

A
GUIDE TO PHRENOLOGY,

DESIGNED

TO ILLUSTRATE THE SCIENCE OF THE HUMAN MIND AS MANI-
FESTED THROUGH THE BRAIN,

EMBRACING

THE FUNDAMENTAL PRINCIPLES OF PHRENOLOGY;

ITS UTILITY TO PARENTS AND TEACHERS IN DEVELOPING AND
EDUCATING THE MENTAL FACULTIES OF THE RISING
GENERATION, AND OF SELF IMPROVEMENT,

TOGETHER

WITH THE ADAPTATION OF EACH OF THE ORGANS AND A

PHRENOLOGICAL CHART,

IN SEVEN DEGREES OF DEVELOPMENT WITH NUMEROUS COMBINATIONS,

ILLUSTRATED BY ENGRAVINGS.

By P. L. BUELL & N. SIZER,
PHRENOLOGISTS.

First Edition.

WOODSTOCK, VT.:
PRINTED BY HASKELL AND PALMER.
(Mercury Press.)
1842.

BF
B9329
1842

Entered according to Act of Congress, in the year 1842,
By P. L. BUELL AND N. SIZER,
in the Clerk's Office of the District Court of Massachusetts.

P R E F A C E .

In presenting this work to the public, the authors have aimed at perspicuity and utility.

They have felt the necessity of some work which should come within the reach of all, embracing the general outlines of the science of phrenology, with its application to the education of children, and the training and cultivation of the mental powers of the student, so arranged as to interest, while it instructs.

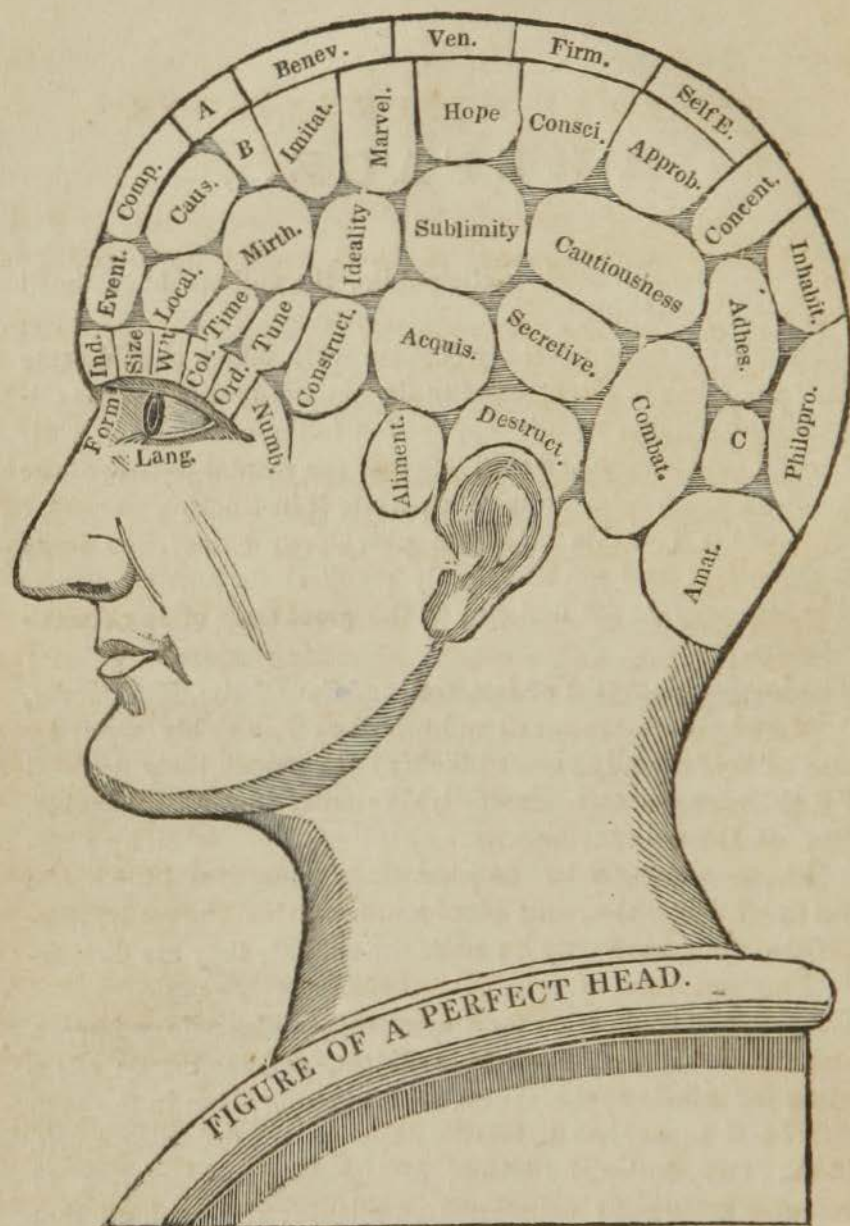
Most of the valuable works on phrenology extant, are large and expensive, and not sufficiently practical for popular utility, and hence, they do not find way to the great mass of the American public.

The invaluable works of Drs. Gall and Spurzheim, Mr. Combe, Fowler and others, are loved and prized as they richly merit by all who have carefully perused them ; but comparatively few will buy a large (and necessarily costly) volume, however valuable. Moreover, several excellent works have been published by phrenologists, presenting detached parts of the science, and the books being small they met a ready purchase, but, when the readers discover that they have only a part of the subject, they are dissatisfied.

The frequent application for a synopsis of phrenology imparting a general view of the whole subject, and the means of expanding the minds of the young, and directing them in the path of virtue and peace, has induced us to write the following work, amid the cares, duties and labors, of traveling and lecturing to promulgate among our countrymen a science, rich with all that can ennoble the human race, and which, when fully understood and universally applied, will bring that reign of virtue and intelligence which causes the philanthropic soul to leap with joy, in anticipation of its bright dawn.

P. L. BUELL,
NELSON SIZER.

Dec. 1842.



NAMES OF THE PHRENOLOGICAL ORGANS.

- | | | |
|-------------------------|-----------------------|--------------------|
| 1 Amativeness, | 15 Conscientiousness, | 29 Color, |
| 2 Philoprogenitiveness, | 16 Hope, | 30 Order, |
| 3 Adhesiveness, | 17 Marvellousness, | 31 Number, |
| 4 Inhabitiveness, | 18 Veneration, | 32 Locality, |
| 5 Concentrativeness, | 19 Benevolence, | 33 Eventuality, |
| 6 Combativeness, | 20 Constructiveness, | 34 Time, |
| 7 Destructiveness, | 21 Ideality, | 35 Tune, |
| 8 Alimentiveness, | 22 Sublimity, | 36 Language, |
| 9 Acquisitiveness, | 23 Imitation, | 37 Comparison, |
| 10 Secretiveness, | 24 Mirthfulness, | 38 Causality, |
| 11 Cautiousness, | 25 Individuality, | A. Human Nature, |
| 12 Approbateness, | 26 Form, | B. Suavitiveness, |
| 13 Self-Esteem, | 27 Size, | C. Union for Life, |
| 14 Firmness, | 28 Weight, | |

to these favorable arrangements in organization. This doctrine, recognizes and explains the reasons of the differences that exist between different species of animals; between animals and the human race, and also that which exists between different members of the *genus homo*. This superiority of physical apparatus, acting as a medium of mental manifestation, gives man his supremacy over the brute creation. While beasts have just sufficient mental sagacity to reproduce, protect themselves, and provide for their natural wants; man, not only manifests the same animal propensities, (he desires food, propagates, protects himself and offspring, and these feelings are, in their nature precisely like those manifested by beasts) but he stretches far beyond this. The searching glance of his intellect ranges among the stars; by its power he directs the lightning's fiery shaft, rides unharmed upon the heaving billows, perforates the earth for its wealth, employs the elements to minister to his wants and serve his purposes, exterminates animals which endanger his existence, or tames their ferocity and directs their power to his service.

Why does feeble man direct superior power? Why, puny as he is, can he be truly called the lord of the creation? This power exists in intellect and human reason.

In addition to reason, man's moral sense is a distinguishing characteristic of his nature.

The inferior animals, have not by nature any conception of a God, neither can they be taught to feel moral obligation; yet man, throughout the world, however debased, barbarous or ignorant he may be, is found to possess an idea of a Supreme and overruling Power, and a sentiment to worship that Being.

Man, is by nature a religious being; was created with a design that he should manifest a religious character, and for that end, was endowed with the organs of the moral sentiments, through the medium of which alone, can he apprehend a God, or feel an obligation to obey His laws.

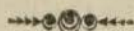
Little fear need be entertained that religion will ever become extinct, for it forms a part of man's nature, as much as a sense of pain, or the appetite for food.

A portion of the brain is allotted to the manifestation

of the moral sentiments in the present life—beasts are destitute of brain in the same region, and the moral feelings are entirely wanting.

If the manifestations of mind, in its various powers and faculties, have any connection with the physical apparatus, with which it stands related, it becomes of the first importance to discuss the laws of its action, and the means of improving the one and developing the other.

The science is based upon a few general principles and professes to be a system of mental philosophy.



PRINCIPLES OF PHRENOLOGY.

The term PHRENOLOGY, is derived from the Greek words, *phren*, (mind,) and *logos*, (discourse,) which signify, a discourse or treatise on the mind.

I. The brain is the instrument of the mental manifestations; the organ through which the mind acts in performing all its operations in the present life.

II. The mind is not a distinct power, but is composed of many faculties; and different parts of the brain, serve as the special organs of those various faculties.

III. The size of the brain as a whole, or of the several organs in particular, is a measure of power in the general or special mental manifestations.

IV. The *temperament*, or physiological constitution of the body, gives character to the texture, compactness and activity of the brain, which is sluggish, active, strong or excitable accordingly; and thus exerts much influence in strengthening and modifying the powers of mental action.

V. *Exercise*, strengthens and enlarges the brain in general, or the several organs in particular.

GENERAL OBSERVATIONS.

The student of nature finds pleasure and profit, as well as matter of astonishment, at every step of his investigations.

If he examines the arrangement of physical nature, animate and inanimate, he discovers a system of perfect order, harmony and beauty, which speaks a language of stirring interest.

This system of order is maintained, not only in respect to mere inert matter, but through the various genera of animals, up to the highest moral and intellectual constitution of man.

Each species of animals is governed by laws suited to its constitution, and a sphere of action allotted to each, which they can never transcend.

Water, is the element of the finny tribes, and preservation of self is supposed to be the height of their abilities. Their brain is soft, small, and simple. (See the adaptation of Destructiveness.)

There seems to be an elevation of mental power from the inert chrysalis, and stupid toad, through the long catalogue of animals up to man.

The nervous system of animals, including the brain, is more complicated, increased in volume and fineness of texture, in proportion as they advance upward in the scale of intelligence.

The fox, has four times as much brain as the woodchuk, (while their bodies are of about equal size) and his intellectual faculties are manifested in an equal comparative degree of superiority. This chain of gradation is perfect in the ascending scale of intelligence in the lower animals, till we arrive to the human species; nor does it stop at its first entrance here: it is continued unbroken, to the highest intelligence on earth; who will be found in possession, not only of a large and well proportioned constitution throughout, but a large, compact, and active brain. His intellectual superiority is attributable,

removed or the injury healed. No such effects result from a disease, or an injury of other parts of the body, until such disease is communicated to the brain; and then, the mental affection is in proportion to the disease of the brain, and not to the disease of the body.

Numerous *facts* are before the world, (and there are few persons of middle life who cannot relate instances of their own observation) which go to prove, that a blow upon the head and pressure upon the brain, cause insanity, or a state of unconsciousness, and thereby proving beyond a doubt, that the mind employs the brain as the medium of its manifestation. From among the many we transcribe a few instances from Mr. Combe's works drawn from various sources, to wit: 'Dr. Niel Arnott, in his recent work on Natural Philosophy, writes thus: 'Fever, or a blow upon the head will change the most gifted individual into a maniac, causing the lips of virgin innocence to utter the most revolting obscenity, and those of pure religion, to speak the most horrible blasphemy; and most cases of madness and eccentricity can now be traced to a peculiar state of the brain.'

"M. Richerand had a patient whose brain was exposed in consequence of disease of the skull. One day, in washing off the purulent matter, he chanced to press with more than usual force; and instantly the patient, who, the moment before, had answered his questions with perfect correctness, stopped short in the middle of a sentence, and became altogether insensible. As the pressure gave her no pain, it was repeated thrice, and always with the same result. She uniformly recovered her faculties the moment the pressure was taken off. M. Richerand mentions also the case of an individual who was trepanned for a fracture of the skull, and whose faculties and consciousness became weak in proportion as the pus so accumulated under the dressings as to occasion pressure of the brain. A man at the battle of Waterloo had a small portion of his skull beaten in upon the brain, and became quite unconscious and almost lifeless; but Mr. Cooper having raised up the depressed portion of bone, the patient immediately arose, dressed himself, became perfectly rational, and recovered rapidly. Professor

Chapman, of Philadelphia, mentions in his Lectures, that he saw an individual with his skull perforated and the brain exposed, who used to submit himself to the same experiment of pressure as that performed on Richerand's patient, and who was exhibited by the late Professor Westar to his class. The man's intellect and moral faculties disappeared when pressure was applied to the brain : they were literally "held under the thumb," and could be restored at pleasure to their full activity. A still more remarkable case is that of a person named Jones, recorded by Sir Astley Cooper. This man was deprived of consciousness, by being wounded in the head while on board a vessel in the Mediterranean. In this state of insensibility he remained for several months at Gibraltar, whence he was transmitted to Deptford, and subsequently to St. Thomas's Hospital, London. Mr. Cline, the surgeon, found a portion of the skull depressed, trepanned him, and removed the depressed part of the bone. Three hours after this operation he sat up in bed, sensation and volition returned, and in four days he was able to get up and converse. The last circumstance he remembered was the capture of a prize in the Mediterranean thirteen months before. A young man at Hartford, in the United States of America, was rendered insensible by a fall, and had every appearance of being in a dying condition. Dr. Brigham removed more than a gill of clotted blood from beneath the skull; upon which "the man immediately spoke, soon recovered his mind entirely, and is now, six weeks after the accident, in good health both as to mind and body."

A lady in Kentucky, received a blow upon the head from an Indian's tomahawk, which so much affected the scalp and skull that they never united, leaving the brain bare, as large as a half dollar.

The family physician often amused his friends by an experiment upon her brain, showing the necessity of the action of that organ, in the manifestation of reason and consciousness. He would press upon her brain with a silk handkerchief, when *she* would instantly cease speaking in the middle of a sentence, and remain unconscious as long as the Doctor applied the gentle pressure, some-

I. THE BRAIN IS THE ORGAN OF THE MIND.

That mind and matter act together, and have a mode of connection and co-operation, is self evident; but *how* this is effected, is not our province, as it is not in our power to decide. The brain is believed to be the medium of the union of spirit and matter, for many reasons.

First. All the nerves, (except those which govern respiration and act independently of reason) which serve as communicating and controlling agents to the whole body, arise in the brain, and point to it as the great seat of sensation from without, and diffuse motion and energy through the body, in obedience to the understanding.

The nerves of motion, and nerves of sensation are minutely ramified throughout the extremities of the body, and if we sever those nerves in the arm so as to destroy their connection with the brain, all power of motion and feeling ceases, and the hand may then be lacerated, or burned, without the least sensation. The arms may be amputated, and the spine affected, so that the lower extremities of the body would be helpless, and still the mind continue to act.

Second. Positive evidence is furnished by the following considerations, that the brain is the delicate apparatus designed by the Creator, to control the body, manifest the mind, and be the seat of the soul or immortal spirit.

Where there is no brain, there is no manifestation of mind; and reason and other mental faculties, are manifested in proportion to the size and perfection of the cerebral mass; and this is true, not only in respect to man, but the same unvarying law is carried throughout the numerous tribes of animals from the crawling reptile to the ourang-outang.

Idiots, also, are very deficient in the front part of the head which is usually very small, or, when this is not the case, it is paralyzed by disease or enlarged by hydrocephali. (See cuts of Dr. Gall and Idiot.)

Third. If the brain be compressed or injured, there is a corresponding suspension of the mental faculties; and consciousness and reflection return, when the pressure is

known, every function is performed by a distinct and appropriate organ. The stomach is adapted to the function of digestion, the heart to propel the blood, the liver to secrete bile, the lungs to perform the office of respiration, the eye to see, the ear to hear, the tongue to taste, &c. These several faculties can be performed by no other organs; no one can answer the end of any other—the eye cannot hear, nor the ear see.

The tongue, it is true has a triple function, viz: tasting, feeling and motion; and dissection proves that its nerves are multiplex, either of which class being severed, one of the functions is extinguished, while the others remain; thus showing that, in respect to the functions of the animal economy, one, and but one, is performed by a single organ. Each class of nerves, always performs a distinct and homogeneous class of functions.

If we may be allowed by analogy to carry this uniformity of action to the brain, we might reasonably expect that there would be distinct organs for each of the faculties of

“Love, hope, and joy, fair pleasure’s smiling train;
Hate, fear, and grief, the family of pain;
Which, mixed with art, and to due bounds confined,
Make and maintain the balance of the mind:
The lights and shades, whose well accorded strife
Give all the strength and color of our life.”

Secondly. Partial Genius, proves that the mind has a plurality of faculties.

That the mind does not act as an unit, or as one primary power, the whole mind being necessary to the performance of each and every mental operation; is now very generally admitted.

If this were so, every person should manifest an equal amount of talent upon all subjects. Each student should succeed equally well in every department of literature and science. The poet, should be as good a painter, sculptor, mechanic, musician, mathematician, or orator; and every orator should be a poet; every mathematician a sculptor, and every mechanic, a musician, &c., but, Benjamin West painted without instruction, and against the wishes and threats of his parents and teachers; Mo-

times for the space of twenty minutes, when, on removing the pressure she would complete the sentence with the same tone of voice, and the same animation of countenance and gesture as it was commenced, without knowing that her remarks had been suspended.

The brain is given to man for some useful purpose, and when we find that any considerable want of brain, or a diseased state of, or pressure upon it, affect the power and action of the mind, and that no such results follow an injury of any part of the body—and when we reflect that the perfection of the powers of vision, of digestion, circulation, common sensation and muscular motion, are *always* in proportion to the perfection of their respective organs; and that, in a similar manner, a certain state of the brain is necessary to the healthy action of the mind, we must inevitably conclude that the brain is given as the apparatus of mental action. We believe, therefore, that every passion and mental emotion; the judgment, imagination, memory, will, and moral sense, or by whatever names they may be called, find their medium of manifestation through the brain.

If the mind be connected with the brain, and if it can be correctly studied, only in connection with that organ; of how much importance is the science of Phrenology as a basis for a correct system of mental philosophy.

The mental philosophy of past time, has been reared without a connection with organization, and hence, the diverse and contradictory opinions in regard to the laws and faculties of the mind, and “the melancholy truth, that, independent of phrenology, no mental philosophy suited to practical purposes exists.”

II. PLURALITY OF THE MENTAL FACULTIES AND ORGANS.

Many persons are willing to admit (what some few deny) that the brain as a whole, acting as a single organ, is the instrument of the mind; who deny, that different portions of the brain are allotted to the manifestation of the various mental faculties. A few considerations will set this matter at rest.

First. Throughout the physical system, so far as it is

zart composed music at the age of four years; Watts, Pope, and others, composed good poetry when children, and Watts, while his father was in the act of whipping him for *rhyming*, begged for mercy in poetic language. Zerah Colburn, calculated numbers with astonishing celerity; was a genius in that; but never manifested superiority in other respects; and Patrick Henry, was an orator by *nature*. These examples are sufficient to show, that some minds, are either all poetry, mechanism, sculpture, oratory, &c., or else that the mind is possessed of a plurality of faculties, and that a very great endowment of one faculty or class of faculties, constitutes the *genius*; and these faculties modified in infinite variety, give all the diversity of character and talents, that distinguish the different members of the human race.

Thirdly. Partial insanity, as well as partial genius, also proves that the mind has many distinct faculties.

Some persons are insane on the subject of property, and imagine that they possess all the wealth in the world. In Dec. 1838, one of the authors, (Mr. Buell,) examined the head of a lady near Philadelphia, who imagined that she owned the city, and that the Girard College was being built for her special accommodation. Converse with her for hours on any other subject and she was perfectly rational and intelligent, and no one would discover the slightest aberration of intellect; but, speak of houses and lands, and she would lay claim to the whole universe and pretend to own it all. In the same year, a man resided in the town of Darby, six miles from Philadelphia, who was insane on the same subject, and perfectly sane on all others. He imagined that the United States government, owed him \$200,000, and he annually visited Washington and conversed with the President, Messrs. Clay, Calhoun, and others, on the subject of his claim. In Suffield, Conn., there is a lady who is very intelligent, and sane on all subjects but that of property. She thinks she owns every farm in town, and directs her conduct and conversation accordingly.

There is at this moment (Dec. 7th, 1842,) in the Court House at Woodstock, Vt., a young woman who accumulated some property in the factories at Lowell, Mass.,

which, by some means she has lost. She became insane on that subject, and regularly attends the courts, alledging that a certain person has obtained her property by fraud, and she thinks her cause is in court, at which she expects to recover her property. The Rev. Mr. Packer of Mount Holley, Vt., related to us the following fact. He visited the Vermont Insane Hospital at Brattleboro', and held an animated conversation with a fine looking gentleman in one of the rooms, and on retiring, inquired of a third person, who the gentleman was, with whom he had been conversing, and why he was in the hospital? The person replied, "go back and ask him, who ought to be President of the United States." He did so, and the man raved in a moment and said, "*I, I*, ought to be President," showing a disease of the organ of self esteem.

In 1839, one of the writers, (Mr. Buell) examined the head of a lady in Madison, Geauga (now Lake) County, Ohio, who imagined that she had committed the *unpardonable sin*, and that for her, there was no hope. The organs of Caution and Conscientiousness were *very large*, and Hope but moderately developed. She was sane on every subject but that of religion, which indicated a disease of Conscientiousness.

We examined the head of a man in the Alms house of the city of Wilmington, Del. in 1840, who had predominant self-esteem, who openly declared that *he* was the Supreme Being, and hence, would put forth no effort for a livelihood.

Dr. Rockwell, Superintendent of the Vermont Insane Hospital, related to us in July 1842, many interesting cases of partial insanity, proving the truth of the plurality of the mental faculties.

'Of *folie raisonnée*, Pinel thus speaks:—“Hospitals for the insane are never without some examples of mania, marked by acts of extravagance, or even of fury, with a kind of judgment preserved in all its integrity, if we judge of it by the conversation; the lunatic gives the most just and precise answers to the questions of the curious; no incoherence of ideas is discernible; he reads and writes letters as if his understanding were perfectly sound; and yet, by a singular contrast, he tears in pieces his clothes

and bed covers, and always finds some plausible reason to justify his wandering and fury. This sort of mania is so far from rare, that the vulgar name of *folie raisonnante* has been given to it."—p. 93. 'Another equally interesting case from the same author may be cited.' "It is difficult to conceive," says he, "the nature of one species of alienation of mind. It consists, as it were, of a combination of reason and extravagance, of discernment and actual delirium, which appear so inconsistent as reciprocally to exclude each other. One lunatic, whose malady is of seven years' standing, is perfectly aware of his state, and forms as sound a judgment of it, as if it were a thing which did not immediately concern himself. He tries to make efforts to free himself from it; but, on the other hand, he is convinced that it is incurable. If any one remarks the incoherence in his ideas in his talking, he readily acknowledges it, but answers, that his inclination overpowers him so much, that he cannot but submit. He adds, that he does not guarantee the soundness of the judgments which he forms, but that it is not in his power to rectify them. He believes, for example, that if he wiped his nose, that organ would remain in his handkerchief; that if he shaved himself, he must of necessity cut his throat, and that, at the first attempt to walk, his legs would break like glass. He sometimes subjects himself to rigorous abstinence for several days, under the impression, that if he took aliments, they would suffocate him. What are we to think of an aberration of intellect so regular and so singular?" p. 94. §

The records of insane hospitals would furnish volumes of facts such as these, showing partial alienation of the mental powers. How can we reconcile these facts with the idea, that one organ manifests all the mental functions? If so, why does that organ manifest one, but *not every* faculty?

Fourthly. Dreaming, or incomplete sleep, is inconsistent with the supposition that the mind is but one special faculty; for, it would be as a whole, either awake or asleep at the same time. An imperfect state of sleep, must be

accounted for on the hypothesis of a plurality of mental faculties; else, our dreams should be as consistent as our wakeful reflections; in fact, there could no such phenomenon as dreaming take place.

Fifthly. Partial idiocy, often occurs where the person manifests one, or more of the mental powers in an extraordinary degree, while destitute, to a very great extent of power to manifest all the rest. The talents which such persons manifest are as various as the faculties of the mind. Some have the talent for music. We have the skull of such an one, and the organ of tune is large and the skull very thin over the organ, and very thick in other places, showing an activity of that part of the brain. Some are kind, others cruel.

At Blandford, Mass., there resides a person with whom we are well acquainted, who has a small head and is destitute of common sense, and has always been under guardianship; yet he possesses the talent of chronological memory in a state of perfection, unequalled by any man of our acquaintance, and perhaps in the union. At Alstead, N. H., in the summer of 1842, we examined the head of a man who has an excellent memory of events and localities, a fair talent for music, some mechanical ability and a great love of property, yet he does not know what things are valuable, knows no difference between a dollar and a cent, is called a fool and cannot take care of himself. His head indicates his true character.

Sixthly. The diversity of human character and talents, presents to the daily observer sufficient proof on this point. How often do persons of good general ability, complain of a want of some kind of memory, say of colors, (see the adaptation of the organ of color) places, countenances, names, verbal memory or want of language, events, dates, &c., or a want of the talent for music, mechanism, or the power to compute by numbers. The celebrated Mr. Geo. Combe, stated in his lectures at N. York, "that he never could learn the multiplication table." Now, it is true that he is an educated man, has practiced law for more than twenty years, and all who have read his writings will pronounce him a philosopher, and yet a boy of five years of age is his superior in res-

pect to numbers ; indeed, if all his faculties were as weak as this, he would be idiotic.

Thus facts and arguments might be multiplied *ad infinitum*, showing the impregnability of our present position. Why is there such mental phenomena as partial genius, partial insanity, partial idiocy, dreaming and the general diversity of character and talents? They can be accounted for on no other ground than the plurality of the mental faculties, and the possibility of possessing a strong endowment of one or more of the faculties, contemporarily with all the others deficient.

PLURALITY OF THE MENTAL ORGANS.

Since the brain is the organ of the mind and as it has been shown, the mind is not a distinct power, but composed of a plurality of faculties, and also, that in the corporeal organization, no one organ is known to perform more than one office or function ; it follows by parity of reasoning, that the brain is a congeries of organs, equal in number to the faculties of the mind ; that each organ of the brain is constituted the special agent for the manifestation of its appropriate and distinct mental power.

The heads of the two sexes are unlike in shape which the observer readily discovers. The love of children which predominates in females is always observed to be concomitant with an elongation of the back part of the head. (See cuts.) Similar evidence is afforded in respect to all the several organs which are considered as established, as well as by observing the different *classes* of organs.

Such men as Franklin, Cuvier, Bacon, Locke, Bonaparte, Finney and Webster, are largely developed in the forehead ; while men of inferior minds down to perfect idiots have a *small* anterior development. Compare the high upward development of Melancthon and Gall, in contrast with that of Pope Alexander VI, and morality, or the want of it, will be found to accompany the two story, and the one story heads. When the head is very broad at its base in proportion to its height, resembling that of the tiger and other carnivorous animals, we find

the animal propensities predominant in the character.

Moreover, different faculties of the mind appear at different periods of life, and one by one becomes weakened, or disappears in age, while others remain entire. Pathological evidence may be cited in proof of the plurality of the mental organs. Numerous instances are on record, where injuries have been received upon particular portions of the head, thereby producing an unnatural action of the faculties, whose organs were injured. We beg to refer the reader to "Fowler's Review of Dr. Hamilton's lecture" in the *Phrenological Journal*, Vol. IV. p. 87, also a statement of the case of E. Sprague, of Deerfield, Mass., by the authors, *Phren. Jour.* Vol. IV, p. 207.

III. SIZE (*cæteris paribus*) IS A MEASURE OF POWER.

This principle holds good in respect to all bodies composed of the same kind of material. The strength of iron and wood, or any other substance, is calculated by its size; but, when the conditions are unequal, an allowance is made for the inequality, to arrive at the true or comparative power of the object.

Large vital organs, or a large muscular system in man and animals, is a measure of vital and muscular energy. Select fifty men of large size, indiscriminately, and fifty who are only of medium size, and the large ones will uniformly possess a majority of physical power. The same experiment would produce a similar result respecting the size of heads. If the brain be the organ of mind, and size as a general law is a measure of power, then, the larger the brain, the more powerful should be the mental manifestations. When we compare the brain of birds and quadrupeds, we find mental sagacity in proportion to the size of brain compared with the gross bulk of the animal.—The fox, as has before been observed, has four times as much brain as the woodchuck, while their bodies are nearly equal in size, but the mental sagacity is vastly different.

Those species of dogs which are very sagacious, have a much larger brain in front, than those which are stupid and untractable. The brain of the turkey is one third

less in size than that of the crow, and all know the stupidity of the former, and the sagacity of the latter. We have, in our cabinet, the skull of a large Maryland horse, which weighed fourteen hundred pounds, and the cerebral cavity contains only *one pint*. We measured the skull of a man of common size, who probably did not exceed one hundred and fifty pounds in weight, and it contained *four pints*. Thus, man possesses more than *thirty seven times* as much brain as the horse, in proportion to his absolute bulk, which is, on phrenological principles, a sufficient solution of the question, *why* man has more intellectual capacity than beasts; by which power he is enabled to control them. Moreover, those convolutions of brain which correspond to the organs of reflection in man, are wanting in the lower animals.

We have noticed, that those men who have arisen to distinction in the learned professions, or in great civil and moral reformatations, have had large sized heads. In the executive and legislative departments of our government, a person with a head below the full size, cannot be found, and the most distinguished, have *very large* heads, sustained by amply developed vital organs. If superiority of intellect, is not dependent upon a large amount of active brain, how does it happen, that *all* great men have large heads, or a large development in the frontal or intellectual department of the brain; while idiots, have very small heads, and men of feeble intellect have inferior foreheads?

This doctrine, is most clearly exemplified by comparing the heads of the different nations of the earth. Compare the head of the European, with that of the Hindoo, the Chinese, the New Hollander, or the Peruvian Indian, and it will solve the questions, why an hundred millions of the Hindoos, are kept in subjection by fifty thousand Englishmen; why England with a few, has hewed her way into the heart of China; why a few Spaniards conquered a whole nation of the Peruvian Indians; why the Spaniards *failed* to conquer the Seminole Indians in Florida; and why the United States have struggled against them for the last eight years with such ill success. An observation of the size and shape of their

heads, *explains all*, while it pours a flood of light upon the national character and condition of the different classes of mankind.

Those Indian tribes, which, in this country, have been easily conquered by the colonists, have heads of moderate size, with diminutive foreheads; while the reverse is true of those, who have disputed every inch of ground, and fallen dead on the outer verge of their hunting grounds. Moreover, those nations who, by their intellect and energy of character, are enabled to sway the political destiny of the world, will be found possessing over the conquered and controlled, a superior cerebral development. When it is objected that *circumstances* give power in the field as well as in the council; we reply, that the love of family and fireside, is imparted by special organs of the brain, and that those feelings were aroused in the Anglo Americans, in their struggles for independence, who were spurred forward to the dread and unequal conflict by the deep seat, and high excitement of these, the strongest of the human feelings, which unsheathed the sword, and gave success over a hireling soldiery, who fought for the *empty name of king*, a feeble rallying cry to, *our wives, children, and native land*.

It is as natural for persons with large heads, to rise to distinction among those, whose circumstances in other respects are similar, as it is for water to obey the law of gravitation, and seek the ocean. Humiliating as it may be, it is not the less true, that persons having *small* heads, may try to rise to eminence, but they,

“With weaker wing, unearthly fluttering make,”

exhibit their imbecility, and sink back to their proper level. In the savage state, (especially among the aborigines of this country) personal prowess and bravery in war, is the criterion of distinction; hence, the chiefs, have much larger heads than the people of their tribes generally. Red Jacket, Black Hawk, and Big Thunder, are examples. In a republic like ours, talent, and not heirship, is requisite to distinction, and the heads of our Presidents, will be found to be larger, than any equal

consecutive number of foreign Potentates. Cromwell and Napoleon arose by their talents; their heads were enormously large.

Another view in proof of this doctrine, is furnished by the size of various portions of the head. Some men have strong intellectual and moral powers, but lack force of character. Such are largely developed in the superior and anterior portions of the head, with a deficiency in the basilar and posterior regions. This was true of Melancthon, and he was a superior scholar and reasoner, eminently pious, mild and persuasive. Luther, his associate in the reformation, when he said, "I clear the ground and Melancthon scatters the good seed," and, "Oh! if I had a voice of thunder, every word should be like a fiery bolt, against the corruptions of the church," evinced an energy, which was never possessed by the former. His portraits show a large head, and a great amount of brain in the basilar region, which corresponds with his character, and explains the difference between the two Reformers. The middle lobe of the brain of the American Indian, is enormously developed, and he is sly, treacherous, cruel, proud and stubborn; showing size to be a measure of power, in the region of the organs of Destructiveness, Secretiveness, Cautiousness, Self-Esteem and Firmness. (See cut of Big Thunder.) The reverse in character and development is true of the Hindoo, except in respect to the organs of Cautiousness and Veneration, and both, are timid and very devotional. Again; the reasoning organs are moderate in the head of the American Indian, and the white man out-generals him; but had he reflection equal to his force and power, no people could successfully lift the hatchet against him.

Thus, it will be seen, that this proposition is sustained, when we view the brain as a whole, or in respect to the several classes of organs; and we may add, that when any one or more organs are large in a small head, or when, in a large head, an organ or a class of organs is small, the mental power corresponding to those extremes, is strong or weak accordingly. This view of the subject accounts for partial genius, and partial idiocy, as set forth in our second proposition.

There are several *conditions* which modify the effects of size. These are, the health, fineness of texture and the compactness, activity and strength of the *brain*, which is produced by large and healthy vital organs, and a well developed system throughout. In the first place, in order that size of brain may be relied upon as a just criterion of mental power, it is essential that the person be in a state of health; shall have inherited no disease of brain or body, which affect the brain. We sometimes meet a person with a large head, who is semi-idiotic. On inquiry it is found, that the person when a child had been subject to fits, or the rickets; that the parents were intemperate, or insane; that the head is enlarged by hydrocephalic disease; that some severe sickness has been experienced; some deleterious drug has paralyzed the brain, or that some blow has been received which has affected it. But say some, "we know persons, who have good sized heads, and yet, they have been fools from birth." To such a remark, it might be replied, that some persons have natural distortions, or deficiencies of body, or limbs, colored tumors, or spots upon the face, &c., which are referable to causes beyond the reach of demonstration; but no one will call such freaks of nature, good specimens of her handy work; or a large brain, a healthy, or *natural* one, which does not manifest mind, even though no natural cause can be assigned for the condition which nature has given it.

In the second place, the *temperament* is sometimes extremely unfavorable to the mental manifestations. If the brain be sluggish, we might as well expect that a wagon-wheel made of chestnut timber, will compare in strength with one of the same size constructed of stanch white oak, as to expect mental activity and strength, from a person whose body and brain are of that soft and sluggish character which is produced by a strong predominance of the lymphatic temperament. The doctrine, that size is a measure of power, (other conditions equal,) stands unscathed, when we make due allowance for the *conditions*. This brings us to the consideration of the temperaments.

IV. TEMPERAMENTS.

The word *temperament*, is used to express a certain condition of the body; or the constitution of the physical apparatus, embracing the *texture, compactness, activity* and *strength* of the system.

Physiologists recognize four temperaments, to wit: the SANGUINE, the BILIOUS, the NERVOUS and LYMPHATIC or Phlegmatic.

The *Vital organs*, including the heart, lungs, blood vessels, &c., constitute the *Sanguine* temperament: the *frame-work* of the system, including the bones and muscles, the *Bilious*: the *Brain* and *Nervous* system, the *Nervous* or *Mental* temperament: and the *Glands* and *Digestive organs*, the *Lymphatic* or Phlegmatic temperament.

