spontaneous. In this, however, we were disappointed, and after making a few additional passes, we asked him if he was conscious of any peculiar emotion of mind. "Yes!" was the prompt reply—"I am conscious of a peculiar feeling, but I can't analyze it. There seems nothing intellectual about it—in fact, it is purely physical—something connected with taste." Our next question was a suggestive one, and he immediately began to discuss good eating with the enthusiasm of an epicure, but at the same time exhibited so conscientious a regard for temperance in all things, as to give assurance that his appetites were under the control of principle.

#### EXTRAORDINARY PHENOMENA.

In another article we have referred to the *identity* of Galvanism, Magnetism, Electricity, and the effects we had produced on somnipathists with the common Magnet. Since that article was in type, a number of other similar facts have come to our knowledge, of a most extraordinary character.

On the 16th of April last, we had put a patient to sleep, and produced a number of Phrenological phenomena by operating on the brain, in the presence of a number of physicians and others, who had requested the privilege of seeing our experiments performed. During the sitting, one of the gentlemen present applied the blade of his knife, which had been magnetized some five years ago, to her hand, and she was so much affected by it, that it had to be removed to a distance. She manifested the most intense earnestness to have it, saying, "it wants me—it wants me," &c. A large magnetized steel ring was held over her head, without her knowledge, and it drew her in whatever direction it was moved, and affected her so much, that it had to be removed. She begged, and entreated that she "might have it."

After waking her up, I again held the ring over her head, without her knowledge, and in a few minutes she dropt into a state resembling sleep, and yet not exactly sleep, but in which she, as before, begged for "that thing;" for she had not seen the ring, and did not know what it was that affected her in this way. But on removing the ring, I found it next to impossible to wake her up, or to control her at all The entire system seemed to be paralyzed, the breathing was much increased, and difficult; and she continued in spasms for about twenty minutes, when she was relieved, and came out "in a shudder," like the lad described in the article below.

We have other facts of this kind which we shall describe in our succeeding numbers.

But, the phenomena described in the subjoined account are most extraordinary, and exceedingly interesting. We know the writer, and have had a full and minute description of this case from his own lips. About the facts, there can be no doubt. And, here we have a singular case of clairvoyance, unlike any of which we ever heard before. Here is an instance of a person so much affected with the natural magnet, in the waking state, that he sees distant things in the dark. And, he not only seems to have had a clear perception of the place, where the magnet had been hid; but his father stated, that when he took his son into the yard, from which there was a burying ground some rods distant, he said, "O, I don't want to stay here—I see every thing—I

see the bones in those graves! O, I don't want to stay here!" declaring that he saw all the bodies in those graves.

We repeat it, there can be no doubt as to the truth of the following account; the writer is an intelligent minister of the gospel, well and extensively known.

Rev. and Dear Sir:—Agreeably to your request, I herewith transmit the facts respecting the influence of the magnet in producing the magnetic sleep in the case of my little son. His age is 15. I first magnetized him about the 20th of February, 1842. For some days he was put to sleep each day, for about half or three quarters of an hour. After that, each alternate day, for about three or four weeks.

About ten days since, he was playing with smaall horse-shoe magnet, capable of sustaining about 12 or 14 ounces. In a short time, I perceived that he was asleep, and exhibiting the usual symptoms of the magnetic state. I attempted to arouse him, and he immediately opened his eyes, but said, "I am in the magnetic state, I can see every thing just as when I am magnetized." I attempted by the usual passes to remove it, but found I could not. He said, "It is the magnet that has produced this state, and you cannot take it off." I then took the magnet in my hand, and tried the effect of making the several passes with that; but it only increased the difficulty. I then proposed to send the magnet away, to a distant place. But he objected, with great earnestness and even with tears. I then persuaded him to go with me into another room, 20 or 30 feet distant from the magnet; and after staying there a short time, he consented to have the magnet removed.

I again tried by the usual passes to remove the influence from him, but could not. He remarked, that "nothing I could do would remove it, but that it would pass off, of itself, in about an hour, and that he should come out of it with a shudder." During all this time, his eyes were open. He could hear and converse with me and with persons who were very near to him, after they had been near him for a few minutes, but with no others.

