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# BUCHANAN'S JOURNAL OF MAN.

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## The Oriental View of Anthropology.

In the following essay, **Dr. F. Hartmann**, an enlightened author of the Theosophical and Occult school, presents the mystic or Oriental view of man, in an interesting manner, deducing therefrom a philosophy of the healing art. My readers will no doubt be interested in his exposition, and, as the ancient doctrine differs materially from the results of experimental investigation, I take the liberty of incorporating my comments in publishing the essay.

### A RATIONAL SYSTEM OF MEDICINE.

All lovers of truth, progress, and freedom of thought must be grateful to Dr. J. R. Buchanan for his discovery of the science of SARCOGNOMY. His system brings us nearer to a recognition of the true nature of man, his origin and his destiny, and of the relations which he bears to the Divine Source from which he emanated in the beginning, and to which he will ultimately return; for the enlightened ones of all nations agree that the *real* man, who resides temporarily in the physical human body, who feels through the instrumentality of the heart, and thinks through the instrumentality of the brain of the external body, does not originate in the womb of the mother from which the physical body is born, but is of a spiritual origin, again and again re-incarnating itself in physical masks and forms of flesh and blood, living and dying, and being reborn, until, having attained that state of perfection, which renders the inner man capable to exist in a state of spiritual consciousness without being encumbered by a gross earthly organization, which chains him to animal life.

[It should here be remarked that the great majority of those who are considered enlightened, and to whom the world is indebted for the sciences which it now possesses, do not accept this theory of re-incarnation. As commonly stated, it is liable to many decisive objections, and these objections, which I have clearly stated in the Religio-Philosophical Journal, have not been, and I think will not be, removed by the teachers of re-incarnation.]

It may perhaps not be premature to examine how far the doctrines of Dr. Buchanan correspond with the doctrines of

occult science; that is to say, with that science which is based upon a perception and understanding of certain facts, which, to be perceived, require spiritual powers of perception, such as are not yet developed in the majority of mankind, but which are only in possession of those who have mentally risen above the sphere of external phenomena and accustomed themselves to look at spiritual things with the eye of the spirit. It is not my intention to enter at present into an elaborate review of the most prominent writers on occult subjects, and to quote passages from such authors to support the views expressed in the following pages, but rather to give a short statement of their doctrines in regard to the omnipotent power of Will and Life; both these powers being fundamentally identical; both being merely different modes of actions, or functions, of that universal, eternal, and divine Central Power of the universe, which is beyond the conception of mortals, and which the latter call *God*.

The ancient religions, as well as reason and logic, tell us that there is, and can be, only one supreme God, or First Cause of the universe, and that from this one first and fundamental Cause or Power every secondary power and everything that exists has come into existence, or been evolved within it and through its eternal activity. The whole of the universe with everything contained therein, man included, is and can be nothing else but a manifestation of this internal fundamental power, or, as it has been expressed by the ancient philosophers, the universe is the product of the Divine Imagination (thought) of the First Great Cause, thrown into objectivity by its eternal Will.

We see, therefore, the great unmanifested *One* manifesting itself in its own *Substance* (Space) by means of *two* powers, *Thought* (imagination) and *Will* (the *Word* or *Life*); both powers being fundamentally identical and merely two different modes of activity or functions of the *One* Eternal, internal Principle, called God. According to the *Bible*, God said, "Let there be light," and through the power of this outspoken "*Word*," the world came into existence. This allegory, expressed in modern language, means that by the *active* Will of the universal First Cause, the images existing in its eternal memory were thrown into objectivity and thus produced the germs from which the worlds with all things existing therein were evolved and grew into the shapes in which we see them now. The *Brahmins* say that when *Brahm* awoke from his slumber after the night of creation (the great *Pralaya*) was over, he *breathed out* of his own substance, and thus the evolution of worlds began. If he *in-breathes* again, the worlds will be re-absorbed in his substance, and the day of creation will be over.

[God being essentially and self-evidently inconceivable by man, all attempts of Brahmin, Christian, or any other theologians to explain his existence and his methods of creation can be recognized by the scientific mind only as hypotheses unsusceptible of verification, and, therefore, incapable of becoming a proper basis of Philosophy.]

Thus we find, on examining the doctrines of all the greatest religions of the world, that they all teach the same truth, although they teach it in different words and in different allegories. They all teach that there exist two fundamental powers, originating from the absolute *One*, namely, *Thought* and *Will*; and it logically follows that if a man were a complete master over his thoughts and his will, he could become a creator within the realm to which his thought and imagination extend; he could, consequently, by the power of his will and thought, control all the functions of his organism, the so-called involuntary ones as well as those which are voluntary. He could—if he possessed a perfect knowledge of his own constitution—restore abnormal functions to their normal state, and restore diseased organs to health.

[The mode of expression used in this paragraph is rather misleading. One may have a complete mastery of his thoughts and will, while both thought and will are very feeble and ineffective. It requires great POWER in the will and thought to acquire such control over bodily functions, and any expression leading persons of feeble character to suppose they can attain such results would be delusive. Many persons of feeble character have been led by current speculations to aspire far beyond their ability.]

Another fundamental doctrine of Occultism is that man is a Microcosm, in which is germinally (potentially) contained everything that exists in the Macrocosm of the universe. [An unproved hypothesis.] As the will and thought of that universal and divine internal power, which is called God, penetrates and pervades the whole of the universe; likewise the will and thought of man, if he has once attained perfect mastery over himself, extends through all parts of his organization, pervades every organ, and may be made to act consciously wherever man chooses to employ it. But in the present state of man's condition upon this earth, no one but the adepts have acquired this power. In them thought and will act as one. In the vast majority of human beings thought and will are not yet in entire harmony, and do not act as one. In the regenerated one (the adept) heart and head act in perfect unison. The adept thinks what he wills, and wills what he thinks. In unregenerated humanity will and thought are divided and occupy two different centres. In them the will has its seat in the *blood* (whose central organ is the heart), and their thought or imagination has its seat in the brain. In them heart and brain are often not only not in perfect harmony, but even opposed to each other. But the *will* and *life* being one, and identical, we see that the central seat of *life* is not, as has been maintained by Dr. Buchanan, the *brain*, but the primary source of all life is the *heart*.

We see, therefore, a discrepancy between the doctrines of Dr. Buchanan and the occult doctrines in regard to Anthropology; but this discrepancy is of no serious consequence; because the *moon* (the *intellect*) is in our solar system as necessary as the *sun* (the *will*), and as the vast majority of people have a considerably developed intellect, but only a very little developed will, and live, so to say, more in their brains than in their hearts, they may be looked upon as receiving their powers and energies from their brains, while the brain receives its stimulus from the heart. The ancient Rosicrucians compared the heart to the *sun*, the intellect, or *brain*, to the moon. The moon receives her light from the sun, the centre of life of our solar system. If the sun were to cease to exist, the moon would soon lose her borrowed light; likewise if the sun of divine love ceases to shine in the human heart, the cold, calculating intellect may continue to glitter for a while, but it will finally cease to exist. If the brain vampyrizes the heart, that is to say, if it absorbs the greater part of the life principle, which ought to go to develop love and virtue in the heart, man may become a great reasoner, a scientist, arguer, and sophist; but he will not become *wise*, and his intellect will perish in this life or in the state after death. We often see very intellectual people becoming criminals, and even lunatics are often very cunning. That which a man may call his own in the end, are not the thoughts which he has stored in his perishable memory; but the fire of love and light which he has kindled in his heart. If this fire of life burns at his heart it will illuminate his mind, and enable the brain to see clear; it will develop his spiritual powers of perception, and cause him to perceive things

which no amount of intellectual brain-labor can grasp. It will penetrate even the physical body, and cause the soul therein to assume shape and to become immortal.

It is not to be supposed that the above truths will be at once accepted by every reader of the *Journal*, except by such as have given deep thought to the true nature of man. Neither are they a subject for scientific controversy or disputation. A knowledge of the truth is not produced by disputations and quarrels, but only by direct perception, experience, and understanding. The conclusions which man arrives at by logic are merely productive of certain opinions, and these opinions are liable to be changed again as soon as the basis from which his logic started, changes. A real knowledge of spiritual truths requires a power of spiritual perception, which few men possess. Nevertheless, even our logical deductions, taking as a starting point that which we know to be true, will help us to arrive at the same conclusions at which the Hermetic philosophers arrived by the power of spiritual perception.

[In the foregoing passage, Dr. H. professes to state doctrines derived from intuition or spiritual perception by the ancients, and also recognized to-day by spiritual perception. To me they appear as the results only of that sort of ancient SPECULATION, which recognized earth, air, fire, and water as the four chemical elements of all things. I do not find them sustained by the spiritual perception of those who have the intuitive powers to-day, nor by scientific investigation. The substance of the heart is *not the seat of life*. It is a merely muscular substance, and ceases all action when separated from its controlling ganglia. The vitality of the heart lies in its ganglia—in other words, in the nervous system, *in which alone is life*, and of which the brain is the commanding centre. That life resides exclusively in the nervous system is one of the established principles of physiology, which cannot be disturbed by any theories descending from antiquity, before the dawn of positive science. That the will resides in the blood and the heart, is about as near the truth as Plato's doctrine that the prophetic power belonged to the liver. If the region of Firmness in the brain be large, it will be strongly manifested, even though the heart be feeble, and as easily arrested as Col. Townsend's. But if the upper surface of the brain be diseased, or sensibly softened, the will power is almost destroyed, even if the plethoric, hypertrophied heart is shaking the head with its power. Many an individual of a delicate frame, has overpowered by firmness and courage stout, muscular men of far larger hearts. That the brain is the organ of thought alone, is a very old crudity. It contains every human emotion and passion, which we may stimulate in the impressible, or suspend instantly by a slight pressure on the brain. There is no intense exercise of any of the emotions or passions without a corresponding warmth and tension in the portion of the brain to which they belong, the development and activity of which determine their power. The will and life are not *identical*, as Dr. H. suggests, for if they were, we should not have these two words with different meanings. If will is an attribute of life, that does not constitute *identity*. The speculations of Rosicrucians are of no authority in science. The divine love or influence is in direct relation to the brain, the central organ of the soul, and not to a muscular structure of the body, which is far below the brain in rank. It would be just as reasonable to affirm that courage belongs only to the muscles. That illuminating love which Dr. H. ascribes to the heart, belongs to the upper region of the brain, and is never found when that region lacks development, or is in a cold, torpid condition. I deny entirely that these mystic theories are the product of true, spiritual perception. They arise from the fact that the thoracic region sympathizes with the seat of true love and will in the brain. This secondary effect has been felt and realized by those to whom the functions of the brain were unknown. Spiritual perception, now guided by the spirit of investigation, discovers the whole truth—that all human faculties and impulses belong to the brain, but have a secondary influence on the localities of the body to which SARCOGNOMY shows their relations.]

If we believe in one great spiritual cause of all, and conceive of it as the great spiritual Sun of the universe (of which our terrestrial sun is merely an image or reflection), we find that spiritual man (the image of God) can be nothing else but an individual ray of that spiritual sun, shining into matter, becoming polarized and forming a centre of life in the developing human foetus, and causing this foetus to grow in a living form of human shape, according to the conditions presented to it by the maternal organism, and when it is born, and becomes conscious, the illusion of self is created within that individual form. Besides the gross, visible, external form, more ethereal internal forms are evolved, which are of a longer duration than the outward physical form, but of which it is not necessary to speak at present.