We seldom find the temperaments pure. There is generally a mixture of two or more, in every person. Some possess an equal proportion of all the temperaments, which is the most favorable balance; but more frequently, one or two are found existing in great predominance. Webster has a predominance of the Bilious; Clay of the Sanguine; Calhoun, Jackson and Wise, of the Nervous; each, having a mixture of the other.

The *temperaments* are distinguished by external signs, including the complexion, and the proportion that one part of the system bears to others.

SANGUINE. The Sanguine temperament, is produced by the predominance of the vital organs and arterial system, and is indicated by a ruddy complexion, light or sandy hair, light or blue eyes, a glowing countenance, a strong and rapid pulse, a large chest compared with the head and abdominal viscera.

It gives bodily activity, a love of exercise in the open air, great zeal and ardor; a general buoyancy and a strong current of animal feelings. Persons of this temperament are usually averse to sedentary employments or close study.

seize upon education intuitively, and become prodigies in intellect, rarely arrive at maturity; but, like a fitful comet, astonish the world by a sudden glare, and sink in starless night. The following case, will illustrate this subject, and give a key to the many *sore afflictions*, which now blast the fondest hopes of devoted parental love.

While lecturing at the city of Washington, in the spring of 1841, one of the writers, (N. Sizer,) was invited to visit the family of Mr. Klinehanse, for the purpose of examining the head of their only child, a boy some five years old. I at once recognized in him, the *Nervous* temperament. His head was larger than that of common men, and measured more in circumference than his chest. His arms were very slender, his lungs small, pulse feeble, and the whole system except the head, frail and diminutive; in fact, he looked like a sickly, or half-starved child. His eyes were large and very brilliant, his skin thin and transparent.

The first remark which I made, was, this boy must *dig*, or *die*. "Why?" said the anxious father. Because, he has a purely *Nervous* temperament, and the brain being the largest and most active part of his system, will lead him to think and study, and be averse to physical exercise: that the brain will *rob* the body of nourishment and the heart and lungs are so *small* and *feeble*, that they *cannot* sustain health and life. "What must we do with him?" Let him think and study less, and exercise more.

"But," says the father, "we can't make him exercise at all, as other children do; he will not play with them; never engages in their sports, but sits down with his books and reads, or asks questions, or listens to the conversation of adults, from morning till eleven o'clock at night. He eats and sleeps but little, and we can't *induce* him to play: he knows all the poetry that his mother and aunt can repeat, and when he can do nothing *else*, he urges them to read to him, that he may learn to repeat it, and his mother reads him to sleep every night."

But this course must be changed. "Tell how," said the father, "and it shall be done." Has he a little wheelbarrow? "No." Then get one made for him, and a lit-

The doctrine of the temperaments, then, as understood by phrenologists, is founded on the relative size of particular organs, such as the brain, lungs, &c., and observations of the complexion, color of the hair and eyes, together with the strength, or weakness of the pulse, and hardness of muscle. No principle of phrenology is more important than that of the temperaments. This will appear evident when we reflect that the human system is composed of a great number of organs, all of which are necessary to complete the man; and a want or disease of any one part, is not only derogatory to physical power, but also to strength of mind. Although the brain is the organ of the mind, still, even where it is *perfect*, and of *large* size, if the other parts of the physical system are weak or diseased, a derangement or want of mental power will be the inevitable result. The temperaments may be *changed*, or essentially *modified*, and a balance produced by attending to the laws by which they are governed.

BALANCE OF TEMPERAMENT, OR PHYSICAL EDUCATION.

The more equally the several temperaments are found to exist in an individual, the less liable will that person be to disease, and the more perfect will be the development of the whole character. But this balance does not always exist, which leads us to inquire, how a change can be accomplished? If a person has too much of the Lymphatic temperament, let him live sparingly, be strictly temperate, and exercise *much*, at some active employment in the open air, and study standing, or walking.

This will excite and enlarge the Nervous, Bilious, and Sanguine systems, and produce a balance. Has a person too much of the *Bilious*, let him work less, and think and study more, or let his labor be such as requires less manual strength, than activity and thought. But, there is more *danger*, from a strong predominance of the Nervous temperament, which, like pulmonary consumption, is a flattering and deceitful condition. Why are persons of the most brilliant intellect, the early victims of disease and death? All have observed, that those children, who

4 BILIOUS. The preponderance of the muscular portion 3 of the physical system, produces the *bilious* temperament; which is characterized by an athletic frame; firm flesh; a harsh outline of features; coarse, dark hair and skin; and a strong, steady pulse. It imparts energy and strength of mind and body; and power to endure great mental and physical labor.

4 NERVOUS. The predominance of the *brain* and *ner-* 6 *vous* system, gives rise to this temperament, which is indicated by a large brain, moderate sized vital organs, a thin skull, lightness of bones, small muscles, fine hair, thin clear skin, brilliant eyes, and sharp, pointed features. This produces great excitability and activity of the mental powers, a disposition to sedentary habits and a passion for mental labor, but weakness of the physical powers.

LYMPHATIC. This condition of the system is produced by a preponderance of the glands and digestive organs. It is indicated by corpulency, roundness of form, paleness of the countenance, dullness of the eyes, ash colored hair, softness of muscles, and inexpressive countenance. The brain partakes of the quality of the whole constitution, and produces coolness of passions, and moderate physical and mental manifestations.

Persons of this temperament, like *ease* better than effort, and usually seek it.

MARKING OF THE TEMPERAMENTS.

When all the temperaments are marked equally, the person will partake of the bodily and mental qualities of each, in an equal degree; but, if one be marked 6, and another 3, it shows, that double the amount of one temperament is possessed over another. The Nervous being marked 7, indicates great mental activity—the Lymphatic 7, great sluggishness. All the temperaments being marked 3, would indicate a fair share of activity; but the person having this combination with a *large* head, will not manifest much brilliancy of intellect. The Bilious, Sanguine, and Nervous being marked 6, indicate, that the person has activity, and strength of mind and body, and the power of enduring great hardship.

the shovel to match, and get a cartman to deposite in your yard, a load of fresh earth, and then induce him to shovel it up, and wheel it across the yard daily.

About four weeks after this, as I was passing the gentleman's house, he invited me to stop and see the boy. The wheel-barrow had been procured, and pleased the child admirably, for he thought it was *man's business* to use it. Every day for three weeks, had he transported the heap of earth across the yard; and when he entered the house from his pleasing task, I saw the glow of returning health mantling his cheek, and his step was more elastic and firm. What are his habits *now*? I inquired.

"O!" replied the delighted mother, "he has n't called for a book for two weeks; he is *very* industrious, can't afford to lose a moment till his daily task is done, and instead of eating little, and sitting up till eleven o'clock, he eats as much in a day as he before ate in three, and frequently falls asleep at the tea-table." Pursue this course, said I, and keep books from him till he gets a *constitution* established, and if at twelve, or sixteen, you find the *muscular* and *vital* systems to be as strong and active as the *nervous*, then, let his study and exercise be *equal*, and with his large and active brain, he cannot fail to become a scholar and an intellectual man.

The law of exercise, as set forth in our fifth general proposition, is the theory of producing the wonderful change in this boy, and may be applied in *all* similar cases to obtain a balance of the temperaments; that is to say, exercise the *weak* parts, and let the *strong* and absorbing ones rest, and they will become equalized.

The doating parent often crowds forward a precocious child; (and it is so, because of the predominance of the nervous temperament) encourages it to study and get double lessons; shows it off and boasts of its extra acquirements, while a host of relatives and friends apply the unction of flattery in view of the future prospects of the child, and it is finally determined to push him through college and into a profession, at an early day, because he is *delicate* and cannot do hard work, and because he is so very fond of books.

Such a youth *may* live to take the highest honors of

college, and settle in a profession ; but while the world looks on admiring the brilliancy of his genius, his glory is eclipsed by pulmonary consumption, or some kindred disease, and he sinks to an early grave, amid the sighs of an expectant community, and the only consolation which is generally invoked, is that, "whom the Gods love, die young," and "The Lord gave, and the Lord hath taken away," &c., and the bereavement is looked upon as a *special* dispensation of Divine Providence. We will not say that this is *blasphemy*, but, that it is its nearest neighbor, and *ignorance* is the only mantle for such a sin.

This young man has been *murdered*, (unintentionally and ignorantly we allow,) to gratify the vanity or ambition of his doating parents and fond friends. He has been induced to neglect that physical exercise without which, (till the corner stone of the laws of God is removed) health cannot be enjoyed, and he has been pressed into the opposite extreme of mental labor, and by these means he has not only neglected to build a constitution, but torn down what little nature had imparted, and then this work of desolation, is sacrilegiously charged upon the bountiful Giver of all good.

The laws of life and health are as immutable as the pillars of heaven, and can no more be violated with impunity, than the law of gravitation or the law of fire, or air. HE, who fixed those laws, and gave man senses and intellect to understand, and ability to obey them, will not, (and cannot consistently with Himself) reverse any one of them, to accommodate those, who wilfully or ignorantly transgress them ; hence, the folly, not to say guilt, of charging the results of our pride and ignorance, to the *special* inflictions of Providence, when in fact, it is only the general and inevitable penalty of the infraction of the *natural laws*. "My ways are equal, are not your ways unequal?"

The thoracic region, embracing the vital organs, is the *fire-place* of life ; the *main-spring* of the human system, and no person can enjoy health, and manifest greatness of mind and attain to 'green old age,' without a large *chest* as well as a large brain. Our great men, have chests of enormous magnitude, especially those of advan-

ced age and superior talents. John Quincy Adams, is a short man, but his chest is large. John C. Calhoun and Henry Clay, though tall and apparently slim, have very large chests. T. H. Benton, N. P. Tallmadge, Wright, Webster, Preston, Buchanan, and *all* of the most distinguished lawyers and divines whom we have seen, have, (as the late Sam'l L. Southard once said to Mr. Fowler of himself,) "*chests like a cider barrel.*" Look abroad in community, and when you see a person of strong mind, strong constitution, great physical power, good health and longevity; those qualities will be found accompanied with an amply expanded chest.

In view of this, it can hardly be necessary to say; give the heart and lungs room for full and free play; and not, by any *artificial* means, *cramp* those organs upon the free exercise of which, life, health, and happiness depend.

Fashion, rules the world, and *women* rule the fashions, and when it becomes fashionable to know our own *nature* and obey its laws, it will then be fashionable to enjoy health, and as ungenteel to have *delicate* health, as the reverse is now *fashionable*.

When we look abroad upon mankind, and witness the pain, sickness, and suffering to which they are subject, two things naturally suggest themselves; 1st, that the Creator designed that man should be miserable while on earth, or 2ndly, that man has transgressed those laws, the observance of which, are necessary to happiness. Justice to an All-wise Creator compels us to say, that the first proposition is erroneous. Superstition may cavil upon this point, but enlightened intellect speaks a different language from ignorance. There are individuals, who live to old age; enjoy perfect health through the whole period of their existence, and finally sink into the grave without a struggle or a groan. They die, because their physical organization has literally worn itself out, and not in consequence of any particular disease. This is a fact which no one can deny, and it proves, that such might be the case with all, if they have inherited a good constitution and understand, and obey the laws of health.

It may be proper to remark, that, no rational man supposes that the present generation can, by following the

most rigid rules of temperance, live to old age, entirely free from pain and sickness. And the reason is obvious. All have not inherited from their parents, a healthy constitution. In the further elucidation of this subject, the *causes* of disease, demand our attention.

These are, first, the hereditary transmission of weak vital organs, from parents to children, and a consequent liability to disease; 2ndly, intemperance, and 3rdly, too great, or too little exercise.

The first proposition, viz. the hereditary transmission of disease, or of weak vital organs from parents to children, is too often overlooked, when we witness the sickness and consequent misery of our fellow men. We frequently meet with persons laboring under some chronic disease, and almost continually groaning with pain.—Some suppose them to be suffering for crimes committed against high heaven, and look upon their misfortunes as dispensations of Providence, to show the worthlessness of the present world, and the necessity of being prepared for a state of eternal beatitude. But if we inquire into the causes of their pains, we shall find in numerous instances that they have inherited their diseases from their parents. If they have not, some indiscretion of their own, either from ignorance or a known violation of the laws of health, has brought upon themselves the pains they feel. Cases are not unfrequent, where a whole family of children, one by one, as they arrive at maturity, fall victims to consumption, having inherited weak lungs from their progenitors, and a consequent predisposition to this fatal malady.

Such being the case, it follows of course, that, until diseased persons shall cease to become parents, sickness and suffering will exist in the world, and man will be called a creature of misfortune. By diseased persons we mean those, who are predisposed to pulmonary consumption, scrofula, gout, insanity, &c. Setting aside, therefore, those who have inherited some malady from their parents, we conclude, that the remainder can, by knowing, and obeying the laws of health, live to old age without suffering from disease, and like a well trimmed lamp, gradually waste away, until the oil of life shall have become extinct.

Secondly. We now come to the second cause of disease, which is intemperance. By intemperance, we do not mean the immoderate use of spiritous liquors merely; but the excessive indulgence in any kind of aliment, or of the passions. Many, who call themselves temperate, because they abstain entirely from the use of spiritous liquors, indulge in excesses equally fatal to health, if not to happiness. Sickness, of an aggravated character, is often caused by overloading the stomach with food, and thus paralyzing the healthy function of that organ. The injurious effects of ardent spirits upon the stomach, and the consequent derangement of the nervous system in general, and the brain in particular, are too well known to need comment.

It must be evident to every reflecting mind, that no rules in regard to diet, can be given, which will apply indiscriminately, to every individual. The science of Physiology, and the effect of different kinds of food, upon different constitutions, should be well understood, and must be, before mankind can escape disease. Every person, therefore, should understand his own physical organization, and make use of such food, as will suit it, and insure health. Those with a predominance of the Nervous temperament, should abstain entirely from all stimulating drinks; use a plain diet, and if of sedentary habits, eat sparingly. "The temperance society, on the tee-total principle is their best friend, and a good cook their worst enemy."

A person with the Bilious temperament, can follow a different course of living, and indulge in many luxuries with impunity, which would be very injurious to one having the Nervous constitution. But let the temperament be ever so favorable to health, we would still recommend a plain diet. The savage of the forest, has no luxuries, and his iron constitution, sustained by a simple diet, enables him to endure much hardship; live to old age, and like the setting sun, when no lowering cloud obscures the horizon, and the elements are all hushed to peace, lays down his noble frame in the sleep of death. The first settlers of New England, were larger and stronger, and enjoyed better health than their posterity, who live upon

dainties, and consider themselves too good to labor. They lived on plain food, used simple medicines when sick, and labored hard, the female as well as the male.

The last proposition, too great or too little exercise, remains to be considered. Here, also, as in diet, no general rules can be given, which will apply to every individual case. A person with the Sanguine temperament, needs a much greater amount of exercise to insure health, than one with the Nervous. It is evident that man was designed by his Creator, to take a certain amount of exercise regularly in order to secure good health. If he does not, he suffers the penalty for its neglect, which is disease, both of body and mind. The rich, violate the law of exercise by living in idleness, and wallowing in luxury; and the poor by over exertion of their physical powers, occasioned, in numerous instances, by those, who have the command of their labor. The unequal division of labor which exists in all civilized countries, tends directly to induce disease, and shorten life.

"It has been computed," says Dr. Franklin, "by some political arithmeticians, that if every man and woman would work four hours each day on something useful, *that* labor, would produce sufficient to procure all the necessities and comforts of life; want and *misery* would be banished out of the world, and the rest of the twenty four hours might be leisure and pleasure."

If *all* would use their time frugally upon some useful object, and the spirit of pride and vanity were annihilated, which now scourges the world, and makes man a slave of fashion, and of his propensities; every child in christendom might enjoy the advantages of a liberal education; (for then it would not cost half as much as at present,) jails, penitentiaries, and poor-houses might be converted into habitations of honest freedom, or halls of science; and man might stand up redeemed from the thralldom of poverty, ignorance, and want, and the earth cease to deserve the name of a vale of tears.

exercise of the different organs of the head. The portraits of Napoleon which were taken at different periods of his life after he had arrived at his full size, (says Professor Cha's Caldwell) are vastly different in the size of the forehead.

Dr. Scott of Buffalo, informed one of the authors in 1839, that a man of that city, at the age of twenty three, changed his business for a mechanical pursuit. He had his head measured with callipers, (by the phrenological society of Buffalo,) in the region of Constructiveness at the time of entering upon the change. At the end of three years, a second measurement was made, and his head, was half an inch broader in the same region than at first; while in other respects it had increased in size, very little, if any. The Phrenological Journal and other works, as well as our own experience abound with facts such as these which might be introduced if necessary, but we prefer in this place simply to say to those who have any faculty of the memory; or, any of the moral sentiments, *weak*; begin to exercise them, and you will find that they will become stronger, and the organs larger, and while you are proving upon yourself, the truth of our position, you will reap an ample reward.

It is supposed by many, to be impossible for the brain to be enlarged as a whole, or in a particular part, after a person has attained to maturity of body. Such persons say, that the skull is hard and thick, and the brain soft, and hence, they cannot comprehend how the skull can be made to give way for the brain. As we have before remarked, the brain is in motion when it is exercised by thought. When the activity of an organ of the brain, invites nourishment which expands it and thus requires more room, the bony matter of the skull is dissolved, absorbed and carried into general circulation and new matter deposited on the outside when necessary. The skull is not a prison house, but, a wall of defence to the brain; and when it requires room in any particular place, or as a whole, *nature* supplies the means to produce the change, just as it imparts room to *shell-fish*, &c.

system increased by exercise? Why are the muscles larger and stronger in the laboring, than in the sedentary, or professional man? Why is the right arm of the blacksmith larger and stronger than his left? Why are the arms and chests of sailors larger than their lower extremities, in comparison with farmers? Do they use their arms and chest more in climbing and at the windlass, than their lower limbs? Do they lift less than farmers, and pull more? Why are the inside of the hand, and sole of the foot more capable of endurance than the outside or top? Are they so in infancy before they have been exercised? Give a child no exercise, and will he not be a dwarf? Swing up one arm, and use the other, and although attached to a healthy body, would not one be small and weak, and the other large and strong, notwithstanding the blood vessels are equally numerous in each?

Let a Lawyer or Physician take an ax to the forest, and use it faithfully, and he will return at night with his hands blistered, and the muscles of his arms so deranged that he can with the utmost difficulty feed himself. Let him continue the labor for thirty days and then inquire after his hands and arms; and he will tell you that *nature* has healed the blisters and coated the inside of his hands with a thick, hard skin, and strengthened and hardened the muscles of the arms and body, so that the labor is endured without difficulty. Now the blood vessels, which distribute nutriment to the arm, are minutely ramified in all parts of it, and if the objection be well founded, the skin on the outside of the hand, should be as thick as on the inside. Is it as thick?

Nature never deals out her bounties where they are not needed. A demand being made upon the arm or hand, she rushes to supply that demand, and the parts most in need of nourishment accrete from the blood as it passes, that which gives size and strength; and in those parts where no special deposition is necessary, just enough of nourishment is left to keep the wheels of nature moving, without any waste of the vital fluid. Apply this principle to the different parts of the brain and the objection is answered. Moreover, numerous facts might be brought to bear on this subject, proving the increase by

V. EXERCISE.

Exercise increases the size of the brain as a whole, and of each organ in particular.

First. In the process of thought the brain is exercised, which produces a motion, as has been proved where the brain had been laid bare by some injury. When the person slept and did not dream, the brain was quiet; when awake, or dreaming, the brain was in active motion, and sometimes when the mind was highly excited the brain protruded above the level of the skull at the orifice. This exercise, invites to the brain a larger amount of blood, than visits it when the mind is at rest; for we notice that the head is frequently much warmer and suffers pain by the influx of blood when we are in deep, protracted study.

Secondly. Men of studious habits have larger heads, and especially larger *foreheads*, than those who have little intellectual exercise: and those who exercise the animal propensities most, are most developed at the base of the brain.

Thirdly. Infants have small foreheads compared with the animal compartment of the brain. Thus nature fully supplies that part of the brain first, which is first wanted, it being unnecessary that the new born infant should reason before it can act; but, as the child begins to notice objects and to think, the forehead, or region of the intellectual organs, increases in a rapid ratio, till the head becomes well balanced, and then, proper exercise of all the organs, would maintain that good balance, till the mind shall have arrived to its highest state of energy.

But, says the objector, if the influx of blood to the brain causes its enlargement, how can one organ, say Destructiveness, become large by exercise and other parts remain small, when the arteries and veins are distributed through all the organs alike, and hence would be as likely to feed and enlarge the organ of Benevolence as Destructiveness? We will answer this question by employing the Yankee prerogative. How are *other* parts of the

EDUCATION OF CHILDREN, AND SELF IMPROVEMENT.

If size of brain, be a measure of power, and if *exercise* imparts size and activity to the brain, and energy and strength to the mind; it follows, that *circumstances* and *training*, have an important bearing upon the development and *direction* of the mind, and the individual and general well being of the human race.

At the sound of the word *education*, every New England parent's soul bounds with interest and expectation, for here is the Plymouth Rock, here the cradle of liberty, here our sacred altars, here the means, and a desire to disseminate among the rising generation, permanent and general intelligence. The very foundation of this people and the bulwark of their institutions, have their basis upon general intelligence and our holy religion. Here and elsewhere, every enlightened parent feels an intense desire for the improvement and well being of their posterity; this string being touched, its deep toned harmony reverberates through the soul, and hence, churches, books, schools and instruction, abound throughout the length and breadth of christendom. The main effort of the present and past, has been directed to the education of the intellect, and little has been known of the real nature of the *propensities*, and *as* little progress made in controlling them. It has been, and now is, too often considered amply sufficient to develop and enlighten the intellect; while the propensities are permitted to revel, with all the impetuosity of blind, animal passions. Expand the intellect of a vicious man, and you doubly arm him, "to scatter fire brands, arrows and death."

The present mode of education is defective in many vital points; else, why are not our *great men*, *moral men*? The members of Congress are *called*, men of great education. Why, then, is the house of Representatives justly called a "*bear-garden*," "*Gladiator's Hall*," &c.? One has only to be a witness for a few weeks, of the proceedings of congress, to see a subversion of transcendent talents to the meanest purposes of dishonesty and self-

ishness, for personal, and party aggrandizement, (to say nothing of corporeal combat) and he will not only blush at the depravity of man, but that he himself has labored in the peaceful retreats of life, to place *such* men, where they abuse their power, and disgrace the country. Nor is this remark applicable to this age or nation. Such men as Benedict Arnold and Aaron Burr, are not like 'angels' visits' in this or other countries. They exist, and only wait for circumstances to call them out.

It must be apparent, that our literary institutions are defective in their moral arrangements, to send forth more of immorality than virtue. Are they not schools of vice, as well as of intellect? This is emphatically true of colleges as well as of the primary schools: and why? In the first place, our youth are not properly trained at home, and when they get beyond parental control, like the wild unbridled steed, they rush forward to do the bidding of their most active faculties: and in numerous instances, those who have the care of them, labor more for the "loaves and fishes," than for the benefit of their ward, and appear to think, that if they cultivate the intellect of the pupil, and obtain their stipulated *wages*, their whole duty is done: and in fact *some* parents forbid the teacher who is so disposed, to institute moral restraint over the student: and it would be indeed a miracle, if intellectual greatness and depravity did not go hand in hand.

We find no fault with the expansion of the intellect; we say go on in this good work, but while this is attended to at the expense of the moral nature of the student, we cannot wish the system good speed; because, like a house upon the sand, or a pyramid on its apex, it can but blast the prospects, and accelerate the certain ruin of those under its influence.

The term, education, is a broad one; it does not mean the development of the intellect merely, or to indoctrinate the learner with peculiar religious creeds; to cram the mind with latin, greek and mathematics; to teach them how to acquire money, and make a splendid show in the world, and to understand the etiquette of (falsely called) refined society, which is but a school of vice, and a system of polite hypocrisy; but, to teach them to

be MORAL, GOOD AND WISE. That the system of education be proper, it is necessary to understand the nature of the being to be educated; and one grand reason why the present system is radically wrong, arises from ignorance on that point.

Phrenology, we hail as the brightest star of human knowledge, that ever dawned on the world: on *this*, if reared at all, must the superstructure of education in its broadest sense, be founded. Phrenology, by specifying the primary powers of the human mind, its animal, and moral, as well as intellectual capabilities; has conferred one of the greatest boons on man. Before this, every *speculative* theory of mental philosophy must bow, and, because it rests on the corner stone of truth, *must* triumph. This system teaches that man is possessed of a plurality of faculties, and that each has its special organ in the brain, and also points out their localities, and the means of improving and strengthening each. It teaches, that man possesses intellect; (that which is almost exclusively cultivated) that he has a class of moral sentiments, which should be addressed through an enlightened intellect, that he has a class of strictly selfish and animal propensities, and also a class of social affections; all of which, acting in harmonious combination, constitute the perfection of human nature, and bring man into harmony with the moral law.

The inordinate activity and strength of the *animal* propensities, cause all the misery which curses mankind, and "makes countless thousands mourn." These propensities must be controlled, if controlled at all, by the moral sentiments and intellect. If the abuse of the faculties of Amativeness, Destructiveness, Combaticiveness, Secretiveness, Acquisitiveness and Alimentiveness, causes all, or nearly all the sins of *commission* which disturb the quiet and work the ruin of the human race; it would seem to be of *vital* importance to understand these faculties, learn their law of action, and how to control them. It may be proper in this place to remark as a general law, that a man, or child, when addressed in the language of kindness or wrath, feels excited in the corresponding feelings; hence, call a man a *villain* in an angry

tone, and in tone and manner *more* angry, will he retort; but say "my *good* sir," or, "*dear* sir," with a smile and a bow, and he will bow, and smile in return; because the faculties are aroused in *him*, which *you* employ in the address. The feelings and faculties of children, are most acute, and they imbibe impressions with a sagacity and celerity, truly astonishing; and, hence, the above modes of address make impressions upon their minds, as in wax, to be retained, as if engraven upon steel. As the passion of anger, is a besetting sin among men, we will discuss the faculties by which it is produced, and show the remedy. These are Combativeness, and Destructiveness. (Here, please read the adaptation of those organs.) How are they commonly, (though not always) trained?

For example: a boy has a large endowment of Combativeness and Destructiveness, combined with an active temperament, and he is energetic and forcible in character, as he should be. He may abuse these faculties, by striking his sister, in anger. The little girl rushes into the presence of her mother, and relates the outrage, which arouses in her the same faculties, which the boy has abused; and without a thought, but the administration of condign punishment upon the tiny culprit, she commands the little "*rascal*," in the language of anger, to come to *her*, which inflames his already excited passion. Being tardy in his approach, he is hastily dragged, (perhaps by the ear, or hair of the head) to the domestic tribunal, and without a trial, or a chance to plead, either the "general issue," or extenuating circumstances, the rod is applied to his back, till the rage of the parent is satisfied; when the little sufferer is ordered away, and the liberal permission given him, to do the same again if he *dare*. He retires, and in sullen silence ponders upon the subject, and meditates revenge. He knows that he has been abused, and this inflames his passion still higher than ever; for now he is not only angry with his sister, but Combativeness and Destructiveness are also arrayed against his mother and perhaps himself; and children have been known under such circumstances to wreak their vengeance upon their persons, clothing, or any domestic animal which might be near.

Now, this course of procedure is obviously wrong. First, the very faculties which the child had abused, the excitement of which should have been allayed, are inflamed by the language and conduct of the mother. Secondly, this treatment outrages the moral and social affections of the child, and reverses their action against the mother, while they condemn the whole transaction. Thirdly, by this additional exercise of the organs, they are increased in size and activity; and thereby rendered much more irritable, and likely to arise a second time, and to a higher degree than before.

"Well," says the mother, "you have told us what is wrong; now will you tell us what is right?" "O!" says another, "I don't believe a word of phrenological *education*, and phrenological *courtships*. I believe that a good *hickory stick* will take the temper out of my boys better than your phrenological *nonsense*; the good old way of putting on the birch that my father and grandfather practiced is the best after all; touch their feelings with the *whip*, that will bring them to their senses."

Now, my good lady, you have given your verdict against phrenology without evidence; without giving it a chance to speak for itself. It is very possible that you think and that your ancestors thought, and practiced on the old flogging system; and possibly, also, your worthy grandsire put his grist in one end of the meal bag, and a stone in the other, to balance it upon his horse; but, does it necessarily follow, that old customs cannot be improved; and that a thing is right, because it is *old* and good men have believed and practiced upon it? Now, have you not noticed, that those who whip most have the most disobedient and worst governed families; and, that those boys of whom it is said, "they want whipping every day at school or at home," and usually get it, generally become reckless of character, pests to society and outcasts among men? The object of punishment is, to *correct*, not to enhance the difficulty: and we assert that castigation as before described, increases the passion of anger in all cases, and effects no good end, unless it be to constitute a safety valve for the escape of parental indignation.

Let it be borne in mind, that Destructiveness and Combativeness in the boy, had been abused, and that the object of the parent should be, to remove the excitement, and establish an opposite state of feeling in the child. How is this to be accomplished? Surely, not by exciting the same feelings to a higher pitch, but by calling up *another class* of faculties to silence the unruly and abused ones. In the first place, if the tale of affliction produced by the quarrel, excites *your* Combativeness and Destructiveness, wait, till you can call into activity your Conscientiousness, Benevolence and Philoprogenitiveness, with all the intellectual faculties; or, in other words *govern yourself*; and then speak to the boy in the language of kindness. Address his Benevolence. Ask him if it was a kind act? Benevolence answers, No! Was it just? Conscientiousness condemns the deed! She is your friend and playfellow—Adhesiveness testifies to *its* violation. She is your *little* sister—Philoprogenitiveness talks to the trembling, and soul-stricken boy—such emotions he has never before suffered—his deepest sensibilities are awakened, he is melted into tenderness; he feels condemned and still his mother does not chide; he would give a world to be liberated from the dilemma, but sees no ray of hope,—no way of relief. “Are you not very sorry my son?” His intellect and all his moral and social affections are arrayed against him, and the tear of sorrow and the heaving bosom tell but too plainly that he is lashed in the tenderest point. “Can’t you kiss your little sister, and resolve never to do wrong again?” With eager delight he clasps her to a throbbing breast and imparts a kiss of affection as natural and sincere as it is ardent. Where now, are his Combativeness and Destructiveness? Swallowed up by love; by the most thrilling emotions of tenderness, and affection.

Thus a *jury* has been raised, in the child’s mind; he is condemned by his own faculties, and the execution of the most severe punishment inflicted, and he stands up reformed. The next time he is tempted in the same manner to transgress the law of kindness, memory brings back the feelings which constituted the punishment of the first offence, and although his hand be raised to strike,

it falls powerless, and he finds himself in a new and happy atmosphere; or, should he transgress a second or even a third time, take the same course as before and he will with greater ease be subdued, and you will ultimately accomplish in respect to him, your highest wishes.

The philosophy of these modes of treatment is this. By exciting with language and conduct, the organs of Combativeness and Destructiveness, they are enlarged by exercise, while the opposite organs become feeble and remain small for want of action, and the evil is increased. On the contrary, by exciting the intellect and all the moral and social affections, and through their combined activity suppressing Combativeness and Destructiveness, you increase the former and check the activity of the latter, and thereby enable the child by the energy of his own faculties, to govern himself. "But," says one, "I have neither time nor *patience* to pursue that roundabout course." Those who advocate and practice whipping, generally have but little patience, and that is the very reason why they of all persons should abandon it.

You have both time and patience to toil for the purpose of making your children learned, accomplished, and rich in the world's goods, but have neither time nor patience to train their propensities and cultivate their moral and social affections, thereby imparting to them a character which the wealth of a Cræsus is too poor to purchase, and of which, the sweeping blasts of adversity, and even death itself cannot rob them.

You who are parents, should plead no excuse, as none is or can be available, for the non-performance of any duty you owe, not less to those to whom you have been instrumental in imparting being than to the world at large, which has a right to expect, nay, *claim* from you the faithful discharge of this, the highest human duty. None are qualified to govern others who cannot govern themselves; hence, *self-control* is the first step in the great work. This may be obtained by the same process that phrenology prescribes for the training of children, for *they* are men in miniature.

Did the limits of this volume permit, we would enter at large upon the discussion of all the organs in a similar

the form of an ellipse. In the middle line, a deep cleft or fissure is perceived, separating the brain, in its whole length, into two halves, or *hemispheres*, as they are called. Into this cleft dips a tight stiff membrane, resembling a scythe in shape, and hence called the *falx* (scythe,) or sometimes, from its being a mere fold of the *dura mater*, the *falciform* (scythe-like) *process* of the *dura mater*. From its dipping down between the two halves of the brain, the chief purpose of this membrane seems to be to relieve the one side from the pressure of the other, when we are asleep, for example, or have the head reclining to either side. The membrane does not descend to the bottom of the brain, except in a small part, at the front and back. It descends about two thirds of the depth of the whole brain. At the point where it terminates, a mass of fibres, named the *corpus callosum*, passes between and connects the two hemispheres.

“Each half or *hemisphere* of the brain is, in its turn, divided,—but in a less marked way, as the divisions are observable only on its inferior surface,—into three portions, called, from their situations, the *anterior*, *middle*, and *posterior lobes*, each occupying nearly a third of the whole length of the brain. The anterior lobe, occupies the forehead; the middle is that portion lying above and a little in front of the ears; and the posterior lobe is that portion which corresponds to the back part of the head.

“Beneath the posterior lobe, a strong fold of the *dura mater*, called the *tentorium*, is extended horizontally to support and separate it from the *cerebellum* or little brain, lying below it. The *cerebellum* forms the last great division of the contents of the skull. Its surface is marked by convolutions, differing, however, in size and appearance from those observed in the brain.

“Adhering to the surface of the convolutions, and consequently dipping down into, and lining the sulci or furrows between them, another membrane, of a finer texture, and greater vascularity, called *pia mater*, is found. The blood vessels going to the brain branch out so extensively on the *pia mater*, that, when a little inflamed, it seems to constitute a perfect vascular net-work. This

manner; but "a word to the wise is sufficient." If what we have said shall be fully adopted, the happy results will, we trust, induce parents to take these hints as a text for the cultivation of all the powers, and they will find the reward to supercede the effort, like a harvest of an hundred fold. When this system of education shall be fully understood as being dictated by *Phrenology*, the unjust and thread-bare cry of *fatalism* will be hushed forever, and those who have hitherto stood aloof from the science and ridiculed its advocates, will become the happy recipients of its benefits, and the generations to come will bless the memory of those who now toil to establish and promulgate it; while the immortal GALL and SPURZHEIM, shall have in every philanthropic soul, a richer and more enduring cenotaph, than crumbles over the ashes of the proudest conquerors.

REMARKS ON THE BRAIN.

Dr. Andrew Combe, in his work on Physiology applied to Health and Education, gives a description of the brain, an extract of which is here introduced.

"The brain is that large organized mass, which, along with its enveloping membranes, completely fills the cavity of the skull. It is the seat of thought, of feeling, and of consciousness; and the centre towards which all impressions made on the nerves distributed through the body are conveyed, and from which the commands of the will are transmitted to put the various parts in motion.

"The structure of the brain is so complicated, that less is known of its true nature than of that of almost any other organ. It would therefore be entirely out of place to attempt to describe it here, farther than by stating generally its principal divisions. On sawing off the top of the skull, and removing the firm tough membrane called the *dura mater* (hard mother,) which adheres closely to its concave surface, the *cerebrum* or *brain proper* presents itself, marked on the surface with a great variety of undulating windings or *convolutions*, and extending from the fore to the back part of the head, somewhat in

minute subdivision is of use in preventing the blood from being impelled with too great force against the delicate tissue of the brain.

"A third covering, called the *arachnoid* membrane, from its fineness resembling that of a spider's web, is interposed between the other two, and is frequently the seat of disease.

"On examining the convolutions in different brains, they are found to vary a good deal in size, depth, and general appearance. In the various regions of the same brain they are also different, but preserve the same general aspect. Thus they are always small and numerous in the anterior lobe, larger and deeper in the middle, and still larger in the posterior lobe."