He was playful and apparently happy. In about an hour he started suddenly, and with a violent spasmedic shudder, and appeared restored to his natural state. Of nothing that had passed had he any recollection, and the only difference that I could discover between this and the state in which he had usually been when magnetized, was, that in this, his eyes were open—he had none of the usual attachment to me, all seemed transferred to the magnet, and I had no power to remove it.

The magnet had been removed to a distant chamber. But he expressed a strong desire to go to it. I then took the magnet away, unknown to him, and, passing out doors, carried it by a circuitous route, and placed it in a pile of lumber distant 70 or 80 feet. It was past 9 o'clock at night, and very dark, and he had no means of knowing, by the ordinary senses, that it had been removed. He said, however, that it had been removed, and went on to tell me which way he would take to find it, and said he would not go directly to it, but would find it by a circuitous route—that he would go out round the house, in about the same course that I had taken in carrying the magnet away! But he said the magnet was wrapped up in a paper, and put in a pile of lumber, which was the fact.

I then went and removed it to a still greater distance, where I left it till the next morning. He said, that he had a strong impression on his mind, that it had been removed to the more distant place as I have described it, and that, from that time he lost all interest in it. This was more than an hour from the time that he came out of the magnetic state with a shudder, as above described. Since then, he has manifested no desire for the magnet, but when it was afterwards brought near him, even within several feet, he said, after a few minutes, that he felt the same influence coming over him, and immediately caused it to be removed.

I might add, that the application of living magnetism in his case, was in a course of medical treatment for a spinal disease, and was generally applied under the divery happy results.

Respectfully yours,

Philadelphia, April 17, 1842.

TO OBTAIN DIFFERENT FLOWERS FROM THE SAME STEM.—Split a small twig of elder bush lengthways, and having scooped out the pith, fill each of the compartments with seeds of flowers, of different sorts, but which blossom about the same time; surround them with mould; and then, tying together the two halves of the twig, plant the whole in a pot filled with earth properly prepared. The stems of the different flowers will then be so incorporated as to exhibit to the eye only one stem throwing out branches covered with flowers analagous to the seed which produced them.

Petato Black.—We are informed by an old painter, that potatoes being baked moderately at first, in a close vessel from which air is excluded, and exposed to an increased heat until they are completely charred through, they may then be ground in oil, and thus produce a beautiful black, superior in many respects to any other in use.—American Mechanic.

# PHRENOLOGY.

## OBJECTIONS ANSWERED.

We have never believed it the better way for exhibiting the claims of Phrenology to excite the organ of Combativeness in its defence. When this organ is exercised too much in its favor, it excises a similar disposition against it. And, when these organs take the lead in controversy, it rarely follows that either party is convinced of error.

We know the nature of the human mind too well to believe that much good is often done by controversy, especially to those directly engaged in it. Hence it is with some reluctance that we comply with a request that we should notice an article in a late number of the Western New Yorker against Phrenology. Not, indeed, that there is any thing new, or at all formidable in that article, but because we do not believe this to be the best way for maintaining the claims of this, or any other science. Let Phrenology be perfectly understood, and there will be but few who will reject its claims. And hence it is, that most of the objections usually urged against it are founded in ignorance or misapprehension. The same reasons were once urged against other branches of science. But now the principles of the Newtonian theory are well understood, we find no one to dispute or condemn.

Though the article above referred to, contains nothing new; though it brings forward no objection which has not been often met and answered before, yet, it may not be amiss to show the writer and others who think with him, that there are views which may be consistently taken of this subject which fully obviate his objections. Let us look at them:-

"Phrenologists profess to be able to distinguish criminals from honest men, and the kinds of crime even, which they have committed."

This is not exactly correct. What we profess to be able to do, is to describe the talents and mental characteristics of men. Phrenology will discriminate between the dispositions of different persons, and tell you which of two individuals would be the most likely to commit certain crimes under certain circumstances.

"There would seem to be a fixed and fatal necessity in the actions of man, implanted in his very organization, and which it would be utterly impossible for him to control."

