

**COLLIER'S
PHRENOLOGY**



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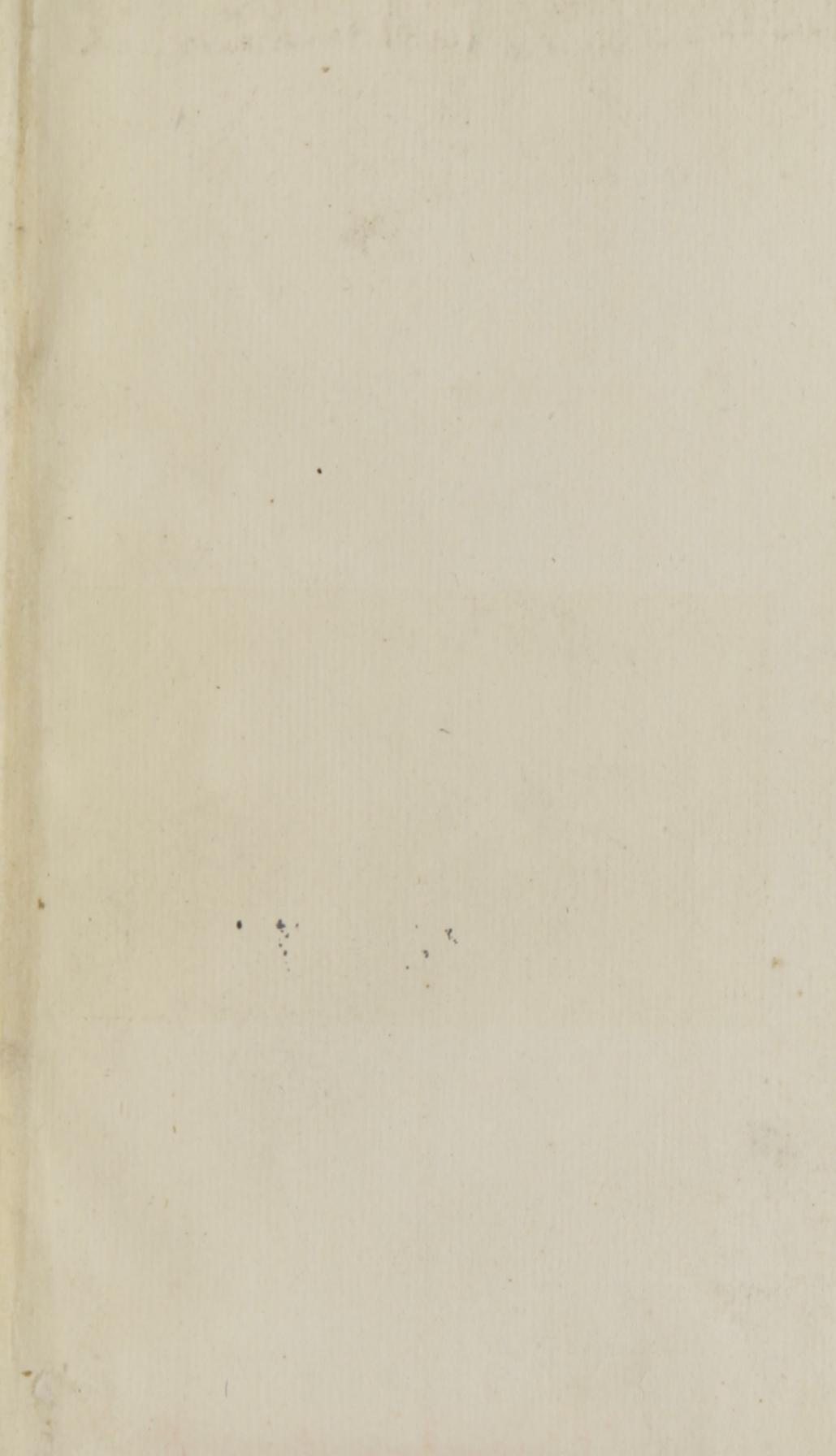
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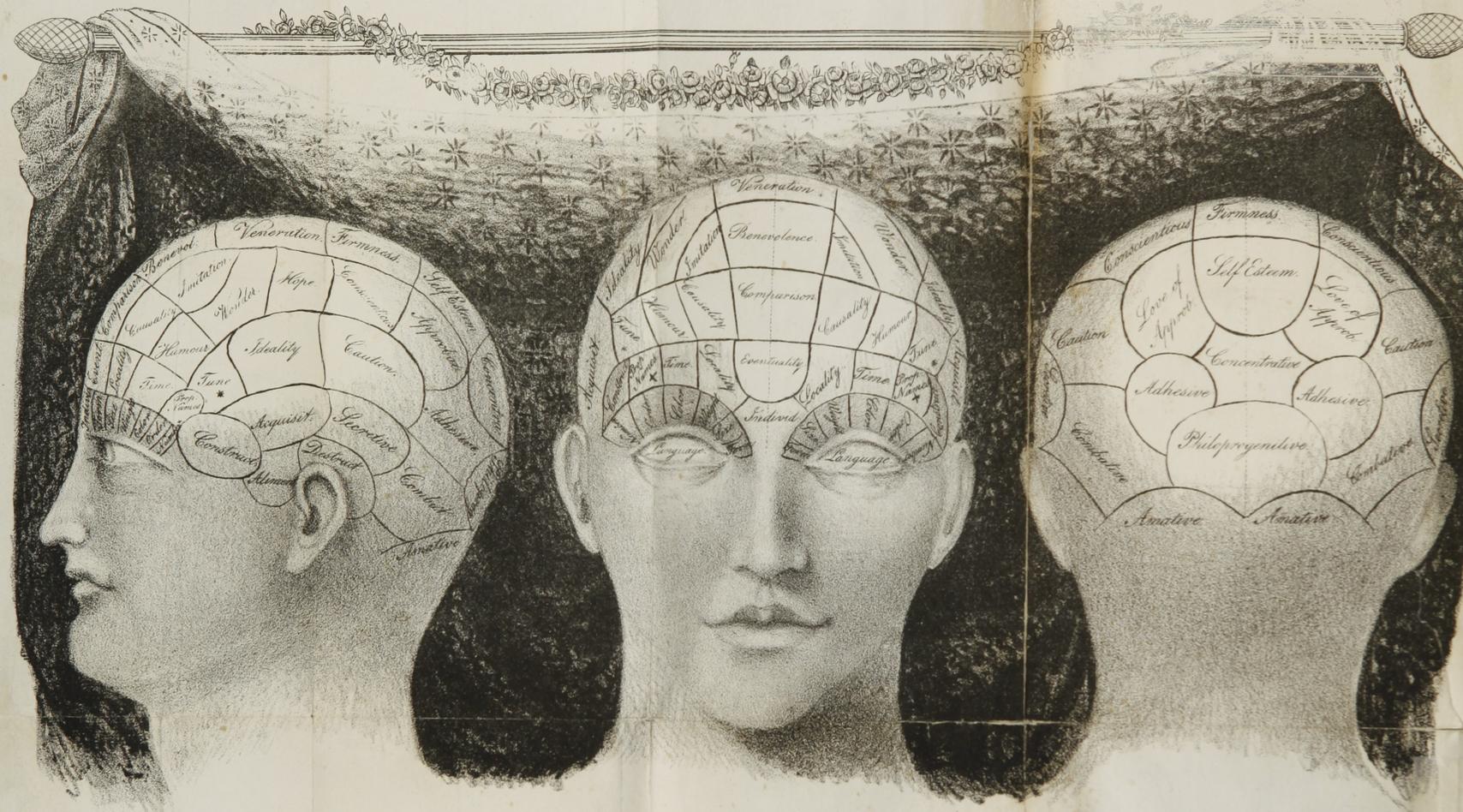
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Improved Classification of the Mental Faculties

By

Dr. Robert H. Collyer
 Professor of Chronology
 (Pupil of the late Dr. Spurzheim)

MANUAL
OF
PHRENOLOGY,
OR THE
PHYSIOLOGY OF THE HUMAN BRAIN.

EMBRACING

A FULL DESCRIPTION OF THE
PHRENOLOGICAL ORGANS,
THEIR EXACT LOCATION, AND THE PECULIARITIES OF
CHARACTER PRODUCED BY THEIR VARIOUS
DEGREES OF DEVELOPEMENT
AND COMBINATION.

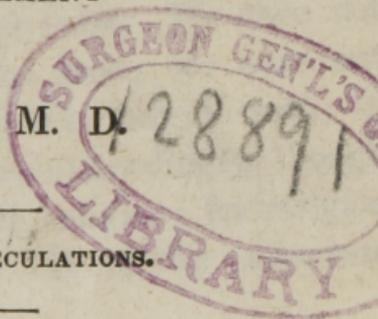
BY R. H. COLLYER, M. D.

ONE FACT IS WORTH A HOST OF SPECULATIONS.

FOURTH EDITION,
REVISED, ENLARGED, AND ILLUSTRATED BY SUPERIOR LITHOGRAPHIC
DRAWINGS AND WOOD CUTS.



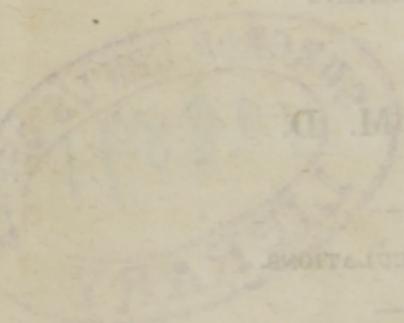
CINCINNATI:
PUBLISHED BY N. G. BURGESS & CO.



MANUAL
OF
PHYSIOLOGY.

OR THE
PHYSIOLOGY OF THE HUMAN BRAIN.
A FULL DESCRIPTION OF THE

ENTERED according to act of Congress in the year 1838, by
R. H. COLLYER, in the Clerk's office of the District Court of Ohio.



CHARACTER AND THE FACILITIES OF
DEGREE OF DEVELOPMENT
AND COMPARISON
BY R. H. COLLYER, M. D.

FOURTH EDITION.

REVISED, ENLARGED, AND ILLUSTRATED BY ESTER B. ILLINOIS
DESIGNED AND WOOD CUT.

CINCINNATI:
PUBLISHED BY N. O. BURGESS & CO.
REPRINTED BY GARDNER AND SHERMAN.

“Phrenology being the knowledge of the most important part of man, and showing the relations between the cerebral organization and the manifestation of mind, cannot be useless. It *reduces* philosophy to demonstrative principles; furnishes new rules for the arts of imitation; guides our judgment to social intercourse; and is the foundation of the doctrines on *insanity* and education.”—*Dr. Spurzheim.*

“We fear not ridicule; we heed not the denunciation of materialism! atheism! and other bug-bear terms used by fools to frighten greater fools. We care not what a science teaches, so it be true; we care not where it leads, so long as its path is that of truth; in that path we are willing to follow unheedingly, though it terminates in infidelity to all religion; for religion is true, or it is worthless.”—*From the American Monthly.*

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P R E F A C E.

“And all be turned * * * * * to apes,
With foreheads villanous low.”

Shakspeare's Tempest.

THIS volume is offered to the notice of an enlightened and reflecting public.

Its author presents it with the hope that the reader will address himself to the subject on which it treats, with the spirit of a philosopher; that he will divest his mind of all prejudice, of all preconceived opinions, hasty or party feelings, founded upon the erroneous statements, misrepresentations, raillery, or abuse of its adversaries. Let him but calmly and dispassionately enter upon its examination, with a sincere desire to discover truth, and it fears no ordeal. Let him scrutinize, investigate, analyze, submit to the severest test every proposition advanced; let him place it, as it were, in the clear, brilliant, unclouded, meridian rays of the sun, then will he be prepared to receive and appreciate facts in relation to it as they really exist.

Phrenology is the mirror of human nature; in it, man sees reflected his animal, moral, and intellectual faculties: by means of it, each individual perceives more clearly, and is enabled correctly to account for anomalies, the existence of which he may be conscious in himself or of which he may be cognizant, in others. It is of lasting

and incalculable value to the proper education of youth. It points out the correct treatment for the insane. It is the true and only sure basis of the philosophy of the mind—it is the knowledge of man. Ought not then such a subject to claim the serious and undivided attention of every rational being?

Philosophers in all ages and in all countries, have had their dogmas; these they have uniformly considered the standard for mankind, and in support of which, have appealed alike to the passions, the prejudices, and fears of the multitude. That which did not concur with the idol they had set up, was hurled, if practicable, into the depths of oblivion.

No science has had to contend more strenuously with the bigotry and superstition of mankind, than Phrenology. Its opponents would have rolled the wave of forgetfulness over its well-founded pretensions, as they have persecuted its advocates, with all the ingenious narrow minded prejudice, this enlightened age could devise. Every effort has been made to shake and undermine the splendid and beautiful structure, which practical demonstration has erected on the immutable and solid basis of truth; yet, unavailing have been their efforts—it has stood unshaken. In its strength and its majesty, it bids defiance to all the attempts of its enemies. The sweeping whirlwind may exhaust its fury—the mightiest waves in vain may dash their foaming waters against its firm foundation; it falls not, for it is built upon a rock—that rock is TRUTH.

Phrenology originated in observation alone; having spread over no small portion of the Eastern hemisphere, it has planted its standard on our

Western world. With unfaltering step—with its watch-word “onward!” it flings the broad fold of its banner to the breeze, and on it men behold inscribed in characters of gold, “*Magna est veritas et prævalebit.*”

Already the wild red warrior of the “West,” in astonishment, has declared to the Author, when unfolding to him his peculiar traits of character, that he had dealings with the Great Spirit.

To believe or disbelieve any science, we must understand the principles on which it is based, and to attain this end we must investigate for ourselves, and on this investigation will depend our belief or disbelief. It is impossible to believe that which we do not understand, and though we frequently yield a blind credence to a doctrine, still this is not reasonable or philosophical belief; that belief which is the result of conviction is worth a million of the other.

How many of those who are daily seen to sneer and laugh at the doctrines of Gall and Spurzheim, have ever thought seriously of the matter? not one in a thousand!

The fool’s weapon, ridicule, has been hurled, with vengeance against the science—and like a huge mass rolling from the loftiest mountain top—it has swept in its course all those who have not had force enough of their own, to withstand its impulse.

The Author claims for himself some originality. 1st. In the Classification of the mental faculties. 2nd. In the discovery of the location of the organ of Tune. 3d. In the discovery of a distinct organ for the memory of proper names.

To become intimately acquainted with all the minutiae of the science, the reader is referred to

the works of Dr. Gall, Dr. Spurzheim, Mr. G. Combe, and Dr. Caldwell, all of which are replete with information and philosophical research the present treatise claiming superiority alone in reference to its practical considerations.

Convinced of the truth of their science, knowing the immutability of the basis on which it rests, and that sophistry, combined with false philosophy, and all the ingenuity of man, could not sap its foundation, phrenologists have met and vanquished its opponents. With the conviction that phrenology will enable man to burst through and dissipate the fog of superstition, and ignorance, so long hovering over and around him, and when dispersed, will introduce him to the clear and unpolluted atmosphere of reason and truth,

THE AUTHOR,
Dedicates these pages to the people
of the United States.

FUNCTIONS OF THE BRAIN.

MAN has been justly called the "*Lord of the Creation*," he is the most intelligent of all living beings that inhabit this planet, he reduces all nature to supply his wants and to gratify his appetites.

All this arises from his superior mental powers. But deprive him of this bountiful gift of the Creator, and we have a being naked, more helpless, destitute, and miserable in his natural condition, than any other animal. Being left without any natural means of defence, he would have been devoured by wild animals, or destroyed by the elements.

But, from his organization, his reasoning faculties were brought into action by *necessity*, and he soon more than supplied all his natural deficiencies. *Experience* having afforded him instruction from generation to generation, until at last we find him organized into societies, building towns and cities, skilled in the arts and sciences. There being no bounds to his power, we find him playing with the elements, turning deserts into gardens, traversing the ocean, making the heavenly bodies subservient to his purpose, turning the course of rivers, levelling mountains, in fact the whole globe shows the mighty effects of human power!

How do we explain and unravel the cause of this superiority in man?

Are we to be biased in this investigation by the many reigning speculations and doctrines, or are we to be guided alone by nature?

When we fearlessly and boldly seek for truth, we are sure to find her; and though sometimes she may be hid for a time by artificial means, to suit selfish purposes, still, when she does burst forth, her rays are so powerful and brilliant, as to eclipse all false doctrines. Truth is the language of the Creator, and all truths emanating from him must benefit and interest mankind. I then have to *prove* Phrenology to be true, nor will I compromise, in the investigation, one item, to suit the views of this or that party, and will leave the science to its own, but sure destiny, *success*.

Philosophers have, from the earliest dawn of intelligence, supposed that the superiority of man, depended upon some etherial essence, which was not possessed by any other animated being. If we trace the Zoological chain, from the polypus or microscopic animalcula up to man, do we not find that gradually as the being becomes more and more complicated in its structure, there is indicated, in the same ratio, a greater share of intelligence? The nervous system is remarkably simple in reptiles, increasing in its parts in fishes, until it ascends to quadrupeds, when we find it approaching nearly to that of man. He possesses the most perfect cerebral mass—this to establish a more extended intercourse with the external world. Nature has added the more complex organs according as the relation of the species with the surrounding creation have become more numerous, it is thus by the successive additions of new organs, and the more perfect development of others, that the animal chain is elevated to man himself.

Would not this, of itself, be very strong evidence of the immediate connection between the brain and the mind? for we find other organs in the lower animals corresponding in perfection with those of man, also whose functions exactly accord. Is the function of the eye, ear, heart, lungs, &c., different in the dog, ox, monkey, elephant, &c., from that of man? No; we invariably find like parts producing like functions in all animals.

Experience has demonstrated the functions of the various portions of our body, their mere anatomical structure does not, nor has not, been the cause of the discovery of their uses. The Egyptians were well acquainted with the general appearance of the brain, and so were all anatomists with the structure of the heart; and until Harvey explained and demonstrated its functions, no one knew it to be the seat of circulation: again, until Spurzheim and Sir C. Bell proved that a nerve, simple in its appearance, could perform two distinct functions, all nerves were supposed to be alike. Such is the consequence, when we rashly infer that because an organ presents uniformity of structure, of necessity its functions should also correspond. Directly we abandon the path of experience and resort to this *a priori* mode of reasoning, we meet with perplexities, and are led into a labyrinth of difficulties. The same kind of reasoning which will prove the eye to be the organ of sight, the stomach to be the seat of digestion, and the heart of circulation, will prove the brain to be the seat of the mind. (Has the mind ever been known to exist except in connection with the brain? No, not one authenticated case is on)

record; and when that organ is affected in any manner, we have a corresponding effect produced on the mind. When the brain is inflamed we have the ravings and delirium of the madman; when it is compressed by a fracture of the skull, we find coma, insensibility and a suppression of the mental manifestations; and when the surgeon elevates the compressing portion of bone, we see the mind gradually resuming its powers. Is not the mind modified in every degree according to climate, childhood, puberty, manhood, old age, and decrepitude, &c? Does it act independently in drunkenness, inflammation, ulcers, effusions or in a great many other affections of the brain? Every body will acknowledge that these circumstances modify, alter, interrupt, arrest, elevate or totally suppress, or change in a thousand ways, the state of the mind.

The brain in the child is soft and yielding, and by degrees attains solidity, until mature age, when we find it in the plenitude of its powers; after which it gradually decreases in size until decrepitude, when we find the mind correspond with its organ, both being weak and inefficient.

“Where then do we find proofs of the mind's independence of bodily structure, if that mind, like the corporeal frame, is infantile in the child, manly in the adult, sick and debilitated in disease, phrenzied or melancholy in the madman, enfeebled in the decline of life, doting in decrepitude, and annihilated by death?”

In every case of precocity or early manifestations of genius, we always find a well proportioned brain, though other portions of the body may be very defective; how often is it that small, ill-shaped persons, have powerful minds. A person

may have lost his limbs, and still his mind remains perfect. The heart by many is supposed to be the seat of our passions, feelings, &c.; this organ frequently becomes ossified, atrophied, hypertrophied, inflamed or affecting in a variety of forms, without affecting the mind (except when the disease affects the system generally). Why then should we ascribe to the heart any qualities of mind? the heart of many of the lower animals is equally perfect with that of man, yet they do not possess mind in common with him. Its office is confined to the circulation of the blood, and a very important one it is, without taxing on it any other function.

The diaphragm, a thin, tendinous muscle, which divides the abdomen from the thorax, was again by many ascribed as the location of the soul.

Van Helmont supposed the stomach to be the seat of thought, judgment, &c. Pinel thought that a small sandy gland, situated in the brain, was the organ of the soul. In fact, there is hardly a portion of the body but what has been supposed, at one period or another, to be the seat of thought and intelligence.

The brain was considered by Hippocrates to be a sponge, which imbibed the moisture of the body. Aristotle thought it a humid mass, intended to temper the body, that is, when it was too hot, it would throw out a fluid, to render it cold. Bichat, thought it was merely an envelope to the more important parts within; in short the offices ascribed to it, have been as numerous, as they have been ridiculous.

The ancient Egyptians were also ignorant of its real structure, and the moderns were contented with cutting and slicing it, and giving names to

the various parts in accordance with their supposed resemblances; this seems to have been the amount of knowledge possessed in regard to this important organ, prior to Drs. Gall and Spurzheim, who have immortalized their names by making known not only its anatomical structure but its functions.

The brain is the most delicate and beautifully constructed of all other organs of the body; and if we may judge of the importance of an organ by the care and protection which nature has taken to shield it from injury, no organ is of such importance as the brain. From its structure the slightest pressure would have altered its shape and deranged its action; hence it is powerfully guarded by several strong envelopes, the most solid of which is its spherical, resisting, bony case, in which it is contained. Within this bony case we find three membranes, so placed as to prevent concussions acting on its substance; externally, is the scalp on which is the abundant growth of hair; then, in its immediate neighborhood, are the five external senses, acting as so many sentinels to warn and protect it from all casualties.

In the human being the brain receives more than one-fifth of the whole volume of blood which is propelled from the heart: if it was of such little importance as some would make us believe, how is it that such a portion of this valuable fluid should be sent to it?

Again, its commanding, elevated situation, &c., all point, in the most eloquent and powerful language, to the dwelling place of the emporium of THOUGHT; that essence, which being imparted in a greater or less degree, produces the savage Carib, the barbarous Hottentot, the stupid New

Hollander, or the poor idiot; or, by an extra quantity, we find the same beings filling the world with amazement, some in the capacity of a Galileo, a Kepler, a Newton, a Shakspeare, a Napoleon, or a Washington.

The reason why the physiology of the brain remained so long a mystery may be explained from the fact, that doctrines sanctioned by length of years, seemed sacred, and were revered from generation to generation through successive centuries, no one daring to burst through the existing state of things. Mysteries of one age become the subject of scientific investigation, and are explained on philosophical principles in the next.

In proportion as any part of the body is used, in the same ratio will it increase; there is no exception to this law. The capacity of the lungs is much greater among those classes, who are employed the greater portion of their lives in active, athletic exercises, as is observed in the broad expansive chest of the sailor, and the arm of the blacksmith or shipwright, contrasted with the comparatively emaciated muscles of the watchmaker or penman. The hands of those who never resort to manual operations, are much smaller than those of the laborer; and the heads or brains of the refined orders of society are much larger than among the uneducated classes; this latter circumstance will be corroborated by every hatter in the country. Therefore, though our original configuration of the brain be bad, we may by a proper course of training in moral and physical education, be enabled to change entirely the shape of the head, by the time the being arrives at maturity. Nor is the remedy to stop here, for per-

sons of from 25 to 40 years of age have, by subduing their vicious tendencies, or by applying the mind to any particular study, either increased or diminished the particular portion of the brain used or disused.

It will be argued, that it is impossible to change the formation of the hard and apparently unyielding skull, and such a conclusion would *à priori* appear very rational; but the question is: Is this the case? The brain is perfectly organized in the child, even before a vestige of bone has been deposited on its surface; and the ossification is not completed until puberty; and from this time to the last moment of the being's existence, this bony system is continually undergoing absorption and redeposit. Is it reasonable to suppose that the skull, which is evidently constructed and placed so as to protect the noblest of our organs, should be an impediment to its growth? There is not a single instance in the whole catalogue of animated beings, where the soft parts are interfered with in consequence of their hard coverings. Does not the light of analogy give the denial, in as strong terms as is possible to be used. Look at the oyster; when young it has a firm hard shell, and, as the animal increases in size, its protection or shell accommodates itself. The same is observed in the case of the turtle, the lobster, the tortoise, the snail, the limpet, and an immense variety of the crustaceous tribes.

In fact we have no occasion to resort to proof beyond ourselves. The head increases materially from infancy to manhood. In chronic affections of the brain, sometimes the skull and brain have been reduced to half their natural size.

The organ of Amativeness, (Cerebellum,) which

bears a proportion to the rest of the brain, in the child is as one to fourteen, whereas, in the adult, it is in the ratio of one to five or six. In this particular region however, every one must acknowledge an increase of skull, but, in consequence of the gradual increase of these parts, it eludes detection by our senses.

