COMPEND

OF THE

PHRENO-PHILOSOPHY

07

HUMAN NATURE.

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17

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CONTENTS.

I	Page
A chart to be used in examinations	3
Marks which denote the sizes of organs	3
INTRODUCTION. Dr. Gall-Dr. Spurzheim-his System-Mr.	
Combe	17
The Albany Society-Prof. E. N. Horsford	18
The American Phrenological Journal	19
Phreno-Mesmerism and the new organs	20
Sunderland	21
Fowler's errors in regard to Consciousness, and to the Cerebel-	
lum	26
SCIENTIFIC CLASSIFICATION	28
ANALYSIS of the Phreno organs-Directives-Perceptives	33
Reflectives	37
REMARKS on the nature of the impulsive powers	39
On the arrangement of the Ipseals	40
Social impulsives	03
Temperaments	66
Large heads and small lungs	00
Size measure of power-Galvanic batteries and oxygen compared	57
with the brain and oxygen	68
Ricketty heads	00
Critical Remarks upon the temperaments: Temperament of	79
lower animals	71
Of boyhood—of girlhood	74
Changes of temperament at different ages	75
REMARKS on new organs	
Suavity-Sublimity-Concentrativeness-matrimomar attach	76
ment	77
Organs of Phreno-Mesmerism	78
GROWTH OF ORGANS SOURCES OF error	79
Exercise cannot make a Franklin of a Hottentot	79
Importance of exercise and education	80
THE BRAIN not the organ of mind	80
Consciousness	

CONTENTS.

Anatomy of the brain-the Hemispheres-Dicotyledons-Com-	
missures-Lobes spinal cord	81
Rieherand	83
Brains of fishes, reptiles, birds and mammals	85
Medulla oblongata	86
The Brain, the organ of conscious motion	86
The motive power does not all reside in the brain	86
Offices of the brain	87
Functions of the Phreno-Organs	88
Resemblance of the nervous system and brain to the magnetic	
telegraph	89
The brain composed of fibrous circuits, in which motions origi-	
nate-the circuits all connected with consciousness	89
The nature of mind unknown—an ultimate fact	91
Measurements	92
Standard of size and proportion very much needed	93
How it may be obtained by measurement	93
Sexes, ages, and races, have different heads in sizes and propor-	~ .
tions	94
We have no standard as yet	94
Prof. Jocelyn of N. Y.; he proposes a craniometer-advantages	~ ~
of measurement	95
Method of applying the rules of measurement and proportion	96
Comparing the head of an unknown character with that of one	
well known	97
Measurement of the body to ascertain the temperaments	98
Resemblance of phreno-quackery and fortune telling	99
Fowler and Dr. Pitman	100
Method in which the head might be measured by eallipers and	
by a craniometer 103,	104
Necessary uncertainty at best	105
SUMMARY of peeuharities of the phreno system of philosophy	106
Idolatrous action	109
Physiognomy	110
Resemblance to parents	110
EXPRESSIONS OF OPINION—Extract from a Report on the Phre-	
nological Classification of J. Stanley Grimes, by E. N. Hors-	
ford, (then) Professor of Natural History and Mathematics in	
Albany Female Academy	11.
Resolutions, adopted at the close of Lectures delivered by Mr.	
Grimes in the Chapel of the Albany Female Seminary	115
Extract from the New-Yorker.	116
New-York Star	116
same, as to the theory of Phreno-Physiognomy	116
New-York Times	117
New-York Star	117
New-Haven Palladium	118
desolutions adopted at New-Mayen after the conclusion of a	110
course of lectures at the Exchange Saloon at that place	118
adopted at Hudson after the conclusion of a second	
eourse of lectures at that place	118

PHRENO-PHILOSOPHY



A CHART

TO BE USED IN EXAMINATIONS.

PRELIMINARY EXPLANATIONS.

When numerical figures are used in examinations, according to the plan adopted in this chart, 4 denotes average size, and of course no organ can be more than 7, nor less than 1, and the organs altogether must average 4; if some are marked more than 4, others must be marked less than 4, to compensate.