At all events, all that we positively know of man, is that he is an invisible internal power, which evolves an outward shape, which we call a human being. The material through which the organism is built up is the blood, and the centre from which the blood flows into all parts of the body and to which it returns from all parts, is the heart. The heart is consequently the centre from which that power which builds up the organism of man emanates, and as this power can be nothing else but Life, the heart is the centre of life. The heart and the brain stand in the most intimate relation to each other, and neither one can continue to live if the other one ceases to act; but according to the doctrines of the ancient and modern occultists the heart is of superior importance than the brain. A man may live a long time without thinking, but he ceases to live when his heart ceases to beat. The heart is the seat of life, the brain the seat of thought, but both are equally necessary to enjoy life; there is no intellectual activity without life, and a life without intelligence is worthless. That the force which constructs the organism of man emanates from the heart, appears to me to be self-evident; that the power which guides this construction emanates from the brain has been demonstrated by Dr. Buchanan.

[This is quite incorrect. The heart may cease acting, as in apparent death while the processes of thought and feeling are going on, and the individual is conscious that he is going to be buried, but incapable of giving the alarm. On the other hand the action of the brain may be suspended, as in apoplexy, while the heart is beating vigorously. In such cases, though the action of the cerebrum is suspended, the physiological brain or cerebellum sustains physical life. We cannot say that the heart is superior to the brain, because it supplies the brain with blood for its growth, any more than we could say the same of the lungs, which supply oxygen, without which the action of the brain is speedily arrested. We might even extend the remark to the stomach and thoracic duct, which supply the material for making a brain, which certainly does not prove their superiority. The action of the brain is far more important, for the quickest death is produced by crushing the brain, or by cutting it off from the body in the spinal cord of the neck, when heart, lungs, and stomach are promptly arrested by losing the help of the brain. If prior development in growth proved a superiority of rank, the ganglionic system which accompanies the arteries and precedes the evolution of the convoluted cerebrum would hold the highest rank, although it is destitute of consciousness and volition, which belong to the brain alone.]

But what is this power which emanates from the brain, and which guides the organizing activity of the soul, but the

power of life which is transmitted to the brain from the heart, and which is modified in its activity by the peculiar organization of the latter? Man in his present state does not think with his heart, but with his brain; nevertheless, the heart is superior to the brain, for the brain has been built up by the power which came from the heart; and it is a universal law of nature, that no thing can produce anything superior to itself. During its foetal existence the brain of the child is built up by the blood of the mother; after man is born his brain receives its power of life through the heart, and in spiritually developed man the thought-force created in the brain reacts again upon the will in the heart, controlling its desires and entering into harmonious union with the latter. The ancient alchemists say: "If the Sun (the heart) enters in conjunction with the *Moon* (the brain) then will Gold (Wisdom) be produced."

We see, therefore, in man two centres of life, the heart and the brain, and it may properly be said that the brain is the seat of life, only it may perhaps be added, that it is the secondary seat, while the principal seat is, or ought to be, in the heart. [Dr. H. identifies will with life, yet every one knows that all acts of volition proceed from the brain alone, and never from the heart; hence by his own statement the brain is the seat of life.] According to the doctrines of the Hermetic philosophers, God is the invisible central fire in the universe from which the Light of the Logos (Christ or the celestial Adam) emanated in the beginning. Man being a Microcosm, contains in his heart the image of that internal and invisible central fire of *Love*, which sends the light of thought to the brain and illuminates the mind of the seer. We are at present not living in the age of Love, but in the age of Thought (not the age of *Reason*, but the age of *Reasoning* and *Speculation*), and by the law of heredity, life has become pre-eminently concentrated in the brain; while in a more advanced age, when the principle of universal Love and Benevolence will be generally recognized, life will become more strongly concentrated at the heart. Men will then not only think, but feel and become able to recognize the truth by that power which is known to us in its rudimental state as *Intuition*, but which, if developed, will be far superior to that uncertain feeling called Intuition, and become a Sun within the heart, sending its rays far up into the regions of thought. Then, as their Love for the supreme Good increases, will their knowledge increase, and as their knowledge expands will their Will become powerful and free.

[The physiology of this passage is all erroneous. In the ages of animalism and barbarism the heart is more powerful, like the rest of the muscular system to which it belongs. In a more humane and refined condition the brain is more predominant. The female heart is not as well developed as the male. The moral superiority of women is due not to the heart but to the superior region of the brain, to which we owe all elevation of individuals and society.]

It has been said above that Will and Life are identical, and there are sufficient facts to prove that they are one. A man may prolong his life by an effort of will, or he may cease to live if he wills to die. A loss of will-power in a limb is identical with paralysis of the latter. If the will (conscious or unconscious will) ceases to act, man ceases to live. No amount of thought exercised by the brain will raise a limb of a person, unless the person has the will to raise it; no amount of imagination on the part of the brain will execute an act, unless the will guided by the imagination causes the act to be executed. In the blood,—the representative of the animal life-principle (*Kama-rupa*) is the seat of the will, its central office is the heart. There the will or life-power acts consciously or unconsciously, sending its rays to the brain, where they become more refined, and from thence they radiate again back through the organism, causing the unconscious or conscious processes of imagination and thought. The way in which these processes take place, has been well described in Dr. Buchanan's "Therapeutic Sarcognomy." Love, Will, and Life are ultimately one and the same power; they are like the three sides of a pyramid ending in one point, or like a star emitting a light of three different hues. Without the fire of divine Love at the centre there will be no good and powerful Will, without Will man is a useless being, without virtue and without real life, an empty shell or form kept alive by the play of the elements, ceasing to exist when the form falls to pieces. But he who possesses a strong love for the good, the beautiful, and true, grows strong in Will and strong in Life. His heart sends a pure current of life to the brain, which enables the latter to see and grasp the ideas existing in the Astral light. The purer the will the more pure will be the imagination, and the more will the latter be able to rise to the highest regions of thought, while these exalted thoughts will radiate their light back again to the heart and stimulate the heart as the heart stimulated the brain.

A consideration of the above will go to prove that Love (Will or Life) and Thought (Imagination or Light) are the forces by which the soul forms and regenerates the external body, and that he who obtains mastery over these forces within his own organism will be able to change and remodel his body and to cure it of all ills. The fountain of life is the will, and if the will is good and pure and not poisoned by the imagination, a pure blood and a strong and healthy body will be the result. If the imagination (thought) is pure, it will purify the will and expel from the latter the elements of evil. *The fundamental doctrine of the most rational system of medicine is therefore the purification of the Will and the Imagination*, and every one carries within his own heart the *universal panacea*, which cures all ills, if he only knows how to employ it. The purification and strengthening of the will by acts of love and human kindness and by leading a pure and unselfish life, should be the principal object of all religious and scientific education. The Bible says: "If the *salt* (the will) of the earth is worthless, wherewith shall it be salted?" If the fountain from which all life springs is poisoned by evil thoughts, how can the soul and body be healthy? The best *blood-purifier* is a pure will, rendered pure by pure and holy thoughts.

This fundamental and self-evident truth is continually overlooked in our present age. The education of the intellect for the purpose of attaining selfish interests is made of paramount interest and the heart is neglected and left to starve.<sup>1</sup> The life-energy which ought to be employed to educate the heart and to render the will good and pure, is wasted in the top story of the temple of man in idle speculations about external and worthless things, in scientific quarrels and dogmatic disputations, which have usually no other object but to tickle personal vanity and to give to ignorance an external coat of learning. Many of our modern scientific authorities resemble ants, which crawl over a leaf which fell from a tree: they know all about the veins and cells of that leaf, but they know nothing whatever of the living tree, which produces such leaves, and moreover flowers and fruits. Likewise the rational medicine based upon reason and understanding, the science springing from a true knowledge of man will forever remain an enigma to the legally-authorized guardians of the health of humanity, as long as they know nothing of man except his external form and refuse to open their eyes and to see the eternal internal power, of which the external form is merely an evanescent image, a transient manifestation.

Hoping that with the appearance of the *Journal of Man* a new era of truly rational medicine will begin in progressive

America,

I am yours truly and fraternally,  
**Franz Hartmann**, M.D.

**Kempten, Bavaria**, April 7, 1887.

[While reaching my conclusions in a different manner by careful and prolonged experimental investigation, and expressing them differently, I agree with Dr. Hartmann in his most important principle,—the importance of love as the best element of life, in sustaining health and intelligence, and the necessity of its culture in education, which has been so long neglected, and which I have endeavored to enforce in the “New Education.” The structure and functions of the brain demonstrate that its love region is the chief support of its life, that it supports both will and intelligence, and that it not only sustains the highest health of him in whom it is developed and exercised, but ministers also to the health of all whom he meets, and is the great healing power in those whose presence or touch relieves the sick. The existence of this beneficent power in the human constitution, more restorative and pleasant than all medicines when present in sufficient fulness, is rapidly becoming known throughout our country, and is made intelligible as to its origin, nature and application by Sarcognomy, as I am teaching in the College of Therapeutics. Medical colleges, in their ignorance and jealousy, unwisely exclude and war against this nobler and more ethical method of healing, thus compelling its development and practice as a distinct profession, which is rapidly undermining their influence and diminishing their patronage by showing that, in many cases where drug remedies have totally failed as applied by colleges, the psychodynamic faculty of man may accomplish wonders.]

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## Miscellaneous Intelligence.

**Religion and Science** are exceedingly harmonious in assisting each other, but theologians and scientists are exceedingly discordant. Who is in fault? It is the fault of both. Both are bigoted and narrow-minded. Neither can see the truths that belong to the other party; theologians dislike science, not being able to see that science is a grander and more unquestionable revelation than any they have derived from tradition, and scientists deride religion and theology, not being able in their narrowness to recognize the higher forms of science in the great spiritual truths which have been apparent to all races from the most ancient limits of history. Of the scientific class the majority are averse to the religion of the times, partly from their own sceptical nature, and partly because religion has been presented in the repulsive forms of an absurd theology.

Prof. E. S. Morse, the president of the American Association, is a very sceptical agnostic.

Proud Huxley's the Prince of Agnostics, you see,

And Huxley and I do sweetly agree.

At the late meeting of the Association, August 10, at Columbia College, New York, Prof. Morse made an address in which he is reported as saying that “Dr. Darwin's theory was accepted by science, although ecclesiastical bodies now and then rose up to protest against it. He asserted that the missing links for which there was such a clamor were being supplied with such rapidity that even the zoölogist had to work to keep up with his science. It was a singular fact that no sooner did some one raise an objection to the theories of derivative science, than some discovery was made which swept down the barrier. It was safe enough for an intelligent man, no matter what he knew of science, to accept as true what science put forth, and to set down as false whatever the church offered in opposition. Every theory and declaration of science had been opposed by the church. The penalty of original sin, according to a scientific writer, was the penalty of man being raised to an upright position. Laughter.] Cannot it be proved without question that the illiteracy of Spain was the result of centuries of religious oppression and of the inquisition?”