The human skull again is known to increase to an enormous extent in the disease called Hydrocephalus or water in the head; which was considered by the ancients to be an absorption of the brain; this of necessity would destroy the fundamental position on which phrenology is based. Drs. Gall and Spurzheim have again done service to the world by exploding this doctrine; by showing that the brain existed in all its parts, but was unfolded and occupied a greater surface than in the healthy state; they also demonstrated its fibrous structure. The skull, in these cases, sometimes attains the size of 30 to 50 inches in circumference. I saw a case in 1831 at Bartholomew's Hospital, London, of a child whose head measured 44 inches; and many others varying from 30 to 40, all of which confirm the above statement.

The skull is sometimes increased to three or four times its natural thickness; but this never takes place, except when the brain is affected by disease, and again, in other affections, the skull is so thin, that the least pressure on its surface will interfere with the manifestations of mind. Do not then, reader, be led astray by those who obtain such exceptions, and palm them off on the uninstructed as natural.

The skull is acknowledged by the most eminent anatomists of the age, to be an exact counterpart of

the brain. It is composed of two tables or plates of bone; the one external, being flexible and yielding; the inner, on the contrary, is brittle and denser in its texture.

In youth these tables are in close apposition throughout, and in immediate connection with the membranes which cover the brain.

When any organ or set of organs, cease to be actively exercised, we find, as the result, that their actual bulk is much diminished. And when, as is sometimes the case, the decrease is very sudden, the internal table follows the brain, leaving the external. The organ of Individuality is situated immediately between the eyes, over the root of the nose (the location of the frontal sinus, when it exists), the function of this faculty is, to observe and see every thing within the sphere of vision; therefore it is found generally large in children, who notice every trivial object and passing occurrence, without reference to their causes and effects. This faculty, at the age of manhood, is not called so much into play, for the information has been received, and now we find another set of faculties brought into operation, namely, the Reflective; young persons observing more than they reflect, whereas in the adult the reverse is the case, but, unfortunately many in this particular remain children all their lives, always observing and never reflecting.

In these the frontal sinus is seldom if ever found to exist, and never in the child, because the particular portion of the brain, appropriated to individuality, has retained its original size, and this is the cause, why the sinus, is never found so large in women as it is in men, they being so much

more observant of every minute particular passing around them.

This explains the cause of the existence of the frontal sinus, which has been used as one of the most powerful weapons against the science; I now show that it is one of the strongest proofs in its favor. And when it does exist, we have an invariable beacon to indicate the same, namely, a sudden elevation of the superciliary ridges, which any expert phrenologist can detect at once. But, conceive it, in its most unfavorable light, the only conclusion that we can come to, is, that those organs in its neighborhood cannot be ascertained, and we give the reason why, it does not therefor in the least degree invalidate the truth of the science, the craniology of the part is alone affected, without interfering with its phrenology.

Man has much the largest skull in proportion to the size of his face, when compared with all other animals.

The difference between the face and the skull, was supposed by many philosophers to be the measure of the human understanding over that of the lower animals; the ferocity and stupidity of the latter, being supposed to be greater as the face and snout surpassed the cranium.

With this impression, Camper adopted the facial angle, which is known by drawing a line from the root of the nose to the opening of the ear, and another to the most prominent portion of the forehead; the angle of the Horse 25 degrees, Dog 40 degrees, Sapajou 65 degrees, Ourang-outang 67 degrees, and in the human subject, from 65 to 85 degrees.

The ancients were well acquainted with the fact, that certain configurations of head invaria-

bly accompanied certain characters. How is it that the head of Nero, made in marble by the Romans, corresponds exactly phrenologically with his character? in fact no phrenologist could model a head to depict the traits of the tyrant more forcibly than they are found in the statue; the low, receding forehead, showing a total want of the organ of Benevolence, and the very small development of the moral and intellectual faculties, with the immense mass of brain in the animal region. Contrast this head with that of Seneca, and how different is the result! Homer, speaking of an idiot, describes him with a small, contracted, low head. Observe the head of Jupiter, the forehead exceeds an angle of 100 degrees.

The heads of Cicero, Socrates, Demosthenes, Plato, the Roman combatants and gladiators, &c. all accord with their respective characters, according to the principles of phrenology.

The larger the brain the greater its power, every thing else being equal; this is certainly the case, and who will assume the contrary? Two men having the same temperament, and general configuration; the one having the largest volume of brain will be able to produce results as much greater in their character, as his head surpasses the other in size. This position is carried out, not only by the facts in the case, but by the size of other portions of the body being the only criterion of their power, provided they possess the same texture, &c. as those which are smaller. Two hearts, the one possessing the greater diameter of its cavities, will propel more blood than the smaller one. The large liver will secrete more bile than a small one, and a small pair of lungs will not arterialize as much blood as a large pair; a small arm is not so

powerful as a large one, bearing in mind that the structure is the same, nor is it more irrational to suppose that a small brain is of the same value as one of double its size, than to ascribe the same power to all brains.

TEMPERAMENT.

The temperament indicating the general constitution, texture or quality of the whole system, and the brain being a very important portion of that system, does not escape participating. This is not a matter of speculation for I have particularly investigated this subject, when in the large hospitals of London and Paris, where abundant opportunities presented themselves to observe the correspondence between the texture of the brain and that of the body, and I invariably found, that when the subject was gross, corpulent, and possessed a great superabundance of cellular and adipose tissue, that the brains of such individuals presented, when observed with Wollaston's reflecting microscope, coarseness of fibre, watery, and a general want of consistence. This appearance is known as the Lymphatic temperament; there are three others, namely; the Sanguine, Nervous and Bilious, each being the criterion of a corresponding quality of brain. This is one of the most important considerations in discovering the power of the mind, for the size of the brain is not alone indicative of power or excellence: two heads of the same size and configuration, the one having the best temperament, will certainly manifest much greater power and energy.

LYMPHATIC,

The worst constitution of the body, the whole system being weak, with a great abundance of fat and cellular tissue; the muscles are soft and not well defined; circulation is slow and sluggish; the eyes want expression; the hair is usually light, and the skin pale white. Examples, Daniel Lambert, &c. In dissecting persons of this temperament, I have observed the correspondence in the texture of the brain; it being soft and watery, indicating want of power during existence.

SANGUINE,

Is known by the general plumpness of the muscles; the skin being clear, the hair of a light color, the eyes blue, gray and hazel, the complexion florid, pulse sharp, frequent and regular, and soon excited, a general tendency to corpulency and has an animated countenance. The person who possesses this constitution, with a head of the same size as one of the Nervous or Bilious, will not have such power of mind; will require much more application to produce the same effect, and will not be so bold in his projects.

This temperament is frequently mixed with the nervous, and forms one of the best constitutions, such as that possessed by Fox, Pitt, Burke, Clay, &c.

NERVOUS,

Is characterized by the features being strongly marked, the muscles small and emaciated, fine thin hair, eye not large, but sparkling and expres-

sive; head not generally very large, but there is great activity of brain. Persons of this constitution are very irritable, sensitive to outward impressions, always on the alert; the pulse is small and quick; such was the temperament of Voltaire, Frederick the Great, Sterne, Jefferson, Montesquieu, &c. &c.

BILIOUS,

The brain firm and dense, hair dark, skin swarthy, flesh firm, muscles well defined, body well proportioned, chest wide, abdomen rather small, the face dark and expressive, nose aquiline or Roman, mouth curved, chin square, pulse strong; it is among individuals of this temperament that we find those who, in different ages, have governed the destinies of the world—Brutus, Julius Cæsar, Alexander the Great, Mahomet, Peter the Great, Cromwell, Napoleon, Wellington, &c. &c.

The temperaments are seldom if ever found pure, for we find nervous and sanguine; lymphatic and sanguine; bilious and nervous; lymphatic and bilious, &c. as the most common combinations.

PLURALITY OF THE MENTAL FACULTIES.

It is admitted by all physiologists and philosophers, that the brain is the organ of the mind; the instrument by which all the phenomena of intellect, sensation, memory, thought or judgment are produced. It is clear that when the instrument used differs, the result will be different; you cannot produce the same phenomena from a bell, as from a drum; then when the effect is different we find a difference in the structure of the instrument used; when we hear the sound of a flute, we know it to be from a flute, when we hear the sound of a drum, we know it to be from a drum, &c. If all instruments could produce the same results, we should have no occasion for a difference of instruments; and if all brains could produce the same result, we should have no occasion for a difference of brains to produce different mental manifestations, the brain of an idiot, would be of the same value as that of a Bacon, or a Franklin. The brain of every animal from the worm up to man, is an exact counterpart of his intellect, and sphere of action, with the external world. The nervous system in reptiles and fishes is simple; in all animated beings we find this nervous system to increase gradually in complexity until we ar-

rive at that advanced point where the brain from the simple organ of Amativeness gradually receives additions, "*each addition* being marked by some addition or amplification of the powers of the animal, until in man we behold it possessing some part of which animals are destitute, and wanting some which they possess, so that we are enabled to associate every faculty which gives superiority, with some addition to the nervous mass, even from the smallest indications of sensation and will, up to the highest degree of sensibility, judgment and expression."

In no instance do we find a simple brain, where the faculties of the animal are numerous, and complicated, nor do we find a highly organized brain where the functions of the animal are simple; and those parts of the brain which exist are exactly adapted to their sphere of action, man having those additions which give him reason and intelligence. Therefore the brain of every animal is perfect in itself, the mind of a dog, a horse, an elephant, or an ourang-outang is in an exact ratio with the degree of developement of their cerebral mass, and whenever we find an animal, or a man, deficient in a particular organ of the brain, invariably the faculty of mind corresponding is also wanting. It is as reasonable to suppose any action of mind being brought into operation without its appropriate organ, as to suppose sight without an eye, or hearing without an ear. Thus if the animal has no organ in the brain appropriated to destructiveness, it cannot destroy. If there is no organ of ideality, there can be no poetical talent, or if there is no tune, there can be no conception of music; and if the reasoning organs are wanting, the being will not be able to

trace effects to their causes, or be a rational, or intelligent animal. The various parts of our body have each their own definite and appropriate function to perform, and one part cannot take on itself the function of another. The eye and its parts is expressly adapted for vision. The optic nerve to be stimulated by light, and light alone. The ear for hearing, the auditory nerve is expressly adapted to receive impression from sound, nor could it under any circumstances be affected by light, or the optic by noises. The same law is to be observed throughout the whole economy of nature. Every part of a plant has its own peculiar destined function, the office of the leaf being different from the root. Let any one examine the brain, and ask himself if the medullary and cineritious matter, the converging and diverging fibres, the convolutions, the cerebellum, the medulla oblongata, &c., parts so manifestly different in their structure, should perform the same function? If the duty of every part, can be performed by any part, there would be no occasion for a difference of parts. It is always a rational inference, that a difference of situation, structure, &c. necessarily implies difference of function.

Phrenology is the physiology of the brain, and proves that the mind depends on this organ, and that no mind can exist independently of it, in consequence of which, its opponents have railed against it, declaring that it tended to materialism, fatalism, &c. Phrenology in this particular is not singular; for all newly discovered truths have had these supposed monsters, fatalism and materialism, to struggle with! I say supposed, for they have been depicted to the minds of the ignorant in such vivid colors, that their mere mention

causes the feelings of horror and consternation to take the place of calm investigation and reason. All innovations on the preconceived doctrines of mankind have always met with violent opposition, and when they are based on truth, their opponents, no longer able to overthrow them by sophistry and vindictives, endeavor to prove that they possess evil tendencies.

This has been, and is, the case with the physiology of the brain, that it overturns the foundation of religion, tends to materialism, and destroys free will.

History shows us that every new discovered fact has shared the same fate.

Among the Greeks, the various schools of philosophy accused each other of impiety, &c.

The same kind of bigoted superstition has existed in all countries and ages—unfortunately too much of that blind dogmatism exists at the present day. Some men *dare* not think for themselves to these conformists, little or no credit can be given, for, had they been born in Turkey, they would have been Mahometans, in Hindoostan, Pagans.

Did not these kind of men persecute the great Tuscan astronomer, Galileo Galilei, at the age of seventy? This philosopher was tortured by the Inquisition, and forced to recant, because they pretended that his doctrine contradicted a particular passage of Scripture where it says, "the sun stood still," he proved the then popular error by showing, that the earth revolved around the sun, and not the sun around the earth, the latter position no one but a madman now would advocate.

Harvey, the discoverer of the uses of the heart,

and circulation of the blood, was ridiculed, called a madman and a fool; and not a medical man of the age of forty, yielded to the fact to the day of his death.

Christopher Columbus, when he made known his intention to the Spanish nation of finding the "new world," was treated as a visionary and a madman; Spain at that time was the most civilized nation in the world, and the abuse came from the Cortes, their most enlightened body of men.

Fulton, the man to whom the world yields the credit of having been the first and most active in promoting the application of steam to the propelling of vessels,—this man, in the *United States of America* was, and the feelings throb with sorrow at the record, ridiculed by the public press, and suffered to end his days in indigence!

Drs. Gall and Spurzheim, when they announced to the world the real functions of the brain, were denounced as materialists, deists, and fatalists, because, like their predecessors, the opinions they promulgated were in advance of the age in which they lived.

Malebranche thus represents the enemies of newly discovered truths: "It is not the persons of true and solid piety, who ordinarily condemn what they do not understand, but rather the superstitious and the hypocrites.

"The superstitious, through servile fear, are startled as soon as they see an active and penetrating spirit. For instance, one need only give them some natural reasons for thunder, and its effects, to appear an atheist or a fatalist in their eyes.

"But the hypocrites make use of the appearance of sacred truths revealed by all the world,

in order to oppose new truths by particular interests; they established for themselves, in the minds of men, a reputation the more solid and the more formidable, as what they thus abuse is more sacred.

“These persons are, then, the strongest, the most formidable enemies of truth.”

PROOFS OF THE PLURALITY OF THE MENTAL FACULTIES.

The mind can be occupied at the same moment in the performance of distinct and opposite operations, such as loving, hating, thinking, speaking, walking, seeing and hearing.

Bacon, Smith, Reid, Dugald Stewart, Locke, Brown, &c. advocate the unity of the mind, and do not admit it in two states at one time, but that it requires the whole mind or brain to produce any effect. Have we not distinct organs for smelling, hearing, seeing, &c., all of which they allow to be mental operations. Yet, that fear, love, hatred, music, painting, mathematics, poetry, adoration, mechanics, &c. should emanate pell-mell from one organ, is repugnant to reason, and forms an exception to every other portion of the system.

If the brain was an unit, all men would have talents alike, the only difference being in degree; no such thing as a genius in one department of mind could exist. Yet we find Homer a poet, Cæsar a warrior, Lycurgus a legislator, Archimedes a mathematician, Orpheus a musician, &c. among the ancients.

Shakspeare, Milton, poets; Washington, Napo-

leon, generals; Rubens, Van Dyke, West, Lawrence, painters; Mozart, Handel, Rossini, musicians; Bacon, Franklin, philosophers; Wren, Perkins, mechanics; Howard, Bentham, philanthropists; Newton, Kepler, mathematicians; Gibbs, Markley, Burke, murderers, &c. among the moderns, all excelling in one particular, and in every other respect sometimes below mediocrity.

I knew a man who could repeat the whole of the Old and New Testament—yet, in nearly every other particular he was an idiot.

The varieties of memory shew the plurality of the brain. Some persons have a splendid memory of names, and bad of places; others have a good memory of places, but bad of dates; others of persons, but bad of names, &c.

The various species of animals, whose characters are entirely different, have brains corresponding. The brain of the sheep differs from that of the tiger; that of the horse differs from the lion; the cat from the dog, &c. The part of brain calculated to produce the character is alone found.

MONOMANIA.

Monomania is the affection of one or more organs of the brain, while the rest retain their healthy action. This disease is commonly known as partial insanity, because only a certain number of faculties of the mind are impaired; this must of necessity destroy the doctrine of the unity of the mind. For if such were the case, the whole mind must be affected at one time: no such thing as partial insanity could take place.

The disease known to medical men as Nostalgia or a longing for home, is the consequence of diseased action of the organ of adhesiveness, and concentrativeness, whence the immense number of young men found in Napoleon's army afflicted with this disease: it being the custom in France to draw from the mass indiscriminately to supply the army. The Swiss are still more remarkable in this particular, as in several instances they have been known to die in consequence of the intensity of this feeling and its action on the brain.

Case 1st. In Savannah, Ga. I was introduced to a young lady, and desired to give her phrenological developements; and I found the organs of Veneration and Wonder extra large, and evidently under great excitement, from the local heat of the parts. The fact was, she continually considered herself infested or haunted by supernatural demons.

Case 2d. In Baltimore, Md. a gentleman called on me to have an examination of his head; I at once discovered a remarkable developement of Constructiveness, large Wonder and moderate reasoning organs; the consequence of this developement was, he was always endeavoring to invent flying machines, perpetual motion, &c.

Case 3d. Henry Williams, (a colored man,) well known as the clarinet player, at Harrodsburg Springs was questioned by me in presence of the undersigned gentlemen. Do you ever feel any sensation or numbness in any particular part of your head when playing or composing music? on which he immediately placed his fingers on each side of his head on the region where I previously located the organ of Tune, being immediately in front of Ideality, and outside of Humor; he also said that when he found himself perplexed in any

musical composition, that the pain became intense in the region. This is a very strong corroboration of the correctness of the location of Tune, for in his head the old spot indicated a total deficiency of the faculty, and this has been the case in all the eminent musicians that I have examined. William Henry is considered to be one of the best musicians in the country: he has composed several cotillions, waltzes and marches. Examined in presence of Capt. F. Marryat, R. N., Professor Bliss, Louisville; George Keates, T. S. Bell, M. D.; all of whom considered the coincidence as remarkable.

Case 4th. In the year 1832, in the Island of Jersey, I examined the head of Mr. Peter Mallett, (who considered himself the King of England,) and found the organs of Self-esteem and Love of approbation very large, and evidently inflamed, for the parts of the head corresponding to the organs in question were found to be much hotter than any other portion of the head.

Case 5th. In St. Malo's, France, I examined a man who was insane on religious subjects, and found the organs of Veneration very large and those of Reflection small.

Case 6th. In the city of Rennes, France, a woman who used to believe herself haunted by all kinds of evil spirits, demons, witches, &c.; I found the organs of Wonder extra large.

Case 7th. In Lancaster, Pa. a gentleman of large property, who on every occasion, committed all kinds of petty theft, and when the bills were presented for payment, discharged them with great cheerfulness, being satisfied by the mere gratification of the organ of Acquisitiveness, which was developed in a very considerable de-

gree; he acknowledged to me that he felt great pleasure in taking any thing if ever so trivial.

Case 8th. A lady who was thrown from her carriage and in falling received a severe injury between the eyes; on recovery, she lost all memory of names, even forgot the names of her nearest relations.

Case 9th. Victor Amadeus 1st. King of Sardinia, was in the habit, when opportunity offered, of stealing trifles.

Case 10th. Saurin, pastor of Geneva, though having strong reasoning faculties, and being a religious man, used to pilfer on every occasion. He entered the military service, so that by strict discipline he might arrest the propensity; he still however continued indulging this propensity, and was condemned to be hung. Ever seeking to combat this passion, he became a Monk, but until the day of his death he would steal.

Case 11th. The wife of the famous physician, Gaubins, had such a propensity to steal, that whenever she made a purchase, she would purloin goods of every description. The same feeling predominated in the Countesses M. and P. at Wesal.

Case 12th. Moreitz, in his experimental treatise on the soul, relates with great minuteness, the history of a notorious robber, who had the propensity to steal in such a degree, that being in articulo mortis, he stole the snuff-box of his confessor.

Case 13th. The famous Turpin, in England, used to rob the rich and give to the poor. The same is related of a notorious robber in Copenhagen.

Case 14th. In Frederick, Md. Oct. 5th, 1837, I examined the head of a young man named Wil-

liam Morton, who said he was greater than any of the apostles, and that his real name was Christ; and that the Almighty had revealed to him that he was destined to convert the whole of the Jews. He was perfectly sane on every other subject but religion. I found the organs of Veneration and wonder extra large, the latter organ being so much excited as to cause an increase of temperature, which was distinctly discoverable to the undernamed individuals who were present during the examination. The reasoning faculties only moderate, and the propensities very small. He felt tension or tightness in the region of Veneration, and complained of frequent headache.

Examined in presence of Rev. S. Brison, Dr. Jenks, Wm. Pitts, Messrs. Augustus Cummings, and H. G. O'Neal.

Case 15th. Baron Larrey mentions several cases of soldiers who had portions of their brain shot away, and always found a corresponding defect in the mind; one case in particular he mentions of a soldier who lost the greater portion of the cerebellum organ of Amativeness and the back part of the cerebrum, or organ of Philoprogenitiveness. He was extremely fond of women and children previous to the injury, but afterward, felt the most inveterate hatred toward them.

Case 16th. Van Sneiter mentions a case of a dress-maker, who, under the influence of cerebral inflammation, made elegant verses, though in health she had never even thought of such a thing.

Case 17th. In Savannah, Ga. a case similar to the last occurred, in the case of a colored female, who was examined by me in the public Jail. Though the organs of Ideality were only moder-

ately developed, in consequence of inflammation of those parts of the brain, she continually made abortive efforts at rhyme. Externally, the part was sensibly hotter than the surrounding portions of the head.

Examined in presence of Messrs. G. W. Hunter, J. Cragin, and J. Blunt, Jailor.

Case 18th. Dr. Gall knew an officer, whose ambition had never been gratified; imagining himself a general, placing himself in the attitude of command, he conversed on scientific subjects, and with the exception of the stiffness of his air, no trace of insanity could be discovered.

Case 19. A skull was presented to me by Dr. Charles Caldwell, of Louisville, to examine. I found the organs of Destructiveness of extraordinary size, not restrained by the moral organs. I pronounced him to be an assassin. It was the skull of a German, by the name of Dehman, who was executed in Indiana about ten years ago. This man acknowledged that he had committed nine murders, without the least provocation, or from any selfish motive, but merely to gratify the feeling of Destruction; or, as he expressed it, to see human blood, and the being in agony; he was in fact an amateur murderer.

Case 20. In Hagerstown, Md. at a public lecture, before an audience of five hundred persons, a skull was presented for examination, by some medical gentlemen who were strong anti-phrenologists.

I found the organs of Destructiveness, Philo-progenitiveness, Caution, Acquisitiveness, and Firmness very large. Hope, Conscientiousness, and the reasoning faculties very small.

I said he was continually calculating ill consequences; and always seemed in a forlorn condition, being afraid of poverty and dying in want, and that I thought it more than probable that he committed suicide. Such was the fact. He was a Hessian, by the name of Wermen, and in consequence of a law suit having been commenced against him, and fearing the consequences, he took an axe and destroyed his wife and children, and cut his own throat. Here then is an instance of a man, who from extreme love of his family, destroyed them. The enigma is solved in a moment on referring to the skull; his small hope and reasoning organs being too feeble to counteract the lower propensities which terminated his existence. On this occasion the most virulent opponents to the science were converted.

Case 21. I have in my possession a skull, which belonged to a female, who was executed for infanticide; still there is no deficiency of Philoprogenitiveness. But when we observe the immense size of love of Approbation and Destructiveness, with small reasoning organs, how can we be surprised at the result? Her fear of disgrace, combined with her destructive inclination, not checked by reflection, are of themselves, agents too powerful to be restrained by moderately large Philoprogenitiveness.

This, and a thousand other cases, will explain the cause of the blunders and palpable falsehoods promulgated by Anti-phrenologists. They, not being acquainted with the bearings of the organs one upon the other, only show their stupidity and ignorance in pretending to refute what they do not understand.

Case 22. In Columbia, S. C. a gentleman call-

ed me to ascertain his peculiarities of character. I discovered, on examination, the diseased action of the organ of Wonder, not checked by any other faculty, he having moderate Conscientiousness, small Secretiveness, and large Love of Approbation. The effect of this combination, produced the unfortunate tendency to exaggerate to the most extravagant extent; his constant tendency to magnify every thing he saw or heard, made him miserable, and the consequence was, when he did tell the truth, he never was believed. I do not mention this case because this is an uncommon organization, for such heads are found every day, though not so strongly marked.

Case 23d. In Louisville, Ky. a remarkable case presented of diseased action of the organ of Destructiveness, not restrained by the prudential or moral faculties. This man stated to me, that he felt extreme pleasure in destruction of any kind, and would indulge himself in any act of cruelty towards the lower animals. So atrocious were some of his acts of barbarity, that when he was reciting them, I thought my organ of Benevolence would have burst through my cranium.

For particulars of this interesting disease, refer to the works of Pinel, Abercrombie, Conelly, Spurzheim, &c., where thousands of similar cases will be found recorded.

SOMNAMBULISM,

Is known from dreaming, which arise from one or more of the senses and that portion of the brain from which the nerves of motion arise, remaining active, and therefore the person walks; we frequently in our dreams, talk, kick, and try to escape from

dangers presenting themselves vividly to the mind; persons at times answer questions put to them during this partial state of sleeping. Somnambulists perform acts which they dare not perform in the perfect waking state. They have walked in the most dangerous situations, on the tops of houses and on the edge of precipices, but should they awake suddenly, destruction would be the result. How is this explained? merely by their becoming apprised of their situation by the organ of Caution which before was asleep. Any one can walk on a plank when it is on the ground, but elevate it 30 or 40 feet and it becomes a difficult task; not that the person is less competent, but caution tells him he may fall.

DREAMING,

Or partial sleep, was never satisfactorily explained, except on the principle of the brain's plurality.