But as mathematical precision cannot be obtained, it is better not to use mathematical expressions, which seem to profess such exactness. I therefore prefer to use the following :

Marks which denote the sizes of the Organs examined.

- ||| Very large.
- || Rather large.
- | Above average size.
- O Average size.
- Below average size.
- = Rather small.
- \equiv Very small.

CHART.

TEMPERAMENTS.

The *Muscular Temperament* is caused by large limbs and muscles and indicates slowness and strength, without much activity or sensitiveness.

The *Phreno-Nervous Temperament* is caused by large and active brain and nerves acting upon slender muscles, and indicates sensitiveness and activity rather than strength.

The Digestive Lymphatic 'temperament is caused by a large development of the digestive organs and a comparative deficiency of vigor in the arterial circulation; it indicates indolence and a love of sedentary employments.

The Arterial or Sanguine Temperament is caused by large and active lungs and vigorous arterial circulation; it indicates a power of vigorous, ardent and energetic action.

The Venous or Bilious Temperament is caused by much venous blood and large liver; it is supposed to produce dark hair, eyes and skin. It indicates a power of long continuance in any operation.

The Debilitated Temperament is caused by any habit or disease, or weakness, either acquired or hereditary, which tends to impair the energy of the character. The size of the whole constitution compared with that of the average of others of the same age, sex and race, should be estimated and stated in order to a correct estimation of the force and influence of the character, for, all else equal, size is a measure of power.

DIRECTIVE ORGANS.

PERCEPTIVES.

1. Flavor.—This organ gives prominence to the bones under the eye near the nose—it bestows the power of perceiving the qualities of food, drink and perfumes.

2. Extension or Size.—This organ bestows the power of observing the outlines, distances, extent and forms of things; it gives practical talent and a memory of facts and things, in detail.

3. Direction.—This organ is commonly called Locality; it gives the talent for navigation and surveying without scientific instruction—the memory of places the points of the compass—the directions of objects.

NOTE.—Individuality, Form and Size, I include under the name of Extension. I do not think sufficient evidence has been yet given that there is any such power as Individuality; I therefore reject it; nor do I think that a clear distinction has been established between the organs of form and size—all that observation has fully proved is, that a general fulness, width and prominence of the forehead at the place where it joins the nose, indicates practical talent in details, all the rest is mere hypothesis.

4. Weight.—Perception of force, weight, tangibility, and resistance in balancing, touching and various delicate operations requiring manual skill.

5. *Eventuality.*—Perception of changes and motions, talent for the detail of stories and history.

6. Words, or perception of sounds, commonly ca'led the organ of language; it gives a memory of words and sounds without reference to their meaning or uses.

7. Color.—Perception of the nice shades of color, foundation of the talent for the coloring of paintings, &c.

8. Order.—Perception of order in the arrangement of things, and talent for neatness and precision in details.

9. Number.-Arithmetical calculations.

10. Time.—A doubtful organ, which is supposed to give a talent in chronology, in marching and dancing.

11. Tune or Vocalness.—A doubtful organ, supposed to contribute in some way to musical talent. I suspect that it merely gives an impulse or a love of using the voice to make any kind of sounds which may be necessary.

REFLECTIVES.

12. Comparison.—Power of distinguishing resemblances and classes; it is the foundation of the talent for rhetoric, and poetic expressions founded upon analogy. 13. Causality.—The power of perceiving connection, dependance, cause and effect; it gives original talent, depth, logical ability, and inventive talent.

IMPULSIVE ORGANS.

These organs are divided into two classes, the Ipseal and Social.

THE IPSEALS OR SELF-RELATIVES.

The Ipseal Impulsives are located on the side of the head, and are divided into five ranges, as follows :

CORPOREAL RANGE.

- I. *Pneumativeness.*—Propensity to breathe—to make an exertion when air is wanting to sustain life and action, and prevent suffocation.
- II. *Alimentiveness.*—Propensity to eat and drink to prevent hunger or thirst.
- III. Sanativeness.—To avoid injuries and diseases of the body and remove the causes of pain.

BELLIGERENT RANGE.

IV. Destructiveness.- To kill, crush, destroy, or be angry and severe. V. Combativeness.—To fight, contend, dispute, resent, contradict.