One of the scientists told a *World* reporter (says the *Truth Seeker*) that at last year's convention in Buffalo, Prof. Morse made an address that was so full of infidelity that the Catholic diocesan authorities there forbade the clergy from attending the meetings.

However, the Association has a small orthodox element in it, and on Sunday about one-eighth of the members held a prayer-meeting at Columbia College, at which allusions were made to the ungodly character of the majority of their associates, which the said associates on Monday regarded as a very objectionable proceeding.

In the contests between scientists and theologians it has long been apparent that the theologians are steadily receding. The time was, two or three hundred years ago, when fearless scientists were imprisoned or burned by theologians. Now, the scientists who lead the age treat theology with contempt and the press sustains them. Meanwhile, scientific scepticism is invading the pulpit, and all that distinguishes the Bible from any treatise on moral philosophy is gradually being surrendered by leading theologians; they are losing religion as well as theology.

**Good Psychology.**—Prof. Wm. James, of the chair of Philosophy in Harvard College, and apparently the most philosophic gentleman in that conservative institution, has published in the *Popular Science Monthly* an essay on *Human Instincts*, characterized by a vigorous common sense and close observation. When he asserts (contrary to the old metaphysics) the existence of such instincts as fear, acquisitiveness, constructiveness, play (or, properly, playfulness), curiosity, sociability, shyness, secretiveness, cleanliness, modesty, shame, love, coyness or personal isolation, jealousy, parental love, etc., he shows the spirit of science. But is it not self-evident, Mr. James, to a man of your fine intelligence, that all strong impulses (or instincts, as you call them) must have a special nervous apparatus in the psychic region of the brain; and that loving, blushing, stealing, and fighting cannot be functions of the same organs concerned in perceiving color, or comprehending music? If I have traced these instincts to the special convolutions in which they reside, and given innumerable demonstrations of their locality, even in Boston, and before critical observers, why have you not interested yourself in the question of the cerebral localities and the complete demonstration of all the

instincts by that method?

I have even found an instinct of the *love of truth* among the higher sentiments, which, to a few rare individuals, is the predominant impulse of their lives, though, alas, in college professors, as well as in other classes generally, it is "inhibited" by a great variety of opposing instincts, interests, and social influences. Nowhere is it more completely "inhibited" than in Boston and Cambridge, as I have been informed by the most intelligent old citizens.

**The Far-away Battle.**—In the quiet home the sounds of the far-away strife are not heard. The war of the cannon is determining the destiny of empires, but it is unheard in the cottage. The myriad sounds of commerce in the city do not disturb the quiet of that home. Its quiet life attracts no attention. But there is something in that home more important than war or commerce or king-craft—something that concerns human welfare more profoundly. In that quiet home, a human life is developing; a human soul preparing for its life work—a work that will change the destiny of coming generations. In many quiet homes such a work is in progress, determining a nation's future.

All important movements are quiet and obscure in their origin. As the magnificent forest was slowly and obscurely germinated in darkness, in the seeds from which it sprung, so are the great discoveries in science and philosophy matured in quietness and obscurity. The thinker hears afar the sound of strife and the agitation of parties warring for power. He knows the follies and errors that agitate mankind, but he is withheld from entering the strife, for he has a more important work to accomplish—a work for the future. It is to such work that the *Journal of Man* is devoted; laying the foundation of that philosophy in which future thinkers shall find the principles of social reorganization. It does not join in the strife of contending parties, nor does it recognize any existing party as entirely free from error. It gives its care to new and growing truths, knowing that, as Carlyle says, "The weak thing weaker than a child becomes strong one day if it be a true thing."

**How not to do it.**—The Seybert commission having made a splendid failure to find interesting and valuable facts where other investigators have succeeded, their blundering ignorance is now assisted by newspaper mendacity. The *New York Times*, of Aug. 22, concludes an extremely stupid article on this subject, by the following paragraph, which, if the writer gave any indications of intelligence, would be set down as a pure specimen of mendacity, but is more probably a specimen of indolent ignorance:

"If Spiritualists could furnish one clearly-proved case of a spirit from the other world, seen and tested by those now living on the earth, there would be some sense and reason in their claims to be heard; but until they do, the great mass of intelligent people will refuse to listen, and rightly, too."

There must be an immense mass of the same kind of lazy ignorance in the community, when such stuff is tolerated in a newspaper. The contents of daily newspapers show that they expect more patronage from the debased and ignorant classes than from the intelligent and honorable.

**Robbery of Public Lands.**—The report of Surveyor General Geo. W. Julian, of Colorado, shows that of the patented and unpatented lands referred to, aggregating 8,694,965 acres, it will be safe to estimate that at least one-half have been illegally devoted to private uses under invalid grants, or unauthorized surveys.

He thinks it would not be extravagance to say that these land claimants, with their enormous interests, have exercised a shaping influence upon Congress. Congress has approved 47 out of 49 of these claims. In this connection the report calls attention to the action of Congress in 1860, and the Interior Department in 1879 in the famous Maxwell land grant case, which he characterizes as a wanton and shameful surrender to the rapacity of monopolists of 1,662,764 acres of the public domain, on which hundreds of poor men had settled in good faith and made valuable improvements. It has been as calamitous to New Mexico, says the Surveyor General, as it is humiliating to the United States. The report says:

"During the last Congress several members of both Houses, including the delegate from this Territory, reported bills for the confirmation of the Socorro grant, which is one of the most shocking of the many attempts yet made to plunder the public domain. I do not say that the men who introduced these bills intended to make themselves parties to any scheme of robbery, but their action shows that the hidden hand of roguery is still feeling its way in Congress for a friendly go-between."

As a remedy for this condition of affairs, Mr. Julian recommends resurveys of all grants about which there is any doubt, and the entering of suits to set aside patents obtained by fraud.

**Land Reform in England.**—One hundred and twenty-four members of the English Parliament are in favor of the following land scheme propounded by Charles Bradlaugh:

"Ownership of land should carry with it the duty of cultivation.

"Where land capable of cultivation with profit, and not devoted to some purpose of public utility or enjoyment, is held in a waste or uncultivated state, the local authorities ought to have the power to compulsorily acquire such land.

"The compensation is to be only the 'payment to the owner for a limited term of an annual sum not exceeding the then average net annual produce of the said lands.'

"The local authorities are to let the lands thus acquired to tenant cultivators.

"The conditions of tenure are to be such 'as shall afford reasonable encouragement, opportunities, facilities, and security for the due cultivation and development of the said land.'"

**Life in Europe.**—Senator Frye, of Maine, having returned from Europe, spoke thus to a reporter, at Lewiston:

"We have taken a tour of the continent and of Great Britain, and although we have seen many places, we have seen no place like home—no place in all respects equal to America. You will find in the Old World much that is admirable, but what impressed me most painfully was the poverty of the masses of the people. Why, the people in Europe live on the poorest food, and mighty little of it. I found that laborers in Glasgow work for 2s. 6d. a day—sixty-two cents. I was charmed with Edinburgh, but when I saw women drunk and fighting in her beautiful streets, the modern Athens lost her charms. I cannot convey to you the picture of the degradation and want throughout Great Britain, caused by drink. I come back a stouter cold-water man than when I went away. The drink evil is a horror. Speaking of wages, I found girls in factories in Venice working with great skill for from five to twelve cents a day, the most experienced getting twelve cents a day, out of which they have to live, but how they live is a wonder. Their chief diet is macaroni. Farm hands all over Europe—women—earn twenty cents a day. Women do most of the field work. I saw no improved machinery on the farms of the continent. I have seen twenty women in one field at work—not a man in sight. The plain people see no meat to eat once a week on the continent. The condition of American wage-earners is incomparably better than that of working people in Europe. It's the difference between comfort and competence, and discomfort and insufficient food and clothing.

"Perhaps the most contemptible people one meets abroad are the Anglicized Americans—the man who apes, both in manners and language, what he regards as the English aristocracy, affects to believe everything in England perfect, and seems to be ashamed to institute any favorable comparison between his country and that."

**Education in France.**—The Academy of Medicine has passed a resolution demanding of the government changes in the hours of study for children, larger play grounds, removal of schools to the country, and daily teaching of gymnastics. These suggestions are urgently needed in France, where children are subjected to a far more rigid and enfeebling method than in America. The power of the church over education is destroyed in France, and religious instruction is now prohibited.

**Canada and the Union.**—Rev. W. H. Murray reports a strong feeling in Canada for annexation. He says:

"A gentleman of great influence in this city, and of established loyalty to the land of his birth, described the position here very distinctly in the following words: 'I wish I could make money and remain an Englishman, but I can't, and hence I propose to become an American, for I cannot impoverish myself and my family for a sentiment, however honorable.'

"In the many conversations I have heard on the part of many people of all classes touching commercial union, it has, in every case, been assumed that it was only a prelude to political union also. Many have insisted, as they talked, that the two countries should come together, and at once; that the feeling of the country was fast ripening for it, and that what it lacked in education in this matter would soon be learned. This has surprised me; for it was not so a few years ago."

**Woman in the Moon.**—The discovery of a woman in the moon is announced by W. H. Burr, in a letter to the *New York Sun*. It was made more than a year ago by Dr. James H. Thompson, a retired physician of Washington. It is a profile occupying the west half of the moon, the dark spot above answering to the banged hair. She faces a little upward, and has a neck big enough to require a collar of the size that Mr. Cleveland wears. And yet she is good-looking. The profile may be seen through an opera-glass.—*Truth Seeker*.

**Emancipation from Petticoats.**—"That distinguished Parisienne, Mme. de Valsayre, has been petitioning the French legislature in favor of the emancipation of women from petticoats. Her case is that petticoats are very dangerous, leading to innumerable fatal accidents, and that trousers are just as decent, more healthy and far less expensive. 'All this is very true,' says Labouchere, in the *World*, 'though I do not suppose that if the French women were as free as our own countrywomen are to dress as they like, they would make much use of their liberty. Trousers do not afford the same scope for decoration as petticoats. They cannot be trimmed to any considerable extent, and the effect of an improver or bustle worn under them would be absurd. I have always wondered, however, that serious ladies in this country do not set more store by this branch of progress. If I were a woman I would much rather have a pair of trousers than a vote or even a university degree.'"

**Women's Rights in the Streets.**—The lawless freedom with which men approach or assail women in some American cities, while women on the other hand are subjected to the meddlesome and domineering interference of policemen, lends some interest to the case of Miss Cass in London, one of the victims of police brutality, which has excited an inquiry and comment in Parliament, and is likely to result in the punishment of the policeman. The *New York Sun* says:

"The case of Miss Cass, who was arrested in Regent Street as a disreputable character, has started in the *Pall Mall Gazette* a discussion of the annoyances to which decent women are subjected in the streets of London. It will be remembered that she was a respectable girl recently arrived in London, where she had obtained employment in a milliner's shop, and that while waiting in Regent Street early in the evening she was arrested by a policeman, who insisted in regarding her as a professional street-walker, as which, also, she was held by a magistrate, who refused, to listen to her denials and explanations.