Dreams are merely the effects of certain organs active, while others remain dormant.

We can now account for the particular dream; as it will be fashioned by the part or parts which are not under the influence of sleep; and the inconsistency of our sleeping thoughts is accounted for by the organ thus acting without co-operation, or correction, from the other sleeping portions of the brain.

When the entire brain is in the sleeping state, no such thing as dreaming can take place.

When some of the reasoning organs are awake, and all the senses are asleep, then dreams occur which resemble and seem to be realities.

When the preceding conditions exist, and the voluntary nerves are awake, we have the state just

described called Somnambulism, which is a state of incomplete sleep.

When some of our intellectual organs and one of our senses are awake, we may be aware of the irrationality of our dream during that state.

When some of our mental organs are asleep with two or more senses awake, then we can attend to external impressions, and notice the gradual departure of our slumbers.

When we are quite awake, and are so occupied by mental operations, that we can divest ourselves from all external objects, we have a revery which deludes us like a dream. Is it not evident, that if the brain were a simple organ and performed its function as a unit, no such thing as dreaming could take place? one part could not be in the waking or active state while another remained in the passive or sleeping state; it must be altogether sleeping or waking.

Every body is acquainted with the fact, that a person may have become fatigued in consequence of applying his mind to one pursuit, and by changing the direction of his mind to one of some other nature, no lassitude is experienced; for instance, the mechanic or the merchant, after the toils of the day, may apply himself without any effort to any department of the fine arts, music, reading, or other entertainments.

How is this analyzed, on the supposition that the mind is an unit? In this case, every faculty must be relaxed at the same time—no such thing as partial fatigue can take place.

The organs are not all brought into operation at the same age; some remain dormant until mature age, others are vigorous and active in the

child, while others again are brought into activity at puberty. The organ of Amativeness in the child, bears a proportion to the other portion of the brain, as 1 to 12 or 14; and in the adults as 1 to 6 or 8.

The perceptive, or knowing faculties, are very large in the child, whereas the reflective or reasoning ones are only brought into operation at mature age. If the brain were a simple organ this could not take place.

Women possess certain faculties of the mind, much more powerful than men; while we find men again taking the ascendancy in other particulars. We even find children in one family varying in their characters as widely as can possibly be conceived; and I have found in the examination of some thousands, that there is a corresponding development of brain.

Those who apply themselves to one study, as Monks, Priests, Ecclesiastics, Artists, Poets, Musicians, are generally much more subject to mania, and it is among these classes of men that we find fanatics and enthusiasts; while we find those who apply the mind to a diversity of subjects, as Naturalists, Philosophers, Chemists, Geographers, &c., seldom afflicted with this disease.

The lower animals again furnish another proof of the plurality of the mind. The fox is cunning and sly; and in them we find the organs of Secretiveness and Caution.

The cat, tiger, panther, &c., are treacherous and cowardly; and there we find Combativeness and Adhesiveness small, and Caution, Destructiveness and Secretiveness large. In the dog, faithful and courageous, we find Combativeness and Adhesiveness large. Ostriches and cuckoos never see their

young; and in them we find the organ of Philoprogenitiveness wanting. The bear and monkey love their young, and we find Philoprogenitiveness very large. The beaver builds, we find Constructiveness very large. The nightingale, thrush, and canary sing, and in them we find the organ of Tune. The ourang-outang is sagacious, and we find an extra quantity of brain in the front region, which raises him above his brother monkies. The knowing elephant also shows his peculiar characteristics in the developement of brain, &c. The same law holds in every living creature with which man has become acquainted.

All the preceding arguments are opposed to the theories of the Metaphysicians, who ascribe to the mind *general* qualities, such as perception, judgment, reflection, imagination, will &c., we might as well pretend to describe the qualities of iron or gold, &c., by simply saying that they possess weight, color, or other general qualities which are possessed by most substances.

Philosophers generally have described the animal, moral and intellectual nature of man by the standard of their particular feelings. This state of things has existed for upwards of twenty five hundred years; but as a grand era in the advancement of medical science has been dated from Harvey's discovery of the circulation of the blood, so will an era even more glorious because fraught with more usefulness and happiness; an era in Mental science, involving the very springs of human conduct, be dated from the existence of Gall.

HISTORY OF DR. GALL.

Francois Joseph Gall, was born in a village of the grand Duchy of Baden, on the 9th of March, 1758. He was the sixth child. His father was a merchant and the Mayor of Teifenbrun, a village two leagues distant from Pforzheim, in Swabia. His parents professed the Roman Catholic religion, and had intended him for the Church; but his natural disposition was opposed to it. He afterwards pursued the Medical profession, and graduated in Vienna.

Dr. Gall gives an account, of which the following is an abstract, of the manner in which he was led to the study of the natural talents and disposition of man, his views of which terminated in the formation of the *Phrenological* system.

From an early age he was given to observation, and was struck with the fact that each of his brothers and sisters, companions in play, and school-fellows, possessed some peculiarity of talents or disposition which distinguished him from all the others.

Some of his school-mates were distinguished by the beauty of their penmanship, some by their success in arithmetic, and others by their talents for acquiring a knowledge of natural history, or of languages.

The composition of one was remarkable for elegance, while that of another was stiff and dry: and a third connected his reasoning in a closer

manner, and clothed his argument in the most forcible language. Their dispositions were different, and their diversity appeared also to determine the direction of their partialities and aversions. Not a few of them manifested a capacity for employments which they were not taught; some cut figures on wood, to delineate them on paper; some devoted their leisure to painting or the culture of a garden, while others abandoned themselves to noisy games, or traversed the woods to gather flowers, seek for birds nests, or catch butterflies. In this manner, each individual presented a character peculiar to himself, and Gall never observed that the individual who in one year had displayed a selfish or knavish disposition, became in the next, either good or faithful.

The scholars with whom young Gall had the greatest difficulty in competing, were those who learned by heart with great facility, and such individuals frequently gained from him by their repetitions, the places which he had gained by his original compositions.

Some years afterwards, having changed his place of residence, he still met individuals having a great talent of learning to repeat. He then observed that his school-fellows so gifted had prominent eyes; and he recollected that his rivals in the first school had been distinguished by the same peculiarity.

When he entered the University, he directed his attention, from the first, to the students whose eyes were of this description, and he soon found that they all excelled in getting rapidly by heart, and giving correct recitations, although many of them were by no means distinguished in point of general talent. He soon came to the conclusion,

that it could not be the effect of chance, and after reflecting maturely upon it, he came to the determination, that if memory was always accompanied by large, prominent eyes, our other faculties must be connected with other *external conformations*. "From this moment," says he, "every individual distinguished for any peculiar quality or propensity, became the object of my attention, and of a close study of their heads." Great poets, great Musicians, great Mathematicians, great Painters, great Artists, great Warriors, great orators, &c. all became the object of his investigation, and he always found a particular part of their head very much developed. In making these observations, he never conceived for a moment, that the *skull* was the cause of the different talents, as has been erroneously represented by his enemies; he referred the influence, whatever it was, to the brain. Dr. Gall had observed in the writings of the Metaphysicians, the variety and discordance of opinions relative to the brain. He observed that Philosophers and Physiologists asserted, that all men are born with equal mental faculties; and that the differences observable among them, are owing either to education, or to the accidental circumstances in which they are placed.

If all differences are accidental, he inferred that there could be no natural signs of predominating faculties, and consequently, that the project of learning by observation, to distinguish the functions of the different portions of the brain, must be hopeless. This difficulty he soon overcame, by the reflection, that his brothers, sisters and school-fellows had all received the same education, but that he had still observed each of them

unfolding a distinct character, over which circumstances appeared to exert only a limited control.

He observed that frequently those, on whom the greatest care had been bestowed in education, remained far behind others. "Often," says Dr. Gall, "we were accused of want of will, or deficiency in zeal; but many of us could not, even with the most ardent desire, followed out by the most obstinate efforts, attain, in some pursuits, even to mediocrity; while, in some other points, some of us surpassed others without an effort, and almost, it might be said, without perceiving it ourselves. But, in point of fact, our masters did not attach much faith to the system which taught the equality of mental faculties; for they thought themselves entitled to exact more from one scholar, and less from another. They spoke frequently of natural gifts of God, and consoled their pupils in the words of the Gospel, by assuring them that each would be required to render an account only in proportion to the gifts which he had received."*

Being convinced of these facts, that there is a natural and constitutional diversity of talents and dispositions, he encountered in books, still another obstacle to his success in determining the external signs of the mental powers. He found that, instead of faculties for languages, drawing, music, mechanics, remembering places, corresponding to the different talents which he had observed in his different schoolmates, the metaphysicians spoke only of general powers, such as perception, memory, imagination, and judgment; and when he endeavored to find external signs on the head for

* Preface by Dr. Gall, to the "Anatomic, &c. Du Cerveau."

these generalities, he found perplexities without end, and difficulties insurmountable.

Dr. Gall, therefore, determined to observe nature, and abandon all kinds of speculation founded on the preconceived opinions of others.

Being Physician of the Lunatic Asylum in Vienna, he had opportunities of observation, of which he availed himself, on the insane. He visited prisons, and resorted to schools; he was introduced to the Courts of Princes, to Colleges, and Courts of Justice; and whenever he heard of an individual distinguished in any particular way, either by any remarkable endowment or deficiency, he observed and studied the developement of his head.

In this manner, by an almost imperceptible induction, he conceived himself warranted in believing that particular mental powers are indicated by particular shapes of head.

Hitherto he had resorted only to Physiological indications, as a means of discovering the functions of the brain.

On reflection, however, he was convinced that Physiology was imperfect when separated from Anatomy. Having observed a woman of fifty-four years of age, who had been afflicted with Hydrocephalus from her youth, and who with a body a little shrunk, possessed a mind as active and intelligent as that of other persons of her class, Dr. Gall declared his conviction, that the structure of the brain in these cases must be different from that generally received; a remark which Tulpius also had made, on observing a Hydrocephalic patient, who manifested the mental faculties.

He, therefore, felt the necessity of making anatomical researches into the structure of the brain.

In every instance, when an individual, whose head he had observed while alive, happened to die, he used every means to be permitted to examine the brain, and frequently did so; and he found, as a general fact, that on removal of the skull, the brain, covered by the duramater, presented a form corresponding to that which the skull had exhibited in life.

The successive steps by which Dr. Gall proceeded in his discoveries, are particularly deserving of attention.

He did not, as many suppose, first dissect the brain and pretend by that means to have discovered the seats of the mental powers; neither did he, as others have conceived, first map out the skull into various compartments, and assign a faculty to each, according as his imagination led him to conceive the place appropriated to the power. On the contrary, he first observed a concomitance betwixt particular talents and dispositions, and particular forms of the head; he next ascertained, by removal of the skull, that the figure *and size of the brain are indicated by these external forms*; and it was only after these facts were determined, that the brain was minutely dissected, and important light thrown on its structure.

From this time Dr. Gall commenced lecturing in public, and was shortly after joined by Dr. Spurzheim, who was born on the 31st of December, 1776, at Longvick, a village about seven miles from the city of Treves, on the Moselle, in the lower circle of the Rhine; after the year 1804, these great men continued their labors conjointly, travelling to different places, visiting hospitals, prisons, and all places where persons were col-

lected in numbers. Dr. Gall died in Paris, 22d August, 1828, in the seventy-second year of his age; after having brought comparatively to a state of perfection, a science, whose results will be of more importance to mankind than any other that has adorned the path of civilized man. Dr. Spurzheim, having travelled through the greater part of Europe, visited the United States of America, where he died in Boston, November 10th, 1832. For further particulars relative to the travels and proceedings of these Philosophers, the reader is referred to Dr. Gall's work on the functions of the brain; and to the more recent accounts of Dr. Spurzheim's labors.

DIVISIONS OF THE HEAD.

The head is divided into three grand regions, viz: Animal, Moral, and Intellectual, and the mutual action of these, one upon the other, stamp the character. The Animal, being the seat of the feelings, gives energy, force, efficiency and impulse to the action of the Moral and Intellectual; and when the Animal region is small in comparison to the Intellectual, we have an expansive mind, wanting, however, in force and energy; there will be more of directing than propelling power, and the individual will be inefficient in all his doings. When the Animal predominates over the Intellectual, we have much more of feeling than reason; of passion than intellect; of propelling than directing power; of the animal than the human being. When the Animal and Intellectual are large, and Moral small, we find a strong mind, guided and depraved

by his lower feelings; he is the creature of his passions. Men of such a formation are dangerous, for they effect their purposes in such a manner, as to insure success, being indifferent of the tendencies of their proceedings, their only object being self-gratification. When the Moral region prevails over the Animal, we have goodness, virtue, and morality, without energy or force of character.

The abuse or correct action of the propensities, the refinement of the moral faculties, and the utility of the intellectual, depend on the character of the education received; still, each faculty retains its own natural current of energy and activity, it being only turned out of one channel of action into another. To illustrate: One having large Destructiveness, Self-esteem, the Moral full, and Reasoning large, in an uneducated state, would be dictatorial, arrogant, bombastical, self-conceited, and overbearing. The intellectual organs in this instance serving the impulses of his feelings. Whereas, if he were an educated and refined character, the same constitution would produce softness of manner, pride of character, independence; these same faculties being governed by his intellectual.

Phrenology, therefore, in the intellectual organs, points out what men can be, what they are, depending on their organization, and the circumstances in which they have been placed, those having the natural aptitude will be sure to distinguish themselves when thrown into favorable circumstances; it has been often said that "circumstances make men and not men circumstances," this is true to a certain degree. Yet if the raw material was not there for the circumstances to act on, no such thing as a great man would be pro-

duced even under the most advantageous circumstances; we must first have the iron before we can make the steel.

Had Washington's organization of brain been different from what it was, he might probably have died unknown, in spite of the revolution of 1776. Napoleon might have remained an unknown inhabitant of Corsica, if his brain had not been constructed as it was. If, circumstances alone made these men, why have we not more great men? for thousands have been more eligibly situated than Shakspeare, Brougham, Webster or Clay. Do not we find that out of the thousands of those who receive collegiate educations, few distinguish themselves; for if men of genius were manufactured like steam engines, then we might bring mankind to one common standard, but as we now exist, this is impossible. Have we not hundreds of examples, where talents have shown themselves in spite of all obstacles, and sometimes at an age when education or circumstances could have had little or no control? At the age of fourteen, Cato of Utica showed his horror and detestation of cruelty, which marked his future character. Pascal, at the juvenile age of twelve, wrote his celebrated treatise on conic sections. Benjamin West, when only eight years old, used to amuse himself by drawing on the floor and walls. Peter the Great remained a mechanic, and worked at his favorite occupation, though emperor of Russia. Louis, the fourteenth, king of France, turned locksmith. Socrates, Pythagoras, Demosthenes, Shakspeare, and many of the most distinguished men of Europe and the United States were the sons of mechanics.

So we see that men may attain the highest pin-

nacle of greatness, if they have the materials to work with; and again, we find that if a man have not this original structure, though he may be placed in a situation to improve, to a great extent, still he cannot be what he originally was not; an idiot can never become a Newton or Shakspeare.

Education therefore makes men, only so far as their organization will admit. The reader is referred particularly to the following considerations.

TEST OF THE ORGANS.

Every organ or faculty is established that comes under the following rules:

1. Which exists in one kind of animals and not in another.
2. Which varies in the sexes of the same species.
3. Which is not proportionate to the other faculties of the individual.
4. Which is not manifested simultaneously with the other faculties; that is, which appears or disappears singly, at earlier or later periods of life.
5. Which may act or rest singly.
6. Which may preserve of itself its proper state of health and disease.

FUNDAMENTAL POSITIONS.

Phrenology is based on the following premises:

1st. That the brain is the material organ of the mind.

2d. That the brain is composed of a number of parts, each having a special function to perform.

3d. That the brain differs in shape, size and constitution in different individuals.

4th. That the shape of the skull exactly corresponds to that of the brain; therefore, the shape of the brain may be known by inspecting the skull.

5th. That the quality or constitution of the brain, may be ascertained by the temperament.

6th. The larger the brain (the temperament being the same,) the greater its power.

7th. The larger an organ, the more disposed it is to activity, and vice versa,—the more active an organ, the more will it increase in size.

8th. The observation of men in different situations, as criminals and others, with particular traits and talents, national differences, and the conformation of the head of various species of animals.

9th. Pathological observations of persons suffering from affections of the brain, as of cretins, idiots, insane, monomaniacs—of persons whose brains have been injured by external violence or other causes—experiments with animals by eminent physiologists, as Magendie, Vimont, Gall, Elliotson, Combe, &c., all tend to demonstrate the truth of Phrenology.

EXAMINATION OF THE HEAD.

I have found that the surest method of examining a head, is first to observe the relative proportion, that the regions bear one to the other—next ascertain the temperament, then with the palm of the hand and the fingers, the part or parts should be inspected, (not with the idea of finding protuberances, or what are vulgarly called *bumps*,) but

the particular configuration of the head. Great care and circumspection, should be observed in combining the various developements before even an opinion should be given.

DIFFICULTY ATTENDING THE EXAMINATION OF SOME OF THE ORGANS.

The organ of Amativeness is frequently mistaken by the uninitiated, in consequence of the muscles of the neck being very large; or again, when the person is of the nervous Temperament, the parts may present a smaller appearance than is really the case.

The same caution should be observed in reference to Alimentiveness.

Constructiveness, again, is liable to be mistaken in size for the temporal muscle; being large, will give in the part an unusual enlargement. Therefore, when being examined, should always be desired to move the lower jaw, that the muscle may be put into motion, then its size will soon be known.

In consequence of a large frontal sinus, the organs of Individuality, Form, Size, and Locality, may be mistaken, though a skilful Phrenologist will detect in one moment the existence of this cavity. The organs of Calculation and Order are very difficult to discover, except when they are very large or small. The organ of Language is situated immediately above the supra-orbital plates; and when this organ is large, it causes this plate to be depressed; therefore, we have a much smaller cavity for the eye, which causes it to protrude. The Phrenologist is frequently deceived in this particular, if he does not observe the tem-

perament; those of the lymphatic having prominent eyes are not always linguists, because the protrusion is caused by adipose tissue. But whenever we find a prominent and full eye in a nervous or bilious person, depend on it, he has the capacity to acquire languages.

Experience in all these particulars is requisite; and all those commencing the science, should give their opinions in regard to these with great care.

The brain is, literally speaking, a double organ; that is, there are two distinct brains; each hemisphere being complete in itself, the same parts being contained on each side; the hemispheres present as near an approach to each other, as the eye does to its fellow. Therefore, when Phrenologists speak of any faculty of the mind, they include the organ of both hemispheres, for they act in concert, the same as the two eyes produce but one impression of the object seen on the mind.

Classification and Arrangement of the Mental Faculties. BY DR. COLLYER.

The organs are divided into two orders, which are subdivided into genera and species.

They are:

ORDER I.—AFFECTIVE FACULTIES.

GENUS I.—PROPENSITIES, OR FEELING.

SPECIES I.—DOMESTIC.

Amativeness,

Philoprogenitiveness,

Concentrativeness,

Adhesiveness,

SPECIES II.—PRESERVATIVE PROPENSITIES.

Combativeness,
Destructiveness,
Alimentiveness.

SPECIES III.—SELFISH PROPENSITIES.

Secretiveness,
Acquisitiveness.

GENUS II.—SENTIMENTS.

SPECIES I.—REGULATING SENTIMENTS.

Self-Esteem,
Love of Approbation,
Caution,
Firmness.

SPECIES II.—OPERATIVE AND IMAGINATIVE.

Ideality,
Wonder,
Humour,
**Tune,*
Imitation,
Constructiveness.

SPECIES III.—MORAL SENTIMENTS.

Conscientiousness,
Hope,
Veneration,
Benevolence.

* Located by the Author.

ORDER II.—INTELLECTUAL FACULTIES.

GENUS I.—PERCEPTIVE, OR OBSERVING.

Individuality,
Form,
Size,
Weight,
Colour,
Number,
Order.

GENUS II.—RETENTIVE FACULTIES.

Eventuality,
Locality.
Time,
** Proper Names,*
Language.

GENUS III.—REASONING, OR REFLECTIVE FACULTIES.

Comparison,
Causality.

* Located by the Author.

The Organs are divided into ORDERS, GENERA *and*
SPECIES.

[SEE CHART.]

ORDER I.—AFFECTIVE FACULTIES.

GENUS I.—PROPENSITIES.

SPECIES I.—DOMESTIC FEELINGS.

These are common to men and animals, and are necessary to the propagation of the species; they impart warmth and energy, and stimulate the other organs. They are situated on the lower and back part of the head, and commence with,

AMATIVENESS.

Situate in the region of the nape of the Neck, and, when large, gives fullness and width between the Ears; when small, the Ears approach, the Neck is small.

USE.—This faculty causes those peculiar feelings of love, which the sexes shew to each other; reciprocal affection, and the perpetuation of the species; it creates an insinuating politeness and fondness for the company of the other sex.

LARGE.—One having this organ large, shows a great partiality to the other sex; and when opportunities occur, finds it difficult to curb its tendencies, except when governed by large moral and intellectual organs; he is a favorite with them, from his fascinating address and manner, though in other respects he may possess disagreeable qualities.

With Amativeness, and large Ideality, one is apt to be romantic, and will be inclined to write verse to the object of his affection; and when

combined with large Firmness and Adhesiveness, he will be constant in his affections; but with Adhesiveness small, he will flirt with many; and if Conscientiousness be also small, with large Secretiveness, he will cause each to believe that he is honest in his intentions, and yet intend to deceive.

One with Amativeness and Acquisitiveness both large, and Benevolence small, will marry for the sake of obtaining money; but with Ideality and Adhesiveness large, will marry for the beauty and charms of his wife. One with the moral faculties also large, will enjoy the family circle; this feeling will be again increased, if Philoprogenitiveness is large. The same, having Destructiveness and Combativeness large, will defend his family, and even punish those, whom he conceives to be their enemies, with extreme severity.

One having Approbativeness and Self-Esteem large will be very desirous of obtaining the favor of the other sex, and will follow their advice on every subject; these kind of men are apt to be ruled by their wives, more especially when the reasoning organs are small. When Benevolence is large, and Acquisitiveness only moderate or full, he will spend money, &c., to gratify the other sex. When Self-Esteem and Secretiveness are very large, and the reflective faculties also large, the person, so constituted, will be in love, and not let others know it; but when Secretiveness is small, he will feel much pleasure in confiding in others, and even reveal the whole of his mind. When Ideality and Mirthfulness are small, he will be coarse, and even vulgar, in his amatory expressions; but when these organs are large, with large reflective faculties he will be elegant and choice in his

expressions. When Conscientiousness and the reflective organs are small, he will, at all times, yield to his inclinations; but when Conscientiousness is large, Approbativeness, Self-Esteem and Caution small, will repent and appear confused when others tell him of his proceedings, and will feel diffident in the company of females.

VERY LARGE.—The individual possessing this organ very large, if he have not large Firmness, and the reasoning faculties also large, will yield to his inclinations, will be loose in his proceedings, and give way to profligacy, obscenity, licentiousness, &c. and all kinds of vice resulting from the abuse of Amativeness. But, when combined with large Firmness and Conscientiousness, and large Reflective faculties, will be very fond of the society of women, and sacrifice every thing for their sake. This organ is freed from any thing gross or indelicate, by the Imaginative and Reasoning organs being large or very large.

FULL.—Amativeness full, makes the person, so constituted, love the other sex, but not to the extent of putting himself out of the common routine of life on their account; will not be particularly anxious to please them. For other combinations see Amativeness large.

MODERATE.—Amativeness moderate, with Ideality and Reflective organs small, will not care about the company of the other sex; if, however, Adhesiveness be large, he will like them merely as companions, and not from any amatory feeling; he will be chaste, and will dislike all kinds of obscene language.

SMALL, OR VERY SMALL.—The person, so constituted, cares little about the other sex, and does

not desire their company, indeed takes opportunities of avoiding them. These persons seldom marry, and generally prefer the society of their own sex.

N. B. This organ is generally smaller in women than in men. Discovered and located by Dr. Gall.

PHILOPROGENITIVENESS.

Situate immediately above Amativeness, and in the median line: when large, it gives a drooping appearance to the Head; when small, there is a general flatness on the back part of the Head.

USE.—This faculty causes the love that parents and animals show to their offspring; in man it also causes a love of dogs, horses, &c., and all beings dependant on him for support.

LARGE.—One in whom this organ is large, takes notice of children, and always feels pleased when they are in his company; he soon ingratiates himself into their favor. When this organ is combined with large Benevolence, small Combative-ness, and only moderate Firmness, the parent or guardian, “will spare the rod and spoil the child;” and when Adhesiveness is large, their loss is insupportable; it causes the reciprocal attachment between parents and children. When Combative-ness, Destructiveness, Firmness, and the Intellectual organs are large, it will cause their obedience, and a severe enforcement in the principles of education; with the moral organs large, will be very particular about their morals, &c. When Approbativeness is very large, it causes extreme parental vanity; and when the reasoning organs are only moderate, their children will be the principal theme of their conversation. N. B. This organ is larger in women than in men.

VERY LARGE.—Causes over indulgence, and the greatest pleasure to be felt in their society; every thing is given them which is asked for; and when Adhesiveness is large, their absence causes misery, and even produces derangement, and sometimes death. Persons of this constitution, have a tendency to become attached to the lower animals; and when combined with large Ideality and Approbativeness, will pride themselves in their horse, dog, &c.