The convolutions, (which is a kind of folding of its surface) give complexity to the brain, designed, as it is supposed to impart a large nervous surface in a small space. The convolutions are few and shallow in the brains of the inferior animals, more numerous and deep as we rise in the scale of animated existence to man, and physiologists inform us, that the brains of men of the highest grade of intellect, are marked much more deeply than those of ordinary talents.

Phrenologists make another division of the brain into some thirty eight or forty organs, in each hemisphere of the brain, so that the phrenological organs are all double (like those of sight, hearing, &c.,) and are usually developed equally in each side of the head. This division of the brain into organs, is objected to by anti-phrenologists because, say they, nature has not made the demarkation, and fortified each like fenced lots, so that it may be demonstrated where one organ leaves off and another begins. How will the doctrine of this objection compare with the known arrangement of other parts of the constitution? It is well known to Physiologists that the nerves of voluntary motion and nerves of sensation are given off from the spinal column together, and enveloped in one common sheath, and that the most skilful anatomist, cannot tell by their appearance, any difference in their structure or probable functions; but by severing or compressing one part of this delicate structure, all power of motion

ceases, while sensation remains perfect, and *vice versa*. Now, a bundle of nerves may be given off and packed together like the fibres of a silken thread, each having a different office to perform, though no human eye can detect the difference in their nature, except by such experiments as above cited: so the brain may be composed of a congeries of organs, each of which have a nature, and an office to perform, as diverse as seeing and hearing, or of motion and sensation.

That these organs exist, and that each acts to perform its appropriate function, may be inferred from the fact that different parts are large and small in the same head and the faculties strong or weak to correspond with the development. By an observation of this fact, Drs. Gall and Spurzheim were led to the discovery of phrenology. Again, different parts of the brain have been injured, removed, or become locally diseased and the faculties of the organs thus affected, have been deranged or lost.

By a laborious collection and comparison of facts, which exhibit a uniform concomitance between the development of the brain and character, has the science of Phrenology been discovered, and established in the minds of all who have thoroughly examined the subject. Speculations must yield to facts, the observation and classification of which, indeed, constitute the only substantial scientific basis; and we will conclude this chapter by repeating the words of its great founder; "Phrenology is true, though at enmity with the philosophy of ages."

EXPLANATION OF THE CHART.

All heads are large or small, or occupy some intermediate size: the same is true of each of the organs; hence in publishing a chart, we recognize seven sizes of the head and of each of the organs, and to indicate the size of the head, or of the *organs* of the head examined, we, use the written figures 7, 6, 5, 4, 3, 2, 1. 7, shows that the organ is *very large*; 6 *large*; 5 *full*; 4 *average*; 3, *moderate*; 2 *small*; and 1 *very small*.

The sign † (plus, or more) signifies that the organ is a little larger than it is marked. The sign—(minus, or

less) placed under a figure, shows that it is less than it is marked. When marked 4 to 5 &c., both sentences may be read, and a medium between the two will be applicable.

In the combinations, the names of the organs are abbreviated thus: Amat. for Amativeness, Philo. for Philoprogenitiveness, &c.—The reader is requested where it is not written, to supply the ellipsis, '*One having the organ large &c.*'

SIZE OF THE HEAD.

A full sized and well balanced head, should measure in horizontal circumference, twenty two inches, and from the root of the nose over the top of the head to the occipital protuberance at the lower portion of the back-head, fourteen inches.

The absolute size of the brain may be very large and the organs of the intellect *small*, and the result will be great propelling, with feeble directing power. Such is the case with many Indian Chiefs.

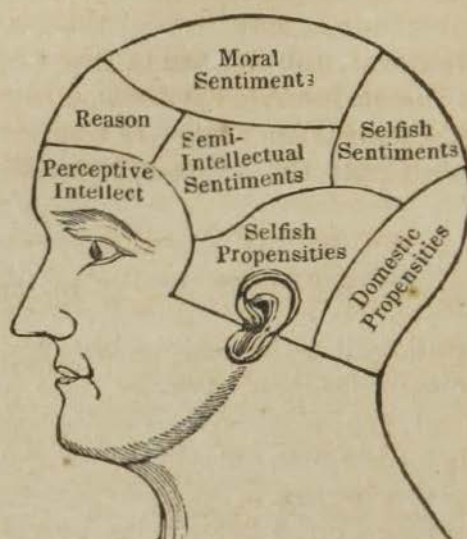
Persons having charts, therefore, should notice the size of each class of organs, before summing up character.

CLASSIFICATION OF THE FACULTIES.

Phrenological writers do not agree in the classification of the faculties. Some appear to have changed, merely for the sake of originality without any improvement. The classification, which seems the most consistent and true to nature, is that of the Messrs. Fowler, which we shall follow, and hereby give credit accordingly. It is of little consequence what *numbers* are employed in a work to designate the organs, as the faculties are not in the least affected by it.

'The faculties are divided into two CLASSES, or ORDERS,' (feelings and intellect) 'and these are subdivided into several GENERA, and these again into several SPECIES.'

The annexed *cut*, shows the location of the several *classes* of organs, each of which should be equally developed.



Order I. AFFECTIVE FACULTIES OR FEELINGS.

These embrace all those propensities, sentiments and emotions, either animal, human, or moral, which may be denominated *feelings*, and constitute the most vivid class of all the mental operations. They spring into spontaneous activity whenever their natural stimuli are presented, and produce the *desires* which demand gratification. All these feelings are *blind* in themselves, and need the guidance of an enlightened intellect.

Genus I. PROPENSITIES.

These bring man into harmony with nature as an *animal* being, and impart those desires and emotions which relate to his physical existence. The feelings which induce propagation, love of offspring, self-preservation and defence, are in man, precisely what they are in the lower animals. The propensities as a whole, impart force, efficiency, and general energy of character, and the impetus to act.

Species I. DOMESTIC PROPENSITIES.

From these arise the social affections, and the desire for society and intercourse, and they lay the foundation for the connubial, fraternal and civil institutions of mankind.

When these organs are large, the back part of the head is elongated; when small, the same region is short and perpendicular. See cuts, No. 5 and 6., p. 54.

1. AMATIVENESS.

Reciprocal attachment and love of the sexes.

The cerebellum, (*little brain*) situated between and behind the opening of the ears in the base of the skull, is the organ of this propensity. It is separated from the brain proper, by a strong membrane called the *tentorium*. The brain proper and the cerebellum, are brought into connection, by being united to the *medulla oblongata*.

The size of the organ is determined, by the downward and backward development of the base of the skull at the back of the neck, and width between the *mastoid processes*.

3. Stephen Burroughs.



1 Amativeness, very large.

4. Mr. *****.



1 Amativeness, small.

ADAPTATION. The design of this faculty, (see Genesis 1 : 28,) is the reproduction of the species, which serves to replenish the earth with inhabitants, who are constantly passing to decay and death, 'to that bourne from whence no traveler returns.'

Benevolence produces kindness, but it is not limited to our own species; it pities a worm as much as a king. It does not stop to ask whether its object is of our own family, nation, or even a human being; it only inquires if *the being* is susceptible of suffering. Adhesiveness produces sympathy and general friendship between equals without regard to sex; but Amativeness is the foundation of connubial love, and produces those tender and generous sentiments, that politeness and affability which is reciprocal between the sexes. It is the fundamental element of that strong desire to please the opposite sex, of which no well balanced mind is destitute. Blot out this feeling, and the institution of marriage, of civilization and society in general, would tumble into ruin, and the earth become an unpopulated waste.

When this faculty is accompanied with large Benevolence, Adhesiveness and Philoprogenitiveness, and guided by an enlightened intellect and strong moral feelings; the most exalted and refined affection is produced between the sexes, which can exist on earth; and when thus directed by the higher powers, no faculty more than this, subserves the glory of God, or the happiness of his creature *man*; and it may be added, that the abuse of no one produces a greater amount of misery.

Licentiousness is the direct abuse of this faculty; (see Exodus 1: 14,) but there are many *indirect* abuses of the propensity. Amativeness, often furnishes the motive for the abuse of several other faculties. For example: Acquisitiveness is often aroused to acquire the means by which it may be gratified; Secretiveness, to practice deception and hypocrisy; Destructiveness and Combative-ness, to overcome and even murder intervening obstacles; indeed the brightest intellect bows to the promptings of this unbridled passion, and lends a willing auxiliary, to devise ways and means for its abuse. Thus we see why men of lofty intellect, are often guilty in this respect; in-

deed it has almost passed to a proverb, that intellectual greatness and licentiousness, go hand in hand. This propensity should be trained, and kept in check by well cultivated moral powers, and then the flood of impurity and wickedness shall be rolled back to its native night, which is now sweeping over society, bearing upon its turbid waves thousands of devoted victims, from moral purity to wretchedness and ruin. Ignorance on this subject, is no protection for the young. To the parent it is a delusive hope: the Siren's song which lulls to security until the dread reality of its abuse, is forced upon the misguided and unsuspecting parent. Let the moral and intellectual powers be well disciplined with reference to this faculty; and it shall no longer 'riot, with all the fierceness of a blind animal instinct.'

VERY LARGE. One having Amativeness *very large*, is very tender and attentive to the other sex; seeks their society, covets their favor, courts popularity with them, makes many sacrifices to please; will seek friends in the opposite sex; confide in, and trust them with secrets; ever speak of them with lively emotions; and with large Ideality, will celebrate them in song.

If the whole mind be well balanced, and well instructed, the person will be likely to marry young, and become a devoted, affectionate companion, and be bound up in the family relation. If a father, will desire daughters, and love them more than sons; if a *mother*, the reverse will be the case.

LARGE. One in whom Amativeness is *large*, will regard the opposite sex with attention and respect; seek their society; desire intensely, to be in favor with them; and try to say, and do things, so as to please; sooner be unpopular with *all* their own, than *one* of the other sex; and always anticipate their convenience and pleasure.

Combined with large Adhes. and Consci., the person will cling to one beloved object, with strong and lasting love. With large Ideal., will admire those who possess correct taste, ease, elegance, and refinement of manners; and with large Form, Size, Color, and Order added, will

admire personal beauty ; with large *Acquis.*, will be industrious to provide for the wants of that *friend*, and with large *Self-Esteem* and *Appro.*, will be ambitious that others shall appreciate their admirable qualities, and praise them. If the moral and intellectual faculties predominate, the person will regard those who are intelligent, and moral ; and found his choice upon those qualities ; but, if the moral and intellectual faculties be weak, and *Ideal.*, *Appro.*, and *Adhes.*, small, the mere animal gratification of this faculty, will be the only bond of union ; and the result will be, vulgarity and obscenity in language and manners ; inconstancy, lasciviousness, and matrimonial infidelity.

FULL. One having *Amat. full*, will take delight in the society of the opposite sex, and be capable of feeling the keen sting of Cupid's dart ; but will have less intensity of this feeling, than is described under *Amat. large*. With large, or *very large Adhes.*, and large moral organs, will be more steady and constant in connubial attachment, than remarkably ardent.

AVERAGE. One having *Amat. average*, combined with an active temperament, will have some ardor of affection for the opposite sex ; but attended with more activity, than intensity, and will not be liable to abuse the faculty. Combined with large moral organs, the person will look upon licentiousness as one of the worst of crimes, and with *Destruct.* and *Firm. full*, added, will severely censure those who have fallen victims to the sexual passion, and make no allowance for the easily besetting sin of others. Other motives than the sexual impulse, will operate in determining to early marriage ; expediency, as well as desire, will be consulted. If *Acquis.* be large, will be particular to gratify *it*, in the choice.

With large *Appro.*, and *Self-Esteem*, will think of the character, and high standing of the chosen one. With the intellectual and moral organs large, combined with very large *Ideal.*, *Order*, and *Appro.*, will select one with a cultivated mind, acute moral sense, and great delicacy, and refinement of taste and manners ; will even be fastid-

ious in this respect. If Caution be large, and Combat. moderate, will be bashful, and timid in the company of the opposite sex; and with large Ideal., will be chaste in conduct and conversation.

MODERATE. One having Amat. only *moderate*, will be rather slow to form attachments to the other sex; will be controlled by the other faculties in making a selection, and parsimonious of encomiums upon the rosy cheek or manly form, of admirers.

If Caution be large, and Combat. and Ideal. average, will be retiring, distant and bashful, and lack the power to please, or become captivating to those having the organ, full or large; will be forgetful of the claims of the other sex, and lack the common etiquette of society, and be respected more than loved. With Adhes. average, will have a general respect for *all*, rather than strong love for *one*.

SMALL. One having Amat. *small*, with an ardent temperament, will occasionally feel the promptings of the amorous feeling, but very rarely abuse it. Will be temperate in professions, and wanting in polite attention, and urbanity of manners toward the other sex.

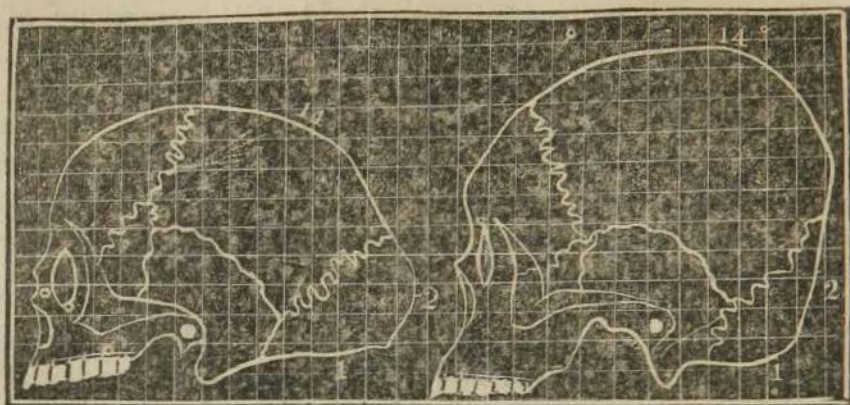
VERY SMALL. One in whom Amat. is *very small*, is almost, if not wholly destitute of that feeling which regards the opposite sex as such.

2. PHILOPROGENITIVENESS.

Parental love, attachment to children, young animals, pets, &c.

The organ is located in the middle of the posterior portion of the head, just above the occipital spine. When large the head is elongated from the opening of the ears backward, and when small, the head is short and perpendicular in the back part.

5. An Affectionate Mother. 6. Big Thunder, an Indian Chief.



2 Philoprogenitiveness, very large.
1 Amativeness small.

2 Philoprogenitiveness, very small.
1 Amativeness very large.

ADAPTATION. The helpless young, require attention and sustenance, without which, their production would be useless. All young animals, which, in their nature cannot subsist independently of their progenitors, naturally look up to the parent, for the supply of all their wants; and the Creator has made it as much a part of the nature of such parents to protect and provide for their young, as to produce them. Hence, from Amat., we infer the necessity of Philo., to care for and protect, the fruit of that faculty.

The ant, deposits its eggs in a place of security; the feathered tribes, after the tender progeny is hatched, provide for their wants, and house them under their wings; while the various genera of quadrupeds, (from the elephant down to the ferret,) manifest such care and tenderness for their young, as their nature and circumstances require. Many animals and birds which are naturally timid, will fight desperately against superior animals, in defence of their young. Nothing, but the love of offspring, (not even hunger or life,) could impart such courage, and cause the bear to fall dead between the lion and her cubs; or, the timid partridge, to assault man. Love of offspring, is not the fruit of general benevolence, as some have supposed; for who will attribute a feeling of benevolence to the tiger, or the rapacious hyena; and

what animals are more attentive to their progeny? Parental love, then, is a distinct faculty, and manifested by an appropriate and distinctive organ. No other faculty can supply the place of this, and without it, almost every being, which is introduced into the world, would perish in the dawn of its existence, and the earth become depopulated.

The *abuse* of this faculty, is an overweening fondness for children, which will spoil them by indulgence in such things as will injure them; the failure to train them properly; the feeding of them with unhealthy dainties; and depriving the *dear creatures* of healthy exercise in the open air; and the fondling of lap dogs, &c.

Females, have this organ larger, and the faculty stronger, than males; and this is true of animals, as well as of the human race. All may observe the strength of this faculty in the little girl. She caresses her doll, a little kitten, or a puppy, with all the fondness, and depth of affection of a mother; while boys, choose a hammer, a knife, a whip, or hobby-horse.

VERY LARGE. One in whom Philo. is *very* large, becomes very strongly attached to children; will do and suffer much to please and make them happy, and feel the keenest anxiety for their health and general welfare; will readily get acquainted with, and please the children of strangers; and if Self-Esteem be *moderate*, will join in their childish sports, be fond of telling stories to please them, and never feel lonely in *their* company. With a well balanced development of all the organs, will watch with the keenest anxiety and interest, the expanding powers of the child and also, (like the stork) be kind and tender to parents in their dotage. In the farmer, this organ very large, leads to the raising of young stock, fondness for horses, pet dogs, birds, &c.

LARGE. One with this organ *large*, if a parent, will love children deeply and tenderly; be devotedly attached to them; minister to their wants in health, and feel the keenest solicitude for them in sickness, and with large

Adhes., "refuse to be comforted" when they are taken away by death. With large moral organs, will strive to educate their moral feelings, and teach them to "fear God and work righteousness." With a strong intellect, and weak Acquis. added, will think more of educating children well, than of leaving them wealthy. Reverse this combination and the reverse will be true in the manifestation.

With Lang. and Event. large, and Self-Esteem moderate, will talk much to children, enter into their feelings and interests, relate anecdotes, and with large Individ., Local., Form and Size added, will describe persons, places, countries, dress and manners, and traditionate them into the history of external nature; in a word, will become exceedingly popular with children, and be qualified by nature for a successful teacher. With a weak intellect, and large Self-Esteem and Appro., will be proud and vain of children, boast of their qualifications, and crowd them forward to their disadvantage; and with strong Acquis., and feeble moral organs added, will be more anxious to see them rich, powerful, showy and fashionable, than "only *great*, as they are *good*."

FULL. One in whom Philo. is only *full*, will not be *passionately* fond of children, or pets, or feel a lively, special interest in children, as such; or have a good faculty to gain their attention and friendship, or to please them when they are ill natured; will lack patience when they are fretful, either in the capacity of a parent, nurse, or teacher. If Firm., Self-Esteem, Destruct., and Combat. be *large*, will be stern in government, and cause children to fear and respect, more than to love; but, if Appro. be *large*, with Firm., Self-Esteem, Destruct. and Combat. only *average*, the person will readily become familiar with children, and often join in their conversation and childish sports; and with large Adhes. added, will love them dearly, as they become playful, and old enough to be associates and friends, and at the same time, will not be likely to spoil them by indulgence; but educate, and train them consistently with their station in life.

AVERAGE, will love children, pets, &c., well enough to provide for their wants; but will not suffer them to rule, or swerve the mind from other objects of attachment. Will regard their comfort and general welfare, without being too indulgent for the good of the child, or convenience of the parent, and will seldom play with, or take much trouble to please children. With large Benev., Consci., Adhes., and Inhab., combined with moderate Destruct., Combat., and Self-Esteem, will value home, and the domestic circle, highly; and be warmly attached to children, and manifest much tenderness and affection for them, and the more so, as they advance in years, with large Acquis., and a good intellect added, will desire to see children become learned, wealthy and honorable; and feel honored when the *child* is honored. With the above combination and Acquis. moderate, will surrender property, and the management of business to a son, and be willing to live *with*, and lean *upon him*, in old age. With large Acquis. and Self-Esteem, will choose to hold possession of the homestead, and the management of business till death, and think that a son cannot manage well.

MODERATE, has but little patience with children, and cannot endure their noise and prattle; is a poor child-nurse, and ought never to become a step-parent, or teacher of young children. Large moral organs will lead to the performance of the duties of protection and providence, but there will be wanting the thousand little parental cares, and that overflowing tenderness described under this organ large, which is among the very strongest of the social manifestations.

SMALL, will show very little love, and *no* fondness, for children, or pets of any kind. With large Combat. and Destruct., and only full Benev., will be severe, and sometimes abuse, and *often*, scold them.

VERY SMALL, dislikes children and pets, altogether.

3. ADHESIVENESS.

Attachment to friends; instinctive desire to love.

This organ is located upward, and outward from Philoprogenitiveness, and just above the lambdoidal suture.

ADAPTATION. The history of man in all ages of the world, proves him to be fond of society and intercourse, and naturally inclined to friendship and love. In the savage state, a village of rude huts huddled together and filled with the wild inhabitants of the forest, where the pleasures of social intercourse can daily be enjoyed, is the result of this faculty. In the civilized state, mankind congregate in cities and villages; form societies for social worship; to devise means to promote the general welfare; and for the interchange of friendly feelings. This natural desire in the human race to congregate together, is the direct result of Adhesiveness. A love of the domestic circle, arises from a large development of *all* the social organs. Philanthropy, is produced by Benevolence; but, constancy in friendship may exist when that organ is small, if Adhesiveness be large. Its absence, leads to false professions of friendship, for the purpose of gratifying some of the selfish propensities. It is usually larger in the female, than in the male head, which coincides with the difference in the character of the two sexes. "In woman alone, can friendship be found in the fulness of perfection." Friendship, founded on large Adhesiveness combined with large moral organs, cannot be shaken by adversity, and is as lasting as life. A striking example is recorded in Ruth, 1: 16, 17. Without this faculty, the pleasures resulting from society, and friendly attachment, could not be enjoyed. Some animals manifest this feeling, herd together and go in droves, while others lead a solitary life. The dog manifests it, in attachment to his master. Poets having this organ large, breathe its language in their writings. The following lines from Moore, show strong Adhesiveness.

"The thread of our life would be dark, Heaven knows;

If it were not with friendship and love intertwined,

And I care not how soon I may sink to repose,

When these blessings shall cease to be dear to my mind."

4. INHABITIVENESS.

Love of country and home, attachment to place.

This organ is located between Concentrativeness and Philoprogenitiveness.

"What makes the home? is it the shadowed cot,
The mansion house, the palace, or the spot
Of mingled beauty, blending in the heart
Things which *create* a love, a home of art?
Oh, no! This feeling of a home comes forth
From 'neath the soul's pure throne, as not of earth."

ADAPTATION. Travelers, who have visited the different nations of the earth, and studied the character of man, both in the enlightened and savage state, in cold, and warm climates, residing in fertile vales, or on rocky and unproductive mountains, have noticed, that wherever the human species exist they manifest a strong feeling of attachment to the place of their nativity. The hardy Ice-lander, wrapped in furs, defying the wintry blast, speaks of *his* native island as being the most lovely spot on earth, and the dusky son of Africa, panting under the scorching rays of a tropical sun, boasts of *his* native country, and believes it the best on the globe. The Swiss have this organ large, and their patriotism and love of home, is a matter of public notoriety. In view of this fact, the poet says of that people,

"Hear the brave Swiss, his native Alps among,
His moss-gray cot, in shelving ledges hung:
Rave on ye storms, sweet, dreadful songsters, rave,
Mad as ye are, this Alp is not a wave
That ye can roll it; and this soul is not
A thing to be transplanted: for this spot
I love, 'mid all its awful neighbors—rock,
And avalanche, and thunder and the shock
Of elements in battle—speed ye! blow
My fireside smoke away, but I shall never go."

Inhabitiveness, is usually larger in women than in men, which agrees with the difference, manifested in the sexes, respecting attachment to place. It is frequently the case, that the husband is anxious to remove from his native town, for the purpose of gain, and the wife ob-

Self-Esteem, will seek for associates among the higher classes, and with large Acquis. added, will court the favor of the rich, and look with sovereign contempt on the poor.

FULL, will manifest considerable attachment to relatives and friends; yet lack that warmth of friendship, which characterizes one with this organ very large. One having Adhes. full, with large moral organs, will be a sincere, but not an ardent friend; and if unsuccessful in the matter of love, will not be much affected by it.

AVERAGE, has a good share of friendly feeling, and manifests considerable ardor of attachment, when the object of love is present; yet will not grieve at parting with friends, or take much trouble to visit them when absent; with large Mirth. and Hope, will choose a witty, gay, and cheerful companion or friend; but with those organs moderate, and Caution, Ven., Benev., and Consci. large, will prefer one who is sedate, reverential, kind and honest.

MODERATE, is not capable of forming lasting friendship; will be cold and distant to relatives; with large Acquis., will try to gain the friendship of the affluent, and perhaps succeed in his endeavors; but would prove a traitor, if that wealth which was the foundation of attachment, should be lost.

SMALL, forms slight attachments; may appear friendly to some, to gratify the love of gain, or the love of distinction, if Acquis. and Appro. be large; with weak moral feelings and strong selfish propensities, will make loud protestations of friendship merely for the sake of popularity, and his secret maxim will be, "out of sight out of mind."

VERY SMALL, is a stranger to the joys of friendship, and the pleasures of social life; may make professions of attachment from sinister motives, but never feels the warm emotions of tender affection.

The proper exercise of Adhesiveness, furnishes much enjoyment to man while he is connected with sublunary objects. How sweet are the joys of friendship, and how pleasant when every thing is dreary around us, when fortune frowns and *fame* like a bubble floating on the ocean, is dashed to endless night by the waves of disappointment, to have a circle of friends, honest and kind, who are in reality "friends in need," with whom we can associate, and take as much delight as if wealth and fame were ours! Imagination cannot conceive the misery that would speedily ensue, if this feeling were annihilated. The word *Friendship*, would be expunged from every language, and its joys be known no more.

7 **VERY LARGE.** One having Adhes. very large, will possess ardent and devoted friendship; cling to friends even in adversity; have a very strong desire for their welfare, and think much of them when absent. Combined with large Benev., and full Acquis., will often sacrifice personal interest, to benefit relatives, or friends; with large Consci., will be sincere, and never forsake a friend; with large, or very large Caution, and Firm., will be slow in forming attachments, but when once formed they will "bear the seal of eternity;" with very large Amat., Philo., and Inhab., will be extremely fond of the domestic circle, and cannot be contented without daily intercourse in that circle, and if obliged to leave it for a few days, will be very unhappy.

LARGE, will manifest much affection for relations and friends, and take great satisfaction in advancing their interests, and rendering their condition agreeable and happy; with large Secret., may love strongly and not make any professions of attachment; with very large Combat., will contend for the rights of friends, and never allow them to be insulted, or wronged, without wishing to redress their grievances; with large Firm. and Consci., will be constant and honest in all professions of friendship; but, with Conscien. moderate, and Secret., and Acquis. large, will be governed much by circumstances, and sometimes prove treacherous to them; with large

jects, and promptly refuses to accompany him. In view of this fact, therefore, man should make due allowance for the natural inclination in woman to remain in the land of her nativity, and not accuse her of weakness, for acting out a noble impulse, a feeling implanted within her, by the God of nature.

The ancient Jews, manifested this feeling in a remarkable manner, when captives in a strange land, and far from their native country. They hung their harps upon the willows, and by the rivers of Babylon, *wept*, when they remembered the land of their nativity. But we need not go back to ancient history to find instances of strong attachment to native climes; for many of our acquaintances in New England, who leave the home of their childhood, for the "far west," after a short stay become discontented, and return to the place which gave them birth. Others, whose circumstances render it impossible for them to return, drag out a miserable existence.

Their minds dwell much upon the lovely hills and vales of their own New England; they think of the beautiful fields where they rambled in childhood's blissful hours; of the silver stream which passed near their rural dwelling; and then with a sigh, look abroad upon fields far more fruitful than those they left behind, but they have no charms for a homesick mind. The history of nations and individuals, shows that the love of country and home is an innate feeling in the human mind; and an observation of facts, proves the existence of the organ through which this feeling is manifested. Were it not for Inhabitiveness, many parts of the earth which are now peopled, would be the abodes, only of inferior animals.

In view of this feeling of attachment to place, Mr. Fowler in his work on Matrimony, argues the necessity of all heads of families owning a house and garden spot, and speaks against the renting system as practiced in our large cities, as being the cause of much distress.

VERY LARGE, will have a very great regard for home; cannot be contented without one, will leave it for a *short* time even, with much reluctance, and, on returning home, after a few months' absence, when the eye first

catches a glimpse of native hills ; will experience intense delight. With Adhes. very large, will be homesick when traveling, or stopping with strangers.

LARGE, feels strong attachment to native country, leaves home with regret and returns with cheerful delight ; with full, or large Acquis., may go abroad to obtain means to make home happy, or to purchase a permanent place of abode, and when traveling, will receive much satisfaction from the hope, that the pleasures of a home will one day be realized ; with large Ven. and Self-Esteem, will be patriotic ; with large Individ. and Local., will have a strong desire to travel, but love home too well to be a great rover ; with large Combat., Destruct., and Self-Esteem, will think much of national honor, and be willing to contend in the field of battle to secure it.

FULL, desires to have a local habitation, and manifests considerable attachment to place of residence ; with very large Adhes., will think more of leaving relatives and friends, than any particular locality.

AVERAGE, is rather fond of the home of childhood, but if urged by large Acquis. and the hope of gain, can leave the place of abode and the home of youth without much regret, and give all local attachment to another, although the last situation may not be as pleasant as the first.

MODERATE, has no particular regard for any spot on earth, feels but little regret in leaving home and is never homesick ; with Adhes. and Philo. very large, and Local. moderate, will have a fixed place of residence, in order to gratify the feelings of attachment to relatives and friends.

SMALL, is very indifferent respecting the place of abode, soon becomes weaned from the home of childhood, feels no uneasiness if obliged to change the place of residence often, and with Individ. and Local. large, and Adhes. only full, will be likely to lead a roving life,

VERY SMALL, feels at home in any place, forms no local attachments; with Acquis. moderate, will care nothing about owning a house and piece of land, and will be likely to live on hire, and change place of residence often.

5. CONCENTRATIVENESS.

This is not classed with any other, as it seems to serve as a balance-wheel, for *all* the other faculties.

This organ is supposed to give 'unity and continuity of thought and feeling; power of entire and concentrated application to one thing.' Its abuses are, protracted and unnecessary brooding upon one subject, study or pursuit, to the exclusion of incidental duties.

It is located between Inhabitiveness and Self-Esteem.

ADAPTATION. Some Phrenologists are not fully satisfied of the existence of such a faculty. Dr. Spurzheim unites this organ and Inhabitiveness together, under the name of Inhabitiveness; because animals and men being full in this region, seemed attached to particular places. Mr. Geo. Combe does the same, yet calls it Concentrativeness; while the Messrs. Fowler, and others, maintain the existence of both; the upper portion giving unity and continuity of thought and feeling; the lower portion attachment to home.

We have made numerous observations with respect to this organ for the last four years, upon the heads of persons of almost every nation, and of every class of people in the United States, and have become fully satisfied of its location, and the office which it performs. The following facts and reflections will show the foundation of our conclusion, and are submitted with the hope that others will institute an examination of their merits upon living heads; always accompanied with an inquiry into this trait of character of those, in whom this part of the head is large or small.

We believe, that one reason of the diversity of opinion among Phrenologists, in relation to the existence of this organ, has arisen from the fact, that it is located upon, or near the *lambdoidal* suture, which often presents a bony ridge with a depression above it; thereby rendering a determination of its size quite uncertain.

Some persons love *home* and *place* strongly, yet in thought, feeling and pursuit they are restless, fickle and erratic; commence many things and finish nothing, and break off in the middle of an anecdote to relate another, and perhaps never return to the first, while others are exactly the reverse, and the developments in hundreds of cases, we have found to correspond with these traits of character without a failure in a single instance. We have also noticed a striking difference between the heads of foreigners and Americans. Foreigners, serve seven years for a trade or profession, and seldom change their course of life, and cannot easily turn the hand to any thing else. The American, frequently pursues divers kinds of business, which imparts not only versatility of talent, but the power to change the mind from one thing to another with *celerity*, or to attend to several things at the same time, without inconvenience or confusion. *Here*, a man learns a trade and quits it for a farm or some of the learned professions. The trader becomes a lawyer, a preacher, an editor, a school master, a farmer, or a mechanic; and not a few, range the whole circle of ordinary pursuits, and like the bee, sip from every flower. Moreover, we have noticed in the New England factory villages, that those girls who have followed weaving in a factory for several years, have the organ of Concentrativeness much larger than those who have pursued the common, and more variable avocations of life—indeed one can select every *weaver* of seven years' standing, from those who have followed housekeeping. The same may be noticed in printers, painters, and engravers.

VERY LARGE. One having *very large* Concentrativeness, can chain the mind or the feelings to a particular study or purpose, and is not satisfied, till every reason

and fact are thoroughly examined; will stick closely to a text or proposition, and move surely, step by step, to the conclusion; often communes with self, and is frequently absent-minded. With large Caus., is very fond of truly abstract subjects.

LARGE, is disposed to fix the mind upon but one study or work at a time; in conversation, prefers a leading subject to miscellany; feels disturbed, if not vexed, if spoken to while reading or writing; wishes to complete an article or chapter before a book or paper is laid aside; and likes to attend to *one* and *but* one thing at a time, and is confused by a multiplicity of cares; frequently becomes attached to difficult, or even disagreeable labor or study; when building, always wishes to finish entirely; dislikes to have more "irons in the fire" than can be well attended to, and prefers a steady business to '*choring*.'

FULL, is able to fix the mind, or to change it from one subject, study or pursuit to another without difficulty or delay, yet generally prefers permanence to change, and likes to leave nothing unfinished.

AVERAGE, is fond of variety, novelty and change; is more intense, than continuous in the application of the mind, or the manifestation of the feelings.

MODERATE, thinks and feels intensely, yet lacks unity; will anticipate a speaker, and in a book look forward to see how the story is coming out; will crave variety of pursuit, and feel that spirit, which characterizes the American people—a spirit of change and enterprise.

SMALL, OR VERY SMALL, dislikes close application; is too fond of a change of study or pursuit;—will leap from premise to conclusion, and fail to supply all the connecting links of argument.

Species II. SELFISH PROPENSITIES.

These desires and feelings terminate upon self, and have direct reference to the promotion of individual interest and happiness. When the organs of these propensities are large, the head is broad at its base and rounded above the ears, and when small, the head is narrow.

6. COMBATIVENESS.

Spirit of resistance, courage, opposition.

The organ is located above, and a little backward of the mastoid processes, at the posterior inferior angle of the parietal bones, about an inch and a half upward and backward of the opening of the ears. When large, it gives width to the head a little back of the top of the ears, and may be ascertained by placing the thumb on one side, and the fingers upon the other, and a continuation of the width of the head from above the ear backward is an indication that Combativeness is large.

ADAPTATION. The design of this faculty is to defend, oppose and resist in general. It is not adapted merely to physical resistance, it enters largely into moral courage, intellectual enterprises, and gives that energy of character which is an essential element of greatness. All great civil and moral reformers, require a large development of this faculty, to meet, and overcome error. It gives the propelling ability, courage and force of character, and energy to talent, and moral effort. It acts in obedience to Conscientiousness, in such patriots as Washington, in repelling unjust foreign aggression. Philoprogenitiveness arouses it in the parent to protect offspring. Adhesiveness calls it to *its* aid, in behalf of defenceless friends. It gives fire to the Orator either in the forum or pulpit; it gave Luther *his* power, to face the Papal dynasty, and energy to carry forward the reformation. A man without Combativeness, and its neighbor Destructiveness, may be compared, to an ax without temper—*good for nothing*. A faculty thus useful, in the discharge of every moral and social duty, should

manifest considerable resistance and general energy of character. Will choose to avoid contentious persons, law suits, &c., and desire "peace with all men." If Destruct. and Firm. be large, combined with an active temperament; will have strong temper when aroused by repeated insult, but when the opposition ceases, resistance will also cease.

MODERATE, may get angry, but will not be dangerous or quarrelsome, and will be likely to bear insults and injuries, till forbearance "ceases to be a virtue," but *can* contend for rights to some extent if *driven* to it, and with moderate Caution, will show a tolerable degree of courage. With large Firm. and Destruct., and a good intellect, will manifest steady resistance, but will not be rash or impassioned, and if forced by circumstances to quarrel, will contend on the defensive.

SMALL. One having Combat. *small*, will be too ready to accept of peace at the expense of personal rights, and suffer long before resenting an injury; will lack bravery and efficiency, and with large social and moral organs, and only average Destruct. will be pre-eminently amiable and peaceable; will fail to carry forward any bold enterprise of a political or moral character, where opposition is to be met, and overcome.

VERY SMALL, will be too tame and cowardly, to accomplish any thing requiring force and courage, whatever may be the size of other organs.

7. DESTRUCTIVENESS.

Executiveness, indignation, efficiency, force, severity.