"Many women have accordingly written to the *Pall Mall Gazette* to ask why, if a woman is liable to arrest on the mere suspicion of having addressed a man, men are allowed to annoy and insult women in the London streets with perfect impunity. The testimony of them all is that, even in the daytime, a lady with any claims to good looks, and who walks alone, is always liable to such treatment, no matter how modest her apparel and reserved her demeanor. It is not merely of insolent and persistent staring that they complain, for they have grown to expect that as a matter of course; but they are actually spoken to by men who are strangers to them, in the most insinuating and offensively flattering terms. These men are commonly described as 'gentlemen' in appearance; 'a tall, distinguished, military-looking man;' 'a youthful diplomat;' 'a government official, a man

holding a lucrative appointment,' and the like. They are not roughs; from them ladies have nothing of the sort to fear; but men who think to have the greater success and to enjoy the complete immunity because they wear the garb of gentlemen.

"Rev. Mr. Haweis writes that 'you might easily fill the *Pall Mall Gazette* with nothing else for months, for we have come to such a pass as this, that a young girl cannot stand aside at a railway station while papa takes tickets, nor a girl lead her blind relative through the streets, nor can a married woman go twenty paces in a London thoroughfare without the risk of insult or even assault.'"

These evils are a relic of the old ideas of woman's inferiority, and their only sure remedy is the destruction of that inferiority by the industrial and professional education, which will make the woman the par of her brother, and enable her to maintain her equal rights everywhere.

**A Woman's Triumph in Paris.**—The public examination of Miss Bradley at the Ecole de Medicine in Paris is thus described:

When Miss Bradley stepped into the arena, clad in the traditional garb, the general comment of the audience was:

"How like *Portia* in the trial scene of the 'Merchant of Venice.'"

It was known to Miss Bradley's college mates and other friends that her thesis would be on "Iodism," and that she had taken a year to write an elaborate book on the subject, which will soon be republished in England from the original French. For an hour and a half she was questioned with great shrewdness and ability by four of the leading professors of the Ecole de Medicine,—Drs. Fournier, Gautier, Porchet, and Robin. Each of these gentlemen had previously received a copy of Miss Bradley's bold book, and they had brought their copies to the examining room, with multitudinous interrogation marks on the margins, showing that the new treatise had not only been very carefully read, but had excited much curiosity and attention. Miss Bradley had the great advantage of an unhackneyed theme, which she skilfully illustrated by a numerous array of unfamiliar facts.

Her triumph was of a very peculiar character. Her four examiners said to her, with admiring frankness: "You have been working a new field; we cannot agree with many of your conclusions; further investigation may lead either yourself or us to different views; but, meanwhile, you have presented to the college a thesis which does you uncommon honor, and for which we unanimously award you the maximum mark of merit."

After the announcement of the award, Miss Bradley was entertained at dinner by Miss Augusta Klumpke, the first female physician who has ever been admitted to practice in the hospitals of Paris. Both these ladies are Americans—Miss Klumpke from San Francisco, and Miss Bradley from New York.

**A Woman's Bible.**—We have not reached the end of revision. A woman's translation of the Bible is expected next. Mrs. Elizabeth Cady Stanton is the chairman of the American committee having this matter in charge, and a woman's Bible and commentary are to be expected in due time.

**Work for Women.**—Miss Katie Young, of Ironton, Mo., writes *The Voice* a letter upon the advantages of plating, as a new and pleasant field of work for women. A relative made her a plating-machine at a cost of \$4; she readily obtained orders for work from everybody in the neighborhood; the outlay for chemicals, etc., proved slight; and in 22 days she netted \$95.45. Her brother, working 24 days, cleared \$90.50. Miss Young states that she is making a collection of curiosities, and that to any lady sending her a sea-shell, fancy stone, piece of rock, ore or crystal, an old coin, or curious specimen of any description, she will be glad to mail complete directions for making a machine similar to hers, that will do gold, silver and nickel-plating.

F. Henry Greer writes: "Two young gentlewomen are studying electrical engineering, which profession has not yet been overcrowded. Great fortunes have been made in its pursuit. If any readers of your valuable journal are interested, I will freely give them any information in my power."

**Mrs. Stanton on the Jubilee.**—"If mine has been the one discordant note in the grand jubilee chorus to the Queen, it is because behind all the busy preparations for the most brilliant pageant the world has ever witnessed, of gilded royalty and nobility, my eyes beheld the dark shadows on the background of homeless, starving men, women and children, into whose desolate lives would never come one touch of light or love. There is something to me unspeakably sad in the eager, gazing multitudes that crowd the streets on these grand gala days. There is ever a sphinx-like questioning look in their upturned faces that seems to say, 'Ah! must the many ever suffer that the few may shine?' As the sun went down on that 21st of June, what a contrast in the close of the day's festivities between the children of luxury and want.

"Who that can share in imagination one hour the miseries of England's impoverished people, can rejoice in a reign of fifty years that has cost the nation 22,000,000 of pounds sterling in extra allowances to the Queen and her children, in addition to the legitimate cost of the royal household and the hereditary property rights of the throne?" Nevertheless the Jubilee was a fine exhibition, and the *London Baptist* says that \$4,000 was paid for the use of the windows of one house to see the Jubilee.

**Electricity** seems destined to be the motor power for street cars. In Montgomery, Alabama, the mule has already been superseded, and there are fifteen miles of street railways operated by the electric motor. Some satisfactory experiments have been made on the Cambridge Street railway. Edison's latest discoveries in the conversion of heat into electricity are expected to produce important results, dispensing with the intermediate use of steam, and ultimately getting the power from the sun's rays.

**Progress of the Telegraph.**—The *London Times* thus summarizes some of the statements made by Mr. Raikes, the postmaster-general, in his speech delivered at the telegraph jubilee the other day:



At first a machine required five wires before it could dispatch a message. Now on one single wire seven or eight messages can be sent simultaneously. At first the rate of sending did not amount to more than four or five words a minute. Now on the latest machine no less than 462 words a minute can be dispatched. The number of messages has increased by steady steps, until now, under the new tariff and with the facilities that have been so widely extended since the telegraphs came into the hands of the government, the number is truly portentous. Those sent during the past year amounted to close upon a million—a fifty-one and one-half millions in all. Letters have grown from 80,000,000 in the year of the Queen's accession to more than 1,400,000,000. According to Mr. Pender, there are some 115,000 miles of cables lying at the bottom of the sea. The progress in this department has been constant. The latest scheme, as the new colonial blue-books show, is for laying a cable under the Pacific Ocean, from Vancouver to New Zealand. Surely there is no task from which modern science will recoil.

**The Mystery of the Ages.**—A work recently published at London by the Countess of Caithness is a work of ability and learning, devoted especially to a philosophy which is thus defined:

“Theosophy is the essence of all doctrines, the inner truth of all religions.... God is Spirit, and Spirit is One, Infinite, and Eternal, whether it speak through the life of Buddha or Jesus, Zoroaster or Mahommed.... The ideal of the Theosophist is the at one-ment of his own spirit with that of the Infinite. This is the essential teaching of all religions, and to obtain this union you must believe in and obey the voice of your own higher conscience; for the true Christ is the Divine Spirit within you, and thus, God manifest in humanity.”

**Progress of the Marvellous.**—Mrs. Herbert, of St. Joseph's Hospital, Joliet, Illinois, as reported Aug. 16, had slept 219 days, sitting in an easy chair, in a cataleptic state. She rarely moves a muscle, and if her arm is lifted and not replaced it remains as it was left. Her hands are cold, and her face very pallid. The food given her daily, it is said, would only sustain life in a bird, and the doctors are expecting her death.

Mr. C. J. Helleberg, of Cincinnati, says that a lady of his family has become developed as a medium, and many messages have been written through her. Among others, a message from Charles XII. of Sweden declared that “Sweden will be a republic sooner than any other power in Europe,” and the elections will be easily and honestly managed.

**A Grand Aerolite.**—The *Galt Gazette* (California) describes the fall of a meteor in that vicinity, witnessed by Dr. Goodspeed, which fell in a slough and so heated the water as to kill the catfish that inhabited it. It lies in the pond, and looks as if a hundred feet wide. A much more marvellous story has been published of an engraved meteoric stone falling in an obscure portion of Georgia near Clayton Court-house, which is a hoax, and has been so pronounced by the postmaster at Clayton.

Whether the California story is true I have not ascertained, but the fall of a great meteor in this region has developed a grand meteoric capacity for lying. The despatch first published by the *Boston Herald* described the stone as falling near McAdam Junction, not far from Bangor, Maine, making the crockery rattle at the Junction, and plunging into the earth all but about ten feet of the stone, which was so hot that no one could come within fifty yards of it. It has not been found at all, for it dropped into the Bay of Fundy; but it illuminated the whole country for a vast distance, and looked as large as the moon. It had a long trailing violet light behind it as it fell. Our meteoric showers generally occur in August, this was on the 15th of September.

**The Boy Pianist.**—Joseph Hoffmann is considered in London the greatest young pianist since the days of Mozart. He is coming to America. He is from Poland.

**Centenarians.**—The *Rabbi Hirsch*, born in Poland, died a few weeks ago in Brooklyn, aged 109. He saw Napoleon on his march to Moscow. Mrs. Paradis of North Grosvenordale, Conn., died Aug. 26, aged 120. The *Boston Globe* in making a record of old people in Maine, has mentioned Miss Betsey Sargent, of Canterbury, aged 100; Mrs. Ellen Scott, Portsmouth, 100; Mrs. Mary Mann, Oxford, 101; Mrs. Jane Wilson, Edgecomb, 102; John Chandler, Concord, 102; Mrs. Nancy Chase, Edgerly, 103; Perault Pickard, Colchester, 107; Robert Peters, Berwick, 107; George McQueen, Portland, 109; Giles Bronson, Castleton, 115; Mrs. Mary Ludkends, Portland, 117.

Samuel Zielinski, a Pole, who came to the United States after he was 100 years old, is now living a mile from Dubois, Illinois, with his descendants, at the age of 120.

**Educated Monkeys.**—The story comes from Brazil, by way of Panama, that on a hemp farm seven large monkeys have been taught to work as laborers, and that they work faster and eat less than negroes. If they can pull hemp, why not do other work? If this report is confirmed it may be of some importance.

A correspondent of the *New York Times* says that monkeys from Cape Town, Africa, have been introduced successfully into the hemp fields of Kentucky. One gentleman employs twelve near Shelbyville, Perkins & Chirsman have eleven, Smith & Murphy twenty-six, and J. B. Park, near Kingston, who introduced monkey labor, employs seventeen. The monkeys cost about \$60 each, they are docile, easily taught, and cost about one fourth of human labor.

**Causes of Idiocy.**—Dr. T. Langdon Down, inquiring into the causes of idiocy, has found that intemperance of parents is one of the most considerable factors in producing the affection. His view is confirmed by some French and German investigators, one of whom, Dr. Delasiauve, has said that in the village of Careme, whose riches were in its vineyards, ten years' comparative sobriety, enforced by vine-disease, had a sensible effect in diminishing the cases of idiocy. Nervous constitution and consumption exercise important influence. Of the professions, lawyers furnish the smallest proportion of idiots, while they are credited with the procreation of a relatively very large number of men of eminence. With the clergy, these proportions are more than reversed. The influence of consanguineous marriage, *per se*, is insignificant, if it exists.—*Pop. Science Monthly*.