FULL.—The person having Philoprogenitiveness full, likes children, but does not take particular notice of them when very young, he is however pleased with them when they begin to speak and walk. When Ideality is large, Combativeness and Destructiveness small, he will be delighted to see them enjoy themselves, and will join them in their amusements; but with Combativeness and Firmness large, will be strict, even to severity; and with the reflective organs large, will enforce obedience, and be very particular in regard to their education, but will not trouble himself much about them in other respects.

MODERATE.—The individual cares little about children, and never takes notice of them unless they are his own. With Destructiveness and Combativensness large, will treat children cruelly, and if Secretiveness and Caution are large, will take every opportunity silyly to injure them.

SMALL, OR VERY SMALL.—Dislikes children, and feels annoyed when in their presence; will punish them for trivial offences, and take great delight in tormenting them.

Dr. Gall found this organ very small in all those females who had been executed in Paris for the crime of infanticide.

N. B. This organ is large in the heads of the Hindoos, Caribs, Negroes, Amsterdam Idiot, Orang-outang, Baboon, Bear Elephant, &c. and

SMALL—In the North American Indian, Ostrich, Cuckoo, Alligator, Crocodile, &c.

Discovered and located by Dr. Gall.

CONCENTRATIVENESS.

Its situation, is above Philoprogenitiveness and below Self-Esteem, when large, it gives a general fullness to the back portion of the Head, its exact location being where the Parietal Bones join the Occipital.

USE.—This faculty gives the power of keeping the rest of the organs in continuous action, and causes application in mental pursuits.

LARGE.—One having this organ large, will be fixed and determined in his pursuits, and will be enabled to keep his whole mind on one fixed point until it is accomplished; he will be able to proceed with any business, but will become confused when several things claim attention at one time; he will retain unpleasant feelings, and, if Destructiveness is large, will be vindictive, and even revengeful. When Individuality and Eventuality are small, with reasoning faculties large, mental abstraction is occasioned, and absence of mind with regard to things which are passing around us. In argument, this organ is of great importance, for it enables the possessor to continue one train of thought, and to reason closely.

VERY LARGE.—One having this organ very large, is soon confused if several things claim his attention at one time; he is not calculated to follow many pursuits. When Caution is large, he will hesitate before he undertakes any thing; but, when once commenced, will go through with it

at all hazards; and, if it be combined with large Hope and Ideality, will cause men to undertake visionary schemes and never give up until they ultimately ruin themselves. Those writers and speakers who dwell long on one subject, have this organ very large.

FULL.—Can change his occupations and pursuits without much effort; he will be a good orator or writer, for his style will be short and to the purpose; and he will use no superabundance of words to convey his meaning.

MODERATE.—Does not feel those disagreeable sensations produced by a continuance of feelings caused by misfortune, &c.; can pass his mind from one thought or subject to another; soon forgets unpleasant occurrences; and will have great versatility of talent. This organ acts on all the others, and according to its size, so will its influence predominate.

VERY SMALL.—One having this organ very small, is fickle, undecided, will not remain in the same mind long; is always changing his opinions, &c.; has a hundred projects, but never accomplishes any of them; is always seeking for variety; finds it extremely difficult to fix his mind in study; lacks application, and indicates laziness. Flighty, giddy, inconsistent people have this organ small; and when Justice is small, they will never keep an appointment. If Ideality and the perceptive faculties are large, the individual will show himself off to good advantage, and appear to know much more than he really does; if Firmness and Justice are large, he may be able to adhere to his religious and political opinions.

Discovered and located by Mr. G. Combe.

ADHESIVENESS.

Situate above, and on each side of, Philoprogenitiveness; and, when large, gives a rounding appearance to the back part of the Head.

USE.—This organ causes the feeling of friendship; a desire to associate; attachment to persons; inclination to love and be loved; love of marriage, &c.

LARGE.—Those having this organ large, will become warm and devoted friends; and when combined with large Amativeness, will be a devoted lover; will sacrifice every thing for the object of their attachment; and if there be large Benevolence and small Acquisitiveness and Caution, will be very apt to serve a friend, even to his own injury; with Combativeness and Firmness large, will defend the rights of others, despite his own interest. If Benevolence, Mirthfulness, Ideality, and the Reflective organs are large, he will be very popular, and his society courted. One with large Secretiveness and Caution, will be very select in his choice of friends; and with Self-esteem small, will be bashful and diffident in the company of strangers. With Acquisitiveness small or moderate, and Benevolence large, will spend money freely, when in the company of friends; and if Approbativeness is also large, will spend to appear on an equality, or with the endeavor to outdo others.

With Self-esteem, Combativeness and Destructiveness large, the individual will be inclined to dictate and command; with large Concentrativeness and Destructiveness, will be revengeful, and take every opportunity to renew an old offence or quarrel; and if combined with large Se-

cretiveness, will take every artful, cunning, under-handed means to debase the objects of his revenge; and, if with small Conscientiousness, will have recourse to unfair, treacherous, despicable means; in fact, he will accomplish the end in view at all hazards.

But when Consciousness, Adhesiveness, and Firmness are large, he may be depended on; he will be frank and candid, more especially when Secretiveness is moderate.

VERY LARGE.—Will be devoted to his friends, and desire to be in their company; wishes them to accompany him on all occasions; will risk life and fortune for their sakes; their loss is insupportable, and often leads to insanity. This is more likely to be the case when Benevolence, Hope and Veneration are large, and Caution only moderate. When such a person professes friendship, he thinks that he never can do too much for his friend. But when Self-esteem and Concentrativeness are also large, and he becomes offended, he will be as bitter an enemy as he was before, attached as a friend. With large intellectual organs, he will seek for the society of men of his own class.

FULL.—One with Adhesiveness full, with large Benevolence, Ideality and Mirthfulness, will make an agreeable companion; and if Secretiveness is moderate or full, with good perceptive faculties, will soon study the character and know how to please; such a person will soon become a universal favorite; if combined with large Eventuality and Language, and small Concentrativeness, will have a fund of amusing conversation; but with Secretiveness large, Caution and Justice small or moderate, will have a prying, inquisitive disposi-

tion, and will be continually concerning himself about the affairs of others; with Acquisitiveness large, will be jealous about their property, more especially if Approbativeness is large. For further particulars, see Adhesiveness large.

MODERATE.—Will never sacrifice his own interests for the sake of a friend; if Secretiveness, Destructiveness and Acquisitiveness are large, and the Moral organs moderate, will sacrifice a friend to secure his own interests; with Caution large, will be fearful and suspicious about him, and ever jealous of his success; and if Secretiveness is large, will pretend to be interested in his behalf.

SMALL.—Thinks little of friends or society; lives secluded from the world; is little known, even by those in his immediate neighborhood.

This organ causes men and animals to congregate and form societies; from its influence, towns and cities are constructed. It is much larger in civilized than in barbarous nations.

N. B. Large in Gen. Wurmser, Scotch head, Buffalo, Wild Horse, Elephant, Spaniel Dogs, &c.

SMALL in the Cat, Tiger, Lion, Panther, Leopard, &c.

Discovered and located by Dr. Gall.

SPECIES II.—PRESERVATIVE PROPENSITIES.

These are calculated to inspire in man a spirit of defence and resistance; for, not being the least protected by nature, had it not been for these faculties, his species would have been annihilated by wild animals, and a variety of casualties with which he is surrounded from birth. They are located above, and surrounding the ear.

COMBATIVENESS

Situate above and behind the Ears; when large, it gives a general fullness in that region of the Head; when small, the Head tapers off.

USE.—This organ gives the feeling and faculty of defence, and is necessary to the accomplishment of every other undertaking, whether Moral, Physical, or Intellectual. It is one of the most useful organs, when under the guidance of the superior faculties.

LARGE.—The individual having this organ large, will meet opposition, brave danger, be animated in discussion, vigorous and energetic in his style. With Firmness, Mirthfulness and Benevolence large, will possess animation of character, and will endure without complaint the most trying hardships. With Self-esteem large, will oppose for the mere sake of opposition; will soon become annoyed and irritated, when contradicted. When Destructiveness and Wit are large, will ridicule his opponent; and when he finds himself inferior in point of argument, will commence boasting, and wish to fight. When Secretiveness is small, he will express himself fearlessly, and be perfectly independent in all his transactions; he will not care about pleasing; and, with Justice large, never compromises his opinions for the sake of pleasing. When the Moral organs are large, he will be determined, and never allow himself to be imposed on. With Caution moderate, he will be very passionate, and at all times violent; but if Concentrativeness is only moderate, with Benevolence and Adhesiveness large, will soon forget and forgive. With large Justice and Self-esteem, will fight for his rights; and with Adhesiveness

large, for the rights of his friends. When Veneration and Wonder are large, then Combativeness will be used to defend religion; and when the propensities are large, and moral organs small, we have a combination similar to those who have caused rivers of blood to flow, under the pretext of upholding the religion which they advocated. When Caution is large, with large Combativeness, we have a prudent, and yet courageous character. With Self-esteem large, will not allow himself to be insulted with impunity. With Amativeness large, will defend the rights of the other sex. With Acquisitiveness large, and Benevolence moderate, will enforce the payment of all that is due to him. With Destructiveness, Self-esteem, and the selfish faculties large, will be apt to treat all under him in a domineering, contemptuous manner, as if they were not worthy of his notice; it is among this class of men that we find the upstart, insolent, arrogant, self-conceited Dandy, who forces himself into notice by his effrontery, and by bullying all who dissent in opinion from himself.

VERY LARGE.—Will contradict every opinion, and dispute merely from the love of it; he will force his opinions on others; creates disturbance in every society or company in which he may enter, especially when Conscientiousness is moderate; delights in exciting broils and animosity among men; such a man always employs brute force; he will be an unpleasant associate, for, on the least occasion, he will fight and abuse; and, when Caution is small, will be desperate and violent when roused.

FULL.—The person having Combativeness full, with large Language and Self-esteem, will be very

fond of talking and enforcing his opinions on others; and with Firmness large, will be obstinate, and not even listen to the argument of others; and with love of Approbation large, will be a great boaster of his own doings and exploits, and he is sure to make himself the hero in his narratives; when Caution is full, he will not fight except he is obliged of necessity; such appear brave when danger is far off; they prove the words of Butler's Hudibras:

“He that fights and runs away,
Lives to fight another day.”

MODERATE.—Will never fight or quarrel, except when very much provoked; and when Caution is large, will always avoid blows and act the coward; if Firmness is small, he will require energy and force of character, and will not oppose others, even when he is in the right; and when Benevolence and Approbation are large, will yield to others in order not to offend them; with Veneration and Self-esteem small, will be meek, humble, and a poor dependent being.

SMALL.—One having Combaticiveness small, will not contend for his right; with Benevolence large, will be mild, and amiable, and will surrender his rights sooner than contend for them, and will avoid quarrelling; he is tame and inoffensive; though, when Approbativeness is large, he may have shown himself off, and in the estimation of his friends appeared a brave man, especially when Secretiveness is large; hundreds of these cases have come under my observation.

N. B. LARGE in Charles XII., Cæsar, Roman Combatants, Gen. Wurmser, Lord Nelson, Luther, Robert Bruce, Dugusclin, Marshal Ney, Murat, and in most savage nations. I have examined

several hundred Indians, and in nearly every instance, found the organ very large. Bull-dogs, Cocks, &c. also have it large.

SMALL in Melancthon, in the Hindoos, and Chinese, fifteen having been examined by me at different times. It is also small in the Rabbit, Hare, Deer, &c.

Dr. Gall relates an anecdote of a very handsome female, who from her childhood, had been fond of dressing in male attire, and going secretly out of doors to fight with blackguards in the streets. After her marriage she constantly sought occasion to fight with men. When she had guests at dinner, she challenged the strongest of them after the repast to wrestle. He likewise knew a lady, who, although of small stature, and delicate constitution, was often summoned before a justice, because of her custom of striking her domestics of both sexes. When she was on a journey, two drunken wagoners, having lost their way in the inn during the night, entered the chamber where she was sleeping alone; she received them so vigorously with the candlestick, which she hurled at their heads, and the chairs, with which she struck them, that they were forced to take themselves to flight. In both these cases the organs of Combativeness were of unusual size, and this first led him to its discovery.

N. B. Gen. Wurmser was one of the bravest officers in the Austrian army; he was conquered by Napoleon Bonaparte, after several obstinate engagements. In him this organ was very large.

This organ was discovered by Dr. Gall.

DESTRUCTIVENESS.

Situate immediately above the Ears, and, when large, the Head is wide in this region; and when Secretiveness is only moderate, it causes a swelling above and a little behind the Ears.

USE.—This faculty causes the feeling of Destructiveness, Extermination, Cruelty, and the desire to kill; love of hunting, &c.

LARGE.—One having the organs of Destructiveness, Combativeness, Self-Esteem, and Firmness large, will be very severe in all his doings; shew much determination of character; be morose, and easily provoked; with Wit large, makes use of cutting, sarcastic language; and with Secretiveness small, will be blunt and pointed in his remarks, and give offence in consequence of his speaking just what he thinks. With Self-Esteem full, will treat his enemies with contempt. With the Moral organs moderate, will be fond of all cruel employments or amusements, such as witnessing executions, seeing bull, cock, or dog fights. One with Adhesiveness large will defend his friends, but frequently hurt their feelings by his unguarded remarks. When Combativeness is moderate, will be severe, and even vindictive; and with Secretiveness large, will have revenge, when insulted, even if he obtains it in a sly, underhanded manner; and with Self-esteem small, will be a dangerous character; and when Benevolence is small, indifferent to the appeals of misfortune.

The Reasoning and Moral organs large, correct the preceding consequences.

VERY LARGE.—One having Destructiveness very large, with large Reasoning faculties, will be able to subdue his passion and feelings of indigna-

tion; and with Secretiveness and Caution large, will be enraged and not show it to those about him. But with Caution and Secretiveness small, or moderate, and the Reasoning organs full, will be desperate when roused; fond of bloodshed; inclination to tear and break to pieces; and, when excited, will murder, poison, or be very cruel towards animals and all in his power. With Veneration and Justice small, will swear, curse, and make use of violent oaths.

FULL.—One having Destructiveness full, will exterminate nuisances, noxious animals and plants, &c.; with Combativeness large, will possess energy of character; he will meet the vicissitudes of life, and will push his way through it; he will subdue all things that tend to retard his interest. With Self-Esteem and Combativeness full, will maintain his character among his fellow-men. With Benevolence full, will be mild at times; and with Adhesiveness and Amativeness large, will be devoted to his family, but severe and harsh when provoked.

One with Destructiveness full, and with large Wit, will teaze and tantalize, and yet be kind in his disposition; he will not be unnecessarily cruel, though he can inflict pain when necessary; such men are always energetic and determined.

MODERATE.—One with Destructiveness moderate, and Adhesiveness large, would resent, with severity, the injury of a friend; with love of Approbation, Locality, Size and Form large, will be extremely fond of hunting, and pride himself on his shooting; but, with Benevolence, will spare pain to the animals he may so destroy; and when Firmness is small, will not be able to witness bodily suffering or death; when the reasoning organs are

also large, will not resort to harsh means, but resort to conciliatory measures in all cases of dispute; when Conscientiousness is large, he will have feelings of a fine tendency, disposed to relieve the poor; and even meet dangers and expose himself for the sake of others. With Conscientiousness small, and love of Approbation large, will at times, when much excited, kill to prevent himself from being the object of disgrace.

SMALL.—When Destructiveness is small, the person cannot witness or inflict pain; is inefficient, effeminate, and puerile. His orders are ridiculed; and when he attempts to manifest anger, it produces no effect, and he is held up to ridicule; he is so mild and forbearing, that he may be abused with impunity. Combativeness full, modifies small Destructiveness.

LARGE in Markley's skull, (in the Author's possession,) Gibbs the Pirate, Tardy, Hare, Burke, Williams, Nero, Caligula, the Lion, Tiger, Brown Bear, Cat, Wolf, Rat, Mole, Weasel, Ferret, &c.

SMALL.—Timid female, Hindoo, Horse, Ass, Ram, Buck, Elephant, Camel, Hare, Rabbit, &c.

Dr. Gall was led to the discovery of this organ, by comparing the heads of carnivorous with herbaceous animals; in the former, he found the large mass of brain to lay about the ears, and in the lower and back regions of the head; whereas, the latter presented quite a distinct configuration; he afterwards examined the heads of seven noted murderers, and found the same portion of brain to be invariably of large size.

Discovered and located by Dr. Gall.

ALIMENTIVENESS.

Situate in front of Destructiveness, and when large there is a general fulness before the Ear.

USE.—This organ gives the desire for Aliment Sustenance, &c., and is of great importance in selecting the proper kinds of food, and those most calculated to nourish the system.

LARGE.—One with the organ large, will be desirous about good living; when Acquisitiveness is large, he will like to give way to his feeling at the expense of others. These persons generally love the table, but are penurious at home. With Benevolence and love of Approbation large, and Acquisitiveness moderate, will be extremely fond of entertaining his friends. With Ideality large, will be very particular about the mode that his victuals are cooked in.

VERY LARGE.—One having this organ very large, will be always on the alert for food—desires very high living, and leads to gluttony. Such a person “lives to eat;” he is always quick and ready to accept an invitation to any repast where he thinks he will gratify his taste.

FULL.—Will be fond of food, yet not lead to gluttony: though he may be fond of a variety of dishes, &c.

MODERATE.—Will not care much about food, and even at times forget his meals. When Acquisitiveness is large, will be penurious and deprive himself of food in consequence of its expense.

SMALL.—One having this organ small, cares little about food, and will not be particular about the kinds of meat he has for his meals.

Discovered and located by Dr. Hoppe.

SPECIES III.—SELFISH PROPENSITIES.

These provide for our wants, and cause the feelings of self-protection; create and increase the feeling of self-preservation, &c. They cause many animals to store up provisions for the winter.

SECRETIVENESS.

Situate about one inch and a half over the ears, and immediately above Destructiveness. When large, it gives width to the head.

USE.—This faculty enables us to keep our thoughts to ourselves. It induces secrecy, concealment, cunning, falsehood, trickery, &c.

LARGE.—One having Secretiveness large, is enabled to keep his thoughts, feelings and plans to himself; and can effect his purposes indirectly, and without detection. With Imitation large, he will appear to feel as he does not, and can with ease discharge from his countenance and appearance, all indications of his real feelings. He will suffer pain or sickness without complaining of it; and with Firmness large, will suppress the feelings of joy, anger, vexation, disgust, revenge, love, &c. With large Caution, will be reserved; prudent about speaking; slow to communicate. And with Adhesiveness full, will be slow to form acquaintances, and have few friends as confidants. With Destructiveness large, will be secretly revengeful. With Wit large, fond of mirth; and will ridicule others, without their perceiving it. With Conscientiousness small, or moderate, is suspicious about the intention of others; never answers a question directly; and when he gives an opinion, it will bear different interpretations. With love of Approbation large, he will employ deceitful means to advance his reputation.

VERY LARGE.—One having Secretiveness very large, will be suspicious, intriguing, deceitful; will hesitate, recommence his sentences, and mystify all his sayings and doings. With Conscientiousness small, or moderate, will sacrifice any body as long as he advances his own selfish motives.

FULL.—Will be enabled to keep to himself all his private concerns; yet, on other subjects, will express himself freely. When Adhesiveness and love of Approbation are very large, he will be frank, candid, and not much reserved; this will be likely to be the case, when Justice is also large, he will not act with deception towards his friends; but with Justice only moderate, will act with deception when it suits his purpose. Ideality large, is essential to the Novelist, Dramatist, &c.

MODERATE.—One having this organ moderate, will be plain, undisguised, frank, and free from dissimulation or deception; he is free to express his opinions; and when Caution is small, will lay himself open to imposition from others; such a man injures himself materially by exposing his own private affairs; and, with Language large, feels much pleasure in relating all he knows. With Destructiveness and Combativeness large, he will use severe language when irritated, and will frequently say more than he means; but with Benevolence and Justice large, will soon make acknowledgement for such unguarded expressions.

With Self-esteem large, will be high-minded, independent, speak his mind freely, and tell a man just what he thinks of him. With Caution large, will show great care in all his transactions in business, &c., yet be imprudent about speaking.

SMALL.—One having this organ very small,

speaks just what he thinks; is so frank and open hearted, blunt, and undisguised, as to leave himself always open to the treachery of others; he always appears just as he is; he is known on very short acquaintance; always shows his true colors; is apt to speak out his whole mind, without regard to time or place; and uses plain, unequivocal language. Such a man hates and detests hypocrisy or deceit.

LARGE in Talleyrand, J. Honfleur, in the North American Indian, Fox, Tiger, Cat, &c.

SMALL in Dr. Dodd, &c.

Discovered and located by Dr. Gall.

ACQUISITIVENESS.

Situation.—This organ lies in front of Secretiveness, about two fingers breadth in front of the upper portion of the ear. When large, there is a fullness and width in this organ; when small, the converse is the case. [See plate.]

USE.—This faculty causes men and animals to accumulate and collect; it excites a desire for property; and the feeling of covetousness.

LARGE.—One having this organ large, will be fond of money, goods, property, &c.; takes pleasure in collecting together things of every description; he is always on the alert to make money; feels a great desire to become rich; spends money with reluctance.

One with the perceptive faculties large, will always make a good bargain, and never let others get the least advantage; with Benevolence and Self-esteem moderate, will be mean and small in his dealings. One having Hope and Ideality large, will risk much for the sake of gain, and desire to make money wholesale; and with Firmness and

Combativeness large, will be a bustling, enterprising character; with Caution small or moderate, will risk even when the chances of success are small; with Secretiveness large, is always on the "qui vive." With Caution large, never speculates, except he is sure of success; is slow to act; and pursues a sure business. Men of this kind get rich by degrees, and prefer a certainty to the chance of making a larger fortune in a short time, if it is accompanied by the least risk.

One with Concentrativeness small and Hope full, will not remain long at one pursuit, but will barter in different articles, and make money when an opportunity presents; and with Justice small, will not be particular with whom he deals; and receive stolen goods, and steal himself, or practice dishonesty in his dealings; with the Moral organs also moderate, will have recourse to every means to obtain money in a clandestine, swindling manner.

One having Acquisitiveness large, with Hope small, will be always fretting and troubling himself about the future; becomes miserable in the midst of plenty, from the feeling that he may come to want and beggary.

One with Adhesiveness large and Caution only moderate or full, will lend money to friends.

One with the reasoning faculties and Acquisitiveness and Benevolence large, will be a charitable, good man, but will not give until he becomes well convinced that the object of relief is deserving of such.

It has been seen that the organ of Acquisitiveness desires riches, property, &c., but the object of such property is specified by the other organs; for instance, if combined with large love of Ap-

probation, will acquire to appear on an equality with his fellow-men; will dress well; build a fine house; have fine furniture, carriage, &c.; yet be penurious in every other respect. With Ideality large, will spend money in the fine arts, such as books, paintings, &c.; with Tune large, for the acquisition of music; with Veneration large, will give money for the cause of religion, &c.; with the reasoning organs large, will be fond of accumulating minerals, shells, and all kinds of curiosities. With Philoprogenitiveness large, will acquire money for the sake of his children.

VERY LARGE.—One having Acquisitiveness very large, will be continually thinking of money; deprive himself of the necessaries of life, and be close in all his dealings. He will be so fond of accumulation, that he will not care how it is obtained, so long as he accomplishes his own ends. If Acquisitiveness, and Self-Esteem are very large, and Benevolence moderate, he will disregard the wants of his friends or of the poor. With Justice moderate, will practice theft, and take every opportunity to encourage others to steal, so that he may profit by it. But with Benevolence and Adhesiveness large, will divide with his friends the property so acquired. (For further Combinations, see Acquisitiveness large, merely deducting the degree.)

FULL.—One having this organ full, will desire to amass riches and acquire property in all its forms; he likes money, yet generally spends it to gratify the other faculties; with Adhesiveness and Amativeness large, will spend money for the other sex. With Approbativeness and Ideality large, will spend to make a show, will buy unnecessary articles of dress, &c.; and with the Reasoning fac-

ulties large, will be remarkably fond of accumulating books, and particularly such as contribute to the advancement of science. With Firmness and Combativeness large, and Destructiveness full, will be a spirited character, always ready to contribute to the public good.

MODERATE.—Values money merely as a means and not an end, only to carry on the affairs of life; with Ideality and Approbativeness large, will not value money as such, and will purchase every thing he desires and show great taste in his choice of articles. With Justice small, will run in debt and never intend to pay. With Destructiveness large, will spend money even when he requires it for other purposes, more especially when Caution is also moderate.

SMALL, OR VERY SMALL.—Cares little about money, and spends it without cause; with Caution and Justice small, never pays his debts; with Benevolence large, will soon ruin himself by his reckless and inconsistent expenditures.

Discovered and located by Dr. Gall.

GENUS II.—SENTIMENTS.

These combine the feelings common to the propensities and emotions which are possessed by men, and the higher order of animals; they are located in the upper and back portion of the head.

SPECIES I.—REGULATING.

These rule and modify the action of all the other faculties; they regulate the action of man, as a moral and intellectual being.

SELF-ESTEEM.

SITUATE on the median line, about the spot where the hair divides, in the upper and back portion of the Head. When large, this portion of the Head presents a general fullness; when small, this region is flat. [See plate.]