The organ is located above, and extending a little backward from the external opening of the ear. A large development of the organ, gives width through the head from ear to ear. All carnivorous animals, from the lion to the cat, are very broad through this region of the head, while herbivorous tribes of animals, such as the camel, deer, sheep, and rabbit, are narrow in the same region.

never be called a bad one. It is only its abuse which leads to contention and quarreling among neighbors, and between nations. War, is an abuse of this faculty, (in connection with Acquis., Self-Esteem and Destruct.) and like a razor which may be used to cut one's throat, yet in its proper sphere, is useful and necessary.

VERY LARGE. One having Combat. *very large*, has very strong resisting force, and will exert a commanding influence for good or for ill. With an active temperament, will readily *fire up* to bold resistance in behalf of self, friends, or property; and has the ability and disposition to defend rights. With large reasoning organs, will be very fond of argument, and contend earnestly for political or religious opinions.

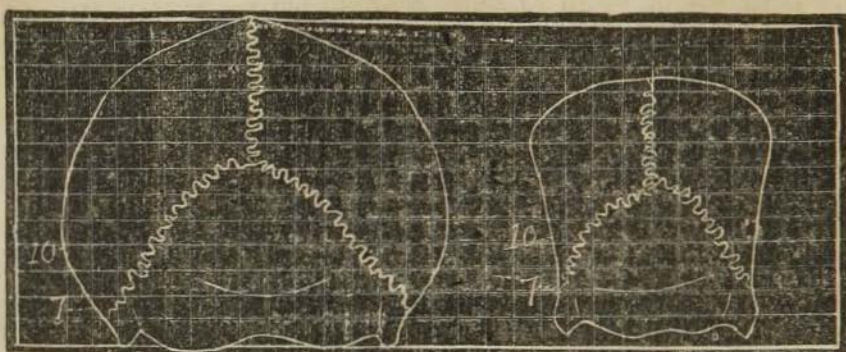
6 LARGE, is courageous, and bold in resistance; and when aroused to high excitement by opposition, or by some great occasion, will be intrepid, forcible, and commanding, in feeling, language, and action. Combined with very large Caution, will not be rash, and will often appear timid, and wanting in bravery. Such a person in the capacity of a soldier, will fight well under cover, but dislike an open field; when cornered, will be desperate, and with small Caution will be reckless. Combined with a strong intellect, it leads to a love of intellectual combat; and with large Appro. and Lang., to assume the opposite merely for the sake of argument. With the intellectual and moral organs only *average*, and Destruct. large; fighting and quarreling will be the result.

FULL, will manifest a fair amount of energy, force and courage, yet other organs being equal, will not be quarrelsome, or contentious; can generally take care of self, and maintain personal rights, and will not be trampled, or insulted, and bear it in silence. With an active temperament, will be quick tempered, yet will not hold resentment, unless Firm., and Destruct. are very large—
5
6
"Peace if we can, war if we must," will be the motto.

AVERAGE, will prefer an even sea, to a storm, and not court opposition; yet when attacked, or oppressed, will
7

7. Big Thunder.

8. Ceylonese Boy.



7 Destructiveness, very large.
10 Secretiveness, very large.

7 Destructiveness, very small.
10 Secretiveness, very small.

ADAPTATION. Man, is surrounded by sickness, sorrow, pain, and death; dangerous animals exist around him, to be destroyed; evil, and error, to be exterminated; and if man is carnivorous to any extent, this part of his nature demands the life of animals to be taken, to supply him with food. This faculty, brings man into harmony with this condition of things. It is an essential element of force, efficiency and power, both of a mental and physical character. It gives penalty to all law, and without it, no government could exist, or justice be maintained among men. Its first, distinctive object, is self preservation, and leads to the extermination of all that endangers our own existence. It imparts weight to indignation, and gives an unflinching power to carry forward the discharge of duty, even though it may give temporary pain to ourselves or others. It enables one to endure pain with fortitude, and when necessary, (as in surgery) to inflict it upon others. Carnivorous animals, have claws to hold their prey, sharp teeth to tear, and incisors to cut flesh, combined with an appetite *for* flesh and blood; a digestive apparatus to dissolve it; and a large development of the organ of destructiveness to impart the impulse to destroy animals, by which to supply themselves with food, together with large Secret. to enable them to surprise their prey. On the other hand, we discover the perfect beauty and order of nature, in the

constitution of such animals as feed on grass and herbs. They have blunt teeth to 'crop the flowery food;' square grinding teeth, to masticate, and digestive organs suited to their natural aliment, and their disposition corresponds with their condition. They neither require destructiveness to kill *their* food, or secretiveness to surprise it, as it never flees at their approach. Hence they are narrow through the brain in the region of Destruct. and Secret., and manifest those faculties in a subordinate degree. Man, is an animal, so far as self-preservation and his physical wants, and animal propensities are concerned. The impulse to destroy, and cause pain, is necessary in man, to complete his character, and bring him into harmony with the circumstances of sublunary things. The *abuse* only, of this faculty is to be feared. "Thou shalt not kill," (murder) implies the existence of the faculty, and its liability to abuse. Combined, with strong animal propensities generally, with feeble moral and intellectual powers, it leads to cruelty, revenge and murder.

The North American Indians, have the organ large, with moderate Benev.; hence, their cruelty and revenge, with ability to endure pain and death without a murmur or a sigh. Tardy and Gibbs, pirates; Bellingham, Le Blanc and Peter Robinson, murderers; King Robert Bruce, Black Hawk and Big Thunder, warriors; Luther, Knox, Leggett, and many other writers, orators, warriors and murderers, that might be named, had the organ large. Combined with large moral and intellectual organs, it gives moral and intellectual energy, and severe censure upon those who violate moral law. To the orator, it gives edge, sternness, and the power of satire; to the lawyer, severity toward his opponent; to the surgeon, nerve; to the warrior, efficiency, and coolness in view of pain and slaughter, and in every lane of life, it serves to give weight to character and effort.

VERY LARGE. A person having Destruct. *very large*, is severe, forcible and indignant when highly excited, and with large Firm., and a bilious temperament, will be able to witness surgical operations, or a sanguine battle field; and with average Caution, and large Combat.,

would not as a soldier, wince even at the cannon's mouth. Combined with an *active* temperament, large Combat., Appro. and Self Esteem, will be quick, and high tempered, and require to watch much, against the passion of anger. With small Combat., and large Firm. and Caution, will be "slow to wrath, but sure when up."

6
to
LARGE, has great sternness and force of character, when excited, and deep toned indignation toward objects of displeasure. Has much warmth and vehemence of temper, and will often utter bitter remarks against enemies, and religious, or political error. With large Consci., Firm., and Combat., will censure injustice, and vice, even in high places (like Luther, Knox and others.) With strong social organs, and moderate Secret., will love friends ardently, yet be liable to wound their feelings, and having weight and force of character, will possess the elements of government. With large Combat., Firm. and Self Esteem, and a good intellect, will be bold, energetic, vindictive, dignified, and persevering, against every opposition; drive forward and upward to distinction; carry out great enterprises, and be able to do much good in the world, being qualified by nature for a leader in society. With the above combination, and a feeble moral development, will be cruel and dangerous when excited. If the head be large, and all other organs large, this should be large also, to complete the character. Destruct., when kept under the control of a good intellect and strong moral sentiments, is an agent of good, and its manifestations useful and virtuous.

5
FULL, is forcible, yet will not cause unnecessary pain, or be very severe when excited; is able to command respect, and overcome the common difficulties of life. When it is necessary to cause pain, or to take the life of animals, will do it at a blow, causing as little pain as possible, and dislikes to see animals tortured.

AVERAGE, does not willingly give pain to the feelings of others, or to animals, will require great excitement to become severe in word or deed, and *then*, it will be only

momentary—will rarely feel disposed to revenge ; and lack the power to be sufficiently severe, to command respect from others. With only average Combat., Firm and Self-Esteem, will be too easy with animals and men, to govern the one, or claim and maintain personal rights with the other, and be likely to be imposed upon by the selfish and overbearing. With large Caution, Secret., Consci., Benev. and Adhes. added, will seldom show anger, and be inoffensive, amiable and peaceable, and too kind and unassuming to command respect, or exert much influence in common society.

MODERATE, will give back when closely pressed by adversity or opposition, and lack efficiency to grapple with "the ills that flesh is heir to ;" cannot carry out a well formed purpose, if the necessity to cause pain lies in the way ; as a debater cannot exercise severity, even against error ; as a clergyman will rarely preach the terrors of the law ; as a soldier would sicken at the sight of blood, and would never make a good butcher ; as a juror would lean toward mercy and commutation of punishment.

SMALL, is too sensitive in view of pain, and has a desire to relieve it, but is too deficient in this faculty to carry out such good wishes ; seldom, if ever, feels resentment or indignation ; is too easily controlled by others, and so mild in reproof, that the word lacks force and edge ; seldom threatens others, and is not able to rise above the opposition of mankind.

VERY SMALL, is the reverse of efficient and executive, in any thing ; with large Combat., may threaten but will never execute. If mankind waited for such persons to butcher for them, they would cease to use animal food.

8. ALIMENTIVENESS.

Desire for food and aliment in general.

Located, just forward of the top of the ear.

ADAPTATION. The proper manifestation of this faculty, is as a porter at the door, to say how much, and what kind of nourishment, the body requires. Its abuses, are gluttony, drunkenness, and the use of narcotics and exhilarants, such as opium, tea, tobacco, spirituous liquors, &c. Children, usually have this organ large, while the physical system is obtaining its growth and strength. Indulgent mothers, too often produce a morbid activity of this organ in their children, by feeding them with rich dainties, not only to manifest their fondness, but to keep them quiet, by which course restlessness is induced, when another application is made to the same source, to allay it. Indeed, rich food, confectionary, fruit, nuts, &c., are often promised the child, as a reward of obedience and close study. This is murdering the constitution by piecemeal, and enlarging this organ, to immoderate size, and morbid activity; and no wonder that children thus trained, are *sickly*, and at maturity, rush to the bottle for stimulus. Let temperance, begin in the nursery in regard to *diet*, and at mature life, there will be less ill health and intemperance, with their attendant train of evils. Mother! this work of reformation is thine! "Health is the poor man's blessing; the rich man's bliss." Who ever knew a half starved beggar, to have dyspepsy, or the gout? Who ever knew strict temperance, and industry, to entertain such guests? When all the laws of nature are reversed, and truth becomes falsehood; then, and not *till* then, can this be the case.

VERY LARGE. One in whom this organ is very large, will think much of the delicacies of the culinary department, and often count upon a rich dinner—will be careful to provide bountifully for the table, and never die in debt to the stomach. Will need to guard well against habits of intemperance, in all its forms.

LARGE, will prize a good cook, or be capable of becoming one; will know how to season a dish, so as to commend it to the appetite; will use many condiments; and with large Philo., coax children by offering cakes, candies, &c.; seldom forgets the dinner hour, or is absent from duty on that occasion.

FULL, will relish food and drink, very well; but have less anxiety on the subject than one with the organ large; will take prudent care in respect to "what we shall eat, and what we shall drink."

AVERAGE, can get along with, or without luxuries; will regard quality more than quantity; is not dainty, or very particular respecting food and drink.

MODERATE, is indifferent as to variety, or luxuries; eats to live, rather than lives to eat.

SMALL OR VERY SMALL, prefers plainness and simplicity, in drink and diet; and will not be likely to become intemperate, or make a popular cook.

9. ACQUISITIVENESS.

Desire to possess, the idea of ownership, a propensity to acquire, to have, to keep.

Located between Constructiveness and Secretiveness, and above Alimentiveness; about an inch and a half upward, and forward, of the top of the ear,—on the naked skull it is found at the anterior, inferior angle, of the parietal bone. When large it gives great width to the head, in that region.

ADAPTATION. All our ideas of property, and personal ownership, arise from this faculty. It is strongly marked in the Anglo-American head, and small in the American Indian: the one is too eager, and the other too careless, to acquire property. The former, requires more than is necessary for happiness; the latter lives from hand to

mouth, lays up nothing for the future, and idles away life. Without this faculty, man would never emerge from the savage state, but, like animals, seek the daily supply of his wants, regardless of the future. The division of labor, arises from trade, and the desire to acquire. This inspires a spirit of improvement in the arts and sciences, which distinguish civilized society. It is useful, in gathering the bounties of a munificent Providence; creating wealth by labor, and providing in youth, and health, for sickness, and age. The injunction, "be diligent in business," recognizes this faculty, and gives countenance to its exercise; but the command, "Thou shalt not steal," as strongly forbids its abuse. Covetousness, also, is an abuse of this faculty, and the tenth commandment thunders against that exercise of it. This organ is too large, and too active, in the people of the United States. There is a morbid anxiety, an *unnatural* haste, to be rich. Wealth is made the standard of respectability, and *property*, in the eye of thousands, covers a multitude of sins. There is not property enough in the world, to make all mankind wealthy; hence *great* wealth must be possessed by a few at the expense of others. In view of this, can we love our neighbor as ourselves, and desire to be *very* rich? Agur's petition exhibits the proper feeling: "Give me neither poverty, nor riches," &c.

The faculty under consideration, is the foundation of the enterprises of mankind, and enters largely, into all the business of life. It inspires governments to extend their territory, by discovery, and by conquest; while individual enterprise, builds cities, establishes commerce, cultivates trade, and fosters the manufacturing and agricultural interests. The desire for gain, goads forward the genius of mechanics, to invent valuable machinery; it touches the poet's pen, as with a flame of fire; and fame is sought by the orator, and statesman, that wealth (as well as power) may follow in its train. The iron hand of poverty, or more properly the desire for gain, has been the entering wedge, to almost every valuable improvement in the arts, which bless mankind. Good may result to the great whole, by the individual abuse of Acquisitiveness, "but woe unto him, by whom the" abuse "cometh."

Arnold, for the sake of British gold, sold his country; and Judas for silver, sold his Lord. It was the abuse of Acquisitiveness, which produced the American Revolution. An unjust extortion of taxes from the colonies, cut them loose from British dominion forever. Interest often, and almost *always* takes precedence of honest justice, in international legislation. Treaties are violated when interest demands it, and justice is pushed aside. An inordinate love of money, aims the deadly steel in the hands of the highwayman and pirate, and is the cause of treachery, forgery, fraud and falsehood. These abuses arise from Acquisitiveness, very large, with a feeble development of the moral organs, and bad training. A good development of this organ, is necessary, to suit man to his condition, and when properly balanced by the moral sentiments and intellect, combined with proper education, its manifestations are virtuous, producing industry and economy.

VERY LARGE. One in whom this organ is *very large*, sets a high value upon any thing which can be called property; is eager to acquire, to lay up, to have and to save; has a strong thirst for riches; likes to call things *mine*; is reluctant to part with money, or property; is often close and penurious; cannot endure profligacy, or waste; does business for its profit, and is arduous and persevering to make money. With very large moral organs, and Appro. and Self-Esteem full; will be honest, as well as eager in the acquisition of property; but if the moral organs be only *average*, combined with large Destruct., Combat. and Self-Esteem, the person will be hard faced in deal; always want the best of a bargain, and get it if possible; pay a small price for much service; drive a team beyond its strength; make ungenerous exactions of laborers; rise early and toil late, and make others do the same, and with large Caution and Secret. added, will be on the alert for thieves, hence use many precautions and locks; will often be suspicious that others wish to cheat in trade, and will watch them closely; and with only small Consci., Self-Esteem and Appro., will lie and cheat outright, and be strongly tempted to steal.

LARGE, manifests much anxiety to acquire, to have and possess; feels a loss keenly and in business deals closely. If the temperament be active, and the propelling powers strong, the person will be industrious and active in business, and keep a close eye upon the ways and means to acquire. With large Consci., will be honest, yet eager for gain; with very large Benev., large Hope, and moderate Caution added, will be liberal in distribution—to friends if Adhes. be large—to children, if Philo. be large, and with a good intellect, and large Appro., to great public enterprises, to the endowment of schools, and the like; and with large Ven., to objects of a christian character. All those who have large Acquis., do not regard *money*, and make it an idol. The *kind* of property which one desires, is determined by the other faculties. Neither do all keep money or property, who have the organ large; distribution being governed by the other feelings. Hence, the scholar, (or one in whom the intellect rules,) acquires books;—one with large Ven. and Marvel., collects the antiquarian cabinet—with large Color, Ideality, Form and Order, seeks to acquire paintings, flowers, statuary, &c.; with Appro. large, desires dress, ornamental furniture and showy equipage. Large Philo., will task Acquis. for the benefit of children; large Aliment., to procure the indulgence of the table, or the cup; large Amat. to gratify that desire. With very large Appro. and Self-Esteem, will sacrifice money for office, station, great name and dignity. If Caution be large, the person will be prudent and saving; Hope moderate added, will fear coming to want, and cling still closer to what is acquired; will rarely run in debt, or fail in business; will never let go a sure and steady profit, for uncertain speculations, and will often, through fear of loss, let good opportunities for making money, pass unimproved. If Caution be only average, and Hope and Appro. large, will wish to do a large, and *splendid* business, to make money on a large scale, and hence will run headlong into rash speculations, and be too careless of the small *change*, the “little leak that sinks the great ship.”

FULL. Acquisitiveness *full*, imparts to its possessor frugality, economy, and a proper love of possession. But if Consci. be deficient, will often discover the "tricks of trade," over-reach in bargains, disregard the Golden, and go by the *Silver* rule, i. e. get money honestly if convenient, if *not*, get it. If Benev. be moderate or small, will never be liberal to objects of charity, unless it be for the purpose of making a show. If the animal propensities be strong, will acquire money, and spend it for *their* gratification. If the moral organs be well developed, combined with a good intellect, and large Appro. and Self-Esteem, will despise dishonorable means in acquiring property, will be prudent and saving in business transactions, yet manifest a generous liberality. With large Ideal. and Construct., will display a regard both to taste and durability, in buildings, furniture, and in the purchase of property.

AVERAGE, looks upon money rather as a means than as an end; is satisfied with the comforts and conveniences of life; and has but little ambition to be rich; but if Appro. and Self-Esteem be large, will crave wealth for the standing, consequence and display it will afford, and spend money freely upon any thing which will feed those feelings. With Hope large, and Caution moderate, will buy what is wanted to-day, regardless of to-morrow; make large promises, and be likely to get into difficulty in business; lets little sums slip through the fingers; can *make* money better than *keep* it; and with the social organs and Benev. large, will be free and generous to friends. With Benev. small, and the social feelings weak, will be selfish, and ungenerous, and although not eager to acquire, yet will be cold and close-fisted.

MODERATE, loves money only for the comforts which it buys; is not very eager to acquire, and is rather free and liberal in expenditures; does not make wealth a test of respectability; governs expenses by present possessions, rather than by a love of cash; finds it difficult to keep; is rather *too* free; buys what the other faculties demand, without much regard to price, and is hardly saving enough

to get along well in the world. With only average reasoning organs, will get cheated in trade.

SMALL, will not be likely to accumulate a fortune, or save one which may have been transmitted, and is too indifferent to property, to lay up the necessities of life; with moderate Combat. and Caution, will not undergo the toil, necessary to accumulate, but live as it were from hand to mouth, and if Hope be large, will let to-morrow take care of itself.

VERY SMALL, is reckless in respect to property and business matters; pays no regard to price; feels in the pocket for money rather than to labor for it, and when it is empty, runs in debt; is always in debt, and generally out of cash.

10. SECRETIVENESS.

Disposition to conceal and suppress thoughts, power of mental reservation.

This organ is situated next above Destructiveness, and back of Acquisitiveness.

ADAPTATION. We have thoughts, almost constantly rushing into the mind, the expression of which would not be judicious. The office of Secretiveness, is, to conceal those thoughts which present themselves involuntarily, until a proper time and place for their utterance. Thus it will be seen, that this organ is given to man for a wise purpose, and is necessary to impart prudence in language and action. But there are so many in community who abuse this faculty, that it is as necessary now, as it was in olden time, for the conscientious individual, to say, as did the sweet singer of Israel, "Draw me not away with the wicked, and with the workers of iniquity, *which speak peace to their neighbors, but mischief is in their hearts.*" If there was no faculty in the mind the abuses of which, are falsehood, deception, and perjury, there would have been no necessity for the command, "Thou shalt not

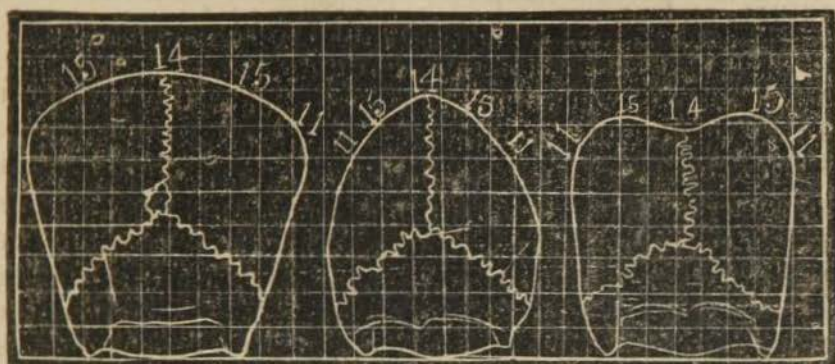
bear false witness against thy neighbor." The Bible, therefore, recognizes this faculty, and speaks against its abuse. A great endowment of Secretiveness, enables its possessor to throw a veil over all his actions; "to shape his face for all occasions;" and thus render it utterly impossible, for the most skillful Physiognomist, to ascertain his character, by observing the features, and expression of his face. "When Napoleon thought himself closely observed, he had the power of discharging from his countenance all expression, save that of an indefinite smile, and presenting to the curious investigator, the fixed eyes, and rigid features, of a marble bust." We notice in some persons a kind of openness and frankness of expression and manner, which at once leads us to conceive their real feelings, and almost read their thoughts, before they are uttered. Their plans, either for business or pleasure, are all known to their acquaintances and friends, and they despise those, who, in every thing they do or say, practice cunning and finesse. This arises from a too small development of Secretiveness. There are others, of an opposite character, who do not transact their common business even, without enjoining upon those with whom they may be dealing, the most profound secrecy. They always make private bargains, and if they wish to speak with an individual on a matter of no moment, when others are near, they will address them in a low tone of voice, or take them aside. Every thing they do has an air of mystery about it; and when interrogated on any subject, they are very careful, not to give any answers which can be brought to militate against themselves. Washington had this organ large, and during the revolutionary war, he made use of many stratagems to mislead and deceive his opponents, and in many instances concealed from the view of the enemy, his real strength; thus saving his army from immediate destruction. This course was necessary, and justifiable in war. Washington had large Conscientiousness, and in private, as well as in a public capacity, he was honest and confiding, and at the same time prudent in the expression of his thoughts; qualities, always to be desired. Secretive-

ness is manifested in a high degree by some of the lower animals, such as the fox, the raccoon, the cat, &c. It produces in them, that slyness, cunning, and instinctive sagacity, for which they are so noted. Children, sometimes have this organ very large, and it renders them trickish, cunning, sly, and disposed to practice deception. These traits of character, which they manifest at an early period, are often mistaken by parents, for shrewdness of intellect, when they are merely the effect of the animal feeling of Secretiveness. Parents, therefore, should remember that such manifestations in a child, are not indicative of strong powers of mind; for idiotic persons, sometimes exhibit them in an extraordinary degree. This organ was very large in Big Thunder, G. M. Gottfried, a murderess of great cunning and sagacity, and small in the Ceylonese boy.

VERY LARGE. One having Secretiveness *very large*, will be cunning, crafty and sly; keep all plans and business operations, from the view of others; make private bargains, and conceal all matters relating to self, from the scrutiny of the world; with the moral organs large, will not deceive others to their injury, or vary from the direct line of truth; but with those organs moderate, and Acquis. large, will be well versed in all the 'tricks of trade,' and take great pleasure in deceiving.

LARGE, has the ability to conceal plans; does not speak what enters the mind, without first letting the intellect judge of its propriety, or impropriety; is non-committal, and employs much art, in accomplishing plans which need concealment; with moderate Consci., will tell a falsehood when the truth would answer the purpose just as well; with large Acquis. added, will take *under-handed* means to acquire property; with large Appro. and Self-Esteem added, will think much of the good opinion of mankind; seek popularity; esteem self highly; be much offended when called dishonest, and after having accumulated a fortune by lying, trickery, and false pretences, will suffer no remorse,

9. Timid Lady. 10 Reckless Boy. 11. Mr. *****.



11 Caution, very large. 11 Caution, very small.

This faculty is useful, inasmuch as it leads to circumspection, and keeps many from taking the first step towards vice, and thus prevents them from plunging into the vortex of crime, and bringing upon themselves misery and woe. It acts as a check upon the manifestation of the other faculties, and leads to prudence of conduct in all the various walks of life. When Approbativeness tempts its possessor to spend his time and money for the purpose of making a *display*, or of gaining the applause of the gaping crowd, Caution says, that applause and fame are nothing but vanity; be careful how you spend your time and money for that which will not be of any value, when old age or sickness shall have taken the place of youth and health. It checks the ravings of Combative-ness, and adds prudence to courage. It is sometimes too

NOTE. Cut No. 9, the *Timid lady*, shows great height and width at the region of Caution, organ No. 11, with Firm. and Consci. No's 14 and 15, also large. We find many females, especially children, with this development. Cut No. 10, represents the head of a boy only seven years of age, whose head we examined at Washington city in 1841. He had frequently passed out of the dormant windows of a three story house and chased the doves to the very verge of the roof, without the slightest signs of fear: to employ the language of his father, "he was always engaged in some dangerous enterprise; he never seemed to have the sentiment of fear, or to comprehend even the *meaning* of the term." Cut No. 11, is remarkable for very large Consci., No. 15, and very small Firm., No. 14. It represents the head of a schoolmaster of Conn., who was noted for the most scrupulous honesty, and the utmost indecision.

Genus II. HUMAN, MORAL AND RELIGIOUS SENTIMENTS.

These are of a higher, more ennobling and refined character than the propensities, and draw a line, which the lower animals can never pass. In proportion as these faculties predominate over the propensities, the soul soars in the empire of morality, virtue and refinement; but if these be deficient and the propensities strong, there will be more of the mere animal, than *human* qualities. The organs of these sentiments are situated at the superior portion of the head, and when they are large it is high and broad; when small, the upper portion of the head is low and narrow.

Species I. SELFISH SENTIMENTS.

These faculties are superior to the selfish propensities, although they make man selfish, and seek to promote his individual advancement. When the religious and reasoning faculties are equally large with these, they combine to elevate and perfect the character. They are located together at the back part of the upper portion of the head and when large give height and fulness to that region.

11. CAUTIOUSNESS.

Sentiment of fear, circumspection, apprehension of danger.

This organ is located next above Secretiveness, and backward from Sublimity, near the middle of each parietal bone.

ADAPTATION. The sentiment of fear has long been considered by metaphysicians, an innate, and distinct faculty in the human mind. Dr. Gall found that caution and fear resulted from a large development of brain in the region of the head now under consideration, and thus accounted for what was unaccountable to all who had preceded him in reasoning upon the different powers of the mind. See cuts, Nos. 9 and 10.

FULL, will be careful in the expression of thoughts and plans; can conceal motives; may use art for the purpose of effecting something useful and necessary, but not with the intention of injuring any one; with large Caution will often wear a cheerful countenance when the mind is troubled, and with a large development of the moral organs, will not be deceitful or trickish.

AVERAGE, will not manifest much cunning or tact, on ordinary occasions; but if transacting business which requires secrecy, will show considerable adroitness; is generally frank in the expression of feelings and plans, and with very large Caution, will be more guarded in action, than in the expression of thoughts. 4

MODERATE, is candid, and always ready to give advice; finds difficulty in concealing feelings and plans; with large Hope, Combat., and Lang., and average Caution, will always be telling of schemes, and have a blunt mode of expression.

SMALL, is not inclined to practice cunning or art, to accomplish ends; speaks in a blunt manner and by so doing, often gives offence; with large Combat., Destruct. and Self-Esteem, will be harsh and rough, in language and manner, towards an opponent in debate, and in general deportment.

VERY SMALL, has no power to conceal feelings; will tell of plans and business operations, when they ought to be kept secret; is not discreet in the expression of thoughts, and lacks that prudence of language necessary to general success in the common affairs of life.

only 522 females. Among the goats, the leader is always a female, and their safety, it will be recollected, arises from a high degree of circumspection."*

7
6
VERY LARGE, will be doubtful, and apprehensive of danger, even where none exists; deliberate long before coming to a decision on any subject, and fail to enjoy the present moment for fear of future ill; with small Hope, and a nervous temperament, will be subject to melancholy; with moderate Combat. and Destruct. added, will not attempt great things, nor set a high mark at which to aim; but with large Firm., Combat., Destruct. and Hope, and large reasoning organs, will succeed well, and be distinguished for circumspection, prudence, foresight, and correct judgment.

6
LARGE, will always be on the lookout for danger, and be very careful in action, and hesitate long before giving an opinion; with Firm. large, will be stable in opinions, when Caution is satisfied that all is right, with large Combat. and Destruct. added, will manifest prudence of character, united with courage, perseverance, and stability; but with moderate Combat. and Destruct., will be irresolute and timid. With Appro. and Ven. very large, and Combat. moderate, even if the intellectual organs are large, and the mind well cultivated, will be exceedingly bashful, take a middle walk in life, and lack that force and energy necessary to overcome those difficulties and obstacles which always obstruct the path of man.

5
FULL, has a good share of caution, and prudence, and as a general thing, looks out for, and guards against danger, and makes provision for the future; with very large Combat. and Destruct., will sometimes appear rash, and careless, and with large Hope and Acquis. added, be likely to speculate, and run risks in business; with Acquis., Hope, and Combat. moderate, will seek some employment, which will yield a sure, and steady profit, and will not venture much in speculation.

*Combe's system of Phrenology, Boston Ed., p. 242.

large, and produces an overweening anxiety about the future, and unfounded apprehensions of danger.

This feeling is usually very active in children, which is the reason why parents are apt to appeal to it in family government. This mode of government, however, is erroneous, because it appeals to the animal, and not the intellectual nature of the child. Parents and teachers should remember, that children have reasoning powers, and should be appealed to through them when they have done wrong, rather than by addressing their Cautiousness. All stories about witches, ghosts, &c., appeal directly to this sentiment, and excite the fears of children and implant in their minds a kind of timidity, which length of years, or the judgment of age cannot entirely eradicate. Moreover, the excitement of this organ to an undue degree of activity, leads to insanity. "Dr. Gall mentions, that, at Vienna, he attended two fathers of families in easy circumstances, who nevertheless, were tormented night and day with the apprehension that their wives and children were exposed to die of hunger. The most earnest assurances of their friends, were insufficient to make them comprehend that this fear was altogether chimerical. After their recovery, they could not bear to hear their condition mentioned, through terror of a relapse. Before their malady, they were known to be men of gloomy dispositions." Cautiousness is usually larger in women than in men, which agrees with the difference existing between the sexes in regard to fear, and ability to shun danger. "Among the lower animals, it is generally larger in females than in males; and Dr. Gall mentions some curious facts, illustrative of the greater manifestation of the faculty by the former than by the latter. He happened to kill, says he, as many as twenty squirrels, without finding a single female among them; although it was not the season in which they were confined by the care of their young. During one winter 500 bears were killed in the two provinces of Virginia, among which only two females were discovered. An account of the wolves destroyed in France, from 1st Jan. 1816 to 1st Jan. 1817, was published officially by Count Gerardin, Captain of the Royal Chase, and it showed 1894 males and

AVERAGE, has some care for the future but does not, at all times manifest sufficient caution to guard against accidents; with large organs of the propensities, and large Hope, will readily embark on new schemes, and enterprises, and pursue them with zeal and efficiency.

MODERATE, has not much prudence of character; lacks that degree of Caution necessary to guard successfully against danger; is apt to be hasty and impetuous, and with a good intellect, will take means to escape impending ills, by the strength of reason, but will not be fearful or timid.

SMALL, is heedless; pays little regard to the future; runs into danger when there is no need of it; meets with many accidents, and "hair breadth escapes;" with large Hope, will be habitually cheerful; with moderate Consci. and large Acquis., will always be engaging in rash, and injudicious speculations, and be very likely to fail in business.

VERY SMALL, is exceedingly rash, and impetuous, destitute of fear, and takes but little care for the future.

12. APPROBATIVENESS.

Sense of character, love of praise, desire of approval.

Located on each side of Self-Esteem, and back of Conscientiousness.

ADAPTATION. Man's fondness for society, seems to render it proper that he should regard his standing *with*, and the opinions entertained *of* him by his associates. This love of approval is an innate sentiment in man, and is one of his strongest incentives to enterprise, and when legitimately exercised, promotes virtue and good order. It is recognized in the scriptures in many places, but especially in the parable of the servants who received the talents, to whom it was said, "well done, good and faithful servants," &c. The love of approbation, of praise, sense

of character, desire to please and be approved, which we know exists in the human mind, implies a distinction in action as regards the public will. This faculty, is always exercised in reference to the standard of public opinion in that society in which one resides. It does not decide what actions are right and proper, but what are praiseworthy or disgraceful, in the nation, neighborhood or society, of which a person forms a part. In every nation and community, there is some standard, some criterion of respectability, style or fashion. Among the Indians, the best hunter, the fleetest runner and most cruel warrior, are most respected. With the low and vulgar of civilized nations, the strongest man, the greatest wrestler, fighter, or he who can carry the most ardent spirit at once, &c., is most popular.

Among others, the greatest wealth, the richest furniture, or the finest attire; and with others, learning, oratory, morality or refinement, give the marks of character and distinction. Thus *the fashion*, is what Approbativeness feeds upon, and when the fashion is *right* and the standard of popularity the *true* one, its manifestations are productive of good. The influence of this faculty is very important, in restraining persons from acts of immorality, which would bring reproach; and often speaks a language as mandatory in its character as that of Conscientiousness, which tells us to *do right*; while Approbativeness, warns us to *shun disgrace*. Those who boldly assert that they care nothing for public opinion, and disregard what people may say or think of them, are generally far advanced in vice, or to say the least, are destitute of one very great safeguard to their morals. How many young men are correct in their habits while surrounded by a circle of acquaintances, being restrained by the love of reputation; who recklessly plunge into debauchery and crime as soon as they leave their native place, and get beyond the influence of those whose good opinion they regard! The love of approbation, is among the most absorbing of the human sentiments. The main reason why fame is but a bubble, is, that this faculty is immoderately indulged, untempered by the moral sentiments, and an enlightened intellect. An "honest fame" is laudable, and should be sought by all. This is one of the most prolific sources

of influence with the human race, especially the young. Appeal to this, and every latent energy is called into activity. How important then, that we study the nature of this faculty, and place high and pure motives for the aspiration of the rising generation, that so strong an impetus may be properly exercised.

7 **VERY LARGE.** One having Appro. *very large*, values character highly; is keenly sensitive to the slightest breath of slander; often feels ashamed when it is unnecessary; cannot bear reproach or ridicule; is mortified at small mistakes, or accidents in company; often asks what people will think or say of this, or that act; and will sacrifice personal ease, to please others. When combined with large Caution and Ven., and only average Self-Esteem and Combat., will be very diffident and bashful in society, especially among strangers; and will fear to act lest some reproach shall follow; be tormented with the fear of giving offence, of losing reputation, or of being laughed at by others, and cannot be independent. Men, having this organ very large, with Combat. and Self-Esteem also very large, will seek office with avidity, and claim it as a matter of right, and be proud, vain and overbearing in office. With Self-Esteem, Combat., Consci. and Firm. only average, will be controlled by the popular will, right or wrong, and follow the fashion, regardless of any consequence, except personal popularity.