**A Powerful Temperance Argument.**—A most powerful argument for temperance is furnished by the records of the

British army in India for 1886, showing the comparative amount of crime, disease, and death among 12,807 soldiers, of whom 3,278 were temperate, and 8,828 were drinking men. The number of cases of crime among the abstainers was 172, among the drinkers 3,988, a difference of one to twenty-three in number, or more than ten to one in percentage. The temperate had but 4.32 per cent. of crime, the drinkers 45.17 per cent. The percentage of sickness and death was more than twice as great among the drinkers. Liquor, therefore, *more than doubled* the proportion of disease and mortality, and increased the *criminality more than tenfold*. Of the numbers tried by court martial there were 120 times as many proportionally among the drinkers as among the temperate. The destructive effects of drink are far greater in hot climates, and perceptibly greater in hot weather.

The Southern States of the Union are in advance of the Northern on the temperance question. The legislature of Georgia has passed a bill by a large majority which taxes wine rooms in prohibition counties \$10,000. At present this covers nearly all the State.

The forty-fifth annual report of the Registrar General of England shows that estimating the average mortality of males in England at 1,000, that of brewers is 1,361, of innkeepers and publicans 1,521. Scotch reports show the mortality of males engaged in the liquor business to be 68 per cent. above the actuaries table for healthy males, and 49 per cent. over the English life table.

**Slow Progress.**—It was a long time before lobelia was recognized by the profession—before anything good was found to belong to it. Now one of our leading professors thinks lobelia will become the most valuable of our cardiac sedatives—regulator of the heart's action. I wrote up the value of lobelia in surgery, obstetrics and practice over thirty years ago; also the valuable properties of hydrastis can., both of which were almost unnoticed then and since by regular practitioners. But now Prof. Bartholow has discovered their great merits and written the latter up especially, and what I and Prof. Dodd, (V. S.,) wrote a third of a century ago will be credited to others. Well, who cares? The tincture of calendule flavas I have tried to force upon the profession for forty years as a dressing for wounds, but it will require some one higher in the profession to give it a hurrah, boys!—*Med. Summary.*

**Community Doctors.**—It is manifestly the interest of society that the doctor should be engaged and paid by the year, so that his interest would be to keep the people well instead of sick. Moreover, it would be more economical, as a doctor, secure of steady support, would not be inclined to make heavy charges, and the patient would not find a fit of illness making a dangerous inroad on his finances, so as to double his misfortune. The scheme has been advocated in the newspapers.

**The Selfish System of Society.**—The system of antagonism and competition results in a universal system of plunder by exorbitant charges, and each man protects himself by overcharging in return. Plunder by overcharging is so much the custom that no one objects to it. The *Boston Herald* says: "There is a baker in New York, who sells large loaves of bread of the finest quality for five cents a loaf. The same-sized loaf sells for ten cents in Boston." In like manner, Americans generally pay ten cents for a loaf about half as large as that sold for ten cents, in London; yet the London baker has to buy the same flour after its cost is enhanced by an ocean voyage. This is the custom of society; the glass of lemonade, costing perhaps two cents, is sold at all prices, from five or ten cents up to twenty-five.

The correspondent of a Denver paper says that lumber costing forty-five cents a hundred feet, is sold at \$2.25. These are samples of the financial disorder of life in all departments.

**Educated Beetles.**—Bridgeport, Conn., Aug. 24. Miss Emily Nelson, of this city, has received a present from Merida, Yucatan, in the shape of an educated jewelled bug. It has a harness of gold and is jewelled with precious stones.

The custom is said to have originated among the Spanish nobility several centuries ago, when the first bug was educated and worn by a princess. The bug became greatly attached to the maiden, and partook of her moods and dispositions. When she was sad or disheartened the bug became sluggish; and when she was joyous and vivacious the bug was likewise lively in its movements. At her death, the bug pined away and died, too.

Miss Nelson is very happy and justly very proud of her present. The insect is about the size of an ordinary black beetle. Around the body is firmly fastened a gold band. A gold strap is riveted to this and passes down the back around and under the body, and is welded upon the under side to the gold belt. Upon the back are tiny jewels set in gold and fastened into the shell. The coloring of the shell is a brilliant Nile green, edged with black. The movement of the bug gives flashes of variegated colors. Upon the under side is fastened a delicate gold chain which in turn is attached to a brooch. It is educated to eat from the lips. It understands various whistles and calls, and appears and disappears at the word of command.—*Globe.*

**Rustless Iron** is being manufactured in New York by a new process which, it is claimed, converts the surface of the metal into magnetic oxide of iron. This is done by subjecting it successively to the action of highly heated air and carbonic acid gas from coal fires. The process can be applied with most satisfactory results to water-pipes and architectural work.

**Weighing the Earth.**—Prof. Proctor proposes to repeat in Florida an experiment to determine the weight of the earth, and mentions the results of the methods heretofore tried. Newton first estimated the weight of the earth to be between five and six times as great as that of water. Such a weight it would have if it were one half iron and the other half limestone, or half copper and half clay. Evidently the metallic weight preponderates.

Weighing the earth is accomplished by comparing the effect of its attraction with that of much smaller bodies. One method is to compare, by balancing the weight of two balls, one above a globe of lead, as large as practicable, and the other below it, so as to have the attraction of the leaden globe pulling up and counteracting the gravitation to the earth. The effect is very slight and requires delicate apparatus.

By another, but more inaccurate method, the attraction of the earth has been compared with that of a mountain—a very

indefinite method indeed. A better method was that of Astronomer Airy and Mr. Dunkin, who went down into the Harton coal pit 1,260 feet to see how much difference that depth would make in the movements of a pendulum. It gained  $2\frac{1}{4}$  seconds in 24 hours, and the weight of the earth was inferred to be over  $6\frac{1}{2}$  times as great as that of water; but it is manifest that such a method could yield nothing much more accurate than the mountain experiment which indicated a weight  $4\frac{3}{4}$  times that of water. The ball experiment, which is the most reliable, indicated  $5\frac{1}{2}$  times the weight of water, thus coinciding with Newton's astronomical opinion, which is probably true.

**Head and Heart.**—The popular use of the terms head and heart to represent thought and emotion, which is contrary to physiology, is analogous to Dr. Hartmann's statement of the oriental doctrine that thought alone belongs to the brain, but life and will to the heart. This ancient *speculation* (not intuition) is easily refuted. If it were true, the will power and powers of life would be proportional to the development of the heart, regardless of the brain, but the reverse is the fact. Great development of heart does not increase either will power, or life, but is injurious to both. The enlarged (hypertrophied) heart is injurious to vital power and will power, and in proportion to its increase, it tends to shorten life by apoplexy or some other form of cerebral disorder. It produces no increase of either life, will, or love. In fact, the stomach is more nearly associated with love than the heart, for men are much more amiable after enjoying a feast, but the heart, which is a part of the muscular system, is at its maximum of action in combat and war.

**The Rectification of Cerebral Science**, commenced in this number, will be continued in the November number, bringing the science up to its present condition, and showing how, after the rectification is completed, the science attains a grand simplicity, and, instead of being puzzled by cerebral organology, a very brief instruction will enable us to master the subject. In 1836 I instructed Prof. Cubi at New Orleans in the old organology, giving him six lessons in exchange for his instructions in Spanish. Three lessons would give an equal familiarity with the new system, though it is four times as extensive.

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## Chapter IX.—Rectification of Cerebral Science, Correcting the Organology of Gall and Spurzheim.

Approximate correctness and incompleteness of Gall and Spurzheim—Grand anatomical discoveries of Gall—Reception of his doctrines—His successors—Omission of Pneumatology and Physiology by Gall and Spurzheim—Organs and faculties overlooked—True locations of the faculties they recognized, Amativeness, Philoprogenitiveness, Adhesiveness, Inhabitiveness, Destructiveness, Combativeness, Secretiveness, Acquisitiveness, Constructiveness, Cautiousness, Approbativeness, Self-Esteem, Firmness, Religion, Benevolence, Hope, Marvellousness, Poetry, Ideality, Imitation, Wit or Mirthfulness, Eventuality, Individuality, Perceptive Organs, Time, Comparative Sagacity, Causality, Tune, Constructiveness, Language—Comments on the Organology of Gall.

The first question that occurs to the enlightened enquirer, when he learns that the functions of the brain have been positively determined by experiment, is whether the craniology of Gall and Spurzheim was successful in locating the cerebral functions, and how nearly their inferences from development correspond with the revelations of experiment.

It is with great pleasure that I am able to say that the system of Gall and Spurzheim was a wonderful approximation to the truth. Dr. Gall was pre-eminently the scientific pioneer of the nineteenth century. No single individual ever did so much to enlarge the sphere of human knowledge, and to establish the permanent foundations of philosophy. Up to his time, the brain of man was at once the greatest mystery of anatomy and the repository of a greater amount of wisdom and truth than all other realms of science which had previously been explored. But so limited was the knowledge, and so narrow the understanding of the learned, that the grandeur of cerebral science was not even suspected, and, even at the present time, it is so remote from the speculations of the learned that, like a distant star, it has few practical relations to their life; nor will its magnitude be realized until an ample literature shall have made its scientific record.

Into this field of mystery, Dr. Gall advanced with a courage unknown to his predecessors, and his success was equal to his courage. The entire plan and constitution of the brain were revealed by his anatomical genius, and his successors have but carried further and perfected his anatomical system. His anatomical exposition of the brain, addressed to the French Institute in 1808, is one of the great landmarks of the progress of science—the commencement of a new era; and his exposition of its functions was the solution of a problem which had defied the genius and learning of all his predecessors. His discoveries in anatomy were so great that Reil (himself a brain anatomist of the highest rank, whose name is permanently associated with anatomy by the name "Island of Reil," which belongs to the location in which Gall made his first discovery of the faculty and organ of language), Reil, I say, declared that Dr. Gall had shown him more in his dissections of the brain than he thought it possible for any one man to have discovered in his lifetime; and, in fact, some of the old anatomists, not having been personally instructed by Gall, professed to find it difficult, if not impossible, to unfold the brain after his manner.

These discoveries gave Dr. Gall at once a very eminent rank among the learned, for anatomy being a physical science, there never has been any opposition, jealousy, or scepticism against its cultivation among the educated, nor was there anything marvellous in his revelation of cerebral functions, for he studied only the common familiar faculties of men and animals, and never looked into the mysterious and marvellous powers which a more thorough investigation has revealed.

Indeed, his reception at first was quite triumphant, and it was not until the death of Gall and Spurzheim, leaving no able and competent representative to carry on their labors, that the drift of medical scepticism and ignorance arrested the progress of his doctrines. I say *ignorance*, for the aversion to the doctrines of Gall was due far more to the ignorance of the profession and their entire neglect of the craniological method than to any other causes.

Gall had good reason to be satisfied with his first reception, except as to the hostility of the Austrian government, which suppressed his lectures and compelled him to go abroad, settling finally in Paris, where he again encountered governmental hostility in the unfriendliness of Bonaparte, whose rejection alike of Gall and of Fulton, who wished to

introduce steam navigation, demonstrated that great military and political ability may co-exist with great shallowness of mind in reference to all things new, original, and philanthropic. So it has always been, and so it continues.