USE.—This faculty gives the feeling of pride, independence, sense of character, self-respect, haughtiness, presumption, &c.

LARGE.—One having this organ large, will be profound, elevated, and always perfectly independent, thinks himself as good as others; will depend on himself, and never allow others to dictate to him; he is calculated to lead and command; and when combined with large Destructiveness and Combativeness, the person so constituted will be haughty, overbearing, domineering, arrogant, self-sufficient, and apt to treat others with disdain; with Benevolence and Justice large, will be proud, but a deserving character in every other respect; he will not be guilty of meanness; and with Ideality large, will be choice in all his doings; will show great beauty in his style of expression, dress, &c. With Acquisitiveness large, will place great value on all that he has; with Caution moderate, and Combativeness large, will not bear contradiction; soon loses his temper; is very irritable; with the reasoning faculties moderate, and the perceptive large, will think much more of himself than others will of him; he is always pleased when he is the subject of conversation; and when Wit is small, is a tiresome companion.

VERY LARGE.—One having this organ very large, will think and talk so much of himself as to become disagreeable to others; thinks himself infallible; and with Firmness large, never admits

a fault; he is proud, bold, forward, and pushes himself into society where he is not wanted; is egotistical, jealous, and frequently uses the words I and me.

FULL.—One having Self-Esteem full, will be independent, and if combined with Benevolence, and Conscientiousness large, will be a fond deserving character, and not cringe, or act the sycophant, but will condescend, without compromising his honor; he will command general respect; will not take too much on himself; and if the Reasoning faculties are large, will be looked up to, and referred to in cases of difficulty, &c.

MODERATE.—One having this organ moderate, is apt to undervalue himself; thinks others his superior; refers to others, even when he is much their superior; with Approbativeness large, will be apt to ask and follow advice; always feels unworthy, and diminutive; and, with Veneration large, bashful, will be diffident, and want self-confidence.

SMALL.—One having this organ small, will think so little of himself that he is not thought much of by others; in his own estimation, he is least worthy of notice of all mankind. The least circumstance will cause him to appear confused; and with Secretiveness large, is afraid to look at a man full in the face.

LARGE in Philip II. Henry IV. George IV. Peacock, Turkey Cock, Hares, &c.

Small in Melancthon.

Discovered and located by Dr. Gall.

LOVE OF APPROBATION.

Situate on each side of Self-Esteem, and above Caution and Adhesiveness.

USE.—This faculty causes men to aspire to eminence, a desire to excel; spirit of ambition; vanity; love of glory; the desire to please and be pleased.

LARGE.—One having this organ large, is very vain and courts approbation from others; does every thing in his power to excite praise; he is very desirous of being thought highly of; he will be polite and courteous to all about him.

One having Love of Approbation and Adhesiveness large, will not oppose his friends from the fear of offending them. With Combativeness and Destructiveness large, will be soon roused, and will avenge an insult on his character with determination. With Self-Esteem and Secretiveness full, and Benevolence, Ideality and Comparison large, will be gentlemanly in his behaviour. With Firmness full, and Self-Esteem moderate, will be much mortified by the frowns of the public; such a man will aspire to office; and with Benevolence large, will be untiring in his efforts to please. With Veneration large, will undervalue himself and think too much of others. With Secretiveness large and Conscientiousness moderate, will always compromise his veracity, and is continually shooting with a 'long bow.' With Combativeness, Destructiveness, Self-Esteem, Firmness, Ideality, Causality and Comparison large, will possess a fine mind, and a great desire to appear before the public, and to gain popularity.

One with Love of Approbation large and the Reasoning organs full, will endeavor to excite admiration by his dress, house, &c., will be conceited and officious, and stoop to meanness; he is soon discomfited by ridicule, and is apt to give way to his rage.

VERY LARGE.—One with this organ very large, will be so desirous about the opinion which others have of him as to cause uneasiness and even misery; he is so vain that when he is not the theme of conversation he becomes piqued and sullen. When the Reasoning faculties are only full, he will be so much concerned and ask so many questions relative to himself, as to become disagreeable to those about him. He will be extremely affected in his manners, and put on many foolish airs, and be very fastidious; with the perceptive organs large, will appear to know much more than he really does; a complete varnished man; and with Causality moderate or full, is a complete fop, dandy or coxcomb, and very particular about fashion, &c. Is also very ambitious to surpass others.

FULL.—One having Love of Approbation full, will think highly of himself; will even at times compromise his honor, especially when Conscientiousness is only moderate. With Combativeness and Destructiveness large, will be given to rage; and with Firmness moderate or full, will not be able to govern the open manifestations of anger. With Ideality large, will be fond of composing verse; and with Comparison and Causality moderate or full, will be a plagiarist. With Imitation, Wit and Secretiveness large, will soon adapt himself to all societies; such a man is very popular; and if combined with Ideality, Adhesiveness and Language

large, will be a universal favorite; will possess the power of pleasing, and not be a sycophant. With the mechanical organs large, will desire to excel as a mechanic; with Tune large, as a musician; with Number large, as a mathematician, &c.

MODERATE.—One having Approbativeness moderate, will not court public praise, and will not be guided by the opinion of others; with Self Esteem large will be quite indifferent, and first please himself; will not condescend to please others, they must accord with his opinions; such a man having Conscientiousness large, will follow a straightforward honourable course, even if by so doing he creates many enemies.

SMALL.—One with Approbativeness small and Self-Esteem large, will be so indifferent to the opinion of others as to appear rude, forward, bold; cares not whether he pleases or displeases. With Ideality small or moderate, is so coarse and blunt in his expressions as to give offence, more especially when Secretiveness is also moderate.

LARGE in the North American Indian, Napoleon Bonaparte, Lafayette, the Dog, Horse, Cat, &c.

SMALL in Peter the Great, Bruce, &c.

Discovered and located by Dr. Gall.

CAUTION.

SITUATE above and a little posterior to Secretiveness; about the centre of the parietal bones.

USE.—This faculty causes the feeling of fear, circumspection, fear of consequences, irresolution; and if it were not for the organ of Caution, men and animals would be deprived of the means of

guarding against dangers, incident to their existence.

LARGE.—One having this organ large, is very careful about his proceedings, seldom undertakes any thing without mature deliberation, and at times seems undecided and undetermined, lest he should do wrong, and when he has made up his mind, is afraid to carry out his project, if Firmness be small.

One with Caution, Destructiveness and Combative-ness large, will be slow to commence, but when once interested in any undertaking, drives it with much energy; he may be fearful until his courage is once roused, and then will be bold, and even reckless; he will be brave and yet prudent; will have great presence of mind in danger, and much cool courage. With Hope large, will embark in speculations on a large scale, and if Causality and Comparison are large, will seldom fail in his projects; he will be depressed when things do not present a favorable aspect, and soon elevated by the least success; in this respect he will show contradictory traits of character; and when the perceptive faculties are large, Wonder small and Hope moderate, will be generally successful; he is sure in his dealings, and generally gets the best of the bargain.

VERY LARGE.—One having Caution very large, is fearful and irresolute, creates in his mind groundless fears, and magnifies the least reverse of fortune; with Hope small, considers himself nearly ruined, and will not risk when there is a great chance of success.

One having Caution very large and Combative-ness moderate, is soon discouraged, timid, lacks energy and decision of character, and is the com-

plete coward. With Hope moderate, is continually making trouble where none really exists, always looks on the dark side of the picture, and indulges in gloomy feelings. Such a person is afraid to mount a strange horse or travel by water; indulges in dreary ideas, anxiety, and is given to melancholy.

FULL.—One with this organ full, possesses a sufficient degree of caution to provide against accidents, which would happen, were it not for this faculty; he is generally circumspect, except under extraordinary circumstances.

One with Caution full and Acquisitiveness large, will be careful about property; with Adhesiveness large, keeps on good terms with his friends; with Secretiveness large, will be careful about speaking; with Philoprogenitiveness large, anxious about children. So that a person may be careful about one class of subjects and careless in others; the object of care being according to the faculty developed.

MODERATE.—One having this organ moderate, will act from the impulse of the moment, and be exceedingly rash and precipitate in all his doings unless modified by large Causality and large Secretiveness; in this case the person will desire to undertake and feel an almost ungovernable impulse to act, but his reason prevents him; he does not commit himself in expression, but with Hope large is too speculative and imprudent in his doings.

SMALL.—One having Caution small is so rash and impetuous, as to be continually getting into difficulties; and with Secretiveness also small, speaks at a time when he should be silent; reveals

the whole of his own affairs to others; is heedless, totally regardless of consequences, and does every thing out of place. With Combativeness large, will be a desperate, pugnacious character, and quarrelsome, and should Destructiveness be large and the Moral organs moderate, the consequences attending such a combination would lead to melancholy results.

This organ is much larger in females than males.

Large in Hindoos, Chinese, Hare, Deer, Sheep, Otter, Mole, Wolf, &c.

Small in Gen. Wurmser, Charles XII., Bulldog, &c.

Discovered and located by Dr. Gall.

FIRMNESS.

Situate on the top of the back portion of the head, immediately in front of Self-Esteem—its exact location may be known by drawing a perpendicular line from the opening of the ear, directly upwards, which will pass through the centre of the organ. When large, it gives to that portion of the head a prominent appearance. [See Plate.]

USE.—This faculty gives decision, stability, perseverancè, determination, and consistency to character.

LARGE.—One with this organ large, will be so fixed and determined in any position he may take, as to appear obstinate; will not be turned from his purpose, plans or opinions. One having Self-Esteem, Combativeness and Destructiveness large, will drive every thing before him, and show great determination even in the greatest difficulties. It is very difficult to convince him, even when he commits an error, and is so blind in his

own opinions, that when contradicted he becomes sullen and ill-tempered; and with Concentrativeness large or full, will retain ill-feelings for a great length of time—and if Conscientiousness is only full, then such a person will take every opportunity to advance his own interest—will play the hypocrite and will dissimulate as occasions require. With Caution large, will hesitate before commencing any project, but when once decided, is fixed and not to be turned from his purpose. With Benevolence and Adhesiveness large, “may be led but not driven.” With Hope large, will lay out plans for the future—and with Caution only moderate, and the Reasoning organs full, will adhere with such tenacity to his plans, as to cause his ultimate ruin, even when he has been told of his imprudence.

VERY LARGE.—One having this organ very large, will be obstinate, stubborn, self-willed, and fixed and determined in all he says and does. With Combativeness and Self-Esteem large, will force his opinions “*nolens volens*” on another—and with Reasoning organs full or moderate, will not bear contradiction; thinks himself infallible, and will not listen to the voice of reason. When the Reasoning organs are large, and Combativeness moderate, will be convinced in his own mind and yet not acknowledge it.

FULL.—One having Firmness full, will be positive and determined, though not obstinate, and will yield when convinced of his error. With Adhesiveness large, will be constant in friendship as long as he is interested: but with Conscientiousness moderate or full, will be apt to waver in his likes and dislikes, and will change his opinions to suit circumstances: but when Con-

scientiousness is large, he will adhere to his opinions to the last. When Concentrativeness is small, he will be undecided and fickle minded. With Caution large, will be afraid of consequences, and therefore show irresolution.

MODERATE.—One with this organ moderate, will be changeable, undecided, and never know his own mind, or remain of the same opinion long. With Combaticiveness large, will persevere as long as the novelty of any thing lasts. But with Caution moderate or small, and Love of Approbation large, will try to please every body and please nobody; and with Conscientiousness moderate, and Secretiveness large, will play the hypocrite. With large Language and the Reasoning organs moderate or full, will be fond of slander, and speak of others in disrespectful terms.

SMALL.—One having Firmness small, will be fickle, undecided, irresolute, and bend to the opinions of others; is so undecided in his manner as not to know his own mind. With Combaticiveness small, will conform to the ideas of others for the time being, and changes again when any new position is advanced by a second or third person—in fact he will lack energy or decision of character.

LARGE in Stubbs, Henry IV., George III., &c.

SMALL in the Hindoos.

Discovered and located by Dr. Gall.

SPECIES II.—IMAGINATIVE SENTIMENTS.

These elevate, expand, embellish the imagination, and polish the lower feelings; cause man to emerge from the rude state of barbarism; from their influence, Temples, Cathedrals, Monuments, and Cities are erected; works of imagination, poetry, &c. all originate from these faculties; they are located on the side of the head.

IDEALITY.

Situate on the side of the head above Tune and Acquisitiveness, and when all three are large, there is a general fullness to that portion of the Head; when Ideality is small, this region in the Head is contracted and narrow.

USE.—This faculty creates a fondness for the exquisite, sublime, and beautiful, it elevates the ideas, and gives refinement to expression, love of poetry, &c.

LARGE.—One having the organ large will be refined, elevated, choice in all his doings; will possess a brilliant imagination; a vivid conception of the grand; will admire the fine arts; be pleased with fine poetry, and eloquence of speech.

One having Ideality and Tune large, will be passionately fond of Music, though he is incapable of performing. With Constructiveness large, will be fond of sculpture, fine buildings, &c.; with Language large, will express himself in a superior and elegant manner; will hate coarse, low conversation; with Imitation and Mirthfulness large, will be pleased with good acting. With Color, Form and Size large, will not only delight in fine paintings, but have considerable taste and talent himself, more especially if Constructiveness is also large. With Language, Individuality, Eventuality and Comparison large, will be a pleasing, popular and eloquent speaker. With Causality and Comparison moderate or full, will possess

more beauty in his style than substance in his matter; will show off to good advantage, but will not be able to sustain an argument. With love of Approbation, Benevolence, Ideality, and the Perceptive organs large; Destructiveness, Self-esteem, Humor, Secretiveness, full; Veneration, Concentrativeness moderate; will be able to adapt himself to any society, and will be "all things to all men;" possesses in a remarkable degree the "suaviter in modo." The degree of suaviter depending on the developement of the respective organs.* When Comparison and Destructiveness are large, will write sarcastic poetry; with Combativeness large, military inspiring poetry; with Mirthfulness large, ludicrous, laughable poetry; with Veneration large, religious poetry. With Causality large, will introduce solid, sound sense into his verses. One with Hope and Ideality large, will give way to elevated, grand, expansive ideas; will view nature through an immense magnifying power; and with Self-esteem large, will look down with pity and even contempt on all who take a more limited idea of things.

VERY LARGE.—One having this organ very large, will possess a mind of glowing imagination; is very enthusiastic, and will indulge in dreams of fancy; and with Hope large, will be exceedingly romantic; and with Adhesiveness large, will be a warm-hearted friend; with comparison large, will make verse of a high order, and will clothe his ideas in the most gorgeous language; and will be disgusted with common-place or plain expressions.

* I refer the reader to this combination in particular, as some persons have considered this to be a separate faculty of the mind. This I am confident is not the case: for in all my examinations, which have been between fifteen and twenty thousand, I never have been able to assign this characteristic to a single organ.

FULL.—One having this organ full, will possess a fine imagination and be pleased with fine poetry, &c.; yet will not trouble himself much about it; with large Perceptive organs, will be plain in his manner; will require facts in preference to theory; will love poetry more for its sense than for its beauty.

MODERATE.—One having Ideality moderate, will express himself in a plain, unsophisticated manner, without beauty or style; will not care for the fine arts, as sculpture, painting, &c.; will be plain in his dress; and if order is small, will be slovenly and destitute of neatness; cares little about scenery, and feels but a slight interest when beholding the works of nature.

SMALL.—One having this organ small, will be so indifferent about the fine arts, as to look at others who take an interest in them with astonishment; he lacks refinement, is coarse, rude in all his motions, and uncouth in his expressions; has a complete distaste for poetry, or any work of the imagination.

LARGE in Byron, Shakspeare, Milton, Cowper, Young, Thomson, Burke, Pope, Dryden, Raphael, Dr. C. Caldwell, &c.

SMALL in Hume, Cobbett, Dr. Cooper, of S. C. New-Hollanders, Caribs, Negroes, &c.

Discovered and located by Dr. Gall.

W O N D E R .

Situate in front of Hope, and adjoining Veneration and Imitation.
[See plate.]

USE.—This faculty delights in the marvellous; love of fiction; a tendency to exaggerate; pro-

duces the tendency to believe in inspirations, presentiments, phantoms, ghosts, &c.

LARGE.—One having this organ large, will believe what others tell him; he is extremely credulous, takes things for granted, is easily hoaxed, and feels great pleasure in hearing of any thing mysterious; and if Language is large, and Secretiveness moderate, will be fond of relating extraordinary adventures, and hair-breadth escapes; with love of Approbation large, and Conscientiousness moderate, indulges in exaggeration and falsehood; but if Benevolence is large, and Secretiveness full, he will do it more from the love of notoriety, and to make himself agreeable, than from any clandestine motive. The worst class of liars are found with Secretiveness, Destructiveness large, Conscientiousness full, and the Perceptive organs large, and if combined with Acquisitiveness large, will resort to any means to effect these purposes.* With Ideality full or large, will read works of fiction and those abounding with the marvellous, such as the Arabian Nights, Robinson Crusoe, Gulliver's Travels, the writings of Sir Walter Scott, Mrs. Radcliffe, &c. One with Wonder and Veneration large, will place implicit reliance in every portion of the scriptures and what he is told by others; with Conscientiousness large, and Causality and Comparison moderate, will not investigate for himself, but be extremely zealous in his belief, and if Combativeness is large, will feel much pleasure in religious controversy; with Caution large, will believe in evil spirits, ghosts, supernatural appearances, &c.; with Cau-

* I refer the reader to Dr. C. Caldwell's celebrated and beautifully written treatise on the Phrenology of Falsehood, and its kindred vices.

tion and Secretiveness small, believes every body and yields assent to the most improbable narratives or theories; with Ideality, Veneration, Comparison and Individuality large, fancies he sees a correspondence between spiritual and natural things; believes that God performs miracles; will attribute things beyond his comprehension as a special act of the Deity. With Conscientiousness and Secretiveness moderate, and love of Approbation, Language, Eventuality and Mirthfulness full, will be fond of making himself the hero of some extraordinary adventure, and will be continually exaggerating his accounts of his exploits.

VERY LARGE.—One having this organ very large, will place implicit belief in all he hears; this is more likely to be the case when Secretiveness is moderate, and when Caution is full, will believe in dreams, witchcraft, fortune-telling, ghost stories, &c.; one with Wonder very large, Comparison and Causality only full, will be easily hoaxed and made the butt of ridicule. Even with the Reasoning organs large, will have a strong tendency to the marvellous, and be guided or influenced by dreams, or what he considers forebodings, presentiments, &c.*

FULL.—One having Wonder full, will be always open to conviction; will require proof before he gives credence to any thing new; with Causality and Comparison full, will believe without investigation or knowing the grounds of his belief; with Veneration and Conscientiousness large, will be a religious character, and over zealous and strict

* I have found in the majority of my examinations of persons who were Deists in their religious belief, that Veneration was large, but Wonder small.

in the practice of his religion; with Ideality full, is fond of reading novels or works of the imagination.

MODERATE.—One having Wonder moderate, will not believe any thing except it is proved; requires to know the how and wherefore; doubts every thing wonderful or strange; will not give credence to any thing he hears, especially if it savors of the marvellous; with Causality and Comparison large, will be convinced on seeing evidence; when the perceptive faculties are only moderate or small, such a person will overlook facts, and with Self-esteem, Destructiveness, and Mirthfulness large, will ridicule and make a burlesque of any thing new; with Veneration moderate, will revere the Deity, but care little about forms of worship; pays homage to God in his own particular manner; with Hope large, believes in a future state of Happiness, and with Destructiveness large, in a future state of punishment.

SMALL.—One having this organ small, will not believe any thing that cannot be proved by actual demonstration; requires an abundance of proof before he is convinced; with Form, Size, and Individuality large, requires tangible evidence, and must have ocular demonstration: with Veneration moderate, will have a religion of his own; and with Destructiveness and Mirthfulness full, he is apt to ridicule those who place implicit belief in any particular established religion; with Veneration, Comparison and Causality very large, and Wonder very small, will doubt the Christian religion, and yet revere the Deity. Such was the case with Voltaire.

Large in Chinese, Bramins, Swedenborg, Irvine, the advocate of unknown tongues, examined by

me in London, in 1834, in Sir Walter Scott, and Mrs. Radcliffe, &c.

Small in Descartes, Hume, Volney, Bolingbroke, &c.

Discovered and located by Dr. Gall.

TUNE.

Situato in front of the organs of Ideality—external to Humor and the Constructive and Proper names; when large, the forehead presents a roundness and width in that region. *

This faculty gives the power of appreciating the harmony of sounds; a love of music, &c.

LARGE.—One having this organ large, will find it easy to remember tunes and possesses a good musical ear. With Constructiveness large, may become a good performer; but to give beauty and richness to music, it is requisite to have large Ideality and Imitation; and a polished performer,

* It is well known to every one acquainted with Phrenology, that great difficulty has attended the examination of the organ of Tune. So much was this the case that many Phrenologists would not give an opinion as to its size. This circumstance led the Author to investigate this subject in particular. He availed himself of all heads, where the possessor was noted for any musical talent. The heads of Paganini, Mad. Malibran, and many other distinguished musicians in Europe were examined, but the object was to be effected in the United States—for when in the States of Georgia and South Carolina during the winter of 1837, more than three hundred negroes were examined. The proprietors of the plantations pointing out those, at all distinguished for natural musical talents: and in nine-tenths, the portion of the brain supposed by Gall and Spurzheim to be appropriated to Tune, was found small, and the location above alluded to was invariably large; and since that time, above one thousand heads have been submitted to the Author for examination, and not one case has presented an exception to the information derived from the negro heads. The former location of Tune I found to be that of Proper names—however, the subject is open for investigation.

should have Veneration and Secretiveness well developed.

One having Tune, Language, and Ideality large, will be fond of sentimental singing. With Mirthfulness large, will be fond of comic singing; and with Combativeness large, fond of military music.

VERY LARGE.—One having this organ and Ideality, Imitation, and Constructiveness very large, will be able to become a splendid musician, can detect in an instant, discord in, and feel great disgust with, bad music. With Adhesiveness, Veneration, Love of Approbation, Time and Ideality large, will be a natural genius in music.

SMALL, OF MODERATE.—One having Tune small, will find it extremely difficult to acquire tunes; and with Time small, dislikes to hear the sound of any musical instrument. But with Ideality full, will love to hear fine music, though not able to become a good performer.

N. B. Many persons suppose, that because they can sing, or play an air on a flute, &c., that they are musicians; this arises often from the organ of Imitation.

LARGE in Handel, Mozart, Van Weber, Gluck, Rossini, Malibran, and in all singing birds.

Discovered and located by Dr. R. H. Collyer.

HUMOR.*

Situate outside of Comparison, and inside of Tune; when large, it gives a rounded and square appearance to the forehead. [See Plate.]

This faculty causes men to delight in humor, mirth, merriment, fun, pleasantry, wit, &c.; it

* Called Wit by Combe, Mirthfulness by Spurzheim.

gives a quick and lively conception of the ridiculous.

LARGE.—One having Humor large, has a quick conception of the ludicrous, enjoys a joke and converts the least occurrence into ridicule. With Destructiveness and Combativeness full, and Comparison large, will, when irritated, be extremely sarcastic, and use opprobrious comparisons, so as to hold his adversary up to ridicule. With Secretiveness and Imitation large, will be able to satirize others without their perceiving it; will be very dry and witty in his remarks; make use of appropriate strange comparisons, which will apply exactly where he intends them; will “speak many a truth in jest,” and be able at any time to keep those about him in a constant roar of laughter, and appear serious himself; but if Secretiveness is moderate and Love of Approbation large, will be sure to laugh himself. With Destructiveness full, will be fond of teasing, quizzing and plaguing those about him. With Ideality small, makes use of low, vulgar comparisons, though they are witty and strange. With Caution large, will conceive many witty ideas, but be afraid to give them expression; and with Self-Esteem moderate, is apt to appear confused when his joke does not take the effect he may wish. With Causality, Comparison and Humor large, and Destructiveness full, will be an able reasoner, and apply his argument in such a direct and cutting manner as to make his opponent appear ridiculous; and with Hope large, will be cheerful and possess great vivacity of mind.*

* Such was the character of Sterne, Piron, Swift, and Theophilus Fisk. The latter was examined by me in January, 1838.

VERY LARGE.—One having Humor very large, will feel disposed to turn every thing into ridicule; has a constant tendency to make fun; enjoys humor in all its forms; and with Veneration moderate, is apt to burlesque serious ceremonies, and often feels a desire to laugh on occasions where he should retain his gravity. With Comparison and Causality only moderate, will carry his jokes to great extremes.

FULL.—One having this organ full, will possess, in a considerable degree, the power of producing mirth, will be fond of sport and enjoy a joke, yet will not succeed in the degree as one having the organ large, or very large. With Destructiveness and Combativeness full, will not study the feelings of any one he may wish to ridicule; will teaze and plague his friends.

MODERATE.—One having Humor moderate, will not be given to mirth and laughter; considers fun and humor as nonsense; soon becomes vexed and ill-tempered when a joke is made at his expense, and when he attempts to make fun himself he is sure to fail, or it is sure to be ill-timed.

SMALL.—One having Humor small, considers jokes as impertinent and *nonsensical*, and will not be able to appreciate mirth; with Veneration large and Hope moderate, seldom laughs and appears dull in company; with Approbativeness large, shrinks under the sting of ridicule.