4 **LARGE.** One in whom this organ is *large*, thinks very highly of character and honor; is fond of admiration and approval; cannot bear censure without pain; is fond of making a good *appearance*, and a favorable impression; is ambitious to be noticed and appreciated; cannot endure to be slighted, or neglected, and with large Destruct. and Combat., will contend sharply for reputation, and feel much bitterness towards the slanderer. With large reasoning organs, will be ambitious to excel in intellectual pursuits, and to rise to eminence among mankind, and with large Secret. added, will never acknowledge faults, and when they are proved, will plead extenuating circumstances. With large Acquis., will have a

strong desire for wealth, not only for its own sake, but also for the distinction it affords; will boast of property, and place it in a conspicuous light to make a show in the world, and perhaps boast of rich acquaintances and relatives. If the social organs be large, with large Lang., Ideal., and moderate Self-Esteem; will be extremely polite and affable, and with large Secret. added, will have a winning popular deportment, and the faculty to say and do things, so as to please. With Consci. moderate and Secret. very large, will often be guilty of gross immoralities, yet keep a fair exterior, and perhaps for years, sustain a good reputation, and with large Ven. added, will make pretensions to religion, and for the sake of popularity act the outward devotee to perfection, until truth, reveals the arrant hypocrite, and displays the Pharisee in all his deformity. Such a combination "makes clean the out side of the cup and platter, while within, they are full of extortion and excess." But when Appro. is large, combined with large reasoning and moral organs, the person will highly regard character and the good opinion of men, and be consistent and honest in all things, and controlled by public opinion and fashion, so far as it is laudable, and no further.

FULL, is ambitious to please, and to excel in labor, study, &c., yet will not do or suffer much, to gain distinction; with a good intellect, will prize temperate and judicious praise without being vain; will not be morbidly sensitive to censure, and if Self-Esteem, Firm. and Combat. be large, will take a straight forward, independent course, and with large Consci. added, will do right, and please self *first*, and be glad in so doing, to meet the approval of others. With a weak intellect, and bad training, will be a "vain boaster;" set a high value upon dress, show, ornament, praise and popularity.

AVERAGE, is temperately fond of praise; and if well educated, will seek for that approval which arises from good motives and correct conduct. Is not indifferent to character, nor *very* sensitive in respect to the opinions

of others. If Self-Esteem and Combat. be large, and Adhes., Benev. and Secret. moderate, will be too independent and plain to secure general popularity; will say harsh things to friends, and wound the feelings of the sensitive, and although possessed of fine talents, will be respected more for ability, than ease of manner and suavity of disposition, and have many enemies; and if Acquis. be large, will think more of money than of friends or fame, and be close in deal, and very unpopular.

MODERATE, seeks first to please *self*, and if the course which seems to be right meets the sanction of others, well—if not, will not lie awake nights on that account; is not troubled by fashion, or the public will, and with large Self-Esteem, will study personal convenience, and pay little regard to that of others, will take office or distinction with coolness, and feel insulted when flattered. With large Consci. and small Secret., will often accuse self, and acknowledge faults.

SMALL, thinks too little of character; will say and do that which is indiscreet, and censurable. If the moral organs and Combat. be large, will seldom, if ever, consult expediency, but take a bold, fearless course, and do what appears to be right if a whole world chides, and every *fashion* is arrayed against it. With Ideal. and Order small, will be careless in dress, manners, and general deportment.

VERY SMALL, is reckless of public opinion, and with strong propensities, serves self on all occasions, and is extremely unpopular, and needs very large moral organs, to keep within the periphery of the civil law.

13. SELF-ESTEEM.

Self-complacency, dignity, personal independence.

This organ is located on the middle line of the head, adjoining, and backward of Firmness, at that point where the head usually begins to slope backward. (See location of Firmness.)

12. Arrogance.

13. Modesty.



13 Self-Esteem, very large.



13 Self-Esteem, very small.

ADAPTATION. Some persons, when told that there is an innate feeling of self-esteem in man, from which pride may arise, at once object to phrenology, inasmuch as moralists, and the scriptures, teach that humility is a virtue, and that we must mortify self, &c. Self-Esteem is as necessary in the mind, as any other emotion; but, like all other faculties, it is liable to abuse. The great error consists in loving self too much, and others too little. Christ, in his teaching, recognized this principle of self-love, when he said, "love thy neighbor, *as*" (but not *better* than) "thyself;" thus making self-love the high criterion of fraternal love; as much as if he had said, it is natural and proper, that you should love yourselves, and now all

that I require is, that you love others as well as, but no better than, you do yourselves. Self-Esteem, is as deeply implanted in the nature of man, and as just in its lawful manifestations as any other sentiment; it gives self-satisfaction and complacency; a desire to rise among men; imparts confidence in one's own powers, and makes us value what is *ours*, and what *we* say, and do. It gives independence of judgment, and leads us to be satisfied with our talents, and our personal *identity*, which no one would exchange with any other, and also leads to the use of the personal pronouns *I, my and me, myself and mine*. It gives dignity and self-consequence, a desire to be known and valued; willingness to assume responsibility, and to undertake the performance of the duties which devolve upon every member of the human race. Some persons shrink from responsibilities, and have such a sense of inferiority and unworthiness, as to unfit them to undertake the discharge of duty, while others are too officious in taking the lead, and try to climb to a position, for which nature never designed them; the former, have the organ of Self-Esteem too small, and the latter too large, and neither have well balanced minds. The love of personal independence, and freedom from arbitrary authority, either political or religious, arises in a great degree from this faculty. Many of the American Indian tribes have the organ of Self-Esteem very large, and they are proud, dignified, and great lovers of liberty. The celebrated chief and warrior, Black Hawk, when introduced to President Jackson, with the most profound dignity, said; "You are one man, and *I* am another." When Gen. Harrison met a tribe of Indians for the purpose of holding "a talk," the chief, when told that his white father (Harrison) had prepared for him a seat, in the nobility of his nature replied; "*He* my father? The *sun* is my father; the *earth* is my mother, and I repose upon *her bosom*." The negro race have less Self-Esteem and Firmness than the Indian; hence, they are more easily subjugated. Democracy, or a government in the hands of the whole people, is the legitimate offspring of this sentiment. Self-Esteem, well balanced throughout society, would place every man upon the platform of

equal rights, which would not tolerate an aristocracy of the few, to control the many; but, while a few possess large Self-Esteem, which gives a desire to control others, those having less of it, will yield to that control. The spirit of liberty, personal and national, is deeply seated in the human mind, and when that mind shall be illuminated, intellectually and morally, "mountains may be heaped upon it, or the angry ocean swell above it, it *will* burst forth, at sometime, and somewhere, and flame up to heaven."

VERY LARGE. One having Self-Esteem *very large*, has much pride of character, and a high sense of personal honor, and individual liberty; willingly assumes responsibility; is independent in opinion; thinks highly of his own judgment; is fond of dictating others; *will be* his *own* master and likes to be master of *others*. With very large Firm., Destruct. and Combat., and a strong intellect; will be morose, overbearing and self-willed, haughty and tyrannical; easily aroused to an arrogant, indignant tone of speech, and action; will drive to "the highest seat in the synagogue" in spite of circumstances, and in defiance of opposition, and become decidedly unpopular.

LARGE, has much personal independence; values self highly; depends upon personal resources; likes to take the lead; never wishes to be second; dislikes to be dictated; is disposed to lead off, and beat out a new, and independent track for operations; avoids any thing low, mean, or degrading; says, and does, few trifling things; maintains identity; keeps aloof from those who are vulgar, thinks much of personal *honor*, will not be brow-beaten; aspires to say, and do, something worthy of self; takes a commanding, and dignified position in society; detests dependence upon others, or service; cannot be enslaved; even *bows* with dignity, and assumes a tone, and manner, calculated to command respect. With a good intellect, strong moral powers and an active temperament; will be worthy of confidence, and general esteem, and with large Combat., Destruct., Firm., Ideal. and

Adhes. added, will be a natural leader in society, and will be looked up to ; and while respected for a high sense of honor, weight, dignity and efficiency of character, will be loved, and admired for talent, good taste, friendship, and high moral worth. But if the intellectual and moral organs be weak, combined with strong propensities, the person will manifest a saucy, proud, overbearing, dictatorial demeanor, which will merit extreme unpopularity, if not the hatred, and contempt of all mankind. If Acquis. be very large, with large Appro., and only average reasoning organs, the person will think *his* property is better than that of others, and be always boasting of what is *his* ; and what *he* can do, or has done, and with large Lang., moderate Ideal. and Secret. added, will not only be a great boaster and egotist, but his company and conversation will be extremely offensive, and his conduct ridiculous.

FULL, sets a fair value upon self ; desires to move in an elevated sphere in society, feels a good degree of independence in word and action, without great haughtiness. If Combat., Firm. and Destruct. be large, and Caution only average ; will be, when aroused, mandatory, dignified, and self-possessed, and have much weight of character ; but with the above combination reversed, will shrink from a test of rights and personal dignity, and be easily tamed by one with large Firm., Self-Esteem and Combat. When Self-Esteem is full, combined with large Ven., Benev., Consci. and Ideal., and *full* social organs, with fair propelling powers ; the person will take an elevated rank among men, yet will not be conceited, or arbitrary ; will mingle dignity with condescension, self respect with politeness, and while claiming personal rights, will guarantee the same to others.

4 AVERAGE. Those having this organ only *average*, are frequently in doubt which way to act ; often ask advice, and are generally governed by it ; may think very well of self when alone ; but when brought into competition with others, feel unworthy and small, and except Combat., Destruct. and Firm., be full, or large, and highly excited,

will not come out in bold relief, (especially in public,) in defence of principles, or personal rights; but with large Adhes. and Consci., will boldly defend the rights of friends, and speak for others, better than for self. Public speakers with this combination, feel embarrassed when they rise to address an audience, but when called out, and aroused, will sustain themselves, and go beyond their own expectations, and that of their friends; will always wish for a direct invitation to speak; will fear to trespass upon the attention of others, and think others can speak better than themselves, and more to edification. All persons having this combination, with large Caution, and only average Combat., will be bashful, and timid among strangers, and even among associates will be retiring, and fail to take the station in society to which good talents, *may* entitle them.

MODERATE, sets too low an estimate upon self; is not proud, or self-confident; values self, temperately, without undervaluing others; has some dignity, yet is not officious, and has not enough Self-Esteem to give ease and weight of character among superior persons. Combined with large Appro., will be free to associate with all classes, and become familiar, and approach inferior persons without dignity; will not strive to assume a commanding station, or a dictatorial manner; and with a good intellect, and large Imitat., Lang. and Ideal., and large social organs, will become very popular with the middling classes, and be likely to rise to distinction upon the popular tide.

SMALL, has too little self estimation to assume a proper station; cannot keep aloof from inferiors, or command their respect, or that of society in general; is too free, and familiar; says too many trifling things; lacks dignity, and cannot control others, except by persuasion. With large Caution, will be extremely bashful and timid, and with large Appro. added, will be ashamed, and deeply embarrassed by trifles.

VERY SMALL, has too low an opinion of self; dislikes, and shuns responsibility; gives an important opinion with

hesitation ; depends too much upon the advice of others ; is likely to be controlled, and surrender rights ; is not regarded with reverence by society, and cannot force mankind to follow or respect him. Combined with large Appro. and small Firm., will have no self independence, and cannot hold an edge, or carry out any thing, where the popular voice rises against it. With large Firm. and Concent., may silently hold on upon opinions, but will lack independence to assert and maintain them.

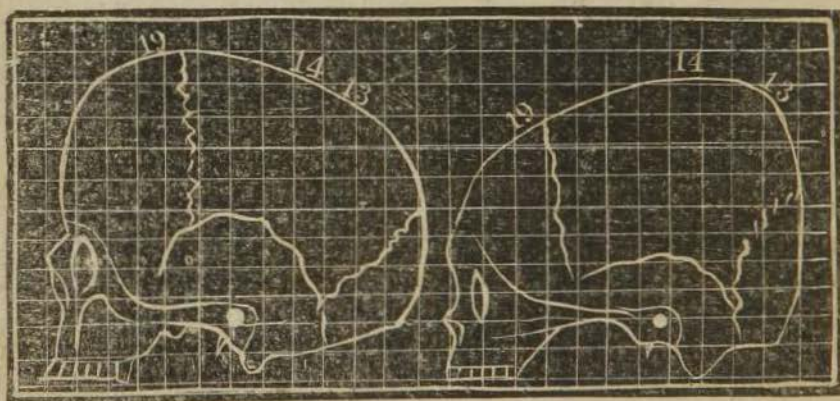
14. FIRMNESS.

Perseverance, stability, tenacity of purpose, &c.

This organ is situated on the top of the back part of the head, and is usually the highest portion in the heads of males. Draw a vertical line from the external openings of the ears, and it will cross the anterior portion of Firmness.

14. Lawyer.

15. English Soldier.



14 Firmness, very small.
13 Self-Esteem, very small.
19 Benevolence, very large.

14 Firmness, very large.
13 Self-Esteem, very large.
19 Benevolence, very small.

The above cuts were drawn from skulls in our possession. No. 14, represents the skull of a lawyer who had great kindness and affection, but no firmness or self-respect. By vicious associates, he was led into intemperance and died a vagabond, because he could not say No, to their solicitations. No. 15, represents the skull of an

English soldier who was killed in battle at Bladensburg, Maryland, in the late war with England. His character must have been the reverse of that of the lawyer.

ADAPTATION. There is a principle in the human mind, known by various names, such as constancy, determination, perseverance, stability, &c. All who have distinguished themselves in any of the great pursuits of life, and immortalized their names on the pages of history, are very much indebted to this principle. What avails the brightest intellect, if firmness of purpose be wanting? Of what use is genius, if perseverance and stability do not accompany it? The history of man will answer these questions. How often do we see talents of a high order, remain useless to society and the world, from the fact that those who possess them, lack that perseverance and stability necessary to make splendid abilities profitable to themselves, or useful to mankind! No man, however brilliant his intellect, unless endowed with a good share of firmness, ever attained to any thing valuable, for "there is nothing worth having that can be obtained without effort." Without firmness, Franklin would have continued a journeyman printer, Demosthenes would have stammered on to the grave, and Bonaparte remained a common soldier. No man can become truly great, without it. Those having an average amount of intellect, accomplish more with *large* Firmness, than others with a strong intellect, whose Firmness is deficient. We are commanded in scripture to be "steadfast and immovable," and not to be "carried about with every wind of doctrine." Some people possess a wilful disposition and a tenacity of opinion, which amounts to absolute stubbornness. No one, in their opinion, is right, excepting themselves; and after they have imbibed an erroneous principle, will not acknowledge their error, though fairly convinced of the fact. Other faculties, it is true, have much influence in bringing about this disagreeable trait of character, but Firmness is the main organ, which, when abused, gives the kind of stubbornness to which we have alluded. Unlike this, is the man of true firmness of character. Instead of being wilful, and obstinate, he steadily pursues

a given course without turning to the right or left, after having first deliberated candidly upon the justice of that course, and when certain that he is in the right, will not change his opinions for any consideration whatever, but when convinced of an error, will readily retract, and own his fault. Such is the legitimate manifestation of Firmness, and when viewed in this light, its necessity to all well balanced minds, becomes perfectly obvious.

VERY LARGE, has extreme tenacity of purpose, and opinion, is set and fixed, and reluctantly abandons schemes and plans when once committed upon them; perseveres to the last in every undertaking, and with average Consci., will not acknowledge an error, but pursue the wrong, to gratify the will; with large Combat. and Destruct., and moderate Ven., will be obstinate and stubborn, but with a large development of the organs of the moral sentiments and intellect added, will have that kind of firmness necessary to true greatness.

LARGE, has a great share of perseverance of character, and firmness of purpose and opinion; is not easily diverted from undertakings; with large Self-Esteem, will be independent in every thing; with large Secret., will not manifest to acquaintances and friends a wilful disposition; with large Consci., Conscientiousness, and Self-Esteem, will be stable minded, and always pursue a straight forward course; with Combat., Destruct. and Hope large, will be very energetic, and never relinquish a pursuit, after having fairly enlisted in it; but with the above organs moderate, will lack force and energy, while firmness of opinion may still remain; with large or very large Caution, will look upon all sides of a question, and deliberate long, before coming to a decision, yet after having decided, will be firm, and fixed; with moderate Conscientiousness, may appear fickle minded, and perhaps often change one kind of business for another, and at the same time manifest much power of will and purpose; with large or very large, Benev., Consci. and Ven., will persevere in benevolent enterprises with great ardor and honesty.

FULL, has considerable firmness of opinion, and fixedness of purpose, yet under great difficulties, will show some want of stability and determination; with large Combat. and Destruct., may be stubborn and obstinate when excited; with small Concent., will be liable to change of mind and lack constancy and stability in the common pursuits of life.

AVERAGE, will generally manifest a good share of stability and firmness, yet readily yield premises or opinions, and often ask the advice of others; may manifest will and temper, if Destruct. and Combat. be large, and when excited, contend for a short time with great spirit and earnestness; with moderate Concent. added, will have a temper like a whirlwind—one blast and it will be all over.

MODERATE, is not tenacious of opinions, but readily yields them, and pursues a course of life which has been marked out by others; is too easily “knocked off the track,” and may sometimes yield to temptation, knowing it to be wrong; lacks that firmness necessary to withstand the enticements of the profligate and vicious; with an average development of the reasoning organs, and small Concent., will be fickle and “unstable as water.”

SMALL, is subject to change of mind and purpose; lacks constancy, and determination, and like chaff before the wind, is carried forward by the breath of popular opinion; with large Combat. and Destruct., may possess force and energy, but lack stability and perseverance.

VERY SMALL, is totally deficient in firmness and stability; manifests no decision or perseverance, and is easily led astray by the artful and designing.

Species II. MORAL AND RELIGIOUS SENTIMENTS.

Man is not only endowed with all the propensities which are possessed by the lower animals, but he has a moral and religious nature, which they do not possess. He has an idea of a God, and moral obligation, and expects im-

mortality. Some few persons may deny this, but morality and religion are inseparable from the human constitution. These faculties are the foundation of all moral, benevolent and religious societies, and point to the fulfilment of the dictates of duty between man and man, and form the connecting link between him and his God.

The organs of these sentiments are situated at the upper portion of the head and when large the head is very high from the eyes and ears upward, but when small it is low. The subjoined cuts of Dr. Gall, and Pope Alexander VI., show a bold contrast. The former was highly moral, the latter an unprecedented *monster of wickedness*.

16 DR. GALL.

17. POPE ALEXANDER VI.



15. CONSCIENTIOUSNESS.

Honesty, sense of justice and moral obligation.

This organ is situated on each side of Firmness, and between Hope and Approbativeness. See cut No. 11, p. 85.

ADAPTATION. Metaphysicians, prior to the days of Dr. Gall, did not agree in their opinions respecting the innateness of the moral sense, or conscience. It is not strange that they should thus differ, when we consider their mode of reasoning upon the various faculties of the

mind. They took their own consciousness as a guide, and were thus not only led into many errors, but were also at variance with each other. One having a strong sense of justice and moral obligation would, in publishing a system of ethics, maintain that the moral sense is innate, if he reasoned from his own consciousness, or his ideas of right and wrong; while another having an obtuse moral sense, would, (reasoning from the same source) deny the innateness of conscience. Phrenology, however, sets this topic of dispute at rest, and proves by facts which cannot be controverted, that a sense of moral obligation is an innate sentiment in man, and manifested by a distinct organ. If there was no germ, which produces an idea of justice and injustice, right and wrong, man could no more be taught to be honest, than the lowest brute that he controls. When a person has done a wrong act, this faculty produces remorse. But we do not infer from this, that abandoned criminals suffer remorse commensurate with their crimes; for they generally have the organ small, and therefore have but little pain of conscience. This faculty is often appealed to in the sacred writings, and many blessings are promised to those who deal justly, and maintain equity in all their intercourse with the world. Conscientiousness is blind of itself, and needs an enlightened intellect to give it a proper direction. The *standard* of morality, therefore, in a nation or community, depends altogether upon education and moral training. In nations where the Bible is read, the "Golden Rule" is the standard of morality, and laws are instituted, which have their foundation upon this, and other commands, found in the sacred volume. In savage countries, a different code of morals exists, and a man may consider it not only just, but a duty incumbent upon him to revenge an injury and "return evil for evil." The Hindoo is as conscientious in performing his religious rites, as the enlightened follower of Jesus Christ. Philanthropists, who have in view the reformation of mankind, should consider the importance of instilling into the minds of the young the absolute necessity of moral and virtuous conduct, and impressing upon them this truth, that without it, no lasting enjoyment can be real-

ized in the present life. Every parent and teacher, should take as much pains to teach those under their charge the principles of morality, as they do to educate the intellect. That such has not been the case hitherto, needs no other proof, than a reference to the annals of crime. Why are so many of our distinguished statesmen, and professional men, guilty of crimes which humanity blushes to record? Why are not all great men, good men? Why did Pope say of one of the greatest philosophers that England ever produced,

"If parts allure thee, think how Bacon shined,
The wisest, brightest, *meanest* of mankind?"

Why, we would ask, are these facts staring us in the face? Because man's intellect has been highly cultivated, and the moral powers left, like the garden of the sluggard to be overrun with the weeds of immorality and vice.

VERY LARGE, is strictly honest and upright; suffers much through fear of doing wrong; censures those severely who are dishonest; has an excessive regard for duty; will not countenance injustice or oppression in the least degree; readily discriminates between right and wrong, and is punctual to fulfil engagements; with large Acquis., will be very eager to accumulate wealth, yet honest in its acquisition; with large Firm. and Combat., will possess great moral courage and never shrink from duty; with a weak intellect, and moderate Firm., will be liable to be led astray by others, but when convinced of the error will suffer strong compunctions of conscience.

LARGE, will be exact to do justly; is a great lover of truth and equity, and always intends to be upright and honorable, when dealing with others; will not knowingly cheat, or defraud any one, and believes that "honesty is the best policy" at all times; intends to be punctual, but with very large Hope, and average Caution, may sometimes promise more than he can perform; but with large Lang., Secret. and Marvel. added, will be liable to exaggerate when telling anecdotes; still, when reminded of the fact, will show much penitence and sorrow and at-

tempt to reform, yet after many reproofs, will be obliged to guard against the sin of exaggeration, and keep a watchful sentinel at the point which is weak and easily overcome. This combination shows why some persons, who are considered perfectly honest in their dealings with their fellow men, are guilty of exaggeration, when relating anecdotes.

FULL, has a good share of honesty of purpose and integrity; intends to be just in dealing with others, yet may yield to temptation, and knowingly do wrong, but if such should be the case, will suffer remorse for the act; with the organs of the propensities full, will be likely to maintain a reputation for honesty and integrity, and gain the confidence and respect of the public. It should be remembered, however, that with the above combination, and a full development of the reasoning organs, the conduct of the person will depend much upon education, training and associates, and will be equally inclined towards virtue and vice.

AVERAGE, has some right motives, but does not feel much remorse of conscience, and believes that "every man has his price;" with large Secret., will equivocate and deceive: with very large Acquis. added, will overreach in deal, and be dishonest in the acquisition of wealth; with very large Self-Esteem and Appro., will strive to gain the character of an honest individual, for the purpose of being popular, but will not be sensible of the injustice of evil deeds, nor care any thing about them, if the community are ignorant of the facts, and his character is not affected thereby.

MODERATE, is seldom conscious of having performed an unjust act; suffers little remorse for evil deeds; thinks that there is no real honesty among mankind; intends to be as honest as the times will admit, and has a very obtuse moral eye; with large Ven., will show much devotional feeling and worship from pure motives, and at the same time be called hypocritical by the world, and by some acts of dishonesty offend those who have this organ very large.

SMALL, discards the "Golden Rule," and pays little regard to duty or moral principle, and never feels remorse for crimes; with large or full Acquis., will be prone to commit theft; with large Secret. and Hope added, will lie, cheat and steal, and make promises, knowing that he cannot fulfill them.

VERY SMALL, has no regard for the principles of honesty and morality; is unjust in dealing with others, and with large Destruct. and Acquis., will be likely to murder for gain.

16. HOPE.

*The miserable have no other medicine,
But only hope.*

SHAKESPEARE.

Located, forward of Conscientiousness, and outward of the front part of Firmness, on each side of the top of the head.

ADAPTATION. Trouble, sickness, sorrow, hardship, reverses, and a thousand nameless ills, bestrew the path of life. Were it not for this faculty of Hope, the world would be indeed, a vale of tears. Energy of character would be useless, could we not look with the eye of hope, through the gloom of present difficulties. We grapple with opposition, because we *hope* to overcome. Who tries to swim the Atlantic, overturn the Andes, or control the tide? And why not? Reason condemns the attempt as impossible, and hope can promise no success. No sane mind attempts impossibilities; yet hope cheers man onward to accomplish gigantic enterprises, and however angry may be the storm, hope anticipates the rainbow of promise. Imagine a man totally destitute of this joy-inspiring emotion, and polar ice would warm his soul. Without *hope*, all promises would be valueless. It promises spring; tells of the harvest; encourages the languishing invalid; nerves the seaman's arm to struggle with old ocean's angry billows, and paints upon earth's dark drapery, the sun-lit joy. It lifts the curtain of time,

and points to immortality! The influence of this faculty on human happiness, is very great. When well developed, it imparts a joyful cheerfulness in the common walks of life, and inspires in the hour of trouble, a prospect of relief. When it is deficient, the person looks on the dark and gloomy; magnifies present difficulties, and sees no smiling goddess to beckon him to a happy future. Such persons imagine themselves unworthy in the sight of Heaven, and indulge a settled melancholy in respect to futurity, when at the same time they may be in a fair way for immortal joys. Others hope too much; build unreasonable expectations for the future, to the neglect of present duty, and promise more than they can perform.

VERY LARGE. One having Hope *very large*, feels a buoyancy of prospect, which imparts at least an imaginary comfort; thinks all will yet be well, even when trouble and adversity howl around; lives in the future; is always expecting something better than present enjoyments, and longing for its arrival, and frequently promises self, and others, too much. If Caution and Causality are large, they will check hope, and induce the person to lay a firm basis for expectations, who will be cheerful, yet proceed with care; but if those organs be only full, or average; will build castles in the air, "have too many irons in the fire," promise much more than perform, and perhaps get the name of dishonesty; fall far short of designs, and meet with disappointments, and reverses, yet the ardor of pursuit will be increased rather than diminished; with large Mirth. added, will be lively, gay and merry; and with large Self-Esteem, will plan largely, be enterprising, and feel confident of success; with large Acquis. and full Marvel. added, will run risks in business, speculate in lithographic city lots, &c., for the sake of *large* profits; add large Adhes., will promise friends, endorse for them &c., With Acquis. moderate, will let the future take care of itself without present effort, and feel, that "sufficient unto the day is the evil thereof."

LARGE, is buoyant and cheerful; tramples present troubles; has bright views of the future; magnifies pros-

pects; diminishes difficulties; dismisses 'dull care' and 'smiles through a tear.' With a good intellect and large Caution, will be prudent in business, and other undertakings; attempt what appears *probable*; and with large Combat. and Firm., will overcome impediments, and master great enterprises. With the above combinations, and Caution only average, with large Self-Esteem, will assume bold responsibilities; lead off in advance of mankind, and generally succeed well; with large Marvel. added, will lay stupendous plans; promise largely, design to do, and attempt great things, and to the cautious, appear reckless; will be angry if friends attempt to dissuade from any rash speculation; always has much unfinished business on hand, and with large Construct. and Appro., will study upon inventions to obtain great wealth and a *name*. With large Benev. and Destruct., and large social organs, will be a good nurse to the desponding sick, and always try to smoothe the path of adversity and sorrow, by pointing to a bright and peaceful future; will feel consoled under losses, that the losses are no greater, instead of sinking in despair.

FULL, is sanguine and ardent, in view of the future, yet not intemperate in expectations. If the temperament be active, will exhibit cheerfulness without exhilaration, and seldom sink beneath difficulties. With a Bilious Nervous temperament, and large Caution, will be subject to seasons of depression; have dark hours and low spirits, yet at times, be very cheerful. If Acquis. and Marvel. be large, and Caution only average, will have an enterprising, speculating turn of mind, and run some hazard in business; will credit promises and expect success, yet if Caus. be only average, will hope more than reason, plan too largely, and get into difficulty, but if Caution be large, and Acquis. and Marvel. only full, prudence in business and conduct, will result, and with large reasoning and perceptive faculties will be highly judicious, and if the propelling organs be large, will be energetic and forcible, and accomplish *much*, and promise *little*.

AVERAGE, is temperate in promises to self and others; 4 lives rather on the realities of life, than in the regions of fancy; strives by present effort to have future prospects well founded, and moves on in an even tenor, neither hoping, or fearing without a basis. If Caution be large, will keep near shore, and sometimes feel depressed, especially if combined with ill health, or a Nervous temperament.

MODERATE, will expect too little in reference to the future; looks on the dark side of prospects; *must* have the approval of reason before embarking upon any thing of importance, and if Self-Esteem be only average, will seek, and value the advice of friends; consult precedents, and rely more upon effort, than *luck* or *fortune*; is prepared to hear of losses and disappointments, and in trouble needs much encouragement. If Caution be very large, will hesitate and balance between hope and fear, till good opportunities are past; will magnify troubles and minify comforts, and need assistance and help from friends, to carry on business. With large Ven. and Consci., and moderate Marvel. added, the person will feel that the earth is truly a vale of tears, and the future will always look dark, and if a professor of religion, will doubt personal acceptance with God, often feel condemned, and dread a future state, though perhaps in the path of duty, and the road to bliss—reverse this combination, and the feelings and manifestations will be reversed.

SMALL, is not elated at success; looks for, and expects reverses and misfortunes; is easily discouraged and borrows trouble even in advantageous circumstances. With Caution full or large, will be subject to low spirits, and indulge and foster melancholy feelings. Persons with this combination, should avoid sedate society, pensive books, or scenery of a mournful and gloomy cast.

VERY SMALL, expects but little good, and looks upon the future with fear and doubt, and never undertakes any thing involving risk. With large Consci. and Caution,

will be timid and irresolute, and never act, fearing to act wrong, and with large Destruct., has the combination of a suicide.

17. MARVELLOUSNESS.

Wonder, credulity, faith, trust and confidence.

Located on each side of Veneration, between Imitation and Hope.

ADAPTATION. Without a faculty in the human constitution, the office of which is, to give credit to the assertions of others, and the descriptions of things which we have not seen, &c., our belief of the existence of things, and phenomena in general, would necessarily be limited to the narrow sphere of our own observation. It is natural for man to believe the assertions of his fellow man, to exercise faith in each other, by which means, social intercourse is rendered instructive and agreeable. One can transmit those facts which have fallen under his notice, and others by exercising credulity in their reality, can, as it were, experience the history of others, and become acquainted with nations, manners, and countries which they can never see. This faculty is the foundation of all faith, where demonstration is either inconvenient, or impossible. Man is fond of the wonderful, the extravagant, and marvellous. This feeling is early manifested in children, and their confidence in their parents and teachers, is almost unlimited. Instruction in those things which they cannot comprehend with intellect or the senses, and their belief of such subjects as present no evidence but the word of the teacher, are received through the medium of this faculty. With what delight do they listen to the tales of wonder and extravagance, which are related to them ! Beings so teachable as children, and so highly delighted as they are with information, should be taught correctly ; yet some persons are ignorant or vicious enough to deceive children for their own amusement. When the teaching is *wrong*, and they are told of fictitious powers and agencies, such as the German St.

Nicholas, Fairies, ghost stories, witches, signs, ominous dreams, lucky days, &c., they become superstitious, credulous, and are easily led into error by the infatuated bigot. Many persons having strong intellectual powers who have been thus deceived in childhood, totally condemn every thing which is not susceptible of proof by their senses or their reason; and may we not conclude that infidelity itself feeds upon this abuse of Marvellousness, this trespass upon the intellect? Rev. Mr. Warne of Phila., in his work entitled "Phrenology in the Family," p. 220, says, "This faculty is really indispensable to man, in his present condition; for without it he would be incapable altogether of religious faith. Such "faith is the realization of things hoped for; the confident expectation of things not seen;" i. e., not submitted to the evidence of the senses; nor capable of appreciation by them." Marvellousness is abused, by enlarging upon facts. The fabrication of works of imagination and fiction, spring from it. Tasso, Swedenborg, Sir Walter Scott, Shakspeare, and most poets, novel writers, and those who abound in theory and fancy, have the organ large.

VERY LARGE. One having *Marvel. very large*, is eager to hear *the news*; is excited with the highest pleasure in reading of, or viewing strange phenomena; and has no lack of religious credence or faith. If Secret. be moderate, is liable to be imposed upon by taking for granted whatever may be related, however mysterious or wonderful. Large Secret. and Caus., however, will institute suspicion and doubt; yet accompanied with a strong *desire* that extraordinary and marvellous statements may prove to be true. If the intellect be weak, the person will believe in omens, dreams, forewarnings, &c.

LARGE. One with *large Marvel.*, manifests a disposition to take upon trust many things which are not susceptible of demonstration by the senses; has much natural credulity or faith; delights in the wonderful, uncommon or astonishing in nature or art; likes works of imagination, and though known to be such, they will seem to be

reality; thinks much of *authority* and precedent; is fond of enterprise, renovation, new things, change and improvement; with large Ven., Comp., Event., Local. and Form, will be fond of collecting antiques, minerals, and curious specimens from the four quarters of the globe, and with large Acquis. added, will set a high value upon them. With a feeble intellect, will be superstitious in religious belief, and in regard to lucky days, dreams, omens and signs.

FULL, is fond of the new and extraordinary, of renovation, new buildings, new arrangements and improvements; has a mind open to conviction, and manifests considerable credulity; has a desire to investigate the wonderful, and wishes that it may prove true; is naturally confiding and trusts in friends; believes with less evidence than many persons, yet is not *blindly* credulous. With large reasoning organs, must have clear evidence, yet has sufficient faith, to create that intellectual curiosity which leads to investigation.

AVERAGE. One having Marvel. *average*, is willing to hear and read both sides of a question, to weigh and investigate any subject, and wishes to believe every thing which is susceptible of proof or legitimate inference; will often doubt, yet desire to believe; question propositions, yet seek for truth. With very large Ven, Benev. and Hope, will look upon the revelation, and prospect of eternal scenes with high delight and active faith, and in works of charity, expect the fulfillment of every promise to the merciful.

MODERATE, will yield to good evidence on subjects which savor of the supernatural or extraordinary, and with strong reasoning powers, disbelieve without it; believes what can be understood and explained; is skeptical and credulous at times, yet not rigidly so, unless Self-Esteem and Firm. be very large; dislikes old theories, and will reject them unless founded on reason, or very strong probability.

SMALL, has too little faith; closes the door of the mind against truth, unless accompanied with an overwhelming amount of evidence; will reject probabilities; dispute analagous reasoning, and with Ven. moderate, will take the *ipse dixit* of no person as evidence on any doubtful subject, unless backed by reason and probability; will reject old customs or modes of thinking, and with large Caus. and Self-Esteem, bring every thing to the standard of his own conceptions, without regard to high names, or musty records of human authority.

VERY SMALL, is a downright skeptic; too narrow and rigid in opinions; doubts almost every thing but his own senses, and even questions the truth of *their* assertions; will try to account for every thing on natural principles, and reject all which lies beyond their reach.

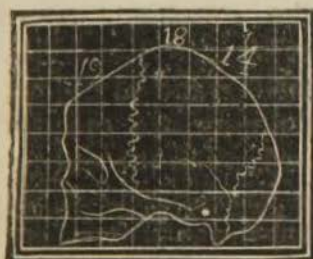
18. VENERATION.

Reverence for Deity, desire to adore and worship, foundation of religious feeling, &c.

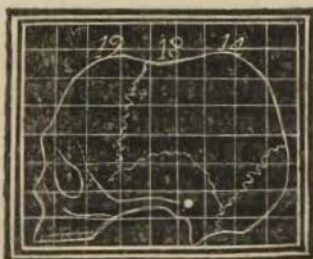
This organ is situated on the top of the head, between Firmness and Benevolence.