In his travels in Germany, from 1805 to 1807, accompanied by Dr. Spurzheim, "I experienced everywhere (said Gall) the most flattering reception. Sovereigns, ministers, philosophers, legislators, artists seconded my design on all occasions, augmenting my collection, and furnishing me everywhere with new observations. The circumstances were too favorable to permit me to resist the invitations which came to me from most of the universities." Thirty-four of the leading cities and seats of learning enjoyed the visits of Gall and Spurzheim before they settled in Paris, where, although French jealousy arose against this German invasion, and the influence of Napoleon prevented their cordial reception, they nevertheless commanded and retained the respect of scientists and had many devoted friends, including Broussais and Andral, who then stood at the head of the medical profession, and of Corvisart, Napoleon's physician, who could not overcome his master's prejudice.

In speaking of the great void left by the decease of Gall and Spurzheim, I do not forget that for a few years George Combe, Dr. Elliotson, and Dr. Macartney, of England, and Dr. Caldwell, of America, survived, but these eminent gentlemen were not so identified with the science, or so competent to sustain it as to wear the mantle of its founders. My own labors beginning after the death of the founders were those of investigation and discovery, and never to any great extent those of propagation. Indeed, for twenty years I entirely abandoned the scientific rostrum, and almost ended my labors, feeling that my duty had been done in the way of development and demonstration. But in accordance with the great law of periodicity, I resumed my labors in 1877-78.

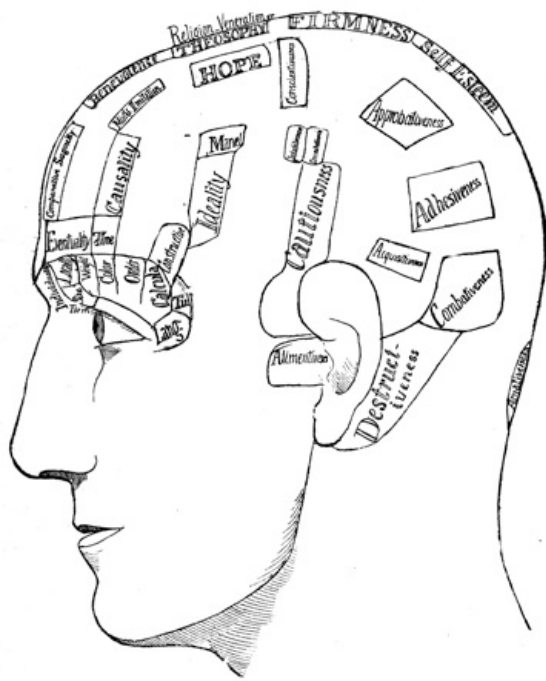
When we look at the doctrines of Gall and Spurzheim in the light of positive science and philosophy, our first observation is that they fell very far short of revealing the entire functions of the brain, and discovering in it all the important spiritual and physical faculties and energies of life. They did not attempt to explore the brain as a physiological organ, and determine how or in what special organs it controls the physiological functions. These may be regarded as one half, though the lower half, of its capacities, out of which arises a vast amount of medical philosophy.

As to the psychic half of the cerebral functions, they omitted entirely that portion which relates to pneumatology. They thought nothing of the soul as an object of science, and made no attempt to trace its connection with the brain, and the vast number of phenomena which lie along the border line between the physical and spiritual, and which are conspicuous in the phenomena of somnambulism, sleep, dreaming, hypnotism, spiritualism, clairvoyance, trance, ecstasy, and religious marvels.

Overlooking these things, they sought the seats of from twenty-seven faculties (as with Gall) to thirty-five (as with Spurzheim), and did not appear to realize how many had been entirely omitted. When all they attempted to locate are located by positive experiment and assigned their proper localities and limits, we find fully one half of the cerebral surface vacant for organs of other functions. Indeed, the first large publication of Gall and Spurzheim, in four volumes folio, with an atlas of 100 plates, begun in 1809 and finished in 1819, did not in the cranial map of organs profess to be a complete development of the functions of the brain. It located organs, but did not determine the functions intermediate between their boundaries. This was the map of Gall. In that of Spurzheim the intermediate spaces were occupied and the entire exterior surface of the brain devoted to organology, yet still the basilar and interior surface of the brain remained unknown to Spurzheim, and the exterior regions which he supposed entirely occupied by his organs were but half occupied by them. Thus when we consider the unexplored basilar and interior regions, and that half of its exterior surface which was erroneously appropriated to the thirty-five organs, as well as the erroneous location of several, we perceive that *more than half* of the organs and functions of the brain remained for investigation.

Turning away from the anatomy to contemplate the psychology, we perceive that *more than half of human nature* had been omitted from the German scheme,—that half of the mental functions which belongs to the organs of the vacant spaces on the corrected map, and in addition to these the higher psychic functions, and the lower physiological functions, neither of which Gall and Spurzheim explored, because they did not attempt to study the brain as a physiological organ, and they did not bring the soul and the higher functions of the mind within the scope of their science.

Gall was a bold, original naturalist and anatomist but not a psychologist; and the incorrectness of his psychology hindered his investigations, and prevented him from carrying out a proper subdivision of faculties and organs. He says in the last volume: "Each fundamental power, essentially distinct, includes sensation, perception, memory and recollection, judgment and imagination,"—disregarding the truth that these are distinct intellectual powers, belonging to different organs, and therefore bearing no proportion to each other. One may have an immense memory without imagination, or a brilliant imagination without much memory. These, and many other psychological errors, are apparent in the writings of Gall, and still more in those of Spurzheim.



In the drawing herewith presented, the thirty-five organs of Spurzheim are assigned their proper locations and dimensions. The first organ, **Amativeness** (made second by Spurzheim), was assumed to occupy the entire cerebellum. It really occupies only its median and superior portion, and a small section of the anterior surface of the spinal cord, adjacent to the encephalon. This error of Gall and Spurzheim did a great deal to discredit their system. It manifested on their part a fallibility of judgment, and a dogmatic adherence to first impressions in the face of evidence to the contrary; for the experiments of Rolando and Flourens demonstrated a connection between the cerebellum and the general vital force and muscular action. The relation may not have been clearly understood, but the facts were decisive, and the researches of Majendie, with the more recent ones of Ferrier, have made more clear the relations of the cerebellum to the muscular system and vital force.

The doctrine of Gall has been abandoned by physiologists because refuted by many facts, the most decisive of which is that the cerebellum of castrated horses is larger than that of stallions, which could not be possible if the cerebellum had only sexual functions. Moreover, the doctrine of Gall was essentially unreasonable in itself. To suppose that so large a portion of the brain which is continually active, being well supplied with blood, could have a function which is but occasionally active, and which, through the greater part of human life, is unnoticed or inactive, is extremely unreasonable; and to suppose that the serious disturbances of animal life and muscular motion, caused by ablations of the cerebellum, were due to the disturbance of an organ having only sexual functions, was thoroughly absurd. The parrot-like repetition of these exploded errors by the followers of the phrenological system contributed to its discredit in the medical profession.

The 2d organ of Gall (3d of Spurzheim), **Philoprogenitiveness**, was regarded as one of the best known phrenological organs, but my unprejudiced study of heads soon assured me of its inaccuracy. The organ was small in Spurzheim, who was remarkably fond of children, and I have found it small in ladies who showed no lack of parental love, but generally well developed and active in criminal skulls. One which I obtained in Arkansas, of a man named Richmond, had this region large and active, although he was the one of a group of murderers by whom the children, or, rather, boys, were killed. This region is *extremely defective* in the brains of birds, which are certainly very devoted to their young. The attachment to children belongs really to an interior region of the occiput, where the occipital lobes face the median line. Hence it is that a large occipital development very often coincides with the love of children; but the true position of the organ renders it difficult to determine its development in life.

**Adhesiveness** (3d) is located by Spurzheim farther back and lower than it should be; also, too far back in Gall's map. It belongs to the vacant space in front of Gall's location.

**Inhabitiveness** (5th) is an imaginary definition of the function located behind Self-esteem. Equally imaginary is the doctrine of the Edinburgh phrenologists, who call it Concentrativeness. The observations of Gall led him to regard it as a portion of the organ of Pride, and as giving to animals a love of lofty locations. Gall was nearer right than Spurzheim or Combe. The only function I find in this spot is Self-confidence. The tendencies to a quiet love of home, and the ability to tranquillize and concentrate the mind, are located, virtually, above the ear on the temporal arch, the ridge which separates the lateral from the superior surface of the head.

**Destructiveness**, the 5th organ of Gall and 1st of Spurzheim, was located much too high and too far forward by Gall. I am surprised at this, since it differs so widely from the indications of comparative anatomy that it is difficult to imagine how Gall was misled. Any one comparing the skull of a dog with that of a sheep may discover the error. He called it Murder, or the wish to destroy. Spurzheim, who does not describe its location, says, "At the beginning Gall placed the seat of this organ too far behind the ear, but a great number of observations convinced us that its seat is immediately above the ear." The truth is that the convolutions which terminate on the temporal bone over the ear are only on the border of Destructiveness, and produce only an irritable and impulsive temper. The true Destructiveness extends fully an inch under the surface of the middle lobe, along the petrous ridge of the temporal bone, and is manifested externally just behind the ear by the prominence of the mastoid process.

**Combativeness** (the 6th of Spurzheim, or Courage and Self-defence, the 4th of Gall) is located with tolerable

correctness by each and properly described.

**Secretiveness**, which is but a modification of Cautiousness, occupying its middle region, is much too large on the maps, and on that of Gall it is quite out of place—too far forward and too high up, occupying a region which produces modesty and refinement.

**Acquisitiveness** (7th of Gall, 8th of Spurzheim) is still farther mislocated on the map of Gall, occupying a region of intellectual, inventive and literary capacity. This is the most *outré* and absurd of all Gall's locations. Placing this selfish and grasping propensity in the front lobe which belongs to intellect, when it really belongs to the selfish, adhesive, and combative elements of the occiput, is an error of so extravagant a character as to show that Gall had no correct psychology in his mind, and no capacity or desire to construct a harmonious system. Spurzheim's location, much farther back, is somewhat less erroneous, but both are thoroughly false, and a few months of my first observations fifty-two years ago satisfied me as to this error. That it should have flourished unchallenged by Phrenologists for eighty years, seems to show that when a dominant idea is once established in the mind, all facts are made to conform to it. Is it remarkable, too, that the very great difference between the locations given by Gall and by Spurzheim has not attracted notice. But in fact the map of Gall has never had any popular currency. Spurzheim and Combe have been the accepted authors. The true location of acquisitiveness is anterior to combativeness, and lower than adhesiveness. Gall was misled by studying the young pickpockets and thieves of Vienna. The organ that he found suits a low cunning and dextrous character when the head lacks elevation.