PRUDENTIAL RANGE.

- VI. Secretiveness.—To avoid direct encounters, to conceal intentions and act cunningly.
- VII. Cautiousness.—To look around for danger and difficulty and guard against it.

INDUSTRIAL RANGE.

- VIII. Constructiveness.—To build, construct learn the nature of structures.
- IX. Acquisitiveness.-To acquire property.

IMPROVING RANGE.

- X. Experimentiveness.—Playfulness, mirthfulness, wit; a species of playful activity of the powers, love of new contrivances and experiments.
- XI. *Perfectiveness.*—To improve, to plan and execute in superior and poetical style.
- XII. Hope or Migrativeness.—To undertake distant, new and doubtful enterprizes, and expect success and happiness.

CHART.

SOCIAL IMPULSIVES.

ESTABLISHING GROUP-TO ESTABLISH SOCIETY.

- 1st. Amativeness .- To love the other sex.
- 2d. Parentiveness or Philoprogenitiveness.-To protect the young and helpless.
- 3d. Inhabitiveness.—To remain at home and to concentrate the thoughts in a limited spot.
- 4th. Adhesiveness.—To cling with fondness to parents and friends in the domestic circle.

GOVERNING GROUP-TO GOVERN SOCIETY.

- 5th. Imperativeness.—Self esteem, to govern command and direct others.
- 6th. Approbativeness. To covet favor, applause, praise or popularity.
- 7th. Firmness.-To be unmoved by persuasion.
- 8th. Justice or Conscientiousness .- To be impartial.

CONFORMING GROUP-TO CONFORM TO SOCIETY.

9th. Submissiveness.—To obey and reverence superiors.

- 10th. Kindness.—To be kind and gentle and courteous to strangers and others.
- 11th. Imitativeness.—To do as others do and feel as others feel and think as others think.
- 12th. Credenciveness.—To believe what is said or written

10

A NEW SYSTEM

OF

PHRENOLOGY.

INTRODUCTION.

THE study of human nature has in all ages been deemed of the very first importance, and called into vigorous action the master minds of every civilized nation. But the numerous systems that have been successively produced and abandoned, afford sufficient evidence that the great fundamental principles of human nature had never been discovered. Some philosophers have shut themselves in their closets and endeavored, by reflecting upon the operations of their own minds, to frame a system of mental philosophy which would apply to all mankind : But the result was that they only acquired an imperfect history of a few of their own mental powers, while they remained in total ignorance of the causes which produce the great diversity of human character. Others endeavored to acquire a knowledge of man by travelling, and mingling with all classes and conditions of the human race. These

were more successful; but however much knowledge might, by the experience of a whole life, be acquired in this manner, it necessarily died with the individual, as it was of such a nature that it could not be communicated. Anatomical investigation, was a method of studying human nature; but, although this led to more correct notions concerning the functions of the body, it shed no light upon the nature of the mind. The study of Physiognomy, is another method which has been pursued from the time of Aristotle, Theophrastus, and Zopyrus, among the ancients, to the attempts of Camper and Lavater of our own day; but all the real success which has attended the labors of physiognomists, is owing to their approximation to the great truths of Phrenology, though they were utterly ignorant of this science. By examining the works of Camper and Lavater, it will be found, that the few useful truths which they contain, are based upon the principles which are explained in this work.

The foundation of Phrenological science, was laid by the discoveries of F. J. GALL, a native of Germany, who was born March 9, 1757. His attention was first directed to the subject while a school boy, from the circumstance that those who committed the words of their lessons to memory with the greatest ease, had *prominent eyes*. He next observed that those who excelled in the memory of places, had a peculiar prominence upon the forehead. After he left the University, he commenced the practice of medicine. He was now a man of science—his very profession led him to study human

nature in connection with the human constitution-and he began to reflect-" If the prominence of one part of the head indicates one talent, and the prominence of another part indicates another, may not all the talents and dispositions of men be indicated by the developements of different parts of the head ?" The suggestion seemed plausible; and he accordingly, after having in vain examined all the different authors on mental philosophy, betook himself to the observation of the heads of peculiar characters. He was successful, even beyond his most ardent hopes ; for he soon discovered external indications of talents for painting, poetry, and the mechanic arts, besides several of the moral and animal propensities. Gall's first publication on the subject was in 1798. He very naturally failed to give system to the facts which he had discovered ; and the names which he gave to the organs were unphilosophical. In 1801, fortunately for the science, John Gasper Spurzheim, also a German, became the pupil of Gall, and in 1804 was admitted as his partner.