Phrenology demonstrates the reverse of this assumption.

rection of experienced physicians, and apparently with | It shows that all who have intellect enough to know right from wrong, have a faculty which chooses what they will do. Phrenology, more than any other science, proves man's freedom of will. It is an attribute of his nature to determine which of his organs he will gratify, and how, and when it shall be done. All the organs were designed to be exercised in a proper manner, but none of them to be abused. Sin and wrong doing consists in the abuse of the mental or physical organs. We do not admit that man is so organized that he cannot obey. The freedom of the human mind to obey or disobey, is a fundamental principle of Phrenology. It does not follow, that because one has a large development of Acquisitiveness, for instance, that he must, or will be governed by this organ, any more than it follows, that when one has large Veneration, he will, or must do nothing but worship God. And, indeed, this writer seems to reason precisely in the same way, when he speaks of the influence exerted by education and circumstances over persons. But how circum. stances influence one to vice or virtue, it would be impossible for him to tell, except upon Phrenological principles. For, if there be no organs to be excited, of course, neither circum. stances nor education could have any influence in forming the characters of men.

"Consequently the drunkard must remain a drunkard, the thief must remain a thief, and the infidel an infidel; for there is no chance of altering their character unless their bumps can be altered first, a circumstance wholly impossible."

The same objection, repeated in another form; and, in fact, this is the sum and substance of all that is said against Phrenology. But it amounts to nothing when compared with the true science of the mind. Man has no organ of Drunkenness. He has no organ of Theft, or of Lying, or Murder. These crimes are committed by the abuse of organs, which it is lawful and right to excercise in a proper manner. Man has no organ of Infidelity; but he becomes an infidel by refusing to exercise the organ designed for faith in God, and a future state.

"Phrenology is opposed to Christianity in another particular; for it teaches that all the propensities of man proceed from the head, while Christianity ascribes many of them to the heart."

Well, this is funny. And, can this writer tell what the heart is? Wherein does it differ from the mind, or that conscious, self-determining principle, in men, which loves or hates? When used in the scriptures it must either signify the mind or not. If it does not, then man has propensities which are not located in his mind! But if it does signify the mind, then the language of scripture not only agrees with Phrenology, but it evidently is based on its truth. Instance the parable of the talents. One had five, another three, another two, and another one. Anti-Phrenologists can never give a consistent explanation of this parable. They tell us that all have talents (minds) equally alike, and the only difference among men is made by circumstances and education!

The parable of the sower, also, is based upon the truth of Phrenology. The ground [heart or mind] on which the seed fell, was not all alike; it was not equal in the degrees of its susceptibility. This truth is so obvious that facts need not be narrated to sustain our position. Every one must have seen what a difference there is in the minds of men to whom the gospel is preached. They all need the gospel-the "good seed;" but when it is sown, they do not all receive it alike; nor do those who do receive it, all bring forth fruit in an equal degree. And the difference alluded to in the parable, is that which exists in the Phrenological developments of different persons.

It would be curious enough to see how those account for this difference, who deny the truth of Phrenology.

## EXTRAORDINARY CHARACTERS.

We have denominated those persons prodigies, who have been quite remarkable for any one peculiar talent. But, most anti-phrenologists have generally failed to notice how clearly the cerebral developments of these persons have demonstrated the truth of Phrenology; or, if they have noticed this fact, we fear they have seldom manifested a corresponding willingness to admit the sequences which might be justly deduced from it.

As it will interest our readers, and be of some service to science withal, we purpose devoting a little space in our work, to accounts of remarkable characters, who have attracted more or less attention in the world, by their talents or eccentricities; and to show, how exactly their conduct and characters correspond with the principles of Phrenology, and Living Magnetism.

We will begin with a well known, but highly eccentric character, who died in this city a few months since,

#### Mc Donald Clark.

We are not aware, that there is any drawing or bust of his head, in existence. However, having been well acquaint. ed with the "Mad Poet," as he was called, and having examined his head a number of times, we are prepared to describe his peculiar phrenological developments, which rendered him so notorious for the last few years of his life. His head was small, and most wretchedly balanced, as his Ideality, and Compassion, Wit and Sadness were remarkably large. Indeed, his head was so much out of the ordinary shape, by the protuberance of Ideality, especially, that any stranger could but notice it, at once, on seeing him. And, it might be truly said of him, that he talked and wrote, yea, he felt and thought in poetry. But, being deficient in Causality, and Firmness, some of his writings were scarcely fit to be seen, while at times, it must be confessed, his strains were poetic and exceedingly beautiful. Here is a specimen :-

> "Now twilight lets her curtain down, And pins it with a star."