**Constructiveness**, Spurzheim's 9th (Bausinn, or aptitude for mechanical arts, of Gall No. 19), is decidedly mislocated by Spurzheim. Instead of being placed in the purely intellectual region adjacent to calculation, order, and system, it is carried back and down into the region of somnolence and sensitive impressibility. Gall's location is a little worse because lower, being carried out of the intellectual region into the middle lobe according to his published map. It is very easy to detect this error in examining a number of heads, and it was quite apparent to me in my first year's observations. In impressible persons the touch upon this locality produces nothing but a dreamy influence, and a disposition to close the eyes. Carried farther, it produces the mesmeric sleep.

**Cautiousness** (the 10th of both Spurzheim and Gall) was too far back in Spurzheim's map, occupying space that belongs to adhesiveness. It runs downward along the course of the lateral convolutions, and its more timid and gloomy functions are developed near the ear, differing widely from the functions of its upper portion.

**Approbativeness** (the 11th of Spurzheim, and 9th of Gall) is located with substantial correctness, covering, however, more functions than that term expresses. Gall's location and definition are also substantially correct.

**Self-Esteem** (the 12th of Spurzheim, 8th of Gall) is well located and described with approximative correctness.

**Firmness, Religion** (Veneration or Theosophy), and **Benevolence** are so well located and described by both Gall and Spurzheim as to need but little comment at present. The four superior organs on the median line, and the organ of **Conscientiousness** were more correctly located and described than any other large portion of the brain.

**Hope** is not adjacent to Conscientiousness, but parallel to Religion.

**Marvellousness** has a preposterously large space assigned it, being really a small organ at the summit of Ideality, which exercises a more intellectual and less superstitious function than has been given it. Marvellousness, Hope, Conscientiousness, Time, Order, Weight, Size, and Individuality are the eight organs discovered and added by Spurzheim, not having been recognized by Gall. The exterior portion of Spurzheim's Marvellousness occupies the space devoted by Gall to Poetry.

**Poetry**, recognized by Gall, is brought lower by Spurzheim and called **Ideality**. Both locations are substantially correct. The location of Gall is the seat of Marvellousness, Imagination, and Spirituality; that of Spurzheim is well expressed by the term Ideality, and the description given, but the word Poetry is rather too limited as the definition of Gall's organ. It gives brilliance to prose and to oratory, or even conversation, as well as to poetry.

**Imitation**, adjacent to Benevolence, is somewhat better located by Gall than by Spurzheim, who gives it too much breadth anteriorly.

**Wit** or **Mirthfulness** is a confused and erroneous statement. The two faculties are distinct, Wit being intellectual and occupying a small space adjacent to Causality or Reason, while Mirthfulness, or the sentiment of the ludicrous, is just above it, and should properly be called Humor. The mirthful or playful faculty is in the posterior region adjacent to Approbativeness, and may be quite conspicuous when there is neither wit nor humor in the mirth. Imitation, Mirth or Humor, and Wit follow each other in a line. The so-called organ of Wit (Gall) or Mirthfulness (Spurzheim) is the seat of the most profound reasoning faculty, while the **Causality** of Spurzheim, the **Metaphysical Depth** of thought of Gall, though it gives a clear analytical intelligence has really less profundity and ability in reasoning than the organ which they have misnamed Wit and Mirthfulness, which is pre-eminently the organ of profound reasoning.

**Eventuality** and **Individuality** are confounded as one organ by Gall, calling it Educability, or Memory of Things but rightly separated by Spurzheim, as the observation and memory of events are distinct from the observation of things. Though I do not use the word Individuality, it is not an objectionable expression, as it suggests the fine perceptive power of its location. Both Gall and Spurzheim had a practically good idea of the region of Eventuality, which Gall first called the memory of things. Spurzheim's description is good; but when the organ is analyzed, it yields consciousness and observation on the median line, memory more exterior, extending to Time.

**Perceptive Organs**—The most marvellous feature of the old phrenological system, is the accuracy with which the smallest organs of the brain have been discovered, located, and described. The organs of Form, Size, Weight, Color, Order, and Number, or Calculation, were so accurately located and described by Spurzheim, that little remains to be

said about them. Gall discovered only Form, Color, and Number, and the latter he located in the position which belongs to Order. These organs were but little developed in Gall, whose great success was due to his philosophic originality and independence. He was not a close observer, and there was a sternness in his nature which prevented him from accepting readily the suggestions of Spurzheim, who with less boldness of character and greater accuracy of perception, was better fitted for minute observation and anatomical analysis. His own cranium has been preserved, in which I found these perceptive organs distinctly marked by their digital impressions on the superorbital plate over the eye. It is a remarkable fact that the intellectual faculties have been most easily understood and located, while their antagonists in the occipital region have proved the greatest puzzle in psychic and cerebral investigations. Gall failed, and left a vacant space in the occiput. Spurzheim failed, but covered the ground incorrectly, and it was many years after I discovered cerebral impressibility before I attained a satisfactory view of the psychology of this region. The location and definition of **Locality** are substantially correct.

The organ of **Time**, another of Spurzheim's discoveries, was very correctly located and defined by him. It lies just above the organ of Color.

**Comparative Sagacity**, or Perspicacity, as Gall called it, was a better term than Comparison, which was introduced by Spurzheim. Direct perception of truth is its leading character. Illustration by comparison belongs to the breadth of the forehead, to the Ideal and Inventive region, and is the characteristic of poetry. Spurzheim's description, however, is substantially correct. It qualifies for clear statement, but not for comprehensive or ingenious reasoning. The portion on the median line has still more penetration, in consequence of which it perceives the nature and tendencies of everything, and is enabled to exercise foresight. Still farther in on the median line are located the powers which are more intuitive, and transcending ordinary foresight are entitled to be called prophecy.

The **Causality** of Spurzheim, or Metaphysical Depth of thought of Gall, was defined with approximate correctness. The immediate perception of causation lies just above the organ of Time, and the special organ of Reason extends therefrom upwards. If the reflective organs of one side of the forehead are divided into an interior and exterior group by a vertical line from the pupil of the eye, the interior group would represent a comprehensive understanding possessing sagacity and judgment, while the exterior would represent profound ingenious thought and originality, a capacity for discovering truth by reason and meditation, by analysis and synthesis, while the interior would discover it only by direct perception. In the exterior group would be included the misnamed organ of Wit or Mirthfulness, which is really a source of philosophy and originality.

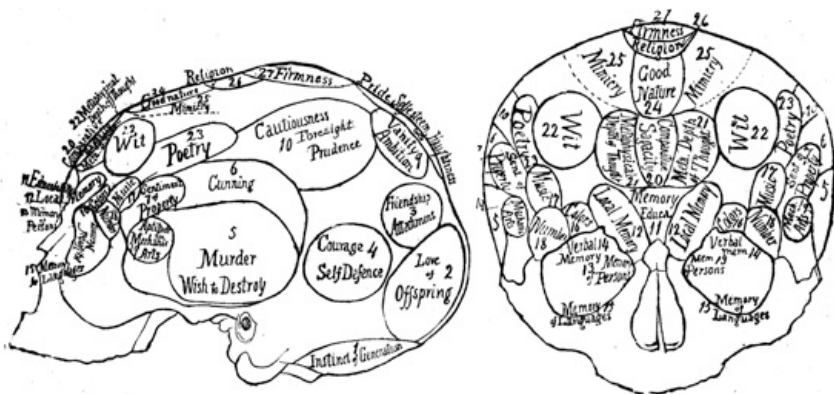
**Tune** and **Constructiveness** have really reversed their positions in the maps of Spurzheim and Gall. The inventive faculty of musical composers was what Gall discovered as Music. The sense of Melody and Tune lies behind the brow in connection with the *sense of hearing*, at the anterior portion of Sensibility, which forty years after my discovery is beginning to be recognized in consequence of the experiments of Ferrier on animals. The organ of hearing which he demonstrated in the monkey, occupies the same position in the superior temporal convolution, behind the eye, which I have given it in man, which brings it into close connection with the organs of Language and Tune. Its close connection with the region of impressibility called Somnolence explains its supreme control over our emotions.

The organ of **Language**, the first discovery of Gall, has been the first to receive its demonstration from pathology and vivisection. But the pioneer teacher to whom contemporaries are unjust has to wait very long for an honorable recognition. The existence of an organ of Language at the junction of the front and middle lobes, at the back of the eye-sockets, has become established in our physiology from the developments of disease and autopsies, without mentioning in connection that it was the discovery of Gall. Perhaps the authors of the text-books may not even know the location of Gall's discovery in the brain, and think only of the external sign, the prominence of the eyes, produced by the convolution at the back of their orbits.

Dr. Spurzheim simply located the external sign of the prominence of the organ at the eye, while Gall recognized the talent for languages as lying further back than that for verbal memory, and consequently being manifested lower at the eye. Nevertheless Gall made a correct observation, as he noticed that a full development was indicated when the temples were broad behind the eye. The true location of the organ externally is just behind the outer angle of the eye, a position central to Gall's observations, and corresponding in the brain to that junction of the front and middle lobes in which the organ has been demonstrated by pathology, though not so accurately defined as in my experiments.

Perhaps in twenty or thirty years more my demonstrations having been brought before the public may attract the attention of the laborious vivisectioners in Europe, who have done so much to verify them, and who will find that their labors do not refute but do confirm what I have discovered by methods so much simpler, easier and more pleasant.

In the second volume I propose to show in detail how much the pathologists and vivisectioners have done to illustrate and corroborate the new Anthropology.



## Organology of Gall, 1809.

1. Instinct of Generation.
  2. Love of Offspring.
  3. Friendship, Attachment.
  4. Courage, Self-Defence.
  5. Murder, Wish to Destroy.
  6. Cunning.
  7. Sentiment of Property.
  8. Pride, Self-Esteem, Haughtiness.
  9. Vanity, Ambition.
  10. Cautiousness, Foresight, Prudence.
  11. Memory of Things, Educability.
  12. Local Memory.
  13. Memory of Persons.
  14. Verbal Memory.
  15. Memory for Languages.
  16. Colors.
  17. Music.
  18. Number.
  19. Aptitude for Mechanical Arts.
  20. Comparative Aptitude for Drawing Comparisons.
  21. Metaphysical Depth of Thought, Aptitude for Drawing Conclusions.
  22. Wit.
  23. Poetry.
  24. Good Nature.
  25. Mimicry.
  26. Theosophy, Religion.
  27. Firmness of Character.
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## Footnotes

1. There is no higher gift of Divinity than the gift of intelligence, which, if pervaded by the light of Divine love, constitutes the Christ, and those who are thus gifted are indeed the "favorites of God." But if such a people kill the Christ-principle in their hearts, and use their intellectual powers merely for selfish purposes, they will become *accursed*. A system of medicine or theology which is based upon self-interests of the privileged class of doctors and priests is a curse to humanity. [Return](#)
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## BUSINESS DEPARTMENT.

### COLLEGE OF THERAPEUTICS.

Next Session Begins November 1, 1887.

This institution is the germ of what will be an immense revolution in education hereafter, when the knowledge now given to small classes will hold a conspicuous place in every college, and will be presented in every high school.