In 1802, the lectures of Dr. Gall at Vienna, which had continued for five years, were prohibited by an order of the government, obtained through the influence of the clergy. In 1805 Gall and Spurzheim left Vienna, and travelled to some of the other cities of Europe, lecturing upon, and disseminating their doctrines. In 1807, Gall arrived at Paris, and remained there until his death, which took place in 1828.

Spurzheim dissolved his partnership with Gall in 1813, and in 1814 visited Great Britain, and lectured in the principal cities. In 1817, Spurzheim returned to Paris. In 1824, the lectures of Gall and Spurzheim at Paris, were prohibited by an order of the government. Spurzheim again visited Great Britain in 1825, where he afterwards spent most of his time until June 20, 1832, when he sailed from Havre, and arrived at New-York, August 4. He remained in New-York until the 11th, when he proceeded to New-Haven. On the 16th he left for Hartford, and from that city he went to Boston, where he arrived on the 20th. He gave a course of lectures in Boston, and another at Cambridge. This was the last labor of Spurzheim in the cause of science. A slow, continued fever, not at first considered dangerous, finally proved fatal, and he died at Boston, Nov. 10, 1832. No man was ever more sincerely lamented. To the honor of my native city, the most distinguished tokens of love and regard were extended to him while living, and the highest testimonials of grateful reverence followed him to the grave. His beautiful monument at Mount Auburn, is but an emblem of the pure affection with which his memory is cherished. The marble may perish, and the place of his burial be forgotten ; but the names, both of Gall and Spurzheim, are immortal. They must always be associated with principles that will be known and appreciated, while science has a temple or a devotee on the earth.

Dr. Gall laid the foundation of Phrenological science by discovering that when certain portions of the skull protruded in a peculiar manner, the character and talents of the individual were indicated by the protrusion.

Upon a careful anatomical investigation, he ascertained that the protrusions of the skull were generally caused by developements of portions of the brain immediately beneath ; these portions he called Organs. His examinations of the brain led him to the important fact, that its principal internal parts are constituted of fibres extending from the circumference of the brain to the central medulla oblongata and that these fibres were crossed by others which proceeded in an opposite direction. Dr. Gall took a profound view of the subject, and conceived that, in consequence of his discoveries, a great revolution must take place in the science of the mind. He proceeded to learn the truth by observations made upon animals and men-upon the living and the dead-upon sculptured busts and painted portraits, and after a whole life spent in laborious researches, with the assistance of his distinguished pupil, Dr. Spurzheim, he succeeded in placing Phrenology upon a solid and enduring basis. It had imperfections-it was mingled with error-a part only of the truth was known, but enough was disclosed to show that all previous systems were false, and that the right path had at length been discovered. No one was more sensible than Dr. Gall himself, that the science was imperfect. He did not attempt to arrange and classify the organs upon any philosphical plan, for he had not obtained a sufficient number of facts. He was not a friend to new theories and schemes, the results of mere human ingenuity, but labored with incredible patience and industry to discover the laws which the Almighty had ordained to regulate the operations of mind; and he continually insisted that carefully observed facts are the only sure elements of science and the only reliable indications of the natural laws which God has established in the constitution of man. Dr. Spurzheim attempted to systematize the discoveries of Gall and himself and to reduce them to a science. He divided the Organs into two grand divisions, one of which he denominated the Intellectual faculties-they are located in the forehead. The other grand division he denominated Affective faculties. He sub-divided the Affective faculties into Animal Propensities and Moral sentiments and ascribed certain peculiar emotions to the moral sentiments, (located in the upper part of the head,) which he supposed that the animal propensities (in the lower part of the head) did not possess. All the Phrenological writers, (in our language at least,) have agreed essentially with Spurzheim in his arrangement and subdivision, except myself.