N. B. Many persons having large love of Approbation, full Self-esteem, large Comparison and Individuality, often pass off for wits, when in reality they have no such talent. They frequently make use of quaint comparisons, and give pert replies; but it is not the true wit as found in the works of Swift, Sterne, &c. This and a thousand

other instances will present themselves to the reader every moment; but every person of discernment will at once discriminate between a strained effort, caused by a desire to gratify love of approbation, and the natural flow of the organ of Humor.

LARGE in Voltaire, Rabelais, Cervantes, Danton, Swift, Sterne, Piron, Matthews, Liston, &c.

SMALL in Kant, Locke, &c.

Discovered and located by Dr. Gall.

IMITATION.

Situate on either side of Benevolence, above Causality; when large it gives to the forehead a square appearance.

USE.—This faculty gives the power of doing what others have done before us; a disposition to copy, and for imitation in general; it is essential in the head of an actor.

LARGE.—One having this organ large, can, with ease, imitate any thing that he sees done; with Mirthfulness and Secretiveness large, could make the complete comic actor; with Ideality large, the tragic actor. One with Imitation and Constructiveness large, will make any thing in mechanics that he has once seen made; with Form and Size large, a complete penman, engraver, &c.; with Secretiveness large, will appear to feel as he does not, and can put on the visage, gesticulation, and action of another; with Language, Eventuality, Individuality and Humor large, can relate an anecdote, story, adventure, &c., to life; can also sing amusing and comic songs; with love of Approbation large, excites admiration and popularity, by his appropriate “bon mots,” &c.; his

society will be courted, because he can adapt himself to all persons; when Imitation is large, and Secretiveness moderate, the person will suit the action to the word, and will be continually moving his head, body, &c., when in conversation.

VERY LARGE.—One having this organ very large, has the power of imitating any thing he sees or hears, as the sounds produced by various mechanical implements, the saw, plane, &c., or the voices of persons or animals, such as the bleating of sheep, barking of the dog, crowing of the cock, grunting of the hog, neighing of the horse, lowing of the cow, &c. &c. With Ideality large, Destructiveness and Combativeness full, can portray the passions of anger, joy, grief, revenge. With Individuality, Form, Secretiveness and Comparison large, could become a capital actor.

FULL.—One having this organ full, will desire to mimic, and feel pleased with good acting; and if Ideality, Mirthfulness and Secretiveness are full, will be a pleasant associate; with Destructiveness and Self-esteem large, will ridicule and imitate the defects of his enemies.

MODERATE.—One having this organ moderate, will not take much interest in mimicry, and if Wit is moderate, will think it ridiculous; and with Secretiveness moderate, will express his dislike and contempt for all kinds of acting; will disdain to copy others; and always shows his real feelings. [*For further particulars see Imitation large, only reverse the combinations.*]

SMALL, OR VERY SMALL.—One having this organ small, will be a total stranger to the faculty of Imitation, and will always fail when he attempts to describe any thing he has seen or heard.

LARGE in Piron, Mrs. Siddons, Matthews, Clara Fisher, Burton, Dr. Valentine, Booth, the Chinese, Monkeys, Parrots, Mocking Birds, &c.

Small in New-Hollanders, Haggart, &c.

Discovered and located by Dr. Gall.

CONSTRUCTIVENESS.

Situate in the Temporal region, in front of Acquisitiveness; the organ is often mistaken, in consequence of a large temporal muscle.

USE.—This faculty gives men the power of making, forming, constructing, designing, and a general aptitude for mechanics.

LARGE.—One having this organ large, will be able to construct, form, design, and invent; and with Imitation full, can become a capital mechanic, and find it easy to do any thing that he has seen done; and with Ideality large, will display considerable neatness in his work; with Form, Size, and Weight large, will be able to turn his attention to any department of mechanics, and become a capital foreman or superintendent. With Combative-ness and Destructiveness large, and Concentrativeness moderate, will soon become impatient and vexed when his work does not proceed to his liking, and will break and destroy his work from the impulse of his rage; with Conscientiousness full, will soon repent of what he has done. With Hope large, undertake large and expensive operations. With Ideality, Imitation, Form, Size, Individuality large, will be able to invent and design machinery.

VERY LARGE.—One with Constructiveness very large, will be able to make any thing he has once seen made. With Ideality large, may become a

capital engineer; he is never at a loss for a plan to carry out his project; feels great pleasure in making, altering, pulling down, and rebuilding.

FULL.—One having Constructiveness full, will have a good idea of mechanics, and may become a capital workman. With Imitation full, makes every thing he undertakes, especially if he has a pattern. With Form, Size, and Ideality large, appears to be a much better workman than he really is; and with love of Approbation large, will try to excel among his fellow workmen. With Secretiveness large, and Conscientiousness moderate, will imitate the inventions of others, and palm them off as his own.

MODERATE.—One having this organ and Imitation moderate, will not manifest much skill in any branch of mechanism. With Form and Size large, may succeed to a great degree, but will not become eminent. With Comparison and Causality large, may be a superior designer, and able to direct others.

SMALL.—One having this organ small, feels it difficult to construct the most simple piece of work; is very clumsy in the use of tools; and with Form and Size only moderate, cannot make a pen, or cut a pencil.

LARGE in Michael Angelo, Watts, Oldham, Canova, Raphael, &c.

SMALL in New Hollanders.

By means of this organ, many animals construct; the Bird builds its nest, the Beaver its huts, &c.

Discovered and located by Dr. Gall.

SPECIES III.—MORAL SENTIMENTS.

These faculties are more common to man than any other animal; they cause him to be moral and humane; to sympathize with others in misfortune, and to take examples from great and good men; they cause us to love, respect, and treat with kindness and humanity the poor, the aged and the infirm.

CONSCIENTIOUSNESS.

Situated on each side of Firmness; when Caution is large it gives to the head a large and full appearance. [See plate.]

USE.—This faculty gives the feeling of justice, a desire to act right; it is the principle of honesty, regard for duty, sense of moral obligation, &c.

LARGE.—One having this organ large, will act with honor and justice in all dealings, will easily discriminate between right and wrong, will not consult his interest when his duty is involved, will always discharge his duties to the utmost, and will be a moral, just, upright, honorable man.

One having Conscientiousness and Firmness large, will be firm and determined on all occasions, and be particularly fixed in all cases where he has to be just and impartial; will admonish his best friends when they are in the wrong; will possess much moral courage; and with Secretiveness moderate, tell a man just what he thinks of him; with Veneration full, will be determined and firm in his religious precepts; with Philoprogenitiveness moderate, will be very anxious about children and consider that their welfare depends on their education, and will even punish them without expressing any harshness or violence, but merely because he considers it his duty; with Self-Esteem large, will censure all who deviate from

the path of justice; when the propensities are large, may at times give way to his feelings, but will express much repentance and sorrow, and will acknowledge his faults; with Benevolence large, will be mild, and with Secretiveness full, will admonish others in a kind friendly manner, will not hurt the feelings of those to whom he communicates his advice; but with Combativeness, Destructiveness and Self-Esteem large, will be harsh, severe, and blunt in his manner of giving reproof, and with Secretiveness and Caution moderate, will tell another's faults at a very unseasonable time, and not consult his feelings; when the reasoning faculties are only full, the person so constituted will consider himself the standard, and censure all those who differ from him in opinion; with Veneration large will advocate in all societies his religious sentiments. When Causality and Comparison are large, will be fitted for a Magistrate, Judge, or for any other station of responsibility where judgment and integrity are required. With Firmness moderate and the Propensities full, will be always sinning and repenting, yet will yield to his desires; with small Self-Esteem and large Secretiveness, will appear composed, and suspect every one, and feel it difficult to look at a man full in the face; with Benevolence large, will be grateful for any favor bestowed, and feel great pleasure in returning it; will feel kind to those who point out his faults, will tender forgiveness to those who ask it, and be more kind to them than ever. With large Amativeness, will be very particular how he speaks of the other sex, and with Combativeness full, will revenge their wrongs.

VERY LARGE.—One having this organ very large, will be continually accusing himself wrongfully;

will not injure or act unjustly to any one; will sacrifice his own interests sooner than violate his moral code; will feel unhappy when he thinks he has hurt the feelings of any one by an unguarded expression; will be unnecessarily scrupulous in all his transactions; supposes himself unworthy if he does not meet an engagement, even if prevented by unforeseen circumstances.

One with Conscientiousness and Veneration large, feels grateful to God for all he has, and attributes his welfare, health, &c. to his mercy. With Adhesiveness large, feels grateful to his fellow-man for acts of kindness, &c.

FULL.—One having this organ full, will desire to do right and feel uncomfortable when he thinks he has done wrong; feels it always incumbent on him to fulfil to the utmost the principles of duty and justice; but with Firmness moderate or full, will frequently give way to his other faculties: for instance, if Amativeness is large, may indulge in its tendencies. With Acquisitiveness large, may take the advantage in commerce; but after having gratified these organs he will feel regret and remorse. With love of Approbation, Destructiveness and Language large, will feel a great desire to talk, and slander others when they are absent; and if Mirthfulness is large, will entertain, and, when at loss for an anecdote, will fabricate one to suit himself. With Combativeness and Destructiveness large, will give way to rage and anger; and when Ideality is only moderate, will make use of low, vulgar expressions.

MODERATE.—One having Conscientiousness moderate, will not be troubled by much remorse of conscience; will consult his own interest before

that of his friends; will indulge himself in all his feelings; will not possess gratitude; and with love of Approbation large, will appear affable and kind; when he is interested in selfish motives, has no feeling of moral obligation. With Secretiveness large, will play the hypocrite, and yet make others believe he is sincere; with Veneration large, will adhere to forms of religion, but neglect principles.

One having Conscientiousness moderate with very large Self-esteem and selfish faculties, will make demands upon others as his interests may dictate, even when he knows the same does not belong to him; will not feel grateful for any favors received, for he considers others are under a kind of obligation to do just what he may require of them. With Approbation and Ideality large, will run in debt, and never intend to pay: he is a treacherous, low villian. With Benevolence and Adhesiveness large, will be perfectly honest in every other respect, and even stand high in society, yet will seldom feel guilty in his own mind. When Approbation is large, will not do wrong because it will injure his reputation, and will be always ready to perform an act of kindness.

SMALL, OR VERY SMALL.—One having Conscientiousness small, will not care how he acts, he will only be guided by his blind animal feelings; with Firmness large, will never admit a fault, even when he knows himself to be in the wrong; with Acquisitiveness large, will practice dishonesty in all his dealings, and will have few compunctions of conscience: will be the complete swindler.

Large in the Turks; Melancthon, Descartes, Bentham, Milton, &c.

Small in Thieves, Forgers, Pirates, J. Honfleur, and most villains.

Discovered and located by Dr. Spurzheim.

BENEVOLENCE.

Situate on the upper and front region of the head, immediately above Comparison, and in front of Veneration. When large, it gives height to the forehead.

USE.—This faculty produces kindness, goodness, sympathy and compassion; a desire to see others happy, and Benevolence in general.

LARGE.—One having this organ large, will be kind and generous; and, with Adhesiveness large, is always ready to oblige his friends; with Secretiveness small or moderate, makes confidants of his friends, and often injures himself; with Acquisitiveness moderate or full, will lend money, goods, &c.; and when Caution is only full, frequently ruins himself by his acts of liberality; with Conscientiousness full, sympathizes with his friends in trouble and misfortune; with love of Approbation also large, will give to excite praise from others; with Acquisitiveness large, will be kind and compassionate, but will not give, except the object is really deserving of relief; with Conscientiousness moderate or full, seldom relieves distress, &c.; with Veneration large and Wonder full, will give to the support of missionaries and other religious purposes; with Destructiveness moderate, cannot bear to see pain or cruelty inflicted, yet, with Combativeness large, will, when roused, be severe to those that offend him. With Secretiveness full, and love of Approbation and Caution large, will be careful about speaking, for fear of hurting the feelings of others, but with

Secretiveness and Caution moderate and Benevolence large, may, at times, injure the feelings of his friends by some unguarded expression, for which he will afterwards express sorrow and remorse. With Benevolence, Adhesiveness, and Self-esteem large, will serve a friend, and do him a favor, but on the least cause of displeasure, will tell him of it, and this is more likely to be the case, when Conscientiousness is moderate; with the Reasoning organs only full, will place great stress on the obligation due to him; with Ideality and Secretiveness large, will serve a friend in a gentlemanly manner, and keep it to himself. When Mirthfulness, love of Approbation and Adhesiveness are large, the person so constituted will be a jovial, happy pleasant companion; will endeavor to please, and even sacrifice his own interests to advance the pleasure of his associates.

VERY LARGE.—One having this organ very large, will possess a great degree of tenderness, kindness, and generosity of feeling; will injure himself for the sake of others; will not give trouble to any one without feeling great reluctance. With Conscientiousness and Adhesiveness large, will sacrifice his time and property to benefit his fellow-man; with Veneration full or large, will take great pleasure in converting mankind to his standard of belief; and with Adhesiveness very large, will ruin himself for the sake of friends; with Philoprogenitiveness large, will be particularly kind to children, and bestow much attention on the sick, infirm and decrepit. For further particulars see Benevolence large, only increasing the degree.

FULL.—One having this organ full, will possess, in a tolerable degree, the feelings of kindness, ge-

nerosity, &c., and will not injure himself on account of his extreme liberality; with love of Approbation large, will give to gain the admiration of others, and with Acquisitiveness large, will seldom give, except he has some interested motives in view.

MODERATE.—One having this organ moderate, will be kind at times when it does not cost him any thing, and with Acquisitiveness large, will be selfish and even mercenary in all his doings; with Conscientiousness moderate, will practise meanness, and turn a deaf ear to the cries of misfortune, distress, &c.

SMALL.—One having this organ small, will seldom or ever disoblige himself to oblige others, and cares not for the sufferings of his fellow-man; with Destructiveness large, feels great pleasure in cruelty in all its forms, and will sooner add to misfortune than relieve it.

Large in Howard, Bentham, Melancthon, Elephants, Dogs, Birds, &c.

Small in Nero, Caligula, Pope Alexander VI., Caribs, Tigers, Panthers, &c.

Discovered and located by Dr. Gall.

V E N E R A T I O N .

Situate immediately in front of Firmness, in the centre of the top of the head and behind Benevolence; when large, there is a fullness in the region; when small, there is a depression and flatness on the top of the head. [See plate.]

USE.—This faculty causes men to venerate and worship a Superior Being, it gives a feeling of adoration for those above us, and a respect for superiors, and all in authority; the mere organ of

Veneration does not specify what is to be worshipped: with this faculty, the Peruvian worships the sun; the Persian, fire; the Hindoo, Juggernaut; the Chinese, idols of various kinds; the object of adoration being according to the degree of developement of the intellectual organs.

LARGE.—One having Veneration large, will pay great respect to all forms of worship, and venerate the Deity; with Acquisitiveness large, Wonder full or moderate, will be fond of antiquities, such as Druidical temples, old coins, ruins, &c., or the graves of great men; with Acquisitiveness large, will be fond of religious meetings and associations; with Philoprogenitiveness large, will take great interest in the religious exercises of his children; with Combativeness large, will advocate his religious opinions with great warmth; with Destructiveness full, will use vindictive language to those who differ from him in opinion, and with the Reasoning organs full, will consider every one eternally lost that does not think as he does. When Self-esteem and Firmness are large, he will be bigoted and dogmatical in all matters of religion; with Firmness full, and Concentrativeness moderate or small, will be apt to waver in his religious opinions, is fond of novelty, and hates to hear a long dry prosy discourse. When Veneration, Secretiveness and love of Approbation are large, and Conscientiousness full, will make great pretensions to worship and to outward show, but will not practice the principles of his creed; will appear to be sanctified on Sunday, and all the rest of the week, will give way to his natural feelings. When Wonder is very small, one will be sceptical on all matters of religion.

VERY LARGE.—One having Veneration very

large, and Conscientiousness full or large, will show great respect and veneration for the Deity, will be very particular about forms of worship, will possess a very comprehensive and extensive idea of the nature of the Deity, and will also venerate old persons, antiquities, great men, and all who hold high situations, as judges, senators, &c.

FULL.—One having this organ full, will have a consistent feeling of Veneration towards religion; and with Conscientiousness and Benevolence large, will be religious, and show a great desire to do good; will practice as well as preach; but with Wonder moderate, may not observe forms of worship. For further particulars see Veneration large, only deducting the degree.

MODERATE.—One having this organ and Wonder moderate, will not care about any form of religious worship, and doubt the authority of many parts of the Bible; with Conscientiousness and Benevolence also large, will always be ready to relieve the distressed, and in every other respect, be consistent and upright in all his actions, and follow the words of Pope:

“For modes of faith, let zealous bigots fight;
His can't be wrong, whose life is in the right.”

SMALL.—One having this organ small, will disbelieve the scriptures, more especially when Wonder is small, and consider all kinds of religious worship as superfluous; does not pay homage to those in authority, the aged, the priest, or any other ecclesiastic; and with Self-Esteem large, will assume the dictatorship himself; with Destructiveness and Combativeness full, and Mirthfulness large, will ridicule those who are strict in their observance of religious ceremonies.

LARGE in most heathen nations, Melancthon, Voltaire, St. Brun, St. Bernard, Malebranch, Newton, Milton.

SMALL in Pope, Alexander VI., Spinoza, Hume, Bollingbroke, &c.

Discovered and located by Dr. Gall.

HOPE.

Situate immediately in front of Conscientiousness and on each side of Veneration, and behind Wonder; when large the upper portion of the head appears full.

USE.—This faculty gives the feelings of hope, expectation, anticipation, desire for future happiness and success.

LARGE.—One having this organ large, will look to the future with feelings of pleasure, and ponder over prospects with bright anticipations of success; always looks at the bright side of the picture, and magnifies advantages even when the chances are small; soon forgets past occurrences and depends on the future for better success; he is lively, and builds in his mind fertile projects. With Caution and Causality large, will undertake projects which appear imprudent, especially if Ideality is large, but though his schemes at first appear visionary, will generally turn out successful; with Causality and Caution moderate, will undertake things which are not likely to succeed. With Firmness large, will be very determined in his pursuits and speculations; and with Self-Esteem large, will soon forget and dismiss unpleasant feelings arising from adversity, and will continually look for better times even when the probability of success is very remote. If Concentrativeness is small, will try many experiments and is often changing his occupations; with

Approbateness large, will try to excel, considering himself capable of undertaking projects which are beyond the reach of most men; with Constructiveness and Wonder large, will endeavor to invent flying machines, to find out perpetual motion, &c.; with Philoprogenitiveness large, will think his children destined to become great and distinguished characters.

VERY LARGE.—One having this organ very large, is always projecting something new; indulges in day dreams; expects much from the future; builds castles in the air; expects much more than he will ever realize, and will look at the most stupendous undertakings as easy; and consider himself capable of completing any thing by his unaided resources; with Self-Esteem large, will meet with constant disappointments, but is not discouraged; with Mirthfulness large, will be lively, cheerful, full of fun; and with Benevolence large, will promise more than he can perform; with Acquisitiveness moderate, only thinks of to-day, and leaves to-morrow to take care of itself; and with Concentrativeness small or moderate, takes things just as they come.

FULL.—One having this organ full, will be consistent in his expectations; will not undertake wild, imaginary speculations; and with Caution large, will predict and expect reverses of fortune, and live in fear of some unexpected calamity. With the Reasoning organs large, he will be careful and show much deliberation in his projects; will not be led away by futile prospects; but considers with judgment and deliberation before commencing any thing new. With Acquisitiveness large, will be careful and slow in the accu-

mulation of property, and will be seldom disappointed in what he expects.

MODERATE.—One having Hope moderate, will expect less than he acquires, is easily dispirited, and apt to consider misfortune near when he has the least cause for apprehensions; with Caution large, will be fearful of defeat in any thing he may undertake, and will anticipate the worst consequences rather than the best. With Comparison and Causality large, he will never undertake any thing unless he sees his way clear and is nearly sure of success.

SMALL.—One having Hope small, will always anticipate the worst consequences and look to the dark side of the picture; with Caution large, soon becomes discouraged and dispirited; imagines troubles when they do not exist, and gives way to low spirits; with Firmness full and Ideality large, will become disgusted with life, and if Destructiveness is full, will contemplate self-destruction; and continually indulge in melancholy feelings; with Veneration and Wonder small, will doubt the existence of a future state.

LARGE in Raphael, Washington, Clay, Van Buren, &c.

SMALL in Cooper, Dr. Hette.

Discovered and located by Dr. Spurzheim.

ORDER II.—INTELLECTUAL FACULTIES.

These communicate to man and many of the lower animals, a knowledge of the external world; they impart a just idea of the nature of things as they exist, and without them the being is reduced to a mere negative state of existence; they are divided into three genera. 1st. The Perceptive or Knowing faculties. 2d. The Retentive. 3d. The Reflective.

GENUS I.—PERCEPTIVE COMMON.

These perceive the existence and physical qualities of external objects and their relations—convey to the mind the knowledge which could not be derived through the external senses.

EXTERNAL SENSES.

Many eminent Philosophers have considered the senses as the only source of our intelligence. If this were the case, the more perfect the senses, the more perfect would be the intelligence. How is it then, that many of the lower animals have some of their senses much more powerful than man—for instance, the Falcon, the Eagle and the Vulture have a keener eye; the Hare, the Deer and Donkey, a more acute sense of hearing; the Wolf, the Dog and the Ox, a more perfect smell; the Sheep and most herbivorous animals, a more delicate sense of taste. Again, the Idiot has all his senses perfect, and yet we find him destitute of reason: but on the contrary, we often find great and talented men who have been defective in some of their most important senses—for example, Milton and Homer were blind, &c. It must be evident to the reader, that the more we abandon facts for speculation, the more we multiply difficulties in ascertaining the true nature of the mind. The senses are merely the inlets to the mind, they take cognizance of bodies in the abstract, but the qualities of such bodies are analyzed in the brain. The five senses are Touch, Smelling, Taste, Hearing, and Seeing.*

* The Author regrets thus to leave a subject which might occupy volumes, but the nature of the book forbids further detail.

SENSE OF TOUCH,

Is the most extensive of all senses; is distributed over the whole surface of the body, and gives us direct impressions of pleasure and pain. This is the elementary sense, for it is found in the lowest class of animals, when all the others are wanting; all the others being mere modifications of it, accommodated to certain qualities of bodies. All that is not seen, heard, smelt, or tasted, is appreciated by the Touch; this instructs us in a great measure of the qualities of substances which it directly concerns us to know, as their temperature, consistence, dryness, figure, size, or their distance, &c. It corrects the errors of the other senses.

SENSE OF TASTE.

This sense resembles closely that of Touch; we may judge of the quality of bodies through the medium of the tongue.

SENSE OF SMELL.

This sense differs from the two last, inasmuch as it does not require immediate contact; it is perfected by the loss of the other senses. It becomes blunted by the application of strong materials to the membrane on which the Olfactory nerve is distributed.

SENSE OF HEARING.

Hearing makes men and animals acquainted with remote objects, and is the first to perceive external things through an intermedium, the air. The nerves of Hearing are found from the lowest

classes of animals up to man. The human ear consists of three distinct parts; the one placed externally, is intended to collect sounds; the middle ear includes the cavity of the tympanum, the small bones contained in this cavity, the mastoid cells, eustachion tubes, &c. The internal ear, is the most important part of the apparatus, for here the sounds are analyzed and conveyed to the brain. Many persons suppose that music is the result of this sense: if so, the sheep, the cat, the dog, and the hog would excel man in the performance on a musical instrument, for their organ of hearing is more perfect than that of man. Again, many birds sing and yet possess a very imperfect ear. Other philosophers have said that the formation of the throat was the cause of birds singing. How is it then, that the female does not sing as well as the male, or that many birds that do not, have as perfectly formed throats as those that do. The mystery is explained immediately on observing the shape of the head—there, and there alone is the cause of the difference.

SENSE OF SIGHT.

This sense is a modification of that of touch, light being its special stimulus; the pleasures and advantages derived through the medium of the eye are so striking, that the vision has been and is, a subject of universal interest. The eye is a simple though beautiful structure, so much so that Arnot says, "perfect, so unspeakably perfect, that the searchers after tangible evidence of an all-wise and good Creator, have declared their

willingness to be limited to it alone, in the midst of millions, as their one triumphant proof."

The eye is a perfect optical instrument; it is composed of several parts; these are the Cornea, Iris, Chrystalline lens, Vitreous humor, Aqueous humor, Retina, Optic nerve, &c. The mechanism of vision is performed in the following manner: The rays of light passing from any object to the eye are those which pass through the iris, and this iris dilates or contracts in proportion to the stimulus received; the rays admitted by the iris pass through the aqueous humor, and meet with the crystalline lens which powerfully refracts them from its density, and lenticular shape, being brought towards the perpendicular by this body, they pass on towards the retina through the vitreous humor, which being less dense, preserves the refraction produced by the crystalline; the rays now being concentrated strike at a spot on the retina, from thence the object is transmitted to the brain through the medium of the optic nerve.

GENUS I.—PERCEPTIVE OR KNOWING FACULTIES— PROPER.

These take cognizance of individual facts, cause the possessor to observe the condition and particular qualities of things, and their individual existences; to take notice of isolated peculiarities of bodies. They are located over the eyes, and are found large in Lafayette Washington, Pope Alexander, &c. [See Cuts.]