The mountain mass of inertia, which opposes, passively, all fundamental changes, cannot now resist scientific demonstration as it has in the past. The instruction in the College of Therapeutics, is thoroughly demonstrative, leaving no room for doubt, and it gives a species of knowledge which ought to be a part of every one's education—a knowledge of the constitution of man, not obtainable to-day in any medical or literary college, nor in our mammoth libraries. It is not merely as a deep philosophy that this interests us, but as a guide in the preservation of health, and in the regulation of spiritual phenomena, which would, to a very great extent, supersede our reliance on the medical profession by giving us the control of the vital powers, by which we may protect ourselves, and control the development of the young.

Each student was made to feel the effects of local treatment on the body, and the power of rapidly changing disease to health, and was personally taught to perform the manipulations for this purpose, and to investigate disease or portray character by the psychometric methods as well as to test the value of medicines.

The various uses and scientific application of electricity were shown, and many things entirely unknown and unrecognized in works on Electro-Therapeutics. The entire class was placed under a medical influence simultaneously by the agency of electricity—an operation so marvelous that it would be considered incredible in medical colleges. By these and other experiments and numerous illustrations and lucid explanations of the brain and nervous system, the instruction was made deeply interesting, and students have attended more than one course to perfect themselves in the science. The following declaration of sentiments shows how the course was regarded by the class:

"The summer class of 1887 in the College of Therapeutics, feeling it their duty to add their testimony to that of many others in reference to the grand scientific discoveries which they have seen thoroughly demonstrated by Prof. J. R. Buchanan, would say to the public that no one can attend such a course of instruction as we have recently been engaged in, without realizing that Therapeutic Sarcognomy greatly enlarges the practical resources of the healing art for the medical practitioner, magnetizer and electro-therapist, while Psychometry, whose positive truths we have tested and proven, like the sun's rays, illumines all the dark problems of medical practice and of psycho-physiological sciences.

"Therapeutic Sarcognomy explains the very intricate and mysterious relations of the soul, the brain and body, which



prior to Prof. Buchanan's discoveries were unknown to all scientific teachers, and are even now only known to his students and the readers of his works,

"We feel that we have been very fortunate in finding so valuable a source of knowledge, whose future benefits to the human race, in many ways, cannot be briefly stated, and we would assure all who may attend this college, or read the published works of Prof. Buchanan, and his monthly, the *Journal of Man*, that they will, when acquainted with the subject, be ready to unite with us in appreciating and honoring the greatest addition ever made to biological and psychological sciences. Hoping that the time is not far distant when all students in medical colleges may obtain access to this most important knowledge, we give our testimony to the public."

H. C. Aldrich, M. D., D. D. S., *Chairman*.  
Dr. Jno. C. Schlarbaum, *Secretary*.

## OBITUARY RECORD.

Visit to our Cemetery.

Sad are the words, "*It might have been*," sad the recollection of lives untimely ended, and equally sad the lives that perished unborn. We have been looking among the latter, the spirit life that might have gone forth to bless society, but perished ere its birth.

The *Journal of Man* has brought forth many a bright, strong thought that will have its career among men, but the other bright, strong thoughts that could not be forced through its narrow limits must be buried and lost to its readers, and they have been interred with sorrow. The following is a list of our early dead—perhaps for some of them there may be a resurrection when a larger *Journal* is issued, but perhaps the majority are interred forever.

1. Career of Mohammedanism in Africa.
2. The True History of Buddha.
3. Influence of Christianity in history.
4. Startling Calculations for the Future.
6. The Snake Charmers in Tunis.
6. Mesmerism in China before the Christian Era.
7. Dr. Montgomery on the Cell Theory.
8. A Race of Dwarfs in the Pyrenees.
9. Religious Hallucination in the Bahamas.
10. Philosophy of Death.
11. The Delsarte System of Elocution and Acting.
12. Why Should the Chinese go? an eloquent argument by a learned Mandarin.
13. An Organic Index of Human Longevity—the Doctrine of Powell.
15. Anthropological Laws of Longevity.
16. Psychometry and Thought Transference in India.
17. Prof. Dana on Evolution.
18. Statistics of Heads and Brains.
19. Cures by Prayer.
20. Indian Witchcraft.
21. Hypnotism among Turkish Dervishes.
22. Discussion of Heredity and Temperaments.
23. Theory and Practice of the Divining Rod.
24. Mrs. Stanton on Sleep.
25. Cures for Insomnia, and Singular Case of Night-sweats.
26. A Modern Samson.
27. Transactions in Psychic Research.
28. A Critique of Unreason—a Caustic Review of the Psychic Society.
29. Scientific View of the Antiquity of Man.
30. Phrenological Quackery.
31. English and German Industrial Education.
32. Training of Viennese Girls.
33. Revolutions in Medicine.
34. History and Progress of Russian Nihilists.
35. The Paradise of Labor—the Familistère at Guise in France.
36. Exhibition of the Keeley Motor.
37. A New Element in the Blood.
38. Reform of the Lunacy Laws.
39. Marvellous Dreams.
40. Byron's Spiritual Belief.
41. How to Deal with Drunkards and Medical Treatment of Intemperance.
42. Combination of Electricity and Medicine.
43. Meynert's Psychiatry, a Treatise on Diseases of the Fore-brain.
44. A Mesmerized Detective.
45. Wonderful Spirit Telegraphy.
46. Discovery of Dead Bodies by Intuition.
47. How Clouds are formed.
48. Psychometric Reports on Simon of Samaria, Henry George, Dr. McGlynn, Lucretia Mott, Dr. Gall, Charlemagne and Julius Cæsar.
49. The Puget Sound Colony.
50. English Rule in Ireland.
51. Dr. Eadon on Memory.
52. Harrison on Mysticism.
53. Progress in Many Parts of the World.
54. Communications from various correspondents, etc., etc. This is not *one half*, but it is needless to prolong the catalogue of the buried innocents,—the interesting narratives, discussions and expositions of rare knowledge which the limited area of the *Journal* has compelled me to exclude.

Let us hope that in our enlarged *Journal* next year, there may be room to review the most important features of social and scientific progress as well as to present gradually the elements of that world-embracing science which is called Anthropology,—the presentation of which will require at least ten years. I am making every effort at present to prepare the improved and enlarged edition of the Therapeutic Sarcognomy for the coming winter.

## LIBERAL PUBLICATIONS.

*The Golden Gate* at San Francisco is a successful eight-page weekly Spiritual newspaper now in its fourth volume, well filled with interesting matter. It illustrates spiritual phenomena by engravings, is well edited and highly appreciated. Published by J. J. Owen at \$2.50 per annum.

*Hall's Journal of Health* at New York, a monthly of twenty-four pages, one dollar per annum, has been well received for thirty-three years, and of late, with a new editor, it has renewed its vigor and prosperity. It contains not only valuable hygienic instruction but interesting sketches of Spiritual and progressive science and has honored the editor of this *Journal* with a friendly biographical sketch. Its circulation is increasing.

*The Better Way*, a Spiritual weekly published at Cincinnati at \$2 a year, is the successor to four Spiritual papers that have ceased, and appears to have the elements of success.

*The Eastern Star*, published at Glenburn, Maine, by C. M. Brown, weekly, at \$1 per year, is full of the enthusiasm and energy that win success. The editor appears to have a clear head and warm heart and devotes his journal to Spiritualism.

*The Carrier Dove*, a large folio weekly illustrated Spiritual journal. \$2.50 per annum, published at San Francisco, is now in its fourth volume, and has obtained a merited success.

*The Truth-Seeker*, a weekly journal (\$3 a year) established by the late D. M. Bennett, still carries on with undiminished

ability the honest agnostic work for which it has been famous. It is a vigorous iconoclast but does little for constructive progress.

*The Open Court*, by B. F. Underwood, Chicago, with an able corps of correspondents, maintains a high literary character, and discusses philosophy and current topics from the agnostic standpoint. Its belief in dry metaphysics, and its stubborn materialistic scepticism are its greatest peculiarities. Published fortnightly at \$3 a year.

### UNLIKE ANY OTHER PAPER.

The *Spectator*, unlike other home papers, seeks (1) to acquaint every family with simple and efficient treatment for the various common diseases, to, in a word, educate the people so they can avoid disease and cure sickness, thus saving enormous doctors' bills, and many precious lives. (2) To elevate and cultivate the moral nature, awakening the conscience, and developing the noblest attributes of manhood. (3) To give instructive and entertaining food to literary taste, thus developing the mind. (4) To give just such hints to housekeepers that they need to tell how to prepare delicious dishes, to beautify homes, and to make the fireside the most attractive spot in the world.—*Am. Spectator*.

### MAYO'S ANÆSTHETIC.

The suspension of pain, under dangerous surgical operations, is the greatest triumph of Therapeutic Science in the present century. It came first by mesmeric hypnotism, which was applicable only to a few, and was restricted by the jealous hostility of the old medical profession. Then came the nitrous oxide, introduced by Dr. Wells, of Hartford, and promptly discountenanced by the enlightened (?) medical profession of Boston, and set aside for the next candidate, ether, discovered in the United States also, but far inferior to the nitrous oxide as a safe and pleasant agent. This was largely superseded by chloroform, discovered much earlier by Liebig and others, but introduced as an anæsthetic in 1847, by Prof. Simpson. This proved to be the most powerful and dangerous of all. Thus the whole policy of the medical profession was to discourage the safe, and encourage the more dangerous agents. The magnetic sleep, the most perfect of all anæsthetic agents, was expelled from the realm of college authority; ether was substituted for nitrous oxide, and chloroform preferred to ether, until frequent deaths gave warning.

Nitrous oxide, much the safest of the three, has not been the favorite, but has held its ground, especially with dentists. But even nitrous oxide is not perfect. It is not equal to the magnetic sleep, when the latter is practicable, but fortunately it is applicable to all. To perfect the nitrous oxide, making it universally safe and pleasant, Dr. U. K. Mayo, of Boston, has combined it with certain harmless vegetable nervines, which appear to control the fatal tendency which belongs to all anæsthetics when carried too far. The success of Dr. Mayo, in perfecting our best anæsthetic, is amply attested by those who have used it. Dr. Thorndike, than whom, Boston had no better surgeon, pronounced it "the safest the world has yet seen." It has been administered to children and to patients in extreme debility. Drs. Frizzell and Williams, say they have given it "repeatedly in heart disease, severe lung diseases, Bright's disease, etc., where the patients were so feeble as to require assistance in walking, many of them under medical treatment, and the results have been all that we could ask—no irritation, suffocation, nor depression. We heartily commend it to all as the anæsthetic of the age." Dr. Morrill, of Boston, administered Mayo's anæsthetic to his wife with delightful results when "her lungs were so badly disorganized, that the administration of ether or gas would be entirely unsafe." The reputation of this anæsthetic is now well established; in fact, it is not only safe and harmless, but has great medical virtue for daily use in many diseases, and is coming into use for such purposes. In a paper before the Georgia State Dental Society, Dr. E. Parsons testified strongly to its superiority. "The nitrous oxide, (says Dr. P.) causes the patient when fully under its influence to have very like the appearance of a corpse," but under this new anæsthetic "the patient appears like one in a natural sleep." The language of the press, generally has been highly commendatory, and if Dr. Mayo had occupied so conspicuous a rank as Prof. Simpson, of Edinburgh, his new anæsthetic would have been adopted at once in every college of America and Europe.

### Mayo's Vegetable Anæsthetic.

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