18. Skull in Dr. Gall's collection.

19. Dr. Hette.*



18 Veneration, very large.
14 Firm., & 19 Benev., small.



18 Veneration, very small.
14 Firm., & 19 Benev., large.

ADAPTATION. The history of mankind proves that there is no nation however degraded, ignorant or debased, who do not pay homage and adoration, either to

* Copied from Combe's System of Phrenology.

the "one living and true God," to an image of man's device, the sun, the moon, reptiles, beasts, or the genius of the storm. This natural desire to *worship* something, manifested by all mankind, furnishes strong evidence that this desire is an innate sentiment in the human mind. Theologians of the present day, hold that religion is a natural principle in man. Rev. Dr. Nott, President of Union College, says, "Religion is a first principle in man. It exists in the world, not because Kings have ordained and Priests defended it; but because God formed man to be religious. He pays from necessity an homage to religion, an homage that cannot be withheld; it is the homage of his nature." These views of the learned Dr. respecting the innateness of the religious sense in man, are in strict accordance with the doctrines of Phrenology as taught by its founder and advocates. Mr. Combe, in speaking on this sentiment, says, "As nature has implanted the organ of Veneration in the brain, and the corresponding sentiment in the mind, it is a groundless terror to apprehend that religion can ever be extinguished, or even endangered, by the arguments or ridicule of the profane. Forms of worship may change, and particular religious tenets may now be fashionable, and subsequently fall into decay; but while the human heart continues to beat, awe and veneration for the Divine Being will ever animate the soul, and not until the race of man becomes extinct, will the worshiper cease to kneel, or the hymn of adoration to rise." Veneration is a blind instinct, and cannot of itself judge of the proper object of worship. Such being the case, we see the necessity of Revelation to direct mankind to the only proper Being to be adored and had in reverence. Superstition abounds in those countries where the light of intelligence and Revelation has never beamed. Without the Bible to direct, and guided solely by the natural desire to adore something, the aborigines of this country worship various objects; the Hindoo, Juggernaut; and the Chinese, idols of divers kinds. The superstitious notions of heathen nations prove, not only the innateness of the sentiment to worship a Superior Being, but the necessity of *enlightened reason*, to give that sentiment a just and

proper direction. It is a fact, humiliating in the extreme to the enlightened mind, that a large majority of the human race now existing on the earth, are led by this sentiment, unaided by Revelation, to worship idols. Such will always be the case, until the light of Revelation and intelligence shall have beamed on every nation of the globe. When this organ is large, it does not necessarily follow, that the person thus endowed will be devout, or devoid of skepticism in regard to Revelation. Belief depends upon the organ of Marvellousness, and professed infidels frequently have that organ small in combination with large Veneration. The education of the intellect, and through it the moral powers frequently determine the direction of the moral character.

VERY LARGE, has great reverence for Deity, and when engaged in religious worship, feels vivid emotions and manifests much fervor in devotional exercises; with very large Consci. and Firm., will adhere to some particular form of worship; with large Adhes. added, will be fond of social meetings for religious conversation and prayer, and become strongly attached to brethren in the church, and despise all professors of religion who are not strictly moral and honest in all their intercourse and dealings with others; with large Inhab. and Concent., will have strong attachment to place of public worship; with very large Philo., will have much anxiety about the eternal happiness of children.

LARGE, is much inclined to respect religious institutions; thinks much of Deity as manifested in His works; has much devotional feeling, and treats with deference and respect the aged, the wise, and persons in authority; with large Consci., will be honest in all professions of piety and devotion, but with Consci. moderate, will be dishonest, and at the same time fervent in devotional exercises; with an active intellect, will be fond of antiques and the history of the ancients, and with large Acquis. and Adhes. added, will lay up old coins, armor and articles of clothing and furniture which were once the property of parents or relatives.

FULL, is not remarkable for devotional feelings; pays due respect, however, to religious institutions; with large Consci. and Benev., and average Combat. and Destruct., will not ridicule religion, or those who make professions of piety, and manifest an ardent desire to do good; will not be a "Sunday christian" merely, but be consistent in "word and deed;" with moderate Marvel. and Hope, and large Caus., will have many doubts in regard to that part of Revelation which treats of the supernatural, and like Thomas Didymus, need much proof to be convinced of truth.

AVERAGE, is capable of enjoying religious feelings, and under favorable circumstances, will manifest considerable devotion; with large Marvel. and weak intellect, will be rather superstitious, but with large reasoning organs and moderate Marvel., will worship according to the dictates of reason, and be void of superstition and blind zeal.

MODERATE, will not be likely to be very devotional, or place much reliance upon creeds or forms of worship, and will not bow the knee to any created object; with a good intellect, and large Consci. and Benev., may have some zeal, but it will be "according to knowledge;" with large Combat. and Firm., and full Destruct., Hope and Marvel., will be stable and firm, in religious belief.

SMALL, has but little regard for forms of religious worship, or creeds of men; does not admit any superiors, and pays little respect to persons in authority; with large Consci., Benev. and Self-Esteem, will think more of morality and kindness, than of forms, creeds, or the opinions of any man, or set of men.

VERY SMALL, is wanting in devotional feelings; treats those in office and power as equals; does not pay due respect to the ministerial office; with small Marvel., will disbelieve the scriptures, and with large Destruct., Self-Esteem and Mirth. added, will be profane, and ridicule those who are truly pious, and strict in the performance of religious duties.

19. BENEVOLENCE.

Kindness, sympathy, philanthropy, mildness of character, desire to see others happy.

This organ is situated on the top of the front part of the head. See cuts, p. 98.

ADAPTATION. There is a sentiment in the human mind which looks beyond the narrow bounds of self, and grasps within its warm embrace the whole human family. It spreads its broad pinions, and with the fleetness of thought encircles the whole world, and pleads for universal happiness: leaving earth, it soars to the throne of the Almighty, and pleads for mercy to be bestowed like the rain, and the light of the sun, "upon the just and unjust." It is the sentiment of *benevolence*. Without it, mankind would have no sympathy for the afflicted, the distressed and the suffering, and would hear the pleadings of the children of want, and offer them no relief. But thanks to the Author of our being, benevolence exists, and is manifested in various ways. Excited upon viewing the sons and daughters of affliction, suffering and want, it leads to sympathy, and if possible affords relief. When it embraces the whole family of man, it is Philanthropy. Influenced by this sentiment, Howard visited the prisons of Europe for the purpose of relieving the distress and misery of the unhappy victims confined within their gloomy walls. The noble act of the "Good Samaritan," as recorded in scripture, is a remarkable instance of a pure manifestation of the sentiment of benevolence. It is not confined to our own species; but with its arms of universal love, it embraces every thing which is susceptible of pain and sorrow, and hastens to ameliorate its condition. Without benevolence, the whole human family would be governed by selfishness, and the command, "Love thy neighbor as thyself," would be unjust, because it could not be obeyed. It should be borne in mind, however, that many men do acts of kindness, which others think spring from benevolence, that do not have their origin in this pure sentiment, but in some selfish feeling.

The love of Approbation prompts many to give liberally to benevolent institutions, that they may receive praise from their fellow men. Adhesiveness leads us to be kind to relations and friends; Philoprogenitiveness gives the desire for the welfare and happiness of our children; but Benevolence is not limited in its sphere of action, to the praise of men, the love of friends or of children. It gives, for the pure love of giving, and receives its own reward.

Pollok describes the character of a man endowed with this faculty in an extraordinary degree, in the following beautiful lines.

"The law of love was in his heart, alive ;
 What he possessed, he counted not his own,
 But, like a faithful steward in a house
 Of public alms, what freely he received
 He freely gave, distributing to all
 The helpless the last mite beyond his own
 Temperate support, and reckoning still the gift
 But justice, due to want ; and so it was,
 Although the world, with compliment not ill
 Applied, adorned it with a fairer name.
 Nor did he wait till to his door the voice
 Of supplication came, but went abroad,
 With foot as silent as the starry dews,
 In search of misery that pined unseen,
 And would not ask."

VERY LARGE. One having Benev. *very large*, has great sympathy for the sufferings and wants of mankind ; takes great delight in relieving distress and rendering assistance to the destitute ; with average Acquis. and Caution, and large Hope, will dispense favors and blessings with a liberal hand, and when objects of pity present themselves and plead for help, will have an almost uncontrollable desire to relieve their wants, and will often sacrifice private interest to benefit others ; with large, or very large Acquis., will not often be liberal with money, and on this account may by some, be called parsimonious, but will often do much good by attending personally to the wants of the sick and needy, which assistance is, in many cases, preferable to money.

6 LARGE, has much benevolent feeling, and a strong 6
 desire for the happiness of others ; takes pleasure in ad-

tive intellect, the constructive talent has been progressing from the moment of its first exercise, and from the rudeness of the articles constructed, to the present time, and to the high standard of mechanical ability which blesses the world. To Constructiveness chiefly, are we indebted for all those comforts and conveniences of life, which are either manufactured, or produced by labor. If food grew spontaneously, or without culture, this class of comforts would be an exception to this indebtedness; but while manufactured implements of husbandry, and skill to use them are required of Constructiveness, this faculty must lie at the root of all the conveniences, and most of the comforts of life. A man with ordinary Constructiveness, may make a decent agriculturist, but one with a large endowment of it, will be a far better one, so far as the use of tools is concerned. Cincinnatus, it is true, could manage to till the soil with his crooked stick or rude wooden plow, but it must have required some mechanical talent, as well as great patience, to do good work with so bad an implement. Constructiveness, has given to the world something in its stead which would have been a pleasing boon to the father of agriculture. But, manufacturing, building, &c., come more directly under the head of Constructiveness. If we compare the rude mud cot, with the stately mansion; the convenient furniture, with the rough contrivances of savage life; the flouring mill, with the ancient corn-bruising apparatus; the rough skins of beasts, with the delicate as well as substantial fabrics for clothing, we can obtain a faint conception of the value of this faculty. But when we take a more extended view, and see cities rise as by magic, and the snowy canvass from a thousand ships flung to the breeze, to waft the wealth of the world to the lap of industry; when the ocean is navigated by steam, and distant continents become neighbors; and the fiery engine, with its burden of life and wealth, bisects a continent, and sea meets sea by this annihilation of time and space, now rushing with the fleetness of thought through the tunneled base of lofty mountains and over rivers; when kingdom is united to kingdom, and state bound to state with bands of iron, and distant provinces made near neighbors, and

Acquis and Self-Esteem, will be cruel, revengeful, miserly, self-confident and overbearing.

VERY SMALL, is destitute of sympathy, kindness and pity; does not desire the happiness of others, and lacks mildness of disposition; with very large Adhes., will manifest strong attachment to relations; with Philo., to children, but will lack general kindness; with Acquis., Combat. and Destruct. large or very large, and Caus., Compar., Event., Consci., Caution and Ven. moderate or small, will be more like a brute than a human being, and have no hesitation in committing the most heinous crimes.

Species III. SEMI-INTELLECTUAL SENTIMENTS.

The office of these faculties is to elevate and refine the feelings and improve the condition of man, to unfold the beauties of nature, and adapt them to his purposes and happiness.

20. CONSTRUCTIVENESS.

Construction in general, the foundation of all mechanics, the power to manufacture.

Located forward of Acquisitiveness, on the temples, upward and backward of the external angle of the eyes. When large, the head is broad and swells out at this region.

ADAPTATION. While the happiness, indeed the very *existence* of man, requires that he should have clothing, houses, agricultural implements, &c., the necessity for a mechanical talent will remain. To adapt the nature of man to this condition, with power to supply his natural wants, the Author of his being has endowed him with a distinct primary power, the office of which is, to manufacture, to build and construct. No sooner did our first parents find themselves in want, than Constructiveness was called upon to supply it. By its combination with the development and exercise of the perceptive and reflec-

ministering relief to those who are in want; with large Appro. and Acquis., and average Consci., will not give liberally for any benevolent object, unless the praise of men be thereby gained; with large Adhes., will be very kind and obliging to relatives and friends, and take delight in witnessing their prosperity and advancing their interests; with large Combat., will be brave, humane and generous, and will not only *feel* for the sufferings of others, but Howard like, visit in person the scenes of distress and suffering, and administer relief. With average Acquis. and Caution, and large Adhes. and Hope, will be free to lend money without good security, and be likely to make himself poor, by acts of liberality and kindness.

FULL, has a good share of kind and benevolent feeling; desires that others should be happy, and will sometimes sacrifice private interest to benefit the public; with large Acquis. and Caution, will be rather parsimonious; with large Hope, Appro. and Self-Esteem, and full Acquis. and Caution, will be liberal and kind to the needy and destitute, and with moderate Combat. and Destruct. added, will have many friends.

AVERAGE, manifests on some occasions a good share of kind and tender feeling for the miseries of others, and has some emotions of sympathy for persons in distress; with large Combat., Destruct. and Hope, and full Acquis., will show acts of kindness by attending personally to the wants of the sick; with large Acquis. and Self-Esteem, and very large Caution, and small Hope, will be penurious, and seldom give any thing for the support of benevolent institutions, or to relieve the distresses of the poor.

MODERATE, is not much affected by the sufferings and miseries of mankind; may give his services, but will curse those who ask for *cash*; with large Appro., will sometimes be liberal for the purpose of being called benevolent.

SMALL, is seldom kind to the sick or the needy; pays no regard to the sufferings of others, with large Destruct.,

a healthful feeling of common interest and common sympathy begotten between distant climes and otherwise discordant interests ; when factory roars to factory and the hum of bee-like industry is manufacturing, exchanging, and disseminating the comforts and conveniences of civilization ; and when the *printing press*, that brilliant luminary of knowledge, is shedding light, and warmth, and vigor upon the intellectual and moral world, and we discover that these mighty works, with all their blessings, have their basis in man's constructing talent, we shall see the wisdom and goodness of *our* great Architect, in imparting so useful and indispensable a faculty. The power to build is imparted by a distinct primary faculty, because some persons, with little or no instruction, become eminent as mechanics, and others, with the best of teaching are but bunglers at the best ; while at the same time the latter may have as much, or even more understanding or reasoning power than the former. Constructiveness and Causality, are the originating, contriving, inventing faculties ; but, the executive mechanic is greatly aided in the use of tools by Form, Size, Weight, Order, Locality, Imitation and Ideality. Great men have been known to break away from the Court of nobles to some retired room, to indulge their passion for mechanics, and we know a clergyman in Mass., who has a private shop where he amuses himself in mechanical operations, and whose secluded vigils have given to the world several intricate and valuable inventions, not only most admirably contrived, but neatly executed. He is an untaught genius, and takes this course, for the real pleasure that such pastime affords. We have noticed that the North American Indians have the organ small, which harmonizes with the rudeness of their constructing ability. Civilization, it is believed, would develop the faculty in the course of a few centuries, and place them upon an elevation in this respect, equal to other nations.

VERY LARGE. One having Construct. *very large*, has an extraordinary talent to contrive and design ; intuitively detects error in things which are made, and with large reasoning and perceptive organs, Concent. and Imitat.,

is capable of becoming a mechanic of the first order ; is passionately fond of viewing curious machinery, ingenious inventions, and mechanical operations ; is possessed of an inventive mind, and with large Hope and Appro., and full Marvel., will wander in the intricate mazes of invention, perhaps try to invent a *perpetual motion* ; will be enterprising as a mechanic, and make improvements in machinery, tools, &c.

LARGE, has a strong theoretical mechanical talent, ingenuity in building, altering, repairing, &c., and readily discovers the mechanical uses to which things may be applied, and understands the mechanical powers and forces, well ; with large Comp., Caus., Imitat., Form Size, Weight, Local. and Ideal., will be qualified for an architect, engineer or master mechanic, for drawing plans, making patterns, and working after those patterns. Construct. and Caus., design the things to be made, while other faculties give the ability to carry out, execute, and practically apply the mechanical principles. Form, gives shape ; Size, the proper dimensions and proportion ; Weight, momentum and velocity ; Order, system of arrangement ; and Ideal. gives taste to finish the whole with peculiar elegance. Without a good development of the perceptive, no person will be a good executive mechanic, even with large Construct. ; and without a large and active brain, and strong propelling powers, few, if any, will rise to distinction and influence in the mechanical world.

5 FULL, has a good share of mechanical skill and ingenuity ; is fond of mechanical operations ; will try to contrive some better way, some labor-saving process to accomplish ends ; takes an interest in viewing machinery, and improvements in mechanism, and with large Imitat. and perceptive organs, will make a good practical mechanic, but will *execute* better than *plan*.

AVERAGE, is not a great original inventor ; may improve machinery, styles, fashions, &c., already existing ; should choose some trade or occupation, requiring but little inventive talent. With large Hope, Appro. and Acquis.,

4

may try to give to the world something *great*, but with Caus. only full, will fail to design and complete any thing of much importance; with large Imitat., Form and Size, and good instruction, will be able to succeed well in the less difficult trades, but will not, Fulton-like, strike beyond the beaten track and win immortality.

MODERATE, is not an independent mechanic; will require a *plan*, draft, or pattern to work by; with very large Individ. and Imitat., will copy well, and do what he sees done; will understand simple machinery, or (when clearly explained) the more complicated, yet cannot, unassisted, trace intricate machinery to its laboring point, or readily adapt new mechanical arrangements to accomplish the same end, but use the old tools and follow the old way; may invent some simple thing, or make slight improvements, but fail on large, original, nice operations, indeed will never make an attempt, unless Self-Esteem be too large. With large Imitat., Form and Size, will be able to learn the executive branch of trades, and succeed well in ordinary business, but with only average Imitat., will be a bungler when out of the beaten track.

SMALL, will never be a leader in mechanical operations; may learn to attend machinery, but be a poor hand to keep it in repair; with large Imitat. and perceptive organs, may work with a pattern, but not without one, and will be confined to one way of doing things.

VERY SMALL, is rude in constructing and unskilful in the use of tools.

21. IDEALITY.

Imagination; sense of the perfect, exquisite, beautiful, ideal; the foundation of good taste.

Located above Constructiveness, backward and joining Mirthfulness, and outward of Imitation and Marvellousness. When large, the sides of the upper part of the head, present a great fulness and width,

ADAPTATION. In all the works of God, there is a perfection, a harmony and beauty, which cannot fail to charm and captivate every well balanced mind. It is exhibited in all that shines above, and all that blooms around us. Poetry is the perfection of language; but this faculty is not confined in its manifestations to a love of poetry merely. All the beauty and perfection in nature or art, where taste, elegance and symmetry are concerned, are loved and prized mainly by this faculty. It gives talent for judging, and delight in viewing, a perfect statue, an exquisite painting or engraving, or a finished temple. It imparts taste in dress, furniture, &c., as well as polish to language and manners. It gives to the mechanic, a peculiar elegance to the finish of his efforts, as well as birth to those masterpieces of poetical and oratorical eloquence, which have stamped with immortality, the writings of Homer, Shakspeare, Milton, Chalmers, Patrick Henry, and many others. It directed the chisel of Canova, and the pencil of Raphael and West; and the same faculty gives a love for their productions, without which, the rudest efforts of savage nations would find equal favor. It imparts to the musician the power to throw into *his* performances, that soul of harmony, that melting melody which carries the infatuated listener above the sober realities of life, to mingle with the seraphic choir of bliss. It mounts to admire the glowing beauties of the ethereal world; or the rich pencilings of departing sunlight upon the fleecy cloud, and then stoops to regale itself amid the beauties of the flowery carpet of earth; the brilliant plumage of its songsters; the singing brook; the mirror lake, or the silvery sea.

VERY LARGE. One having Ideal. *very large*, has the keenest relish for the beautiful and perfect in nature or art; real refinement of taste and feeling, and dwells in the regions of fancy and romance. When combined with large Lang., Event., Caus., Comp., Combat. and Appro., will be an orator whose beauty, copiousness and strength of expression will command universal admiration. With large social organs, and Mirth. added, will be highly polished as a writer, either of prose or poetry, and mani-

6 + fest an ease and elegance of manner and conversation, which cannot fail to win affection and admiration. With only average reasoning organs, large Appro., and moderate Caution, will dislike that which is not romantic, and neglect the more solid and useful, for the gaudy and showy, alike in language, articles of dress, furniture and equipage, and have much more taste than judgment.

LARGE, has an active fancy; is fond of the elegant, the finished and ornamental, of poetry, eloquence, polite literature, the fine arts, &c. With large Color, Form, Size, Local. and Order, will admire paintings, flowers, statuary, landscape views, either natural or artificial; with large Lang., Event., Comp., Appro. and Hope added, the person will use a glowing, elevated, metaphorical style of speaking or writing; with large Adhes. and Amat. added, will endow the object of love with superhuman refinement of qualities, and never admire one who is not elegant in figure and manners, and like Burns and others, will celebrate the idol of the soul, in ecstatic song. As a mechanic, will desire to follow some trade, embracing elegance of workmanship, and true taste and finish.

FULL, has good taste, but will not sacrifice every thing *else* to beauty and refinement; values the beautiful, in connection with the useful; regards poetry and eloquence, as well for its strength of thought and correctness of argument, as for its elegance of expression. With large reasoning and perceptive organs, will be disgusted with gorgeous eloquence, except as a vehicle of sound argument and correct principle.

AVERAGE, is temperately fond of poetry, oratory, elegance and beauty, but is influenced on this subject by other faculties. With strong reasoning faculties, will be pleased, if elegance and beauty of expression, are combined with vigor and weight of thought, but will prefer the latter to the former when they cannot be combined; add large Event., and as a speaker or hearer, will prefer straight forward, convincing matter-of-fact, to the beau- 4

ties of diction, yet choose to combine both, the former, always taking precedence.

MODERATE, prefers durability to elegance; a plain, to a gorgeous style of utterance; values poetry mainly for the strength of thought, love, devotion, or the truth which it expresses, and generally surrenders ornament for utility. If *Appro.* and *Imitat.* be very large, may seek for show and splendor in dress, furniture, &c., but will lack that refined taste in their arrangement which imparts beauty; may load the person with finery, and the language with swelling words, but both will be ill timed, deficient in good taste, and fail to please those who have the organ large.

SMALL, is so deficient in this sentiment as to be coarse and unadorned in expression, and common place in all things. With large *Caus.*, will prefer solid logic to rhetoric, and often feel disgusted with and reject, that which is presented in glowing language; cannot be a popular orator, but will be stiff, dry and barren in style, though the matter may be strong and sound; with large *Acquis.* and *Self-Esteem*, and only average *Appro.*, will spend nothing for show or taste, and censure those who do.

VERY SMALL, is blind to the world of beauty, which

"Glows in the stars, and blossoms in the trees;"

lacks that sweet string in the soul, that echoes to the harmony and beauty of nature and art; is harsh, coarse and vulgar in every thing; may love ardently and worship sincerely, or thunder in the pulpit or forum, but every performance will resemble the rough block of marble more than the polished statue.

22. SUBLIMITY.

Love of the vast, the grand, the magnificent.

Sublimity is located between Ideality and Caution, directly above Acquisitiveness. Draw a vertical line from the openings of the ears, and it will bisect this

organ, which, when large, gives width to the upper and lateral portions of the head.

ADAPTATION. It has been supposed by some phrenologists as well as metaphysicians, that the love of the beautiful and sublime, is the result of the same faculty; but, if we consider the nature of these emotions, a vast difference will be discovered. Ideality, recognizes the perfect, the exquisite and beautiful; it delights to see

“The desert blossom as the rose;”

to listen to the sweet minstrelsy of nature; is enchanted with the perfection of the rainbow, the glittering galaxy, the pearly dew drop, the rose, the pink and violet. Sublimity soars to the vast and grand in the mighty machinery of the universe; it delights to ride upon the wings of the wind, that

“——take the ruffian billows by the top,
Curling their monstrous heads, and hanging them
With deafening clamors in the slippery clouds.”

It gazes with delight upon the grotesque, the rude and truly natural. The chilly darkness before an approaching tempest, its deep, distant murmuring; the contemplation of eternity and illimitable space, all furnish food for this faculty. Sublimity leads its votary to the loftiest cliff of some craggy mountain to gaze upon the grand battle-field of the elements, when, from beneath his feet, the white capped mountain-waves leap from their ocean-bed, and dance among the clouds, mocking the vivid lightning that streams about their heads, and singing to the pealing thunder that rolls across their dark blue bosoms, the awful music of the storm. Indeed, this faculty will quaff the boiling flames of the Volcano, and swallow bellowing Niagara at a draught. Sublimity and Ideality acting together, admire the grand and beautiful in combination. Sublimity, labors up the steep ascent, while Ideality admires the leaping rill, or the lone wild flower that blooms beneath some jutting crag. The writings of Homer, Shakspeare, Milton, Pope, Byron, Pollok and many others, abound with examples of the sublime, and

23. IMITATION.

Ability to copy and make after a pattern, power of imitating the manners and gestures of others.

This organ is located on each side of Benevolence, and next forward of Marvellousness.

ADAPTATION. Man is an imitative being, and much that he knows, is learned by copying others. This is an active faculty, and has much to do with the outward actions of mankind. Adults are commanded in Holy writ not only to shun evil but to set a good example to those who are to imbibe and reflect their conduct and character; indeed every dictate of reason proclaims the utility of Imitation, and if the model be correct, their full and lawful scope is given for the exercise of the faculty, which always tends to virtue and happiness; but if the example is bad, Imitation in the learner with equal activity and fidelity to the original, like a mirror, reflects back the haggard features of the copy, and misery to the unfortunate pupil is the result. Parents and teachers therefore, should be particularly careful not to say or do any thing in the presence of children and youth which has a tendency to pervert the mind and give a wrong bias to the affections, or which, if imitated, will lead to immoral conduct. Young persons frequently imitate the vices of others, and thus bring upon themselves remorse and shame. For example, a young man of good intellect and superior education is profane. His associates, knowing that he has splendid talents, think it manly to imitate his vices and thus learn to be profane themselves. A young man, occupying such a position, by following vicious practices, may, and often does induce many of his associates to *imitate* his evil habits, and forsake the paths of rectitude and virtue. Those who are, or wish to be *patterns* to society, for religion, virtue, morality, temperance, &c., should be very careful not to set an example which, if *imitated* by the young, will have a tendency to lead them astray. If the intellect be weak, this organ leads to a servile imitation of the fashions, and no matter how

upon the great Architect of Nature, as a God of power and glory. , With large Local. and Caus., will love, and succeed well in the study of Astronomy. If Caution be large, will have a sense of danger in the storm, yet love to hear the crashing thunderbolt when the danger is past; with large Ideal. and Construct., will view the towering domes of a magnificent edifice with extreme pleasure.

FULL, enjoys the grandeur of nature and art, but is not passionately fond of the wild and majestic. If Ideal. be full or large, will relish mountain scenery, and delight to contemplate the beautiful vale beneath; with large Color and Order added, will have a lively taste for the diversified landscape embracing hills, vales, winding streams, villas and lofty mountains in the back ground. As a speaker or hearer, will be pleased with strength, vigor and beauty of expression, now rising to consult the sublimity of nature, then stooping to the tender, the refined and beautiful.

AVERAGE, is not enraptured with sublime emotions in viewing the objects described under Sub. large, and uses but little effort to visit such scenery. If Destruct. and Firm. be large, and Caution only average, will not be highly delighted or intimidated, or feel vivid emotions in view of the sublime. With large Ideal., will prefer the beauty to the grandeur of the world.

MODERATE, has an obtuse conception of the sublimity of nature, or art, and prefers the useful and arable, to the awful. With large Ideal., will admire the tasteful and exquisite, to the exclusion of the vast, and with large Lang. added, will write or speak with ease and elegance, rather than power, and prefer poetry whose soft and dulcet strain is more like the gurgling stream than the thundering waterfall.

SMALL OR VERY SMALL, is wanting in capacity to enjoy any thing which is sublime, and views descriptions of that character, as mere bombast.

beautiful, at sometimes blended, at others, separate and distinct. The following shows an activity of both organs.

Pleasant were many scenes, but most to me
 The solitude of vast extent, untouched
 By hand of art, where nature sowed, herself,
 And reaped her crops ;—whose garments were the clouds ;
 Whose minstrels, brooks ; whose lamps, the moon and stars ;
 Whose organ choir, the voice of many waters ;
 Whose banquets, morning dews ; whose heroes, storms ;
 Whose warriors, mighty winds ; whose lovers, flowers ;
 Whose orators, the thunderbolts of God ;
 Whose palaces, the everlasting hills ;
 Whose ceiling, heaven's unfathomable blue ;
 And from whose rocky turrets battled high,
 Prospect immense spread out on all sides round ;
 Lost now between the welkin and the main,
 Now walled with hills that slept above the storm.

POLLOK.

VERY LARGE. One having Sublimity very large, is passionately fond of viewing or contemplating any grand or sublime phenomenon in nature, the warring elements, an awful cascade, loud crashing thunder, the dashing, roaring ocean-waves, a rugged rock-bound coast when lashed by foaming surf, the loftiest mountain's ragged crest, and views any thing wild, and sublime, with feelings of the highest ecstasy, and reads or hears with the liveliest emotions, that poetry, or oratory which describes such phenomena. One having Sub. very large, combined with large Ideal., Caus., Comp., Event. and Lang., joined with large Combat., Firm., Destruct., Hope and Marvel., will be an orator of the highest order, transport the hearer with high-wrought bursts of commanding eloquence, arouse a tempest of passion and control it at will. Such orators were Demosthenes, Cicero, Chatham, Fox and Henry, and the writings of Homer, Milton Shakspeare, Byron and a few living poets and orators, strike the same high-toned string in the human mind.

6 LARGE, admires speakers or authors, who manifest energy, strength and fire, in their eloquence ; enjoys mountain scenery ; contemplates with delight, the universe of worlds rolling in broad immensity, and reflects

unbecoming, or ridiculous the style may be, it will be followed by such minds, notwithstanding the admonitions of those who are favored with good sense. Imitation assists the mechanic and the artist, and enables one to copy the works of others. Many mechanics are indebted to this organ for their success, when they have but little Constructiveness. It enables the actor and the orator to make an impression on the minds of their auditors by means of gesticulations, whereby the feelings and passions are expressed by action, as well as words. The deaf and dumb, communicate by signs, which is mainly done by this faculty, and their feelings are expressed with a reality and vividness rarely equaled by the most pathetic oral language.

VERY LARGE. One having Imitat. *very large*, has very great imitative powers, and readily copies the manners and gestures of others; can act out the feelings, and make a person know, from the natural language of the organs, or expression of countenance, without saying a word, the ideas wished to be conveyed; with large Combat., Destruct., Secret. and a good intellect, will have a theatrical talent; with large Construct., Form and Size, will be capable of excelling in chirography and mechanics.

LARGE, has a natural talent to work after a pattern, and can easily imitate the style and manner of others; with moderate Caution, and large Combat., Destruct. and Mirth. will make many gestures when talking; with large Comp., Event. and Lang. added, will, in relating anecdotes, tell them in such a manner as to excite laughter and gain the attention of the hearer; with Form, Size, Construct. and Ideal. large, will have the ability to excel in sketching and drawing, and with large Color added, can succeed well in painting; with Tune large, will imitate the brogue of the Irish, Dutch, Scotch, French, &c., and the natural language of various beasts.

FULL, does many things by imitation; can copy and make after a pattern tolerably well, and manifests a fair share of imitative talent; with full Construct., and large,

or very large Form and Size, will succeed well as a mechanic, and work with, or without a pattern; but with those organs moderate or small, will not succeed in any trade which requires ingenuity and skill.

AVERAGE, has some, but not great ability to imitate, copy, or make after a pattern; in relating stories, will be original in manner; with large Combat., and moderate Caution, may make some gestures, but they will be made in a style peculiar to self; with average Mirth., may get credit among the lower classes for wit, when in reality it is nothing but oddity.

MODERATE, is not skilful in working from patterns; has but little power to imitate the manners or gestures of others; has a mode of relating anecdotes, different from any body else; with large Combat. and full Mirth., and a strong and well cultivated intellect, will, as a public speaker, gain the attention of auditors by the boldness, singularity, and oddity of manner and expression, and please a popular assembly.

SMALL, takes no delight in imitating the manners of others; has no skill in copying; is original in action, gesture and manner; and if a good mechanic, will be indebted to Construct., Form, Size, &c., for success.

VERY SMALL, is averse to any thing which requires a talent to imitate the works or manners of others; has no ability to copy; still, with very large Construct., Form and Size, will succeed well as a mechanic, and in some trades be able to excel.

24. MIRTHFULNESS.

Wit, facetiousness, perception of the ludicrous and incongruous.

This organ is situated outward from Causality, and when large, gives a fulness to the outer angles of the upper portion of the forehead.

ADAPTATION. That there is an innate faculty in the human mind which inclines man to indulge in mirth, and leads him to judge of the congruity or incongruity of arguments, is a fact, the truth of which no one who has associated with all classes of persons, will attempt to deny. Phrenologists hold that Mirthfulness is the organ which imparts this faculty to man. It is an essential element of a cheerful disposition, and is therefore very useful. Religionists, who are well acquainted with the various workings of the human mind, and the good effect of cheerfulness, and the bad effect of melancholy upon the health and happiness of individuals, approve of the legitimate manifestation of this faculty. Many seem to imagine that those who make a profession of religion, should always be sedate and grave; and a professor, having a feeble endowment of this faculty, would be sedate and appear melancholy, and thus throw a gloom on religion, and also condemn those as hypocrites who are naturally gay and mirthful. Such persons are not fit judges of the propriety or impropriety of the expressions of mirth, inasmuch as they are deficient in the organ which gives rise to such feelings. They are too grave and gloomy in their intercourse with the world, and thus give an idea to the young, that to be religious, is to be melancholy. There are some professors of religion who are too mirthful and gay, and sometimes ridicule or speak lightly of solemn things, and their conduct in this respect has a bad influence upon many minds, and leads the opposers of religion to say that all who profess christianity are hypocrites. These are the two extremes, and are abuses of Mirthfulness. It is as necessary, therefore, in this, as in any of the other organs, to distinguish between its use and abuse. Many expressions excite Mirthfulness, which contain no genuine wit, and persons are often called witty, whose remarks contain nothing but oddity or incongruity, which combined, perhaps with a peculiar mode of *expression*, is a sufficient cause for laughter. Any class of organs may be excited, and cause a person to smile, but the outward manifestation must be through Mirthfulness. A little girl with large Approbativeness will smile, when told that she has a very pretty

dress. A Clergyman, with a high endowment of the moral organs, and naturally of a sedate turn of mind, when addressing his hearers on some favorite topic, smiles involuntarily, and those who hear him smile in return. Mirthfulness is excited in these cases, but there is nothing boisterous in its manifestations; hence it is justifiable. A man distinguished for vulgarity, having a predominance of the animal propensities, relates his anecdotes in a blunt, rough and singular manner, and though not accompanied with any real wit, causes much laughter, which is expressed in a noisy, boisterous manner. Mirthfulness in this case is excited, and it is also abused. The organ was large in Sterne, Swift, Franklin, and several who might be named, and their writings abound with wit.

VERY LARGE. One having Mirth. *very large*, will be remarkably fond of wit and humor; views every thing in a ludicrous light, and is highly pleased with mirthful stories; with large Lang. and Event., will recollect, and relate many witty anecdotes; with large, or very large Combat., Destruct., Secret. and Hope, and moderate Caution added, would succeed well as a comic actor; be forcible, sarcastic and severe in his mode of expression, and very fond of making people laugh by his witty remarks.

LARGE, is much inclined to view things in a ludicrous light, and turn passing incidents into ridicule; often feels an irrepressible disposition to laugh when and where it would be improper to do it, enjoys mirthful company remarkably well, and is capable of making much sport; with very large Destruct., good intellect and average Benev. and Consci., will be very sarcastic and severe in argument; and with large Secret. added, will give many "sly jokes," and still appear very sober; with very large Caus. and Comp., and average Lang. and Event. will, as a writer, be humorous, and often speak in such a manner as to please the mirthful, and at the same time convey some important idea; in argument will hold up an opponent to ridicule; with very large Caution, may be too modest to give a joke till after the proper time; but with the same organs average, will be a *ready wit*; with

Caution very large, and Hope moderate, will manifest opposite traits of character, being sometimes gloomy, and at other times, very gay and mirthful.

5 **FULL**, is quite fond of the ludicrous, and finds difficulty in refraining from the use of mirthful expressions when in company with those who are quick at repartee; with Lang. and the organs of the perceptive intellect generally small, will not be distinguished for quick sallies of wit; but will sometimes give a "dry joke," which will be directly to the point; with large Comp., Amat., Combat., Destruct. and Aliment., and moderate Ven., Consci., Ideal. and Caus., will be vulgar, coarse and harsh in his witticisms; make many obscene and witty comparisons; and tell falsehoods, if by so doing some one can be held up to ridicule, and thereby cause laughter and merriment.

AVERAGE, is rather mirthful, and fond of making sport, 4 but has not a keen perception of the ludicrous; likes a good joke well, but is not always ready to give one; with moderate, or small Imitat., and large Combat., Lang. and Comp., will say many odd things which will make sport and pass among some persons for real wit.