That is Clark, himself.
The following, is, perhaps, the best piece he ever wrote:—

"Belle of our Beauties—brightest of the flock,
My eyes are shut—but, since half one o'clock,
My heart's been beating, like the—the—no matter,
Donald, dear, you shouldn't have—looked at her.

O! who can help it—heigho—dont she seem
Lovelier than doubloons, or a Poet's dreams.
Is n't she young, and tall, and plump, and—rich,
And does n't she whiter heads, than mine, bewitch?

Toast of even Traders—Saratoga swears, The nights of the yard stick followed her in pairs, Grew thin, and pale, and could n't touch their meals; Then only fancy how a poet feels.

Her form's clastic as a willow tree, Glorious in motion, when the winds are free; She moves with timid dignity and grace, While thought is thrilling thro' her sweet young face.

Her head is small, and balanced, to a turn, Her white cheek flushing, with the fires that burn Deep in a heart, that dreams of—who—who—who, Donald, you dunce—you need n't dream—'tis you.

O no—she's much too beautiful, and gay,
For one who's poor, and creditless, and grey,
Whose note has not the chemical, true stamp,
And who's been christened, long ago, a scamp.

Where we left off-, I said her head was small, Her forehead full, firm, as an ivory wall, Her hair like cypress plumes, in moonlight's ray, Her lips were only made—to kiss and pray. O the deep magic of her mild kind eye, Bright as the daylight, bluer than the sky, When Autumn warms, and mellows down its tone, And the moon, without a cloud, in heaven alone. Calm as the brightness that we had, last night, That made the soul grow giddy, with delight, And when it looks you side away-heigh-hi-ho, I wish I dare tell-Daddy-what I know. But ah-'tis silly-silly sure for one, Whose years, in this world, nearly all, are run, Whose face is fading fast—and fortune's thin, To doat on her-rich dandies cannot win. I know 'tis folly-but I love to think, And have my heart in swooning rapture sink, And wonder who will lay his head to hers-A Buck of Boston, some say, she prefers. Amen-my sweethearts-all have turn'd their backs, Wont risk a fortune so forlorn as Mac's, God help him-his Ione pillow's cold, and wet; When will Experience teach him to forget? His loves are cluster'd like the solemn lights, That blaze thro' the blue dusk of our Winter nights, That, like a rich, broad banner, is unroll'd, As bright, and cheering, but alas, as cold-Remember thee !-O how can I forget

Remember thee !—O how can I forget
That form, where Grace her glowing seal has set ?
While Woman's name omnipotent shall be,
And man shall worship—I'll remember thee."

Never, perhaps, was there a greater combination of weakness, wit, misery, and poetry, in the same head. He once informed us, that he never wrote or read poetry, without weeping, and on our repeating a somewhat pathetic verse to him, he wept like a child.

His sarcasm is well illustrated by the following anecdote, related in a recent number of the Commercial Advertiser:—

"It was, we believe, about the year 1829, that in the course of one of the late Mr. John Lang's short controversies with the Commercial, he rather wantonly introduced the name of McDonald Clark, to whose brains he applied the term "zig-zag." Clark's feelings were really wounded by the attack, and he came to beg permission to reply. We tried to dissuade him from his purpose—averse as we were to controversy, and apprehending that we could not afford the space that the poet would require. He was so urgent, however, and his manner so imploring, that we yielded, upon condition that he would write but four lines. Delighted with this, he sat down at our desk, and produced the following impromptu:

"I can tell Johnny Lang, in the way of a laugh,
Since he's dragged my name into his pen-and ink brawl,
That most people think it is better by half
To have brains that are "zig-zag"—than no brains at all!"

The hit was capital; and we believe Mr. Lang never again assailed 'the mad poet.'"

## ZERAH COLBURN.

Every body has heard of the astonishing Mathematica powers of Zerah Colburn. The widest space in his head was between the organs of Câlculation! At least, this was the case, while he was astonishing Europe with his solutions of Mathematical problems, as we have seen a drawing of his head, taken at that time. In after life, however, his oth-

er organs were brought into exercise, till he, finally, became a minister of the gospel, and ccased to excel in the exercise of his peculiar gift.