In the year 1834 I commenced lecturing upon Phrenology, but did not otherwise publish my peculiar views of this science until 1839, when my "New System of Phrenology" was laid before the public. That work contained a new classification and arrangement of the Phreno-organs, a new system of Phreno-Physiognomy, a new doctrine of hereditary resemblance, and several newly discovered Phreno-Organs. That these things were not essentially new no one has attempted to show, but their truth was denied by every author in this country who had previously committed himself by advocating different doctrines upon these subjects.

17

Mr. George Combe had just arrived in this country at the time when the work was issued. It was generally understood that the mantle of the illustrious Spurzheim had fallen in an especial manner upon him ; and I was therefore desirous to receive his sanction of the new doctrines which I had advanced. But before I had an opportunity to make his acquaintance, I learned that he was opposed to the New System. He avoided mentioning it in his lectures and writings, and when the subject was urged upon his attention by some one who thought my doctrines correct, he seemed exceedingly annoyed and irritated. Under these circumstances I declined his acquaintance, and determined to appeal to the scientific public. I was then engaged in lecturing in Pittsburg, Penn.; and being informed by a correspondent that Mr. Combe was to lecture in Albany, I immediately proceeded to that city and gave a course of lectures, in which I stated to the highly respectable audience that attended, the grounds of the difference between the two systems. At the conclusion of my course I was gratified to find my system had made a favorable impression, the evidence of which may be found in the proceedings and resolutions recorded in the concluding part of this work.

I then proceeded to the city of New-York, where I delivered a very successful course of lectures. In the meantime Mr. Combe gave his lectures in Albany, and at their conclusion a Phrenological Society was formed, and Mr. Combe's collection of plaster casts of heads purchased for illustrations. The relative merits of the

two systems became the subject of much discussion, and I was invited to return to Albany and repeat my lectures. I consented, and finding that the influence of Combe, Caldwell and Fowler was all united to create a state of public opinion unfavorable to what I deemed the cause of truth, I was desirous to provoke a discussion which would give me an opportunity to vindicate myself. I therefore addressed a letter to the President of the Phrenological Society, requesting the appointment of a committee composed of their most competent members, to investigate and determine the relative merits of the two systems. The committee seemed to be actuated only by the spirit of truth; and accordingly, after a laborious investigation, and after corresponding with Combe, Caldwell, Haskins and other distinguished authors, they made a unanimous report in my favor. This report produced a very powerful sensation. It consists of twenty-eight pages, drawn up in a masterly manner by the chairman, Professor Eben Norton Horsford, now Rumford Professor in Harvard University, and laid before the Society for their consideration. Professor Amos Dean, of the Albany Medical College, (author of several able works on Phrenology,) read an argument of thirty pages in opposition to the report. One of his adherents read another of about equal length. About the same time the American Phrenological Journal arrived in this city, thirteen pages of which were occupied with a very hostile review of my book, written by Dr. Caldwell, of Kentucky, a gentleman of great

ability, and the author of several works upon this subject.

Professor Horsford replied to the objections and arguments which had been adduced, and in the face of the whole array of eloquence, authorities and prejudice, succeeded in obtaining for his report the sanction of a large majority of the Society, after it had been six months under their inspection, and the ingenuity of the most able critics in the country exhausted upon it. It is worthy of remark that when the investigation commenced not one of the committee approved of my views.

This Report was all that I could wish. Two thousand copies were printed, and it was widely circulated. It was sent to every one who was supposed to take especial interest in the subject; but up to the present time no one has attempted to controvert its positions, or deny the correctness of its conclusions.

If any one enquires why all phrenological authors and lecturers did not at once adopt this system, or else show its imperfections, I can only answer by referring to the history of other improvements. Human nature always exhibits the same traits under similar circumstances.

When the Albany report was sent by the Chairman to a periodical which professed to be a Phrenological Journal, the editor was not *permitted* to notice it, such was the hostility of his employers to the new system. I will not comment upon these facts, but content myself by making them known. In the meantime, the public generally, and all those (not being themselves authors, nor the dependents of authors of phrenological works,) who are disinterested and independent, without a single exception within my knowledge, have admitted the correctness of the Report, and the superiority of the new system.