MODERATE, is rather sedate, and not apt to speak in jest, or disposed to view things in a ludicrous light; with large Hope, and moderate Caution, will be cheerful, but not witty or fond of laughter; with only average Caus. and Comp., and large Appro., will be much displeased if a joke is given at his expense, and with large Combat. added; will manifest a high degree of temper when ridiculed, and from this fact, many who have large Mirth., will take delight in *teasing* him, for the purpose of gratifying their own fun making disposition.

SMALL, has a sober turn of mind; is displeased with those who make sport out of every passing incident, and will not succeed in attempting to give jokes; with very large Appro., will shrink under the keen sting of ridicule, and be angry with those who indulge sportive raillery against him; with large Combat., Destruct. and Self-

Esteem added, will be likely to resort to blows when ridiculed.

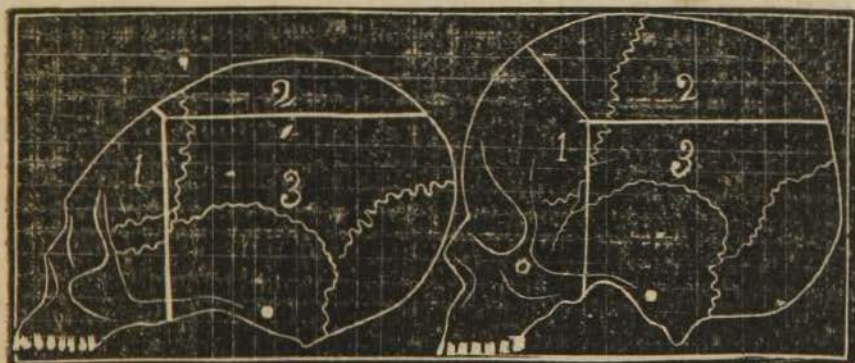
VERY SMALL, has a want of perceiving the ludicrous, and is destitute of mirthful feeling; with large Consci., Ven. and Caution, and moderate Hope, will be very grave, gloomy and sedate, and be poor company for the mirthful.

Order II. INTELLECTUAL FACULTIES.

These faculties observe phenomena, and reason upon the whole physical and metaphysical world, and constitute what is called *intellect*, *understanding* or *judgment*, in contradistinction from the feeling or emotions produced by the other faculties; and serve to enlighten and direct the feelings. They impart that thirst for information, that desire to *know*, that power to observe, remember, classify and reason, which makes man an intelligent and progressive being.

20. New Hollander.

21. Raphael.



Region, No. 1, Intellect, Very deficient.

" " 2, Moral, " "

" " 3, Animal, Very large.

Region, No. 1, Very large.

" " 2, " "

" " 3, " "

A glance, merely, is sufficient to show the great superiority of the cerebral development of Raphael, over that of the New Hollander, and that the latter with such a brain, *must* possess more of the *animal*, than of the moral, intellectual and human qualities.

"The natives of New Holland," says Sir Walter Scott, "are, even at present in the very lowest scale of humanity, and ignorant of every art which can add comfort or decency to human life. These unfortunate savages use no clothes, construct no

cabins or huts, and are ignorant even of the manner of chasing animals, or catching fish, unless such of the latter as are left by the tide, or which are found on the rocks."

Genus I.

PERCEPTIVE FACULTIES.

These bring man into connection with the material world, and serve as a medium of communication to the other faculties.

Species I.

EXTERNAL SENSES.

They are SENSATION,	} By these, the mind gains knowledge of external things, and the <i>internal faculties</i> receive these materials and from them, form ideas of surrounding objects.
SIGHT,	
HEARING,	
TASTE,	
SMELL.	

SENSATION OR FEELING. This faculty is manifested through the agency of the nerves of sensation, which are ramified throughout the whole physical system. It procures a knowledge of tangible objects, and while it ministers to man's safety and preservation, it also furnishes to the internal faculties, the means of judging of external things.

SIGHT. By this faculty, the image and hue of external things are conveyed to the internal faculties, which judge of their *form, size, color, number, order, &c.* Eye-sight alone does not enable us to judge of the qualities of objects, for persons frequently possess the power of vision, and fail in judging of Colors, as well as one or more of the other qualities just enumerated, while imperfect vision is often accompanied with *acute judgment* respecting those qualities.

HEARING. Hearing is manifested by the auditory nerves, and is the medium of receiving sounds which are rendered discordant or harmonious, according to the strength or activity of the other faculties. Good taste and judgment of the tones of voice and musical harmony are not produced by hearing alone, else all who hear

distinctly would be judges of the harmony of sounds, which is not the case.

TASTE. The *gustatory* faculty, acts upon substances to produce the sensation of taste alone, and conveys that sensation to the other faculties, which form ideas of the qualities of matter.

SMELL. This faculty is independent of sight and makes us acquainted with distant objects from which odorous particles emanate. No effort of the will, can change these impression or reproduce them; but the ideas of such objects are formed and recollected, by the internal faculties. One valuable design of this faculty, is to guard man and animals from unhealthy objects, and acts as a monitor in the selection of proper food.

REMARKS.

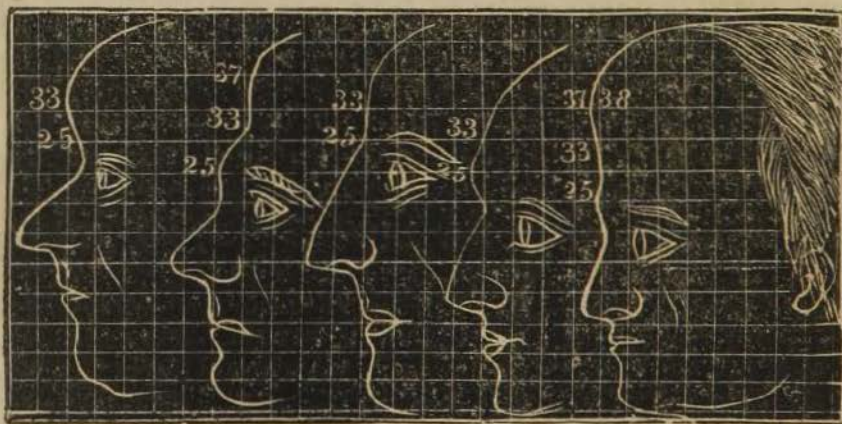
It is supposed by some who object to phrenology, that the talent to judge of *color*, *form* and *size*, is imparted *exclusively* by the eye-sight, and that the senses of *taste* and *smell* (as they relate to food and even the sense of hunger) are referable to the *stomach* as the direct primary seat of the feelings, and also that the sense of musical harmony depends upon the simple faculty of hearing. Now, it has been decided that the *olfactory* and *gustatory* nerves (which give the powers of *smelling* and *tasting*) originate in, or communicate with, that part of the middle lobe of the brain which is called *Alimentiveness*, which organ imparts the appetite for food, and controls the stomach. The same may be inferred respecting the *optic* nerves. The eye is an apparatus which enables the faculties or organs of *color*, *form* and *size* to obtain knowledge, and through its agency *they* are stimulated to activity; but when these *organs* are *small*, the *faculties* are *weak*, even with the keenest eye-sight. The eye is the only medium of exercise of the organ of *Color*, and the main one of the organ of *Size*, and greatly aids *Form*; and we have noticed a marked deficiency of these organs in the blind. We examined a young man in Cavendish,

Vt., who has been blind with one eye from infancy, and found the organs of *Size* and *Color small*, on the side of his head opposite the defective eye and *large* on the other. Moreover, persons with feeble hearing power are good judges of musical sounds; and those with deficient vision, are acute judges of colors, and *vice versa*.

Species II. OBSERVING AND KNOWING FACULTIES.

These faculties gather information, criticise surrounding objects, analyze the intrinsic qualities of material substances, observe general phenomena, impart correct practical judgment, and collect materials for the use of the higher faculties. These organs are located above and about the eyes, in the lower part of the forehead, and when large, give prominence and width to the head at that region. A receding forehead is produced by large observing organs, and is favorable to superior practical talent. Adams, Calhoun, Clay and Preston are examples,

22. Pitt. 23. Moore. 24. Sheriden. 25. Burritt. 26. Franklin.



25. Individ. Moderate.	Large.	Large.	Very large.	Full.
33. Event. Very large.	Small.	Large.	Large.	Average.
37. Comp. Large.	Very large.	Large.	Full.	Very large.

25. INDIVIDUALITY.

Power of observation, desire to see things as mere individual existences.

This organ is located at the root of the nose, and when large, gives width between the arches of the eyes, and forward prominence.

ADAPTATION. Whereever we open our eyes upon nature or art, *objects, things* and *existences* surround us. The mountain with its rocks, trees and rills; the vale with its streams, parks and lawns, the village and city, with their towers, mansions, churches and the ten thousand articles of which they are composed, are objects on which this faculty is exercised in observing. Individuality takes cognizance of things without reference to their bulk, shape, density or color; brings man into harmony with the divisibility of matter, and recognizes *things*, as mere individual existences; while the following class of faculties, acting on the other qualities of objects, come in to scrutinize them, by which operation correct judgment of physical substances is formed. A train of cars, for instance, is presented to view when in motion. Individuality notices the whole as a separate existence, Form observes the shape of the cars; Size, their dimensions; Weight, the velocity of their movement; Color, their hue; Order, the manner in which they are arranged; Number, whether there are two, three or more; Locality, the direction they are moving; Time, the duration of the scene; and Eventuality treasures up the whole as an occurrence, or individual fact, and preserves it for the use of Causality and Comparison. The office of this organ, therefore, is, merely to observe individual things, without reference to their physical qualities or the uses to which they may be applied. Some travelers gain by observation but little knowledge of the physical condition of the country through which they pass, and rely on books and conversation for information. They often travel for miles in an open carriage without noticing any objects which they pass; their minds being occupied on some abstract subject during the whole time. Others possess an opposite trait of character, dislike close study, and gain the most of their knowledge by observation. The former show a weak, and the latter, a strong endowment of the faculty under consideration. Individuality, as a

general thing, is very large, and the faculty active in children, and the eagerness which they manifest to see every thing that comes within the range of their vision, agrees precisely with the development. Books, containing engravings illustrative of the facts which they contain, highly please children, and have a tendency to improve and strengthen their minds. A want of this faculty throws the mind out of balance, by not furnishing the other faculties with that intellectual food necessary to give depth of thought, and strength of judgment. It is essential to success in the study of Chemistry, Botany, Mineralogy, &c.

VERY LARGE. One having Individ. *very large*, has very great observing powers, and manifests an intense desire to see every thing that comes within the sphere of observation, and when traveling, lets nothing escape notice or scrutiny; with large Event. and moderate Caus., will be a real *starrer*, observe more than reflect, be very superficial in information, and have a good memory of that which comes under his observation.

LARGE, has a strong desire to see every thing within the range of vision; takes great delight in the mere examination of objects; with large Event., Compar. and Time, and an active temperament, will be qualified to excel in the study of the natural sciences; with large Lang. added, will not only have a strong thirst for information, but a talent to impart instruction to others; with very large Caus. added, will first notice objects closely, found premises upon the sure basis of facts, and then reason from them, and like Franklin and Gall be qualified to make discoveries in science.

FULL, is generally quite observing; notices objects in bold relief without descending to details and particulars unless the objects are connected with the business or interest of the person; with very large Caus., will often, when traveling, see an object, and while reflecting upon it, pass many things without notice; with large Event. added, will know much of a few things, or subjects, rath-

er than a little of many; with small Event. and Lang., will not be qualified for a general scholar, or excel in any one science.

AVERAGE, is not a very minute observer of things in general, and does not possess the power necessary to acquire knowledge of existing objects with facility; with large reasoning organs, will gain information from books and reflection more than by observation.

MODERATE, will fail to notice objects minutely, and when traveling will let many things escape observation; with moderate Event., will, on entering a room, observe the general appearance of furniture, &c., but after leaving it, will be able to give only a vague description of its contents.

SMALL, has very feeble powers of observation; gains knowledge slowly, and when traveling, will pass many objects unnoticed, although they may be conspicuous; with full Caus. and Event., will be able to gain *some* knowledge from books, but be deficient in general information and practical ability.

VERY SMALL, notices but few objects when traveling; has no talent to acquire knowledge by observation; feels his way through the world, and if all the rest of the intellectual organs be large, will fail to become a distinguished scholar in the natural sciences.

26. FORM.

Idea of configuration, power of recollecting models, countenances, family resemblances, &c.

This organ is situated near the inner angles of the eyes, and when large, causes great width between them.

ADAPTATION. The universe is composed of particles of matter, having an infinite variety of shapes and forms. In the vegetable kingdom, no two leaves can be found

which, upon close examination, present the same configuration or shape ; and the same fact is observable in the animal and mineral kingdoms. Such being the case, it seems necessary that there should be some faculty in the mind, to bring man into harmony with this quality of objects. Phrenologists maintain that the organ of Form enables man to do this, and without it, no one could tell the difference between a circle and triangle, or a square. It is essential, to the sculptor, the painter and the mechanic, and enables us to recollect the form and features of absent friends, and configuration in general. It was a large endowment of Form, that enabled Cuvier, the celebrated French naturalist and anatomist to recollect the shape of every bone which he had ever seen, and tell, when the bones of any animal were presented for his inspection whether he had seen them before ; and if so, to know the class of animals to which they belonged. Some children learn the letters of the alphabet with little teaching, while others find difficulty in distinguishing the different letters by their form. The former have a strong and the latter a feeble endowment of this faculty.

VERY LARGE. One having Form *very large*, has an extraordinary memory of shapes, form and configuration, is very fond of viewing any object, the form of which is beautiful ; with large Individ., will be very observing of persons, and never forget the countenances of those once seen ; with very large Lang. and Size, will have the ability to become a good reader, and deliver a written discourse well before a public assembly.

LARGE, will have the ability to judge of the configuration of objects with great accuracy and has a good memory of countenances ; with large Individ. and Comp., will readily detect slight differences in the shape of objects ; with very large Size added, will point out with great accuracy the want of resemblance and size of two articles intended to have been made alike ; with large Individ., Comp., Event. and Local., will be able to excel in anatomy, mineralogy, geography, &c.

FULL, has a tolerable good memory of the *shape* of objects, and of persons' countenances; with very large Construct., Size, Imitat., Color, Comp. and Ideal., will succeed well in drawing and painting; with large Individ. and Local. added, will be fond of beautiful landscapes; with large Lang. and Event. added, will have the ability to describe natural scenery in minute detail, and of excelling in the natural sciences.

AVERAGE, will find it necessary to spend considerable time with strangers to recollect their countenances; has only a fair talent to judge of the configuration of objects, and will never excel as a mechanic without the aid of patterns.

MODERATE, cannot recal to mind the countenances even of intimate friends, and when meeting them after a few years' absence, will recognize those only, who have strongly marked features; with moderate Individ., will miscall many words when reading, and never excel in orthography.

SMALL, has a very poor memory of countenances; cannot retain the shape of objects with any degree of accuracy, and often shakes hands with persons whom he cannot recognize.

VERY SMALL, forgets the countenances of familiar acquaintances; cannot recognize old neighbors after a short absence from them, and has no idea of the features of absent relatives and friends.

27. SIZE.

Power to judge of magnitude, distance, height, depth, &c.

This organ is located outward from Individuality.

ADAPTATION. All things occupy space; and hence every particle of matter has length, width and thickness. The faculty of Size in man is in harmony with the attri-

bute of material substances, called *extension*. All substances are large, or small; broad, or narrow; long, or short; and from this fact, arises the idea of maximum and minimum. Thus, a mansion, and a cabin; a mountain, and a grain of sand; a continent, and a manor; a man, and a boy; an inch, and a league; are relatively large and small, and are judged of, in that respect, by this faculty. Without it, we could not tell one thing from another when other appearances are alike; that is to say, where form, density, and color, are the same. By this faculty, we judge of animals, men, buildings, and things generally, and know our own, from those of others, or any given class of objects. The egg of an Ostrich and of a small bird, alike in shape and color; can be distinguished only by Size. It is useful to mechanics, in measuring size and distance, by the eye; say the parts of a machine, building, coat, boot, &c.; to the artist, in proportioning the size of the different parts of a picture, statue, or landscape, and is indispensable in foreshortening and perspective; indeed almost every mechanical and agricultural operation, calls for an exercise of this faculty; and size, in regard to property and things, being a measure of power, or quantity, or value, constitutes an important element of practical judgment. This organ should be cultivated in youth, by judging and then measuring, dividing of things and judging of magnitude in general, and the faculty will become strong, and the judgment in this respect good.

VERY LARGE. One having this organ *very large*, has a keen, and ready perception of the magnitude of objects; can determine with great accuracy, the distance of places, or things; the height of a house, room or tree; can divide things into equal parts without measuring; tell the centre of objects, such as a line, square, or circle; in drawing, get the true, the relative, or comparative size of the thing sketched; and do it by the eye, with great precision.

LARGE. The organ of size *large*, imparts a talent to judge of the magnitude, bulk, distance, and height of things very accurately by the eye; the person will succeed

well *cæteris paribus*, in such arts as require good judgment of magnitude; and will usually be able to calculate ordinary things without measurement; or detect the errors of measurement with the eye; is a good judge of size and proportion in respect to buildings, men, cattle, horses, &c. When combined with large Order and Ideal, will arrange tools, furniture, books, minerals and curiosities, with due regard to neatness, beauty and proportion of size, of the things arranged.

FULL, is able to calculate size and distance; to make, compare and arrange things, where judgment of magnitude is concerned, with a fair degree of accuracy; and with large Weight added, will judge by the eye of the weight of animals, men and things tolerably well.

AVERAGE, can judge of size and distance, and measure, height, depth, &c., with the eye, to some extent, yet will choose to trust to some rule—cannot carry the dimensions of machines, buildings, garments, men, or animals, in the memory, so as to decide with critical accuracy, in respect to the relative size of a *present*, with an *absent* object.

MODERATE, will fail to measure correctly by the eye, the height of mountains, buildings and distances, or the size of men, animals or other objects; and can only obtain a tolerable amount of skill in this respect, by long and persevering practice—as a mechanic or artist, will trust to the rule; will judge and then measure, and if a mistake occurs in measurement, will not readily detect it by the eye.

SMALL OR VERY SMALL, judges very inaccurately of absolute or relative size, length and distance, and will place no reliance upon the judgment, in such matters.

28. WEIGHT.

The perception and application of the principles of specific gravity, momentum, force and resistance; of that quality of matter called imponderability.

This organ is located on the arch of the eye-brow, outward of Size. When large, it gives a squareness, and a kind of frowning appearance to the brow, with great prominence to this part of the arch of the eye.

ADAPTATION. All bodies, are subject to that law of nature called gravitation. In proportion to the density, or solidity of two bodies, so are they influenced by this law. The equilibrium of bodies is determined by this law, and all weighing apparatus are constructed in obedience to it. Man's nature also, is arranged in harmony with the same principle. The faculty of Weight gives him a knowledge of his own equilibrium, and an intuitive desire to maintain a perfect balance of the whole body. It gives him an idea of perpendicularity and balance, both as regards his own body and every other object. He exercises it in almost every act. In walking he alternately surrenders and restores his equilibrium at every step. If he stretches forth the hand, the body is thrown back, or the opposite foot extended in the reverse direction to balance the arm. When carrying a weight in one hand, the body leans the other way to balance the burden. If another of equal weight be taken in the other hand, the one balances the other and the body assumes a perpendicular attitude. In carrying a burden upon the back, one leans forward, and the reverse when the burden is in the arms, and in either case, the body is thrown off its balance to counterpoise the burden, so that a perpendicular line from the feet shall divide the total weight of the body and the burden carried. This organ also gives the talent to judge of perpendiculars in general; and combined with Form, to determine when any thing is level. This last judgment, is formed by drawing a right angle from the innate imaginary perpendicular line existing in the mind. All bodies when left to the control of the law of gravitation, fall in a direct line to the earth, and in falling describe a perpendicular line; and the mind, being in harmony with this law, determines the direction a body will take in falling, without regard to any surrounding object or appearance whatever. A right angle from this line will be level, which is determined by the organ of Form,

which judges of angles or shape, and thus the faculty of Weight, furnishes the basis for the survey of canals, and level roads around hills and over a rough country by the eye alone; and by this organ we are able to tell if a pole, tree, or building is perpendicular, when they are situated upon sloping or uneven ground, surrounded by nothing which is either level or upright. Every leaning object which seems to be unsupported offends against the law of gravitation and of equilibrium and against the feelings of one having the organ of Weight large. It is necessary to the sculptor, to enable him to make his statue so as to be perfectly balanced; to the painter, to give the proper attitude to a picture; to builders, in judging of levels and perpendiculars, and to the machinist in determining the force and resistance of a machine, and to understand the laws of velocity and momentum, in the whole arrangement. The whole system of Hydraulic power is based upon gravitation and a knowledge of its principles is obtained and applied by the faculty of Weight. This faculty enables us to judge of, and apply the power necessary to propel bodies; to throw a ball or quoit; to balance the body on the mast, or yard-arm of a ship, or a high frame, and to walk on high and narrow places, and maintain the equilibrium of the body. Great engineers, circus riders, rope dancers and balancers, have the organ very large. This tells them when the body, or any thing to be poised, is in the least degree off the true balance, and induces an instantaneous desire and ability to restore it. Without it, man and beast would fall, and like water or any round substance, seek a level.

VERY LARGE. One having the organ of weight *very large*, is capable of preserving the true balance of the body in any position; will judge with critical accuracy of the specific gravity of bodies, and the power necessary to propel them; and whether buildings, trees, masts, steeples, furniture, mirrors, maps or pictures are perpendicular; and feel uneasy if the law of gravitation is violated in the least degree.

LARGE, judges very correctly of the weight of animals, men and things, also whether things are reclining; is offended with leaning statuary, a stooping man, house, fence, steeple, tree, or any thing which ought to be perpendicular; has good judgment of weight and resistance; can balance the body on horseback, and if a man, will throw a ball, stone or quoit well, or become a good marksman with little practice.

5 **FULL**, can judge tolerably well of specific gravity, keep a balance, &c.; will notice if things are not perpendicular, or level, but lack that nice perception, that mathematical certainty in this respect, described under Weight *very large*. 6

AVERAGE, has not enough of this faculty to judge with accuracy of weight, resistance, momentum and perpendicularity; will notice if things are very much leaning, but is not pained at a slight variation; will frequently trip and lose the balance of the body, and if Caution be large, and Combat. and Appro. moderate, will venture very little in the way of climbing. 4

MODERATE, will require much practice to judge with any degree of correctness, of gravity and perpendiculars; will stumble and trip easily, and venture upon high and difficult places, only from imperious necessity, and balance poorly.

SMALL OR VERY SMALL, is the reverse of what is described under Weight *very large*.

29. COLOR.

Perception of primary colors, their shades and blendings.

This organ is located at the centre of the arch of the eye-brow, and when large, gives great upward and forward arching to it.

MODERATE, seldom notices colors, unless the attention is directed to them by business, interest, or some singularity, such as a spotted horse, ox or bird, will suffer ordinary colors, to pass without a thought; with Ideal, and the perceptive organs large, will be fond of pictures and flowers, but other qualities more than color, will be the foundation of admiration.

SMALL OR VERY SMALL, can never excel in judging of colors, even with practice; may tell black from white; an African from an European; but sees little difference in colors, or their blendings.

30. ORDER.

Love of arrangement; desire to have things in their proper places.

This organ is situated between Color and Number "at the external corner of the eye, and beneath the origin of the superciliary ridge."

ADAPTATION. Order is said to be Heaven's first law, and if we take a survey of the celestial worlds, and witness the order and regularity of their movements, and then turn our view to the earth, and notice the regularity of the seasons, day and night; the regular gradation of animals from the meanest reptile up to man, and the perfect system every where existing in the natural world, we are struck with the truth of the words of the poet, that,

"The general order since the world began,
Is kept in nature, and is kept in man."

Man, is brought into harmony with this system in nature, by having implanted in his mind, a distinct faculty, the design of which is to give regularity and order, in all his actions. Without order in the natural world, confusion and disorder would take the place of that perfect harmony which now exists. Blot this faculty from the mind of man, and much of the happiness which he now enjoys, would be annihilated. In view, therefore, of the

to pictures and flowers, has a tendency to cultivate and increase the organ ; while boys, who are dressed in black or sober gray, are left without cultivation ; and hence it is, that men seldom notice the color of a stranger's hair, eyes or dress, and women are close observers and good judges in those matters. Some Artists draw well and color badly ; others draw badly and excel in coloring ; the latter, have the organ of Color large, and Form, Size, Weight, Ideality and Imitation deficient ; and the former, the reverse.

VERY LARGE. One having the organ of Color *very large*, is a great observer and lover of colors ; a good judge of the nicer shades and blendings of shades ; and with large Imitat., Form, Size, Weight and Ideal., is capable of drawing and painting with extraordinary skill, and will be fond of cultivating flowers and collecting paintings, shells, &c., for the beauty of their colors.

LARGE, has a ready and clear perception of the nice shades and blendings of colors, and is quite observing of the color of the hair, eyes and dress of persons ; has the faculty to combine and compare colors with skill and detect errors in paintings ; will manifest good taste in the selection of goods where color is a valuable quality, and with practice, would become a good colorist.

FULL, possesses a tolerable amount of talent to observe, discriminate and judge of the primitive colors, and with practice, will be able to harmonize and blend them with some, but not great skill ; in painting, will use bold colors, and with large Ideal., will be as fond of mezzotint or Daguerreotype pictures, as colored paintings.

AVERAGE, can distinguish colors and recollect them by giving particular attention, but is not very observing of complexion, the color of the dress of persons, &c. If Form, Size, Order and Ideal. be large, will notice the figure, proportion and delicacy of a person or picture, flower, dry goods or animals, more than their color.

ADAPTATION. Color is a quality of objects, which not only renders them beautiful, but one by which we discriminate things which may be precisely alike in *form*, *size* and *weight*. Personal beauty is dependent to some extent, upon color, and by the *organ* of Color, we admire the general complexion, as well as the rosy cheek, the beaming eye and flowing locks. The green carpet of the earth, studded with variegated flowers; the foliage and blossoms of the forest, with the rich plumage of its merry songsters; the unsurpassed splendor of the marine beauties; the mellow pencilings of sun-light upon the summer cloud; the glowing hues of the rainbow, and the warm, life-like coloring of the breathing canvass, are loved and prized by this faculty, which brings us into harmony with those beauties of nature and art, and without which, "full many a flower would bloom unseen," and man would be blind to the rich hues that invite admiration and feast the eye on every hand.

Some persons who have keen eye-sight, cannot distinguish *red* from *green*. In the winter of 1839, one of the authors, (N. Sizer,) examined the head of Mr. John G. Richey, of Bloomsbury, N. J., who had excellent eye-sight, yet he could not tell one color from another; could see only one hue in the rainbow, and as he said, all colors looked to him like ashes. In the summer of 1842, we examined the heads of Dr. Harwood and Col. Harwood, of Whately, Mass., who have good eye-sight, and cannot tell green from ripe cherries or strawberries by their color. They can, with difficulty, distinguish the tincture of blood-root from Jamaica spirits by the color, when they are side by side in transparent bottles. These facts, and many others which have fallen under our notice, as well as those recorded by Spurzheim, Combe, Fowler and others, prove, that good eye-sight may be present without the power to distinguish colors, and that the ability to judge of colors, is dependent upon a special organ of the brain.

Females generally have the organ of color larger, and the faculty stronger than males; because little girls are dressed in gaily colored clothing, and their attention being constantly directed to their various shades as well as

importance of order and system, in all the affairs of life, we see the necessity of training children in such a manner that they will practice it from choice, when they come to act for themselves. The secret of order is this; "always put a thing in its right place when you have done using it, and so nothing in that case gets out of order." Parents should teach their children this secret, both by precept and example, and make them practice accordingly, and it will be of immense service to them in subsequent life.

VERY LARGE. One having this organ *very large*, is extremely precise and systematic in arranging clothing, tools, books, &c.; keeps every thing in its proper place, is very uneasy in viewing disorder, and in many things is over-nice. One having Order very large, combined with moderate or average Ideal. and Caution, will not be very particular about personal neatness; with large Appro. added will keep the "outside of the cup and platter" clean, and use a great deal of finery to cover up a slovenly person.

LARGE, likes good order and arrangement in all things; can usually find clothing, tools, &c., in the dark, if no one has misplaced them; with large Combat., and a nervous temperament, will be angry at others if they do not practice neatness, and keep every thing where it should be; with large Lang. added, will be well qualified for a scold, and will be likely to use some harsh language when things do not go right; will be displeased with domestics if they are not neat and tidy, and with small Secret., be so *blunt* with them as to give offence, and find difficulty in retaining their services.

5 FULL, is rather precise and systematic; values order highly, and generally keeps things in their proper places. With large Ideal., will be quite neat and particular; with very large Local. will have a particular place for clothing, books, &c. With large Inhab., will want a particular seat at the table and fireside. 57

AVERAGE, has an average share of order and love of arrangement; likes to see things in their proper places, but does not always keep them so; is not fastidious or over-nice; with large Ideal. and Appro., will be neat in dress and personal appearance, and exhibit more taste than systematic arrangement in general business.

MODERATE, will not appreciate order, or in general arrangement keep things as they should be; has some order, but more disorder, in respect to keeping clothing, tools, &c., in their proper places.

SMALL, is not troubled if things are out of place, and does not appreciate good arrangement; in writing, will get many blots upon the paper and fail to cross the t's and dot the i's; with large Combat., Self-Esteem and Destruct., and a nervous temperament, will scold at others if they do not keep order, and at the same time lack the ability to arrange things with neatness and propriety.

VERY SMALL, is not systematic, has no sense of propriety in arranging furniture, dress, &c., always leaves things out of their proper places, in short, has a place for nothing and nothing in its place.

31. NUMBER.

Ability to add, subtract, multiply and divide, to count and calculate numbers.

This organ is situated outward from Order, and a little above the external angle of the eye.

ADAPTATION. It is a source of much enjoyment to know the number of inhabitants in different countries and upon the whole earth, the number of years since the Adamic creation, the birth of Christ, and other important epochs in the history of the world. This enjoyment could not be realized, if the Creator had not endowed man with the faculty of Number. It enables us to reckon days, months and years, the number of seconds in a year,

to calculate the movements of the heavenly bodies, and predict with mathematical precision the time when an eclipse of the sun or moon will take place; to navigate the ocean and "state the tides;" in short, every thing that comes under the head of computing by numbers whether mentally or otherwise, is performed through the agency of this organ. It does not, of itself, enable those who have it large to excel in mathematics. Number was very large in the head of Zerah Colburn, who surprised the whole learned world, when a mere boy, with his astonishing powers of calculation. But with this extraordinary power of mental calculation he never excelled in the study of mathematics. "This organ," says Dr. Spurzheim, "only calculates; and while arithmetic, algebra, and logarithms belong to it, the other branches of mathematics and geometry are not products of its activity alone, but with its union with Size and Locality."* Negroes, generally have this organ moderately developed, and they seldom excel in the study of arithmetic. We have frequently heard accountants complain of pain in the region of the head where Number is located, after having been busily engaged during the day in difficult calculations.

VERY LARGE. One having this organ *very large*, has very great powers of calculation; can reckon figures in the head, with celerity and correctness; solve difficult questions without the aid of rules; with a large development of the reasoning organs, will have the ability to excel as a mathematician; with those organs *moderate*, will succeed well in acquiring a knowledge of Arithmetic, but not in the higher branches of mathematics.

LARGE, has the ability to succeed well in the study of arithmetic; reckons figures in the head with ease and dispatch; takes much delight in solving arithmetical problems; with large Local., Form, Size and Comp., will have the ability to succeed well in the studies of surveying and navigation; with large Caus. and Comp. added, will be able to excel in the higher branches of mathematics.

*Spurzheim's Phrenology, Vol. I, p. 322.

FULL, can acquire a knowledge of arithmetic with a good degree of facility, and be able with practice, to solve difficult problems, without the aid of a pen or pencil; with large Caution, will be slow, but correct in calculations, and with large reflective organs, succeed well in the reasoning part of arithmetic, and in mathematics.

AVERAGE, has a fair talent to compute by numbers, but is not very fond of the study of arithmetic; with large Caus., will be better pleased with mathematics than simple numbering; with average, or full Individ., cannot become a rapid penman, and will be liable, when trying to write with celerity, to leave out letters, or parts of a letter, or put too many letters into a word; with large Caution and Order added, will write a stiff, but legible hand.

MODERATE, cannot compute by numbers with ease or facility; dislikes the study of arithmetic, and will need to study much, to be able to transact common business that requires a knowledge of the science of numbers.

SMALL OR VERY SMALL, is wanting in arithmetical talent; cannot learn the multiplication table, yet with large reasoning organs, and an active temperament, may be a philosopher, and possess sound judgment in every thing, except the science of numbers.

32. LOCALITY.

Knowledge of direction, and of the relative position of places and things.

This organ is located above Size and Weight, on each side of Eventuality and Individuality.

ADAPTATION. One principle in natural philosophy is, that no two substances can occupy the same place at the same time, and hence the *impenetrability* of matter. Every thing in existence, must occupy some place. Every particle of matter bears some relation to other particles of matter, and each is located in some direction from

every other. Man occupies a place in creation, and every other thing is situated in respect to him, either above, beneath or laterally. This organ gives man a memory of the relative direction of things from himself, and by knowing such direction he is enabled to point toward or approach them. It imparts all our ideas or knowledge of the cardinal points, the locality of rooms, towns, states, and countries, and from this faculty has arisen the science of geography, which is the handmaid of navigation. Man may be called a peregrinating being, from his fondness of roaming from place to place. Locality gives this desire, and ability to visit any spot on the face of the earth, and find the way back to the "dear native home." Inhabitiveness imparts the desire for a "local habitation," a home; but necessity, convenience, pleasure or profit, requires man to visit other places, and the organ of Locality serves as an internal magnet, to direct him in his travels, and pilot him back to his haven-home. The American Indians have the organ large, and it is well known, that they are very sagacious in knowing and finding the localities of the trackless forest. It is indispensable to civil engineers, navigators, printers, organists, &c., and useful in every lane of life. Certain animals and insects manifest an intuitive talent in knowing the location of places and finding them, without ever having traveled over the ground. A pig may be removed from its native place several miles and by a circuitous route, and when liberated, it will take a direct line to its home and swim rivers to accomplish the journey. A foreign hunting dog may be placed upon a track in a strange territory, and after having run all day, will take a new and direct route to the place where he ate his breakfast. A bee may be carried in a box for twenty miles, and when liberated, will make a few turns to regulate the local knowledge, and then take a "*bee line*" for its hive. Bee hunters, take advantage of the direct, homeward-bound course of bees, to find their delicious treasury. Thus, there seems to be in animals an innate knowledge of the geography of places. The faculty of Locality in man, is designed to impart the same talent, to such an extent as his circumstances require.

VERY LARGE. One having Locality *very large*, is anxious to visit foreign places; desires to understand the minute geography of different countries; has a clear and vivid recollection of roads and places once seen, their relative position, direction or location. With Inhab. moderate, will be passionately fond of traveling, and reading of travels, surveys, &c.; never gets lost in cities or forests, and can direct travelers well.

LARGE, is well qualified to enjoy traveling; or to pursue the study of geography understandingly; will retrace the steps through winding ways without difficulty, and seldom forgets the appearance or location of places once seen. With large Number, Form, Size and Weight, will excel as a surveyor, or navigator; with large Lang. and Individ. added, will excel in describing localities; and with large Ideal., Hope and Marvel. and average Acquis. added, would like to travel the world through, to see curiosities and examine the wonders of the present and ruins of the past.

5. **FULL,** has a relish for traveling; likes to get information respecting nations, places and general geography; in listening to a fact or transaction, wishes to know *where* it occurred, and in relating incidents, is particular to tell the place of the transaction, as well as the fact; always has a curiosity to know *where* persons live, to find out the residence of strangers, &c.; seldom gets "*turned around*," or loses the point of compass; generally recollects the appearance of towns, direction of roads and streams; the locality of mountains, buildings, places and things.

AVERAGE, feels some desire to visit foreign places; has ordinary local memory, and requires strict attention to recollect the peculiarities of places. With small Individ., will often pass places a second time without recollecting them. With large Inhab., Adhes. and Acquis., will travel only to see friends, or when interest demands it, and will then travel in a cheap way. With large Lang., will remember where things are situated by the

4

language used to describe their location rather than by their absolute situation.