Our discoveries have demonstrated, we think, the duality of the pairs of organs usually called calculation. The first pair, outside the corners of the eyes, are appropriate, merely, to counting numbers; the next behind them to Calculating, and the higher branches of mathematics. We examined the head of a gentleman, a few weeks since, (a stranger to us) in whom these last named organs were unusually large; between them from side to side, was nearly the widest part of his head. His friends present, pronounced him one of the most excellent mathematicians in the country.

It is said, that among the boys now employed for the different purposes of calculation on the ordnance survey of Ireland, there is at present one named Alexander Gwin, only eight years old, and a native of Derry, whose abilities at his early age are truly surprising. He has got by rote the fractional logarithms from one to 1000, which he will repeat in regular rotation, or otherwise, as the interrogator may put the questions. It is certainly astonishing to think so tender a mind can retain, with such tenacity and correctness, seven figures of an answer, (a ccording to their different variations) for 1000 numbers. His rapidity and correctness in the various calculations of trigonometrical distances, triangles, &c are amazing.

He can in less than a minute make a return in acres, roods perches, &c., of any quantity of land, by giving him the surveyor's chained distances, while the greatest arithmetician, with all his knowledge, will certainly take nearly an hour to do the same, and not be certain of truth in the end.

It is very desirable, that an exact admeasurement should be taken of the head of this extraordinary lad, as we are confident it would be in perfect keeping with phrenology.

It will be found, we doubt not, when the laws of Living Magnetism shall have become more perfectly understood, that, when any organ in the head is perfectly developed, its exercises will be perfect, that is, the knowledge appropriate to that portion of the brain, will be intuitive, as in cases of somnipathy, where the patient seems to have a perfect knowledge of things without any mental effort.

FRANKLIN.



We have referred to Franklin's organs of Causality, in another article. The above cut gives a tolerably correct idea of them; and it is worthy of notice, that all the portraits of this great philosopher, represent his head as bent slightly forward, thus giving the natural language of these organs, which, in his head, were exceedingly large; as were the organs of Comparison also, and with his other developments,

giving him great powers of analysis, and critical acumen It has been well observed, that Franklin was a philosopher, without being conscious of it, but it was these organs which gave him those powers of discovery which have associated his name with that of Newton and Capernicus.

HERSCHEL.



The above cut is said to be from a correct drawing of this most extraordinary man. No one can look at it without being struck with the enormous size of that portion of the brain where we have located the two large consecutive poles of the brain, (36). Order (30), Locality, and the other perceptive organs, were remarkably developed in his head, and they gave him those astonishing powers of observation which have immortalized his name. Compare such a head with a person of known inferiority, and no one can resist the conviction which is at once forced upon the mind.

OBERLIN.



Here you see a most remarkable development in the anterior and coronal regions of the head; and the fame of his benevolence has extended as far as the Christian name is known. It is said, that he found the inhabitants of his parish, isolated in five different villages, poor, ignorant, agitated by heinous passions, and without the most necessary

means of comfortable existence. But by laboring unremittingly, he, by degrees, succeeded in changing their wretched condition. He taught them to cultivate potatoes, flax, and such vegetables as succeeded best in light and sandy soils. He laid out a nursery, in order to supply the peasantry with fruit trees of various kinds, and shewed them the advantage they would reap by attending to their cultivation. He gave instructions to the children himself, teaching the younger to read, write and calculate; while he lectured to the more advanced in age, upon the cultivation of fruit-trees, the principles of agriculture, and the noxious and useful qualities of the plants which the country produced. He particularly accustomed them to order and cleanliness.

The good pastor, with his parishioners at his back, actually worked at the formation of convenient ways from one village to another, and of a good and ready communication with the great road leading to Strasburg. To this city he sent children to become artisans, such as tailors, shoemakers, smiths, and carpenters, a female to learn midwifery, and a promising youth to study medicine and surgery. He himself had some knowledge of the healing art, used the lancet in cases of necessity, and preserved the most necessary remedies in his house, which he distributed as he thought they were required. He devoted his talents, time, labors, and whole life to the welfare of his flock. He persuaded a benevolent family, Legrand, to favor his philanthropic views, and to transfer their manufactory of ribands from Basle to his parish, and to furnish employment to the people.