INDIVIDUALITY.

Situate at the root of the nose, immediately between the eyes; and when large, gives width and fulness to that region.

USE.—This faculty causes men to notice the individual properties of bodies; gives the disposition to see things, and to observe in general.

LARGE.—One having this organ large, desires to see every thing within the sphere of vision; is very observant, and wishes to know things; and, with Comparison large, leads to impertinent curiosity, more particularly when Self-Esteem is large. With Comparison and Causality large, is a close observer of men and things, and forms a clear and distinct idea of things; is profound and just in his conceptions of the nature of objects. With Eventuality, Form, and Size large, will possess a good memory of facts; and with Comparison large, will compare things and remember by association; and with Locality large, will be enabled to remember where he has seen things. With Ideality large, will be fond of the works of nature, and take great interest in their study. When the Reasoning faculties are moderate, and Individuality, Form and Size large, will appear more talented than he really is.

VERY LARGE.—One having Individuality very large, will possess a very great desire to see every thing that it is possible for him to see; and with Eventuality large will show extreme curiosity, and be apt to stare and gaze at things.

FULL.—One having this organ full, will, at times, appear absent, and not extremely desirous to see things. When Comparison and Causality are large, will be anxious to see objects, so that he

may judge of their qualities, uses, effects, causes, &c.

MODERATE.—One having this organ moderate, will not observe things, except his notice is particularly called to them; and when the Reasoning faculties are large, will consider, more with the desire of ascertaining their real causes, relations, &c., than to know their mere qualities.

SMALL.—One having this organ small, will not care about detail or minutiae; considers things more in the gross; at times is exceedingly absent, more especially when the Reasoning organs are large. With Eventuality moderate, feels it very difficult to remember details of any kind.

This organ is of essential value to the botanist, geologist, physician, lawyer &c., and all who have to load their minds with particular detail.

It is brought into operation in children, and this is the cause of their observing, and desire to know and see things.

The organ of Individuality takes cognizance of things in the aggregate, as of a man, a house, a tree, without reference to their color, form, size, &c.

LARGE in George III., Pope Alexander VI., La Fayette.

SMALL in Franklin, Kant, J. C. Calhoun.

Discovered and located by Dr. Spurzheim.

FORM.

Situate in the region of the inner angle of the eye; when large, it gives width between the eyes; when small the eyes approach.

USE.—This faculty gives us the idea of the configuration of objects, that is, whether they are long, square, round, flat, &c.

LARGE.—One having this organ large, will be able to judge of the form of objects with great precision; and with Comparison large, conceives in his own mind particular shapes of things he hears described, and even of spiritual things. With Individuality large, remembers faces and the countenances of persons, but cannot remember names. This organ is of great service to the painter, engraver, penman, &c.

VERY LARGE.—One having this organ very large, is able to discover immediately the exact form or shape of any thing he may see, and when he once sees a person, he never forgets him; and with Locality large, remembers where he was introduced, &c. When Comparison is large, will compare his thoughts to some known object, as death to a skeleton, innocence to a dove, &c.

FULL.—One having Form full, will remember countenances that he has once seen, tolerably well; and with Individuality full, will recollect persons because he has taken particular notice of them.

MODERATE.—One having this organ moderate, will feel it difficult to recollect the physiognomy of persons, and feels it tedious to learn the natural sciences.

SMALL.—One having this organ small, will not be able to recollect persons. He may be introduced to a person one day and forget him the next; and when Approbativeness is large, feels annoyed by this deficiency; will not be an observer of things; makes great blunders in judging of the shape of any thing, and finds it difficult to decipher any manuscript.

LARGE in George III., in the heads of Chinese, &c.

SMALL in Byron, Gall, &c.

Discovered and located by Dr. Gall.

S I Z E .

Situate next to Form, only more external.

USE.—This faculty judges of dimensions, length, breadth, height, distance, and the actual bulk of bodies, from the infusoriæ to the magnitude of the sun.

LARGE.—One having this organ large, will be able to judge accurately of size, height, and dimensions; and of the quantity of space any body will occupy. With Locality large, is produced the complete shot; all good riflemen have this conformation.

VERY LARGE.—One having this organ very large, will possess the power of judging of the dimensions of objects, and in an extraordinary degree can detect in one moment, if any thing is out of the perpendicular or the exact level.

MODERATE.—One having Size moderate, will not be able to judge of the magnitude of objects correctly.

SMALL.—One having this organ small, will never succeed in judging with the eye, of dimensions; and will find it difficult to be expert with fire arms.

Large in George III., Crockett, &c.

Small in Gall, Brown, &c.

It is often difficult to ascertain the exact size of this organ, in consequence of the frontal sinus.

Discovered and located by Dr. Spurzheim.

W E I G H T .

Situate about the centre of the eye brow; when large, there is a considerable projection of this part of the head.

USE.—This faculty enables men to judge of

specific gravity; gives the power of judging the weight of bodies, and of the quantity of force requisite to stop their momentum.

LARGE.—One having this organ large, will be able to perform any feat where it requires exact equilibrium to be observed; he is generally fond of riding, an expert skater, a good dancer, or a good boxer, and understands the relative proportions and strength required for certain parts of machinery.

SMALL.—One having Weight small, will not be a very great adept in riding, balancing, and rope dancing.

Large in great mechanics, rope dancers, and in most men who perform in a circus.

This organ is not well established.

Discovered and located by Dr. Spurzheim.

C O L O R .

Situate externally to Weight; and when large, the eye-brow appears full.

USE.—This faculty communicates the perception of colors; ability to judge of the harmony and analogy of the color of different objects.

LARGE.—One having this organ large, will readily judge and discriminate colors, and will take notice of the kind of dress another wears, the color of his eye, complexion, hair, &c. With large Imitation, Secretiveness, Form, Size, and Individuality, will make a complete portrait painter; with Locality large, a landscape painter; with Philoprogenitiveness moderate, will be fond of drawing animals; with Ideality large, will show great taste in his choice of colors in dress.

SMALL.—One having this organ small, will not

care about the color of his clothes, and feel it very difficult to discriminate shades of color.

Large in Rubens, Vandyke, Titian, Rembrandt, West, Lawrence, Reynolds, David, etc.

Small in Gall, and two fellow-students of mine, a Mr. Lord and Mr. Stevens, in the University of London; they could not discriminate red from blue, or green from yellow; most things that were green appeared red.

Discovered and located by Dr. Spurzheim.

O R D E R .

Situate at the external corner of the eye, and often very difficult to determine, from the circumstance that the bone in this region is sometimes extremely thick.

USE.—This faculty causes man to be systematic; to love arrangement, classification, and to have the desire of seeing things in their proper places.

LARGE.—One having this organ large, will observe a great deal of nicety in his person, books, papers, house, etc., and have a place for every thing. This is more particularly the case when Locality is also large; will also make others who are about him observe order. With Ideality large, will be fastidiously nice in every thing he does. With Locality large, will be able to lay his hand on any thing, even in the dark. With Combativeness full, will become annoyed and vexed by disorder.

MODERATE.—One having Order moderate, will be fond of seeing things in their place, but not observe order himself. With Self-esteem and Ideality large, will enforce order among those who are about him, and love system more for its beauty than for its exactness.

SMALL. One having Order small, leaves things just where he finds them, and will not observe system or order in any thing he does; forgets where he leaves things; is negligent about his dress; and with Ideality moderate, is the complete sloven.

Large in Dr. Darlington, Linnæus, Lindley, Cuvier, etc.

Discovered and located by Dr. Spurzheim.

N U M B E R .

Situate on the outer angle of the eye.

USE.—This faculty gives the power of calculation, ability to reckon and solve mathematical problems, etc.

LARGE.—One having this organ large, will find it easy to calculate and comprehend arithmetic; and with Comparison and Causality large, will be fond of the higher branches of mathematics. With Individuality very large, will be able to calculate mentally with perfect ease.

SMALL.—One having this organ small, feels it difficult to understand even the rudiments of mathematics, forget numbers, and find it very difficult to cast up accounts correctly.

Large in Zera Colburn, George Bidder, Sir Isaac Newton, etc.

Discovered and located by Dr. Gall.

GENUS II.—RETENTIVE FACULTIES.

These perform the important office of retaining past occurrences, philosophical facts, travels, and knowledge of every description. They act as an emporium to the rest of the faculties; and consist of Eventuality, Locality, Time, and Proper Names. They are found very large in the head of Shakspeare.

EVENTUALITY.

Situate immediately above Individuality, about the centre of the forehead; when large, there is a general fulness of this part of the head.

USE.—This faculty causes us to remember events, facts, occurrences, incidents, etc.

LARGE.—One having this organ large, will be enabled to recall to his mind any thing he has once heard, seen or read; will be constantly seeking for news; reads the papers with great eagerness to discover something new; has a great fund of anecdotes; and with Language and Mirthfulness large, will be able to relate them as they occurred; this is more likely to be the case when Secretiveness and Imitation are also large. With love of Approbation large, Wonder and Conscientiousness full, will relate anecdotes of his own manufacture, and is not particularly scrupulous in adhering to the truth. With Individuality, Form and Size large, will be able to describe any conversation he may have heard; with Ideality large, will be passionately fond of studying works on the natural sciences.

VERY LARGE.—One having this organ very large, will possess a remarkable memory of facts, events and historical occurrences; with Comparison and Causality large, will have an immense fund of anecdote and useful information.

FULL.—One having this organ full, will be en-

abled to recollect events only in a tolerable degree; with Individuality large, will ask a great many questions and show a prying curiosity; with Imitation and Secretiveness moderate, will feel it very difficult to relate any thing as he has heard it.

MODERATE, OR SMALL.—One having this organ small, will have a general remembrance of things, be apt to confuse occurrences, observe generalities much more than detail, and will suffer great inconvenience from his bad memory.

This organ is much larger in children than in adults.

Large in Pitt and Sir Walter Scott; in the Elephant, &c.

Small in most of the lower animals.

Discovered and located by Dr. Gall.

LOCALITY.

Situate immediately above Size and Weight, and on each side of Eventuality; when large, there is a considerable projection of the region over the internal angle of the eye.

USE.—This faculty gives the desire to travel, love of roaming, emigration, remembrance of places, and their relative situations, love of geography, &c.

LARGE.—One having this organ large, will be able to remember any place that he has once seen, and can give a correct and minute description of any town, country, road, &c.; finds it easy to retrace his steps, is also very fond of traveling and witnessing fine scenery; with Imitation, Eventuality and Language large, will be fond of relating his adventures; with Ideality large, will spend time and money to enjoy fine scenery; and with

Comparison large, will remember what he has seen by associating it in his mind with familiar every day occurrences; with Adhesiveness large and Concentrativeness full, feels when travelling, great pleasure in returning home, and possesses strong attachment to his native country. This is the combination which many Phrenologists attribute to the organ of Inhabitiveness, the same with many other supposed new organs which are easily explained by the combined action of others.

VERY LARGE.—One having Locality very large, will be able to remember distinctly every place, house, tree, rock, hill, &c. that he has once seen. With Ideality large, is passionately fond of reading travels, voyages, &c.; will display great taste in the fine arts. With Number large, will be fond of geometry, &c.

FULL.—One having Locality full, will be able to recall to mind places that he has seen, but not with that distinctness as one having the organ large, or very large; with Individuality large, will be able to recollect particular places, because they are associated with some remarkable occurrence.

SMALL.—One having Locality small, finds it very difficult to retrace his steps to any place that he has once seen; will soon forget fine scenery, or possess a very indistinct remembrance of its local beauties. With Adhesiveness and Concentrativeness moderate, cares little about one place in preference to another; will frequently lose his way in the woods, streets, &c., and forgets the position of objects. [For further particulars see Locality large, only reverse the size of the organs.]

Large in Capt. Cook, Columbus, Dogs, Pigeons, &c.

Small in Gall, Brown, Locke, Kant, &c.

Discovered and located by Dr. Gall.

T I M E .

Situate on the outside of Locality, and above Number and Order.

This faculty gives the idea of the exact lapse of time between two given periods. The perception of the duration of time; it enables us to remember dates.

LARGE.—One having Time large, will be an excellent judge of the time of day, and in relating any thing, will be very particular in mentioning the date, time of the day, &c. With Conscientiousness full, always keeps an appointment, and is exact in his attendance at church or every public meeting, where he is expected to attend. With Ideality large, is pleased to read poetry when the measure is exact. With Eventuality large, possesses an extraordinary memory of dates, ages, and the time when particular events took place.

SMALL.—One having Time small, feels it very difficult to keep time in music, dancing, &c.; forgets dates and appointments. [For further particulars see Time large, only reverse.]

LARGE in Shakspeare, eminent Chronologists, &c.

Discovered and located by Dr. Spurzheim.

PROPER NAMES.

Situate above Number and Order, at the external angle of the forehead; when large, it gives to the parts a full and square appearance. [See Plate.]

USE.—This faculty enables its possessor to remember the names of characters related in any work he may read, and many of the names of acquaintances and persons generally. This organ enables us to remember the technical phrases used in Botany, Geology, Chemistry, Anatomy, &c.

LARGE.—One having this organ large, will seldom or ever forget the name of a person that he has been introduced to. He can vividly relate the characters in the plays of Shakspeare and other dramatic writers. If combined with large Locality, will remember the names of places; if with large Eventuality, will, when relating an adventure or anecdote, be particular in giving the names of all the parties concerned.

MODERATE.—One having this organ moderate, will only be able to recollect Proper Names as long as the person presents himself vividly to his mind; he soon forgets on a short absence, and if Self-Esteem is only full, Love of Approbation large, will appear much confused on meeting a person that he has been on rather intimate terms with when he cannot call him by name.

SMALL.—One having this organ small, soon forgets names of persons; and if Individuality is also small, will be forgetful in a remarkable degree. He is absent-minded, and finds it difficult to recall person or name. If the person is of a nervous temperament, having Veneration,

Love of Approbation large, will feel great mortification on not being able to recall names.

LARGE in Hon. Henry Clay, Patrick Noble, Willard of New York, &c.

SMALL in M. Van Buren, J. C. Calhoun, McDuffie, &c., &c.

Discovered and located by R. H. Collyer.

L A N G U A G E .

Situate on the upper portion of the orbital plate, immediately over the eyes; when this organ is large, the plate is pushed down, and therefore causes the eye to protrude.

USE.—This faculty gives to man the power of expressing his thoughts through the medium of speech; remembrance of words, volubility of speech, and facility of expression, &c. This portion of the brain is wanting in all animals except man.

LARGE.—One having this organ large, will find it easy to express his ideas, and use appropriate words, so as to convey his ideas in a compact, intelligible manner, and will be copious and clear in his style. With Ideality and Comparison large, will make use of figurative metaphorical language, and is capable of becoming a good public speaker. With Combativeness moderate, requires to be roused to produce effect. With Imitation large, will suit the action to the word. With Individuality and Eventuality large, will soon acquire foreign languages. With Secretiveness small or moderate, and Caution full, speaks before he thinks; and with Adhesiveness large, will communicate all he knows to his friends.

VERY LARGE.—One having Language very large, will be able to express himself with per-

fect ease on any subject; feel a constant desire to converse, and be an intolerable talker, more especially when Secretiveness is only moderate; will be able to repeat any thing he has heard, the major part of a lecture, sermon, &c. With Ideality and Causality very large, will be able to use powerful and appropriate language, so as to rivet the attention of his hearers for hours.

FULL.—One having Language full, will possess a tolerable command of words, yet will not be fluent; will express himself in a plain unsophisticated manner; but if Ideality, Comparison, and Causality are large, will be very choice in his expression of words, or be a pleasant speaker, and observe great care and precision in his expressions.

MODERATE.—One having this organ moderate, will frequently be at a loss for words, and at times appear to be wanting in ideas, whereas it is merely a deficiency in speech; when he does talk, will employ few words. With Causality large, will be a deep thinker, but seldom express his thoughts except through the medium of his pen.

SMALL.—One having Language small, will find it very difficult to express his ideas; will not seek conversation, and often remain silent for days. With Causality and Comparison large or full, will have more thought than words; find it very difficult to convey to others exactly what he wishes, and from his poverty of speech appear to be less talented than he really is.

LARGE in Racine, Milton, Swift, Cobbett, Burke, O'Connell, and Brougham.

SMALL in Rousseau, &c.

Discovered and located by Dr. Gall.

GENUS III.—REASONING FACULTIES.

These faculties elevate man from the brute creation; for the lower animals, possess more or less of every other faculty hitherto considered. That they possess reason to a degree, is not doubted by most eminent Naturalists and Philosophers; but the human being has faculties which of themselves enable him to reason and reflect, to trace effects to their causes, to form judgments and distinguish truth from error. Causality and Comparison, digest and mature all the information received by the other faculties. [See Plate.]

COMPARISON.

Situate about the centre and upper portion of the forehead, above Eventuality and below Benevolence.

USE.—This faculty gives the power of perceiving analogies, resemblances, similitudes, &c.; ability to discover things unknown by comparing with things known, and the aptitude to express our ideas by comparisons.

LARGE.—One having Comparison large, will at once discover analogies between remote objects, will associate his thoughts with something familiar; in argument, will reason from analogy, and possesses a happy turn in generalizing and illustrating subjects. With Ideality large, will make use of metaphors and figures in his language; with Individuality large, will be able to detect false premises or sophistry in reasoning, and will illustrate by familiar facts so as to make himself easily understood. With Individuality, Form, Size and Locality large, will have great practical business talent, and succeed in the natural sciences; with Combativeness large, will be fond of criticising and analyzing the speech, writing, &c., of others. With Veneration large, will illustrate

his religious opinions by means of parables. With Causality full and Comparison large, will have acquired his knowledge by observation and not by study.

VERY LARGE.—One having this organ very large, will be able, by means of his accurate comparisons, to comprehend any thing in his investigation, detect any erroneous statement in argument, &c.; and will illustrate by so many familiar facts as to render himself at once understood. With Imitation and Secretiveness large, will imitate any thing he wishes to illustrate, and with Combative-ness large, will oppose in argument for the mere sake of opposition.

FULL.—One having Comparison full, will be able to distinguish differences with tolerable facility, yet at times finds it extremely difficult to illustrate by comparison, and will not be able to appreciate good comparisons; but as regards detecting remote resemblances, he will fail; with Causality moderate, will be decidedly shallow in intellect.

MODERATE.—One having Comparison moderate, will not be able to discover resemblances of differences accurately, except his attention has been particularly brought to the subject by the observation of others; with Individuality large, is apt to represent things in the gross, and will not observe shades of difference.

SMALL.—One having this organ small, feels it difficult to associate two ideas, cannot discover the most obvious differences, confounds things together, and is very slow in comprehending things by description.

LARGE in Curran, Abernethy, Hume, Milton, Moore, Roscoe, and the Hindoos.

SMALL in Caribs, New Hollanders, Idiots, &c.
Discovered and located by Dr. Gall.

CAUSALITY.

Situate on the upper portion of the forehead, externally to Comparison; when large, it gives a square appearance to the forepart of the head. [See plate.]

USE.—This faculty traces effects to their causes; gives the disposition to investigate, to ascertain the why and the wherefore, and to infer conclusions from certain premises.

LARGE.—One having Causality large, always desires to know the cause of certain results that may come within his notice; feels it easy to comprehend any thing submitted to his mind, is anxious to know the why and the wherefore, takes comprehensive views of things, predicts the future from the past, and possesses a good judgment and penetration. With Ideality large, will be an original character. With large Perceptive faculties, will be able to discriminate truth from untruth; will be pleased with natural philosophy, and contemplate the beautiful adaption between cause and effect. With Individuality and Eventuality large, will possess the power of turning every thing to his own advantage, more especially when Acquisitiveness is also large; knows exactly how far to go, and what to do, so as to produce a given result, and shows sound judgment in all his doings. When the Perceptive faculties are small and Causality large, the person is apt to be absent, and allow small occurrences to pass unobserved; will be fond of metaphysics and abstract reasonings; with Propensities large, is apt to make his reason the tool of his animal feelings. With Com-

bativeness full, will defend his rights and privileges with great energy of mind. With Wonder full and Veneration moderate, or Veneration large and Wonder small, will revere the Deity, though not be a professor of religion.

VERY LARGE.—One having Causality very large, will possess a clear and correct judgment, great power of reasoning, and will make himself distinguished by his original and splendid conceptions; always adapts his plans to attain the end in view, and will possess great power of discernment; in fact, will have a great mind, display sound sense in all his proceedings, and will be eminently fond of abstract study, metaphysics, and deep investigations.

FULL.—One having Causality full, will desire to know the cause of effects, will reason with tolerable clearness, yet will be inferior to one having Causality large, or very large; will be able to understand the nature of things, and possess considerable judgment, yet will not succeed when deep and original investigation is required.

MODERATE.—One having Causality moderate, will not be able clearly to understand the relation between cause and effect, nor will he be able to sustain an argument where it requires the exercise of reason. With large Perceptive faculties, may be able to commit to memory, and show to some advantage, among his equals. With Secretiveness and Acquisitiveness large, will possess considerable tact and cunning, but not have sufficient power to carry out his intentions. With Self-Esteem moderate, feels himself dependent and subservient when in the company of great men.

SMALL.—One having this organ small, will not be able to advance an original idea, cannot com-

prehend the cause of any effect, and is very dull of comprehension. [For further particulars, reverse Causality large.]

LARGE in the busts of Socrates and Plato, in the head of Bacon, Galileo, Leibnitz, Wolfe, Voltaire, Rousseau, Diderot, Kant, Brown, Locke, Condillac, Shakspeare, Newton, Berzelius, Gay-Lussac, Gibbon, Franklin, Drs. Elliotson, Turner, Faraday, &c. &c.

SMALL in Hottentots, New Hollanders, Caribs, Idiots, &c.

Discovered and located by Dr. Gall.

EXPLANATION

OF THE

SCALE USED IN THE EXAMINATION.

In examinations of the Head, I have adopted a scale ranging from ONE to TWENTY. When the numbers 1 or 2 are placed opposite one organ, it signifies that it is unusually *small*: when 3, 4 or 5, that it is *very small*: when 6, 7 or 8, that it is *small*: 9, 10 or 11, that it is *moderately* developed: 12, 13 or 14, that it is *full*: 15, 16 or 17, that it is *large*: and when 18, 19 or 20 is placed opposite to an organ, that it is *very large*. I also use the signs +, or more, and —, or less, which being placed with a figure, signifies that the organ is either larger or smaller, according to the sign used: for example, if 10+ be placed opposite an organ, it indicates that it is moderate or more, or 17—, that the organ is large or less; in the first place 10 being the minimum, and in the latter 17 the maximum of the developement.

APPENDIX.

*From Sir C. Bell's work on Anatomy and Physiology, vol. ii,
page 77.*

“Comparative anatomy will exhibit the nerves of the senses with the organs of the senses at their further extremities, and the ganglia at their nearer extremities: and when these ganglia run together, they constitute the brain. We ought to inquire what parts of the brain bear no correspondence with the change of the organs of the senses. Surely that part of the brain, the developement of which corresponds with the nerves and senses, must be directly connected with them. *But if there be portions of the brain which are evolved, and increased, and finally assume the form and size of the cerebrum and cerebellum of the human head; and if these bear no relation at all to these organs of sense, whilst they bear an intimate correspondence WITH THE DEVELOPEMENT OF THE POWERS OF THE MIND; the natural conclusion is, that they constitute the higher and more important part of the brain.*

“The ossification of the bones of the skull is a gradual process. *The brain, already formed, is invested by its strong membranes; and betwixt the laminae of the outer membrane, the points of ossification commence, and are not completed until the ninth year. The bony matter which is deposited betwixt the layers of this membrane, retains a firm connection and interchange of vessels with the now apparently distinct membranes on its inner and outer surfaces. The outer layer, which is so strong in children newly born, be-*

comes the delicate pericranium, whilst the inner layer is the dura mater.

“THUS WE FIND THAT THE BONES OF THE HEAD ARE MOULDED TO THE BRAIN, AND THE PECULIAR SHAPES OF THE BONES OF THE HEAD ARE DETERMINED BY THE ORIGINAL PECULIARITIES OF THE SHAPE OF THE BRAIN.”

—*Sir C. Bell, Vol. ii, page 82.*

Cuvier says: “In all mammiferous animals, the brain is moulded in the cavity of the cranium, which it exactly fills; so that the description of the osseous part, affords us a knowledge of, at least, THE EXTERNAL FORM OF THE MEDULLARY MASS WITHIN.”

Sir C. Bell says, he has seen a case where the skull decreased with the brain. “It occurred in an individual who died at the age of thirty-two, after having labored under chronic insanity for upwards of ten years, and *whose mental weakness augmented in proportion to the diminution of the brain and shrinking of the skull.* The diminution attracted his own attention during life.”