MODERATE, will not be fond of roving, or remember roads, places and localities, unless directed by something of special interest. With large perceptive organs and large Eventuality, will readily see things, and remember all that he sees, but not be critical respecting their locality. If Inhab., and the social organs generally, and Acquis. be large, the person will travel only from imperious necessity and turn the back upon the world and say, "There's no place like home."

SMALL, is liable to get lost when traveling or rather is not disposed to travel at all; with large Individ., Form, Color, Ideal. and Marvel., will be fond of seeing the curiosities which new scenes afford, but will have a poor memory of localities.

VERY SMALL, has a very poor geographical memory, and travels only from the urgency of business and the promptings of the other faculties.

Species III. SEMI-PERCEPTIVE FACULTIES.

The organs of these faculties are located across the middle of the forehead, above the simple perceptive, and below the reflective or reasoning organs, and the faculties in their nature are intermediate, those which relate merely to the physical qualities of material substances and those that grasp abstract relations and truly metaphysical subjects. The perceptive faculties gather facts and observe the phenomena of things as simple existences, while the semi-perceptives take cognizance of their modes of action, and remember what the others observe, and transmit it to the reflective faculties, and thus the perceptive and semi-perceptive faculties all combine, to furnish data for the reasoning powers. The reader is respectfully referred to the cuts, page 140, which exhibit the organs of the reflective, semi-perceptive and perceptive faculties, in different degrees of development,

33. EVENTUALITY.

Recollection of facts, actions and occurrences; power to treasure up what the other faculties observe.

This organ is located in the centre of the forehead, between the simple perceptive, and reflective faculties.

ADAPTATION. The adaptation of such a faculty to the affairs of this busy world, will be perfectly apparent when we reflect that the earth, with its innumerable inhabitants, is one great theatre of life, motion and change; old things are passing away, and the new constantly taking their place. Like the rolling current of a stream, so are facts, circumstances and phenomena, constantly rushing upon, and passing off the stage of action; the sun rises and sets, the seasons change, vegetation springs up, blooms and decays; men and animals rise, flourish and die. This faculty is placed in man, to treasure up those facts, actions and changes; to engrave them on the mind, and reserve them for future use or application. Without such a garner-house in the mind, some distinct power to remember events, the facts, actions and living phenomena of yesterday would furnish neither pleasure nor wisdom to-day. The judgment of the present would not be illumined by the experience of the past, and we should live, and think, and know, only in the circumscribed point, called *now*; we should learn and use knowledge instantaneously, and of necessity, cast it aside forever. Without memory, the events of life, like impressions in water, would be effaced and none could become wise or learned. Man would be unable to revel amid the rich treasures of the past; the history of his early life, of the centuries of time since the creation, *all* teeming with stirring interest, would be to him as a sealed book. Only *one* thing, circumstance or event, could be known at a time; and that only during its occurrence, the memory of which would pass away forever, and leave the mind, as it respects what *has* been, a perfect blank. With a good memory of facts and occurrences, we are enabled to garner not only those things which have transpired in

our experience, but we range the ancient battle fields, the changes of government, the rise and fall of kings, the advancement of science and religion, and the onward progress of knowledge and refinement, which have given interest to the world in former ages. The scholar of historic lore, "is a contemporary of all ages—a denizen of all nations," and even while on his pillow, may roam upon the ramparts of Babylon, Jerusalem, Troy, Thebes, or Pompeii, and connect the ante, with the postdiluvian history, converse with the poets, philosophers and orators of other times, and trace the glowing pages which record the changes, habits and manners, of every nation which has risen and flourished and passed away. This pours a flood of wisdom and delight into the soul, cultivates the taste, enlarges and elevates the mind, corrects the judgment, and lays the foundation of wisdom and happiness. This faculty is indispensable to success in the business man, the orator and statesman. We have noticed that Ex-Presidents Adams and Van Buren; Senators J. C. Calhoun, Preston, Benton and Wright; Mr. Clay and Mr. Wise; Jonathan Roberts, late collector at Philadelphia and many other distinguished public men, have the organ of Eventuality *very large*; and they are very remarkable for acute and comprehensive memory of facts and details. This gives them the material for extemporaneous debate, and the power of bringing to bear upon the point in question, every fact and precedent in the history of the present or past. Mr. Adams literally knows all that he has ever learned; and we have seen him called out by incidental debate, when he would at once, by the power of his memory, give the history of our own, or of foreign governments in detail, being himself a *walking library*. J. C. Calhoun never takes notes in the Senate, but replies to long speeches from memory alone. Reporter Stansbury also, has an extraordinary development of Eventuality, and without the aid of stenography, reports more for the press than any other congressional reporter, and at the close of each day, writes it out from memory, with the aid of a few brief notes. This organ is usually large in children, and their memory of facts, stories, &c., corresponds with it; while adults often have the organ

moderate and the faculty weak, which shows that it has not been cultivated. It is, like the key-stone to an arch, one of the most important faculties of the mind, and one of the easiest to improve and cultivate. Children love to listen to narratives and anecdotes, and *that* should be the mode of educating this faculty of memory, as it furnishes stimulus for the organ. The Jews taught their *children*, what their fathers had taught *them*, "showing to the generation to come the praises of the Lord, and his strength, and his wonderful works that he hath done. For he established a testimony in Jacob, and appointed a law in Israel, which he commanded our fathers, that they should make them known to their children; that the generation to come might know *them*, *even* the children which should be born; who should arise and declare them to *their* children; that they might set their hope in God, and not *forget* the works of God; but keep his commandments." No nation ever was better versed in their own history than the Jews; and sacred and profane Jewish history, bear testimony to the truth of this assertion, as well as furnish a strong motive to improve the memory of the present generation by similar means. History taught by tradition makes a lasting impression upon the memory, for it is given with warmth, and life, and action; whereas, *written* history is too often dry, cold and uninteresting, and fails to take root in the memory. *Æsop's* fables assume the form of stories, and are an exception to the common mode of communication. Persons read a plain matter of fact or a principle, and forget it almost as soon; but a story, even an anecdote of early youth, is remembered with mathematical accuracy for an age.

VERY LARGE. One having Event. *very large*, possesses a clear retentive memory of facts, historical events, anecdotes, what has happened, &c. With large Individ., is very observing of things when in action and motion, and has a remarkable memory of such occurrences, even in minute detail. With large Consci., Time and Local., will be a good witness in courts of justice; will remember circumstances, and the time and place of their occur-

detail, only by associating them with other appearances and circumstances.

SMALL, lacks the power to remember facts successfully even when interest produces a desire to retain; gains but little knowledge from books, because he cannot remember what he reads.

VERY SMALL, cannot remember what daily occurs; when a question arises, is obliged to reason out every thing anew, and fails to profit by experience.

34. TIME.

Perception of duration, ability to recollect the time when events transpired.

The organ of Time is situated between Locality and Tune, and above Color.

ADAPTATION. Time is continually passing away, and events are daily transpiring, the date of which it is pleasing and important to recollect. Every event recorded in the history of the past, took place at a certain period of *time*, and bears some relation in point of occurrence to other events. The starting point with man in relation to *time*, is the Adamic creation. We have no faculty that enables us to comprehend eternity, hence we are lost in its contemplation. Chronology is founded upon this faculty in connection with Number. It aids the musician by enabling him to give each note its exact *time*. It should be cultivated in children by learning them to observe the day of the week, month, &c., and by being particular, when telling them historical facts, to impress upon their minds the exact *time* when those facts transpired. If you wish to give your child a short account of the life and character of Washington, be particular in stating the time of his birth, when he was chosen Commander in Chief of the American armies, the date of the principal battles in the war of the revolution, the time of his first and second election as President of the

rence, while Consci., will lead to the honest relation of the facts.

LARGE, asks many questions; seeks information; has a prying curiosity to find out and know; remembers interesting events without effort, and has the talent necessary for a good historian. With large Local., will be passionately fond of reading of travels and voyages, and with large Ven. added, the biography of distinguished persons. With large Firm., Destruct. and Combat., will like the history of wars, and the rise and fall of Empires; with large Time and Local., will remember with accuracy the time when, and the places where events occurred; and with large Lang. added, will remember the language of writers used in the description of events, and be able to communicate those facts to others in a clear manner.

FULL, is anxious to read and hear the news and to gather facts; will remember leading events tolerably well, but suffer minor matters, and less interesting particulars to escape the memory. If Acquis., Time and Caution be large, will have a good memory of business transactions, and with large Consci. added, be punctual to fulfill engagements.

AVERAGE, will require much effort to remember events, which are not important or interesting. If Acquis., Philo., Adhes., Caution or Appro. be large, will remember what concerns the interest of the purse, what relates to children, or friends, or danger, or reputation, and will *always* require some aid of the other faculties to impress upon the mind the recollection of events. With large reasoning organs, will remember ideas and principles better than facts.

MODERATE, recollects important facts and events only, or where interest is concerned. With large Mirth., Imitat. and Lang., will remember ludicrous incidents and anecdotes, and relate them well. With very large Individ., Local., Time and Form, will remember places, dates and faces, better than events, and recollect events in

United States, his retirement, his death, &c. By taking *this* method with children, they can easily be taught to become good chronologists. For the last four years, the authors have made many observations respecting the size of this organ in the heads of different persons in the United States, and have generally found it in a moderate state of development, accompanied, if we take the statements of those examined as evidence, with a poor memory of dates. To what is this owing? We answer, to a want of cultivation. Books should be published for the use of schools, containing the *date* of every important event that has taken place since the creation of the world, and children should study such books when young, and then would the common complaint of a poor memory of dates and ages, cease.

VERY LARGE. One having Time *very large*, has a remarkable talent to recollect the precise time when events transpired, the day of the month, the hour of the day, &c., with great accuracy without the aid of a time piece, and has the ability to become a good chronologist.

LARGE, has an excellent memory in respect to the time when events transpired; in relating anecdotes, will be particular to tell the *time* of their occurrence; keeps good time in marching, dancing, and in performing music; with large Consci. and Firm., will be punctual to the moment to fulfill engagements, and wish others to do likewise.

5
to
FULL, has a fair memory of dates, and of the ages of friends; in reading history, will recollect the time when important events have taken place, but will forget the date of events of minor importance; with large Tune, Event. and Number, will have the ability to become a good musician, and keep correct time.

4
AVERAGE, is not capable of excelling as a chronologist; cannot tell the day of the week or month, without giving particular attention; with large Event., will recollect a circumstance much better than the date of its oc-

currence; with large Local., Individ., Lang. and Form added, in relating an anecdote will tell the circumstances accurately, the place *where* and before *whom*, but forget the time *when* it occurred.

MODERATE, cannot recollect dates, ages, &c., or tell the time *when* events have transpired, without giving great attention; has not the ability to excel as a chronologist or to keep correct time in music; as a public speaker, will *clip* his words, and speak one part of a sentence with great rapidity and another part slowly.

SMALL OR VERY SMALL, finds difficulty in recollecting the ages of near relations; cannot tell the time when important events have taken place; fails to keep time in music and marching, and with moderate Number, will forget his own age.

35. TUNE.*

Sense of melody and musical harmony.

This organ is located forward of Constructiveness, and above and backward of the external angle of the eye.

ADAPTATION. That man is naturally a musical being, may be inferred from the fact, that savage as well as civilized nations, have their songs and melodies, and seemingly take much delight in music. Without this faculty, a great amount of enjoyment which mankind now experience, would be lost, and the soul-stirring melodies which almost electrify assemblies, the varied music of the social circle, the plaintive strain which leads the humble worshiper to raise his thoughts from earth to heaven, and joined with Hope, to anticipate the time when he shall sing the "praises of redeeming love," in the company of

*NOTE. The organ of *Tune* occupies a small space in the head, and is covered with the temporal muscles, and for this reason we are not always positive respecting its size; and hence, in giving a Chart, we seldom mark the organ. In the naked skull, we find no difficulty on this point.

the blessed, could not be enjoyed. The kind of music which will please a person, depends much upon his other faculties. The organs of the propensities being large, give a love of martial music; but if the moral organs predominate, sacred music will be preferred. Many, judging from their own consciousness, maintain that a very considerable portion of mankind cannot learn music. Such, however, is not the fact. There are a few, who cannot see any difference in different colors, and others who cannot solve a simple question in arithmetic, and there are some persons so deficient in Tune, that they cannot learn to distinguish tones. The reason why so *many* persons cannot sing, is in consequence of so little *attention* being given to the education of this faculty, in childhood. If no more pains were taken to learn children arithmetic, than is now given to music, there would be as many poor arithmeticians as musicians. This shows the necessity of teaching music in common schools. If the sense of melody is an innate faculty in the human mind, and a temperate exercise of all the faculties constitutes happiness, then the cultivation of this organ in childhood must be apparent to all intelligent minds.

VERY LARGE. One having Tune *very large*, is very quick to learn tunes by hearing them sung, and recollects them without effort; with large Imitat., and average Form, Size, Individ., Event. and Time, will dislike to sing by note; with large, or very large Ideal., will be fond of soft and gentle airs; with very large Combat., Amat. and Mirth., will be fond of martial music, *love songs*, and comic singing; with small, or moderate Ideal. added, will admire negro songs of a coarse and vulgar nature, and prefer them to elevated and refined music.

LARGE, has a good musical ear and by hearing others perform, can learn tunes with facility without the aid of notes; with large Individ., Local., Time and Weight, will readily learn to perform well on the Piano Forte; with large Benev., Ven., Hope, Marvel., Adhes. and Ideal., will throw the whole soul into music, and perform with great talent and melting melody; with large Com-

bat. added, will perform with energy, force and power.

FULL, is quite fond of music and can learn tunes by ear with a good degree of facility; with large or full Time, Individ., Form and Numb., will learn tunes readily by note; with large Mirth. and Hope, and average Caution and Consci., will be fond of gay and lively airs; with average Hope, and Mirth., and large Caution and Consci., will be pleased with plaintive music, and be disgusted with comic songs, dancing tunes and boisterous music.

AVERAGE, cannot readily learn tunes by hearing them performed by others, but can discriminate between good and poor music; with large Form, Time, and Number, and much practice, will be able to play on musical instruments, and with a good voice, to sing with the aid of notes.

MODERATE, is not elated at the sound of music and learns tunes with great difficulty; with large Self-Esteem, will like to take the lead; will sing loud, and make many discords and not know it, to the great annoyance of those who have a good taste for musical harmony; with large Ideal., may be very fond of hearing vocal music, and will think much of the words with which it is connected.

SMALL, OR VERY SMALL, dislikes music; has not the ability to distinguish the difference in tones; cannot tell harmonious from discordant strains, or one tune from another, but if Time be large, may do it by the slowness or rapidity of the movement; as a public speaker, will fail to modify the voice, so as to please an auditory; with small Ideal., will be low and vulgar in feeling and conduct.

36. LANGUAGE.

Faculty of committing to memory, power of expressing thoughts and ideas by means of speech.

This organ is located immediately over the eyes, upon the super-orbiter plate, and when large, presses the eye outward and downward.

ADAPTATION. The faculty of Language takes cognizance of the artificial signs by which our ideas are represented, the ideas themselves being given by the other faculties. Eventuality enables us to recollect daily occurrences, Form gives the idea of configuration, Causality takes cognizance of cause and effect, and Language supplies the words or sounds, by which to express the ideas which those faculties originate. Without this faculty, by which man communicates his thoughts to his fellow man, literature, science, arts, civilization and refinement would not be known. When we take a view of the function of this organ, we are forcibly reminded of the wisdom and goodness of the Creator, in thus distinguishing man from the lower order of animals. It must be borne in mind, however, that there is a natural and artificial language, both of which are expressed by signs. Brutes are endowed with natural language; but the ability to convey an expression of their feelings is confined to a few inarticulate sounds. Domesticated animals, not only have a natural language by which they can understand each other, but they inform those persons who have the charge of them, of their wants and aversions, by the various sounds that they are accustomed to make. Dogs, Cats, &c., make use of a particular sound when they are hungry and ask for food. Birds, also, the most musical of the lower animals, make use of different sounds, to express joy or fear. The Robin, for example, pitches her voice on a very different key, when her young ones are approached by some destructive urchin, a serpent or murderous hawk, than when at early dawn, unmolested by man, reptile or bird of prey, she charms the cottager with the sweet music of her notes. But man, unlike the brute creation, has the ability to form an alphabet, place several letters together, form words and give to those words certain articulate sounds, and thus express his ideas to his fellow men. The cultivation of this faculty in children is very important, but from a want of knowledge of the true nature of the faculties of the mind, it has not been educated in a manner best calculated to enlarge and strengthen the mental powers. We have stated that Language has nothing to do in generating ideas. It

merely gives the ability to commit to memory the ideas of others and to repeat them when occasion requires. Some persons have the impression that if a child can commit to memory with great facility, it is a mark of superior intellect. But it is an erroneous opinion, for such is often the case with children having weak minds. Idiotic persons sometimes have the faculty of Language so strong that they can repeat the whole of a long discourse, after having heard it but once. This shows that the faculty of committing to memory may be very good when many of the other faculties are decidedly weak. Children are sent to school, and for weeks, perhaps, no intellectual organ is called into exercise, excepting Language. And how is this done? Merely by giving the child tasks to commit to memory, without even explaining the meaning of the words or sentences committed. And sure enough it is a *task*, the child dislikes it—becomes tired of going to school, and its parents sometimes feel obliged to have recourse to the whip, in order to secure attention to books. Take a different course, and learn the child *things* as well as words; let the whole of the intellectual organs be exercised instead of the one organ of Language, and the school house will not be an irksome place. In short, children should not be learned to spell a word, or repeat any sentence without knowing the meaning of the word or sentence. Parents sometimes take pride in letting strangers hear their children repeat verses which they have committed, when it is done parrot-like, without understanding what they repeat. They might as well be proud in exhibiting the skill of a Parrot in repeating its favorite words. All who have a strong endowment of this faculty are not fluent speakers, or great talkers. Cautiousness being large, often produces slowness of communication, and combined with small Hope, leads a person to be taciturn, even when the organ of Language is large. Neither does it alone, give facility in the acquisition of foreign languages. Large Comparison and Eventuality, united with a good share of Language, (a combination, which exists in Elihu Burritt, the learned blacksmith,) give the ability to excel as a linguist. Children having this faculty strong and active,

will be talkative, and if they cannot find any one to converse with, they will talk to themselves, or their playthings. A full eye, and a swollen appearance to the under eye-lid, are signs of a large organ of Language; but the eye may be prominent from a want of brain in the region of the perceptive organs, and thus lead a novice in the science to mistake its size. The eye, also, may appear sunken, if the anterior lobe of the brain is very large, when this organ is well developed, as is the case with Clay, Webster, Calhoun and others.

VERY LARGE. One having Lang. *very large*, has a remarkable talent to recollect words; is able to speak with ease and fluency, and can commit to memory with great rapidity; with large Event. and Individ., and moderate Caus., will use a great many words to express a very few ideas, and in relating anecdotes will be prolix; with moderate Secret. and Caution and large Hope, will be loquacious.

LARGE, has a good verbal memory; makes use of appropriate words to express feelings and ideas; with large Individ., Event., Hope and Combat., and moderate Secret. and Caution, will have a great command of words and be able to communicate thoughts with ease and fluency; with large Caus., Comp., Event., Individ., Imitat., Ideal. and Tune added, will make a good public speaker, be eloquent, and have a faculty to gain the attention of auditors, and be able to excel in the science of elocution.

FULL, can commit to memory with a fair degree of facility; has a tolerable command of words and, when excited, will be fluent; with large Secret. and Caution, and moderate Event., Combat. and Hope, will hesitate when talking, and appear to lack Language, and will have a better faculty to write than speak; with small Secret. and Caus., will speak without sufficient thought, and with large Self-Esteem and Destruct. added, will be blunt and harsh in the expression of views and feelings.

4 **AVERAGE,** possesses an average talent for committing

to memory, and has language suited to ordinary occasions; with large Combat. and Hope, will be fluent, especially when excited; with large Event., and average Secret. added, will be quite a talker, but lack ease and copiousness of style in the expression of ideas.

MODERATE, cannot learn to repeat words and sentences without much labor; will often be at a loss for words by which to express ideas; with large Caus., will remember the ideas of a speaker better than the language in which he clothes them, and be concise in the expression of thoughts either orally or with the pen.

SMALL, is slow to commit to memory; uses language that is common-place; with full Caution, and average Combat., will often be much troubled for words by which to express ideas; with a good development of the other organs of the intellect, will, on a slight acquaintance, appear less talented than is in reality the case.

VERY SMALL, has a very poor verbal memory, often hesitates when talking, for words; will use inappropriate language, and sentences without any significant meaning; with Individ. and Form moderate or small, will find much difficulty in learning to read with any degree of celerity or accuracy.

Genus II. REFLECTIVE OR REASONING FACULTIES.

These faculties give understanding or reason, and take a general supervision over all the other faculties and give power to reason upon the ideas which they obtain. They impart the power to trace the connection between causes and effects, lead to the discovery and application of first principles, generate resources, invent, adapt means to ends, comprehend truly abstract, metaphysical subjects and create that high order of intellect which makes man a *progressive* and *improvable* being, and although weaker than many animals, yet the natural lord of the earth.

27. DR. GALL.

28. Amsterdam Idiot, copied from
a cast of the original.

Reasoning organs, very large.



Reasoning organs, totally wanting.

37. COMPARISON.

This faculty compares, illustrates, discovers analogies, resemblances and differences in principles, objects, &c.; the power to reason from parallel cases, to illustrate and classify phenomena.

This organ is located in the middle of the upper portion of the forehead.

ADAPTATION. Every object in nature bears some resemblance to other objects, yet no two things are precisely alike. The millions of men and animals, and all physical existences, show greater or less likeness to each other, and truth and falsehood often bear to each other a striking similitude. It is the office of Comparison to recognize these resemblances and differences, thereby imparting critical acumen in forming a judgment of men and things and of the various phenomena of the intellectual and material world. Comparison has been justly called "the fountain of proverbs." It enables us to reason upon things which we do not know, by a comparison with those with which we are acquainted. Thus, we see a stone sink in water; a tree fall when cut at the root; a balloon rise in the air; the sun set in the

and investigate the movements of the heavenly bodies, revolving in their spheres; and not content with this, to approach the throne of the Almighty, and seek to investigate the character of Him, who is the great first Cause of all. This faculty being strong in children, produces an inquisitiveness which will not rest satisfied until the question asked, receives a full, reasonable and decided answer. Some children are inquisitive, but any answer to their questions, however unreasonable it may be, will satisfy them. Such have large Individuality and Eventuality, with feeble Causality. This organ appears very large in the portraits of Bacon, Locke, Franklin and Gall, and they were remarkable for originality, and the depth of their philosophical researches. It is also very large in Daniel Webster and Professor Silliman of Yale College, moderate in the Aborigines of this country, and very small in the Charibs and New Hollanders.

6. **VERY LARGE.** One having Caus. *very large*, has a very strong desire to know the *why* and *wherefore* of every thing; is an original thinker; reasons from first causes; searches deeply into abstruse principles and relations, and is capable of investigating and comprehending the most profound arguments; with large perceptive organs added, will observe closely, obtain data from small matters, and upon them found large systems, and thus, like Newton, Franklin and Gall, make new discoveries in science.

LARGE, is much inclined to search deeply and find out the causes of existing phenomena, and easily comprehends abstruse principles; with large Individ. and Event., will be fond of natural philosophy; with those organs moderate or small, will like abstract reasoning, yet lack judgment on many practical subjects, and learn more from books than by observation; with large Combat., will be fond of contending upon metaphysical subjects; with very large moral organs added, will take pleasure in reasoning on the doctrines of morality and theological subjects.

FULL, will wish to know the causes and reasons of things, but will not be distinguished for deep, original

comparisons only, as are strong and perfectly apparent; is more general, than critical in illustration; fails to observe minute resemblances and differences in property, ideas or language, and cannot classify thoughts or things closely.

SMALL, has but little talent for illustration, and seldom uses, or tries to employ comparisons, and is crude and inappropriate in all such efforts.

VERY SMALL, is slow and obtuse in analogical perception, even when bold and striking comparisons are presented by others.

38. CAUSALITY.

Power to reason, ability to trace the "dependences of phenomena, and the relation of cause and effect.

This organ is located outward from Comparison, in the upper and lateral portions of the forehead.

ADAPTATION. Philosophy teaches that every effect must have a cause, and that every cause produces an effect. Causality brings man into harmony with this established principle, and leads him to search into the deep mysteries of nature. It draws a distinct line between man and the lower animals; takes the place of instinct, and is denominated, Reason. Some animals, by their instinctive sagacity, perform many operations in one way only, with wonderful skill, and in performing them they cannot err. Man, on the other hand, aided by this faculty, is enabled to invent new things and to make improvements on the inventions of others; but notwithstanding this, *he* is liable to err. This, then, is the difference between reason and instinct. Causality leads man to investigate the laws that govern the world which we inhabit, the cause of day and night, summer and winter, the tides, an eclipse of the sun or moon, the attraction of gravitation, earthquakes, volcanoes and lightning; and leaving earth, to soar through the regions of space

ference or analogy, of principles, language or things, and with large Lang., will be a real critic in terms.

6 **LARGE**, has superior power to reason by analogy; to detect a slight incongruity; makes appropriate comparisons, and with very large Caus., will have strong theoretical understanding, critical and comprehensive views, and originality and depth of thought. With large Individ., Event., Lang. and Ideal., will be apt, and to the point in illustrations, use glowing metaphors, and highly polished proverbial and parabolical expressions; with large Firm., Appro., Hope, Sub., and Combat. added, will carry every thing before him in argument and oratory, and be the personification of intellectual greatness; with very large Destruct., Self-Esteem and Mirth. added, will, when aroused, be sarcastic and his withering criticisms will be bold, censorious and overwhelming.

5 **FULL**, has a fair talent to compare and reason by analogy; but will not detect the nicer differences, the minute and obscure resemblances in principles, arguments and things; with large Construct. and perceptive organs, will make bold comparisons, and illustrate ideas and principles well by the mechanical powers. With large Mirth. and moderate Imitat., Secret. and Ideal., will be blunt, off-hand and odd, and make many singular and laughable comparisons, but with large Secret., Ideal. and Caus., will be chaste and elegant in illustration and take a few bold points of comparison, and reason from them with success.

AVERAGE, has tolerable ability for analogy and classification; readily feels the force of such comparisons as are bold and striking, and manifests strength, rather than acuteness in illustration. With large Caus., will reason more from first principles than by a comparison of facts, and with moderate Ideal. and Hope, will rarely use a metaphor, and is rather dry and abstruse, than eloquent, polished and refined.

MODERATE, perceives and uses in argument, such

west; the moon wax and wane; winter succeed summer; fire dissolve combustible matter, &c., and we conclude that the same effects will succeed similar causes forever. When we compare phenomena with causes which *have* acted, and find them the same, we infer beforehand, what must follow, viz., that analagous causes, will produce analagous results. By this faculty we obtain a knowledge of things not seen, by knowing that they resemble those which we have seen. We see a Chinese, a Hindoo, a Greenlander or an African, and from hence infer the general resemblance of all in their several nations. We see one city, and infer the general appearance of all other cities. We see corn growing upon the stalk; an acorn, upon a tree; or a fish, in water; and whenever, or wherever we may see those objects, we say that the place of their nativity, was the stalk, the tree and the water. Much of scripture teaching, aside from the Psalms of David, and Proverbs of Solomon is addressed to man through Comparison; for example, 'The kingdom of Heaven, is likened to a man,' &c. This mode of reasoning by illustration, the comparison of spiritual with temporal things, and temporal with spiritual, is not only one of the happiest, but is decidedly the most convincing. The organ of Comparison is generally larger than Causality, and we notice that those speakers who illustrate truth by something with which the audience is familiar, are listened to with the deepest interest. Such was true of Pitt, Curran, Sheriden, Phillips and Cookman, and such is the case with Finney, Burchard and Maffitt, and indeed *all* popular speakers or writers abound in similes, metaphors and analogical expressions. Comparison gives to poetry much of its beauty and interest, and the writings of Shakspeare, Pope, Byron, Burns, Moore and Pollok, abound in figurative expressions. *Æsop's Fables*, are a perfect exhibition of the use and effect of this faculty.

VERY LARGE. One having Comp. *very large*, possesses a scrutinizing, analytical mind; extraordinary talent to illustrate and reason from supposed or similar cases; power to discover and appreciate the nice shades of dif-

conceptions ; with large Comp. and perceptive intellect, will possess sound judgment and have good practical ability ; with large Firm., full Combat. and Destruct. added, will not only plan well, but have force and efficiency to carry out those plans.

AVERAGE, will not possess great power of reasoning upon first principles ; with large Comp., Lang., Event. and Individ., will reason plausibly upon many subjects and appear to good advantage, yet be superficial upon those which require deep thinking ; and with large Self-Esteem added, will, upon a short acquaintance, get credit for knowing more than he really does.

MODERATE, has but little desire to search into first principles ; lacks the ability to reason upon abstruse subjects ; with large Secret., will display considerable tact and shrewdness, but lack the power to lay deep plans and carry them out advantageously.

SMALL, has feeble ability to plan and reason, and is not possessed of sound judgment ; cannot understand profound arguments and solid reasoning ; with large Ven., and moderate Self-Esteem, will feel very lowly in the company of the learned and dignified.

VERY SMALL, cannot comprehend the most simple reasoning ; is not able to originate any new ideas, and is destitute of common sense.

Phrenological Character of

Jane E. and Paulina B. Keale.

Examined by

N. Lizer,

19 Feb.

1846.

REMARKS ON THE FOREHEAD.

Those having but little acquaintance with phrenology, often form very erroneous opinions in regard to the mental capacity of individuals by merely taking a front view of their foreheads. They imagine that a receding forehead is very unfavorable and cannot be accompanied with good sense. And noticing, too, that persons of good practical judgment, frequently have receding, while others, noted for stupidity, have perpendicular foreheads, they conclude that phrenology, is one of the "delusions of science." A few suggestions will show the error into which such persons are often led by ignorance. In the first place, strength of intellect, (other conditions being equal) depends upon the size of the anterior lobe of the brain. The rule laid down by phrenologists by which to judge of the size of this portion of the brain, is to ascertain the most prominent portion of the zygomatic arch, a little back of the cheek bones, from which point draw a perpendicular line, (the eyes being on a level with the horizon,) and the amount of brain forward of this line indicates the bulk of the anterior lobe of the brain, which is devoted to the intellectual organs; or in more general terms, observe whether the head is long or short, from the ears, forward. See Cuts of Raphael and New Hollander, page 137, by which a very large and a very small endowment of the anterior lobe is exhibited, with the rule for ascertaining its size. A perpendicular forehead, is not indicative of a large, nor a receding one of a small anterior lobe. The one that is perpendicular, however, may when viewed in front by a novice in phrenology, be considered preferable to the one which is receding, when in reality the reverse is true. A very large endowment of the organs of the perceptive faculties is usually the cause of receding foreheads, and is often accompanied with a good development of the reflective organs. Two heads may appear alike, when viewed in front, but when seen in profile, one will indicate a well balanced intellect, while the other will show evident marks of imbecility.

We have noticed that most of our distinguished statesmen, divines, lawyers, physicians and teachers have retreating foreheads, occasioned by a very large development of the perceptive organs. We have also noticed that those scholars who receive the highest honors at college, have the same form of head. In short, a good endowment of the perceptive organs is absolutely necessary to enable a man to be a ready scholar, and to rise above mediocrity in any of the learned professions.

Washington and Lafayette had retreating foreheads, and they were men of sound judgment, sterling sense and good practical ability. There are some persons who have large organs of the perceptive faculties, combined with very large reflective organs, which produces foreheads like those of Dr's Franklin and Gall. (See cuts.) Such a combination enables its possessor to look into the hidden mysteries of nature; to reason from cause to effect, and make discoveries in science and philosophy.

REMARKS ON THE CUTS.

No. 1, Figure of a perfect head, is designed to show the location and comparative size of the phrenological organs. The reader will see the spaces, marked A, B & C, which some Phrenologists suppose to be mental organs, but they are not yet fully established.

A. SUAVITIVENESS, is supposed to give ease and affability, and the power to please and render one's self agreeable to others.

B. HUMAN NATURE, is supposed to give ability to judge of the motives and character of others, and to lead to suspicion. Such are not too confiding, and hence are seldom deceived by strangers.

C. UNION FOR LIFE, is supposed to induce a desire to unite for life to one beloved object, and to be constantly with that friend. Dr. Vimont, the great French anatomist, has noticed a difference in this region of the brains

of connubial animals, and those which choose their mates yearly or associate promiscuously.

No. 2, shows the location of the several classes of organs.

No. 3, Stephen Burroughs, had large reasoning, and *extraordinary* perceptive organs. He was a man of remarkable shrewdness of intellect and versatility of talent. He had very strong propensities and feeble Conscientiousness, and he was highly talented and (unless his reputation is incorrect) depraved.

No. 4, shows only average perceptive, large reasoning and moral organs, and small Amativeness.

No. 6, presents a side, and No. 7 a back view of the skull of Big Thunder, an Indian Chief and warrior. No one will fail to perceive the very great breadth of the skull in the region of Destruct. and Secret. and the total want of Benev. He was a monster of treachery and cruelty.

No's, 12 & 13, present a bold contrast. In No. 12, Self-Esteem is excessive, while the social organs are small, and hence, his head is high and perpendicular in the back part. No. 13, shows very small Self-Esteem and very large Philo., which elongates the back-head and makes it appear deformed; but reduce Philo. and increase Self-Esteem, and the head would be well balanced. We find many female heads like this.

No's, 14 & 15, are true copies of skulls in our possession, and their characters corresponded with their phrenological developments. The other Cuts are sufficiently explained where they are inserted.

INDEX.

	Page.
Adhesiveness,	58
Amativeness,	49
Alimentiveness,	74
Acquisitiveness,	75
Approbateness,	88
Brain, the organ of the mind,	8
" enlarged by exercise,	33
" remarks on the,	43
Boy in Washington, having a very large head,	26
Benevolence,	117
Combe, Mr. George	16
Colleges,	37
Classification of the faculties,	48
Concentrativeness,	64
Combativeness,	67
Cautiousness,	84
Conscientiousness,	102
Constructiveness,	120
Color,	150
Comparison,	174
Causality,	177
Cuts, remarks on the,	181
" Perfect Head, showing the location of the organs,	4
" showing the location of the several classes of organs,	48
" of Stephen Burroughs & Mr. *****,	49
" " Affectionate Mother & Big Thunder,	54
" " Big Thunder, back view, & Ceylonese boy,	70
" " Timid Lady, Reckless boy & Mr. *****,	85
" " Arrogance & Modesty,	93
" " Lawyer & English soldier,	98
" " DR. GALL & POPE ALEXANDER VI.,	102
" " Skull in Dr. Gall's collection & Dr. Hette,	113
" " New Hollander & Raphael,	137
" " Pitt, Moore, Sheriden, Burritt & Franklin,	140
" " DR GALL & Amsterdam Idiot,	174
Diversity of character,	16
Destructiveness,	69
Education of children, and self-improvement,	36
Explanation of chart,	46
External senses,	138
Firmness,	98
Form,	143
Forehead, remarks on the,	180

General Observations,	5
Hope,	106
Inhabiteness,	61
Ideality,	124
Imitation,	131
Individuality,	140
Indians, North American,	19, 20, 21, 31, 71, 75, 94, 122 & 158
Luther, Martin Rev.,	21
Laws of Health,	29
Locality,	157
Language,	169
Measurement of skulls,	19
Melancthon, Philip Rev.,	21
Mapping of the head into organs,	45
Marvellousness,	110
Mirthfulness,	133
National heads,	19
Napoleon,	81
Number,	155
Order,	153
Preface,	3
Principles of Phrenology,	7
Plurality of the faculties,	11
“ “ “ organs,	17
Partial genius,	12
“ insanity,	13
“ idocy,	16
Peruvian Indian,	19
Physical education,	25
Philoprogenitiveness,	53
Size, a measure of power,	18
“ of the head,	47
Size, organ of,	145
Secretiveness,	80
Self-Esteem,	93
Sublimity,	127
Schools and school teachers,	37
Temperaments,	23
Tight lacing,	28
Temperance,	31
Time, organ of,	165
Tune,	167
Veneration,	113
Wounds of the head,	9
Washington,	67 & 81
Weight, organ of,	147
Youth, murdered by kindness,	27