Besides his vast care of all worldly concerns, he paid the greatest attention to moral and religious instruction, which he enforced in the most effectual manner by deed as well as words. He ended a law-suit in which the parish had been involved many years, and he brought good will and mutual love to dwell with his flock, instead of discord.

It is delightful to contemplate such a character; and the name of Oberlin has been appropriated by benevolent Institutions, as one of the best mementos of that divine philanthropy which was so wonderfully exhibited in his pious life.

# LITERARY NOTICES.

THE ASTRO-MAGNETIC ALMANAC FOR 1843; In which all the motions of the earth are demonstrated, in accordance with the theory of the ancient eastern nations. By H. H. Sherwood, M. D. Calendar by David Young, Philom. New York, 8 vo. pp. 72, illustrated by numerous engravings. Price 12 1-2 cents.

Our readers are not to suppose, from the title of the Almanac prefixed to this article, that it is of a character with the catchpenny pamphlets, which, under the same name, are yearly hawked about the streets. Even they are so far useful, as they contain an astronomical calendar, which is often indispensable, and always convenient to the navigator, the farmer, and others. But then, their adjunct matter is, with few exceptions, of a trashy, puerile character. Not so with the present work. It will bear favorable comparison with the nautical and American Almanacs, nay, it is so far superior to both of them, as it embodies a condensed system of science, illustrating, in a few prominent outlines, the relations between Astronomy and Magnetism. The author, Dr. Sherwood, of this city, has, for many years, been engaged in the investigation of magnetism, and although certain poachers upon his labors have made attempts to anticipate the publication of a work which he has long been preparing for the press, and of which this treatise forms but a part, we venture to prophesy, that, when the result of

his labors shall have been laid before the public, his name will assume a high station in the scientific world. His original and ingenious theory, as profound, as we believe it to be correct, of the exclusive magnetic power of the Sun over the planets, the earth, of course, included; his rejection of the disturbing forces of the planets, his fixation of the magnetic poles and magnetic meridians, and the discovery of their rates of motion in the arctic and antartic circles, giving to the earth, (if we may so term it) a tertiary motion, which gives rise to the precession of the equinoxes, and the progressive obliquities of the angle of the ecliptic with the equator between a right angle and no angle at all, involving millionary periods of years; his ascertaining the longitude by the variation of the needle, and the variation of the needle by the latitude and the longitude, and, specially, the view taken by him of the cause of the rise and fall of water in different portions of the globe, which he shows to be dependent on the magnetic poles; these, we say, are but a part of the subjects touched on in this interesting manual. We scarcely need recommend such a work. Its utility must be apparent to every scientific student. It is, also, calculated to render useful science popular, by making it easily understood by the meanest capacity. We have no doubt that it will have a wide and general circulation.

Uncle Sam's Recommendation of Phrenology,—To His Millions of Friends in the United States. In a Series of not very dull Letters. New York: Harper and Brothers, 82 Cliff-street. 12mo., pp. 304.

To merely say, that we are pleased with this work, would not, certainly, be doing justice to its merits. For, although the author does not, by any means, say every thing which might be adduced in favor of Phrenology, yet, he has presented some of its most interesting features in a style which is neither dull nor uninteresting; a style which, we venture to predict, will take, with the generality of readers, better than most works heretofore published on this subject. We commend this book to the notice of our countrymen; for, however much they may differ in their views of many things, heretofore done by "Uncle Sam," we must all yield to him the credit of having done a special service to science, in the publication of these letters.

To give our readers some idea of his manner of writing, we will here quote a few of the titles to his letters, and which are designed to give an idea of the organs described. For instance, he begins with, a "Salutatory," and then comes the "Way and Manner," "The Why and Wherefore" of his writing, "The Whence and What of Phrenology," "How Phrenology gets along here," "Beginning to Begin," "Paring and the Half a Story," "Parentage and the other Half of that Story," "Home," "Surrounding Affections." &c. &c.

Popular Phrenology. Exhibiting the Exact Phrenological Admeasurements of above fifty distinguished and extraordinary personages of both sexes, with skulls of the various nations of the world. Embellished with fifty engravings. New York, 296 Broadway. By F. Coombs.

This work possesses quite an attractive appearance, and we doubt not, it has many excellencies which render it worthy of patronage. When we find the necessary time we shall give some account of its contents.