A somewhat similar case may be seen in the cabinet of Doctor Mussey, Ohio Medical College. It is the skull of a Frenchman, who fell from the top of a house, and indented in a great degree the right side of the frontal bone, at the same time severely injuring the brain; the consequence was, the anterior lobes of the brain diminished in bulk, so much so, as to cause the internal table of the skull to recede from the external, causing an extraordinary frontal sinus, or cavity, extending the whole length of the frontal bone. *The man became an idiot, and lived seven years after the accident.*

Tiedmann says, (page 502:) “There is, undoubtedly, a very close connection between the abso-

lute size of the brain and the INTELLECTUAL powers of the mind. This is evident from the remarkable smallness of the brain in cases of congenital idiotism, few much exceeding in weight the brain of a new born child. Gall, Spurzheim, Haslam, Abercrombie, Esquirol, and others, have already observed this, which is also confirmed by my own researches. The brain of *very talented men is remarkable on the other hand for its size.*"

From Carus's work on Comparative Anatomy. Vol. i, page 273

"If we consider the formation of the *brain* and nerves in *man*, we shall find a confirmation of what has been already said as to the means of estimating the degree of perfection of organization, which, it was asserted, could be furnished with sufficient certainty by the highest organic system alone. *Thus the perfection of human organization is most definitely expressed in the nervous system, as including within it the most elevated organic structure; and that, principally, as we shall find, by the perfect appearance of unity which it presents in the midst of the diversity of its individual parts.*

Dr. W. E. Horner, Professor of Anatomy in the University of Pennsylvania, in his work on Pathological Anatomy, page 327, says:

"In man and all other mammalia, the modifications of the nervous system are not blended together, but each have their particular throne or habitation, as the eye, that by which we see, the tongue, that by which we taste, and so on of all the other senses.

"We find, moreover, by experiment, that other locations of functions take place with both ani-

mals, (mammalia.) That the brain is the seat of *intelligence*, medulla oblongata, of the principle of respiration, and that the medulla spinalis, is the immediate seat of life to all other parts. Be it allowed that such localities of vital function do exist; *of which there seems to me so little doubt*, WHY SHOULD NOT OTHER PARTS OF THE BRAIN AFFORD SETTLED POSITIONS TO THE ANIMAL, MORAL, AND INTELLECTUAL FACULTIES, AS ASSERTED BY THE PHRENOLOGISTS?

Carus says in his Comparative Anatomy, page 231: "When, however, a more perfect evolution of individular portions of the chain of central masses take place, as invariably happens with regard TO THE BRAIN, and occasionally also in the spinal marrow, the EVIDENCE OF THE SEPARATE EXISTENCE OF THE INDIVIDUAL MASSES IS NO LONGER DOUBTFUL."

From Dr. John D. Godman, late Professor of Anatomy, New-York:

"If it be true, that certain protuberances of the skull are found in numerous individuals, and each of these individuals are remarkable for the possession of given qualities, or dispositions of mind; and if it be true, that a number of persons are found wanting in the same qualities of mind, and, at the same time, destitute of the first mentioned protuberances of the skull and brain; it is perfectly justifiable, after a sufficient extensive examination has been made to decide upon the general rule, to declare that the protuberance is a correct indication of the mental quality; or that the manifestation of the mental qualities indicates the presence of certain protuberances upon the skull.

"This is the foundation upon which the doctrines of Gall and Spurzheim rest—PURELY UPON

OBSERVATION; and this is the reason why these doctrines have SO TRIUMPHANTLY OUTLIVED ALL THE MISREPRESENTATION AND VIOLENCE OF OPPOSITION.

“In this view of the case, it is altogether unessential whether the protuberance be caused by the brain within, or the membrane of bone without. The fact of the relation between the natural protuberance and the intellectual character, is not in the slightest degree altered by our being unable to account for it. It is because we commence with a determination to *see and believe in a certain way*, that our improvement is so much impeded, and our advances are so slow. We appear afraid to discover truth, lest we be obliged to *relinquish some cherished notion*, and we find so much fault with those who attempt to arrive at a better knowledge, as if they were doing so with a view to our injury. *If we remain unwilling to submit to the evidence of our own senses*, we certainly are under no necessity of denouncing those who do: yet such is the perverseness of our nature, that nothing is more common than this preposterous conduct.

“As a general rule, it is perfectly safe to infer that the opponents of Gall and Spurzheim do not understand the exact nature of the case against which they dispute. At least no man who has ever set himself honestly to work to examine the subject fairly, has remained in opposition. A great deal of ingenuity has been wasted in discussion on both sides. The opposition taking it for granted, that the whole doctrine is one supported merely by plausible arguments, and therefore to be overthrown by argumentation; and the defenders of Gall and Spurzheim unavailingly endeavoring to induce those to reason from facts,

who have determined previously to be influenced by prejudice. THE RATIONAL student HAS ONLY TO EXAMINE CANDIDLY FOR HIMSELF, without reference to any predetermination, and the result will be perfectly satisfactory.

“But a few years have elapsed since the writer was filled with zeal against the views of Gall and Spurzheim,* and even deemed it his duty to join in the hue and cry against them; so much was his mind imbued with the prejudices derived from the fulminations of a public teacher, whose “zeal” unequivocally, on this subject at least, was not “according to knowledge.” An investigation of the evidences on which Gall and Spurzheim’s views rely for support, fully dissipated the clouds in which the subject had been involved by misguided ignorance, and taught with force the valuable lesson, THAT NO JUDGMENT SHOULD BE FORMED IN MATTERS OF SCIENCE, WITHOUT A CAREFUL EXAMINATION OF THE FACTS CONNECTED THEREWITH.”

Columbia, South Carolina, July 1st, 1838.

DEAR SIR:—

You desire my opinions of Phrenology. It is universally conceded, that all intellectual phenomena, all sensation, consciousness, or perception, and all voluntary action, depend on the brain. You have no feeling but in the brain; for by cutting, tying or compressing a distant nerve, the sensation it would otherwise convey to the brain, is stopt in its course; whether it commence in the leg, or in the arm, or in any other distant part. In like manner the muscles of voluntary

* The author was first induced to believe in Phrenology, when investigating to obtain arguments against it; this occurred in the early part of the year 1830..

motion are paralyzed if the appropriate nerve be cut or tied, or compressed, between the brain and the muscle. By the brain, I mean the cerebrum, the cerebellum, and medulla oblongata, and the upper portion of the spinal column.

THE BRAIN DOES NOT ACT AS ONE ORGAN. The experiments of Bell, of Florens, of Magendie, &c. prove that different parts have different functions, as the cerebrum, cerebellum, and medulla oblongata. Indeed, every part of the brain is so manifestly different in structure from the other parts, that it would be just as reasonable to ascribe the same functions to the leg, and to the nose, as to the optic nerve and the medulla oblongata. Difference of construction, composition, and *location*, must of course, imply difference of function. The optic nerve has one duty, the auditory nerve another.

THE BRAIN, THEREFORE, IS A COMPOUND ORGAN; consisting of parts destined to perform different functions or duties, one part cannot perform the duties of another.

The same neurilema or sheath incloses nerves destined solely to convey sensations to the brain, and nerves destined solely to convey the orders of the brain to the voluntary muscles. All known facts tend to prove that every part of the animal body is appropriated to its own peculiar function or duty, which cannot be well performed by any other part.

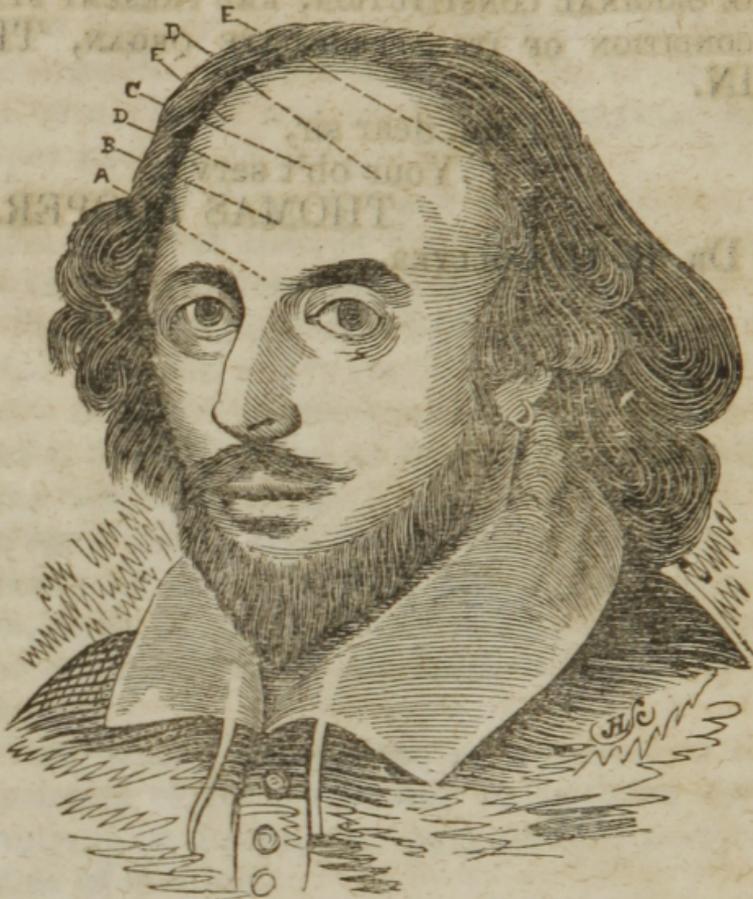
HENCE, ALL CLASSES OF INTELLECTUAL PHENOMENA, HAVE THEIR PREDESTINED, APPROPRIATE SEAT IN THE BRAIN; AND INTELLECT OF ALL KINDS, DEPENDS

**ON THE ORIGINAL CONSTITUTION, AND PRESENT STATE
AND CONDITION OF ITS APPROPRIATE ORGAN, THE
BRAIN.**

I am, dear sir,
Your ob't serv't,
THOMAS COOPER.

To Dr. R. H. COLLYER.

NO. 1.



WILLIAM SHAKSPEARE.

Taken from the original likeness in the possession of the Duke of Buckingham.

- A, Individuality very large, (see page 123.)
- B, Eventuality very large, (see page 130.)
- C, Comparison very large, (see page 137.)
- D, D, Causality very large, (see page 139.)
- E, E, Ideality very large, (see page 93.)

Such a combination of faculties must ensure to its possessor great versatility of talent, and a mind of the most comprehensive order. Compare the formation of this head with that of No. 3, the difference must strike the most superficial observer.

NO. 2.



MARTIN VAN BUREN,

President of the United States.

The likeness was taken at the White Sulphur Springs, August, 1838.

A, Amativeness very large, (see page 59.)

B, Caution very large, (see page 87.)

C, Self-Esteem full, (see page 83.)

D, Firmness very large, (see page 90.)

E, Hope large, (see page 116.)

F, Veneration large, (see page 113.)

G, Wonder small, (see page 95.)

H, Benevolence full, (see page 111.)

I, Causality large, (see page 139.)

L, Comparison large, (see page 137.)

M, Eventuality moderate, (see page 130.)

N, Individuality full, (see page 123.)

Such a combination of organs indicate a great determination to overcome all obstacles, and in such a way as to ensure success. Never did the Author examine a more perfect diplomatic head, excepting that of M. Talleyrand; the head is certainly very well balanced. His large love of Approbation, Caution, Veneration, cause that suaviter which so eminently characterizes the President. Secretiveness checking powerfully the action of the other faculties, not allowing any unguarded expression to escape. The back view of the head will be presented on some other occasion.



An exact representation of the noted Amsterdam idiot, who, though 26 years of age, was so low in the scale of intellect, as to be unable to speak.

NO. 3.



HEAD OF AN IDIOT.

A, Individuality very large, (see page 123.)

B, Eventuality full, (see page 130.)

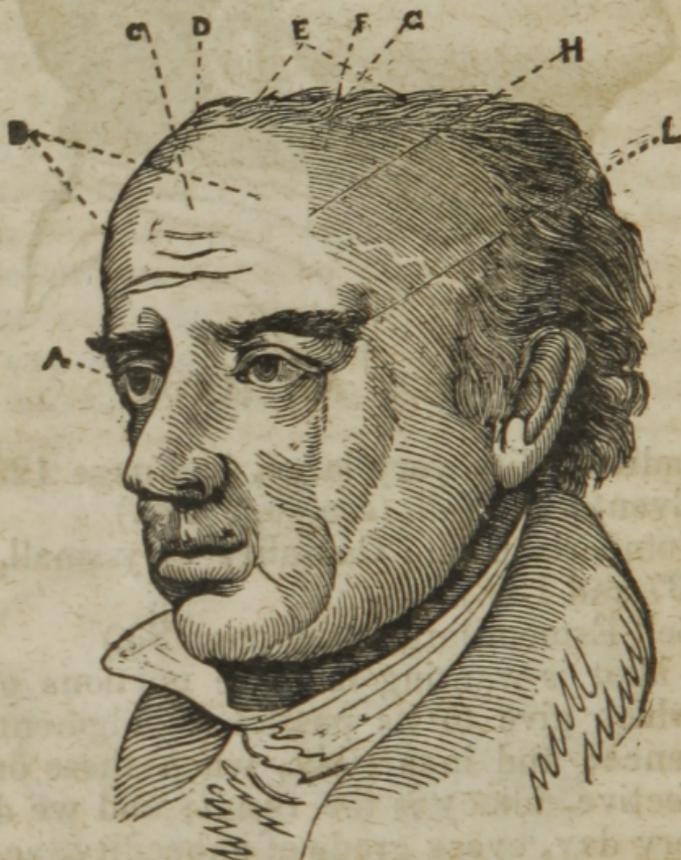
C, Comparison and Causality very small, (see page 137 and 139.)

D, Self-Esteem large, (see page 83.)

This idiot is wanting in those portions of the brain which give to its possessor judgment and intelligence; and invariably, when these organs are defective, idiocy is the result; and we discover every day, every grade of imbecility, according to the developements. Idiocy is the absence of any faculty; if a man is wanting in the organ of Tune, he is an idiot as regards music; if he is wanting in Ideality, he is an idiot as regards poetry; if he is wanting in Constructiveness, he is an idiot as regards mechanics; these traits of charac-

ter may be dispensed with, without materially affecting the being, yet, when Causality is wanting, its idiocy, viz: want of intelligence, it is so manifest, so apparent, that every one yields assent to its correctness! There are moral and animal, as well as intellectual idiots. Contrast this head with that of Shakspeare or Dr. Cooper.

NO. 4.



THOMAS COOPER, M.D., L.L.D.

Many years Professor of Chemistry and President of Columbia College, South Carolina.

A, Language very large, (see page 135.)

B, B, Causality very large, (see page 139.)

- C, Comparison large, (see page 137.)
 D, Benevolence large, (see page 111.)
 E, Veneration small, (see page 113.)
 F, Wonder small, (see page 95.)
 H, Humor very large, (see page 100.)
 L, Number and Order very large, (see page 129.)

This head indicates to the Phrenologist a mind of a gigantic order, and such has been the mind of Dr. Cooper. His Firmness, Combativeness, Destructiveness and Concentrativeness, have enabled him to trample down and expose error, and wield with success his mighty pen against bigotry and superstition. Few men ever possessed more moral courage than he. His Conscientiousness is remarkably large, which combined with small Veneration and large Reasoning faculties, cause him to be regardless of the frown of friends or foe, so long as he considers he is vindicating the cause of freedom. In consequence of his bold and determined conduct, he has had many enemies; and such men always have had, and always will meet with, opposition from the grovelling mass. In future ages he will be admired for having dared to express himself as his reason dictated. Dr. C. was examined by me in May, 1838.



LET it be remembered, that in the examination of Heads, the Author does not pretend to give a chart of mathematical accuracy; and should, perchance, any errors occur, the reader will please attribute them to him, NOT TO PHRENOLOGY. He considers that those persons who state in their advertisements, "that Phrenology shall either

stand or fall by THEIR failure or success," are committing an outrage too flagrant and presumptuous to be pardoned; because, in all sciences of observation, the manipulator is subject to error; still, such an error does not in the least degree invalidate the truth of the science.* Many persons call on Phrenologists with the expectation of discovering some discrepancy; and if such should occur, they bray it to the world as an argument against the science, at the same time carefully forgetting the sixty or seventy correct traits that have been delineated; some, *I have no doubt*, it is to their interest, to keep in the shade. The Author is well aware of the effect of wounded self-love: many frequently coming to him expecting to receive a certificate for some talent which they never possessed, but which they think they possess. This may arise from the flattery of friends, from ignorance, self-conceit, and other causes. But, when the honest Phrenologist, fearlessly gives them their true character, mortification and discontent are the inevitable consequences. More corroborations of the truth of Phrenology have occurred under these circumstances, than from any other source.

* I regret to state, that there are many illiterate persons prowling about different parts of the country, endeavoring to teach a doctrine which they do not understand, and thus subjecting that doctrine to the ridicule of the intelligent, who would otherwise embrace it.

TESTIMONIALS.

In consequence of the number of impostors pretending to a knowledge of practical Phrenology, Dr. Collyer conceives it due to the public and himself, to publish a few (from many hundreds) of the recent testimonials which he has received of his qualifications to delineate character, &c.

The following Resolutions were presented by my class in Columbus, Ohio, Jan. 7, 1839.

At a meeting of the members composing the class of Dr. Collyer, on Monday Evening, Jan. 7,

On motion of Dr. J. Dunham, Demas Adams, Esq. was called to the Chair, and B. Latham appointed Secretary.

On motion of Dr. Dunham, the following preamble and resolutions were unanimously adopted, viz:

The undersigned, having attended the Lectures of Dr. Collyer, on Phrenology, do hereby state, as a small acknowledgement for the invaluable information acquired, that they have listened, with pleasure, to his interesting discourses on the nature of man, the relation he bears to the world as a moral and social being; or those more ennobling faculties which designate him as the "Lord of Creation,"—and whereas, we have derived benefit from his instructive and entertaining Lectures and practical illustrations, and feel desirous to express our warm regard and testimony for the meritorious efforts of the lecturer in the cause of science, Therefore,

Resolved, That, in the expression of our views, as to the merits of Dr. Collyer, as a Lecturer, as an intelligent man, and as an independent friend of truth, we hereby tender him our best wishes for his future success in life, and our thanks for his laudable efforts to rescue an important branch of science, intimately connected with physiology and pathology, or man in every stage of existence, from the destroying hand of impostors, and from the ruthless grasp of ignorant opponents.

On motion of John T. Blain, it was resolved that a copy of the foregoing be furnished to the Ohio Statesman and Journal, and Register, for publication.

D. ADAMS, Chairman.

B. LATHAM, Secretary.

Dr. J. Dunham, D. Chase, W. L. Casey, H. N. Hubble, John T. Blain, Wm. R. Guest, E. Bishop, G. M. Herancourt, Geo. A. B. Lazell, Committee.

From the Hon. Thomas Ewing, formerly U. S. Senator for the State of Ohio.

Dr. Collyer this morning examined my head, when an entire stranger to me. In his observations, during the examination, he disclosed a knowledge of traits and even shades of my character, which would hardly be known to my familiar friends.

(Signed) T. EWING.

Dec. 21st, 1838.

We hereby certify that we were present at the examination of Col. Mulvany's head, by Dr. Collyer, and we were surprised at the accuracy and truth of the delineation. It is proper to state that Col. M. was an entire stranger to Dr. C. The traits of Col. M.'s

character were fully known to us from many years acquaintance. (Signed)

J. H. KEITH,

Pres't Judge of the 6th Judicial Circuit,

JNO. DUNHAM,

Sec. to Gov. Shannon.

I concur in the above.

J. R. MULVANY.

Columbus, Ohio, Dec. 25, 1838.

From Gen. Geo. McDuffie, the distinguished statesman, late Governor and Commander-in-Chief of the State of South-Carolina.

I take pleasure in stating that Dr. Collyer examined my head, when a perfect stranger to me, and so far as I know my own character, presented even the shades of it. (Signed) GEO. McDUFFIE:

Augusta, Georgia, 1838.

The above gentleman was introduced to me by James Edward Calhoun, Esq., as a planter, and desired to know whether it would be safe to travel with him, at the same time pretending that they were perfect strangers to each other.

Mr. Calhoun's character was delineated more accurately, if possible, than mine. So says Gen. McDuffie.

From the Hon. Henry Clay, of Kentucky, United States Senator.

Dr. R. H. Collyer examined my head; and his observations upon the traits of my character were very correct, as he orally stated them during the examination. Dr. C., at the same time, examined the head of R. P. Letcher, Esq., a friend of mine, and his observations upon it were surprisingly accurate.

(Signed)

H. CLAY.

Asbland, 25th August, 1838.

From Pierce M. Butler, present Governor and Commander-in-Chief of the State of South-Carolina.

My head has been submitted to Dr. Collyer's inspection, and I take pleasure and satisfaction in saying, that as far as I can judge, he has portrayed my true character and leading characteristics.

(Signed) P. M. BUTLER.

Columbia, S. C., May 19th, 1838.

From Wm. Gibson, M. D., Professor of Surgery in the University of Pennsylvania, and author of a celebrated work on Surgery, &c. &c.

I have great pleasure in stating, that the character drawn by Dr. Collyer, after a full examination of my head, is so correct in every particular, as to establish firmly in my own mind the claims of Phrenology—many of the facts stated by him being only known to myself. I may add that I was perfectly astonished at the developement.

(Signed)

WILLIAM GIBSON, M. D.

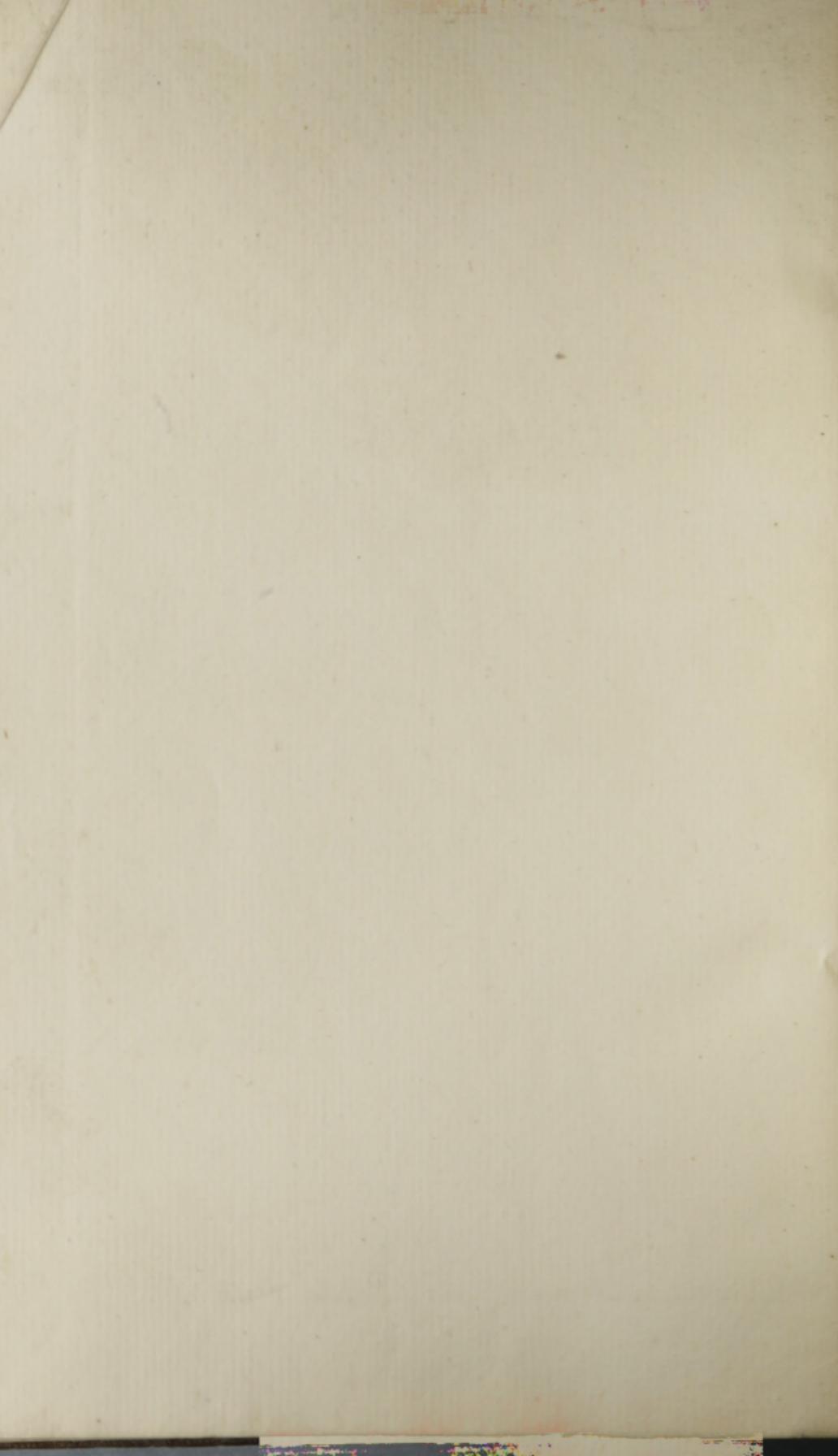
White Sulphur Springs, Va., Aug. 1st, 1836.

From Gen. Joseph M. Hernandez, of the United States Army—the officer who captured Osceola in Florida.

Dr. Collyer having examined my head, I take pleasure in saying, that he has delineated my character strikingly correct throughout, and that he did so on an interview of not more than a few minutes from the time we first saw each other.

(Signed) JOSEPH M. HERNANDES,
Of Florida.

White Sulphur Springs, Va., 1838.



Med. Hist.
WZ
270
C 715 m
1839

Book deacidified with methyl
magnesium carbonate. Rebacked
in a harmonizing cloth. Leaves
mended where necessary.

Sky Meadow Bindery
April 1990