When the doctrines of Phreno-Magnetism and Neurology were announced, and were making converts by thousands, and multitudes of new organs were daily discovered by this means, so that my favorite system was threatened with an overwhelming inundation, I was forced to take up this subject in earnest. Almost every friend I met asked my opinion of the new doctrines and new organs, and seemed surprised at my scepticism.

In 1842, the public were assured by Messrs. Sunderland, Buchanan, Fowler and Caldwell in this country, and Elliotson, and many other phrenological writers in Great Britain, that the organs of the brain could be excited by touching the head of a person in the mesmeric condition. A large number of new organs were announced as discovered by this new process and some of them of such an extraordinary character as to entirely overturn my new system of phrenology-and indeed every other system, if their claims were admitted; social organs were discovered in the very midst of my Ipseal class, and Ipseal organs in my social class; some of the warmest friends and stoutest advocates of my new system fell under the influence of the delusion, and I stood for a while almost alone, expecting soon to be obliged to surrender at discretion to the combined

forces of Phreno-Mesmerism, Pathetism, Neurology and Hypnotism, for these were the formidable names which the new science assumed. At first, such was the force of the testimony that I supposed that the organs of the brain actually could be in some cases excited in the way pretended; and had all the experimenters been as candid and judicious as Caldwell and Elliotson, I should doubtless have been completely misled; but the extraordinary and ridiculous organs which Buchanan, Sunderland and Fowler pretended to have discovered rendered the whole proceeding suspicious, and induced me to commence a series of experiments for my own satisfaction. I very soon detected the nature of the errors which had been committed, but they were not easily dislodged from their hold upon the public mind.

In 1845 I published a work of 350 pages entitled "Etherology, or the Philosophy of Mesmerism and Phrenology, including a new philosophy of sleep and of consciousness, with a review of the pretensions of Neurology and Phreno-Magnetism." This produced the desired effect. Buchanan's Neurology was abandoned. Nothing is now heard of the new organs, but a new delusion has taken its place under the name of Electro Biology, and Electro Psychology, which in reality are but effects of credencive induction as explained in my Philosophy of Mesmerism.

Mr. Fowler seems to give up the new mesmeric organs with much reluctance and regret, and it is indeed no wonder, for he had inserted into a new edition of

INTRODUCTION.

his phrenology, a long catalogue of them and declared that he had verified them by the examination of thousands of crania. Mr. Fowler, says—

"No sooner had an application of Animal Magnetism been made to Phrenology, than I eagerly embraced it, not only to test the truth of magnetism in regard to the organs that were fully established, but also, when satisfied on this point, to see which of the doubtful organs stood being tested with magnetism, as well as whether new ones could be discovered. Accordingly, the Rev. Le Roy Sunderland, Dr. Sherwood and myself instituted a series of Phreno-Magnetic experiments; a summary of that portion of the results which relates to *Phrenology* is given.

"Nothing has ever more interested me than those experiments. and I felt that I could not put another edition of this work to press, though it was stereotyped, without giving at least a summary of them. I will just add, that I have examined hundreds, probably thousands, of heads, since these discoveries were made, with the view of sceing whether examinations made by means of them, coineided with the characters, and I find they do without the least perceptible variation."

It is hardly necessary to remark that these notions are now repudiated by every one, notwithstanding their verification by Mr. Fowler's examinations of crania.

The truth is, that the subjects whose organs were supposed to be excited, were highly susceptible to the mental influence of the operators; and when any part of the head was touched, they very innocently manifested the phenomena which the enthusiastic operators desired; and they could very easily have been made to verify any other notions or organs, however absurd, which the wildest fancy could have suggested. The lesson taught in this matter should not be forgotten; those who make examinations, and pronounce upon the size and function of parts, should be held to a rigid rule, from which fancy should be excluded

Mr. O. S. Fowler has lately, among various other similar things, published a phrenological work entitled

"Physiology," containing so many scientific blunders, as to be really beneath criticism; but it includes several things which it is my duty to notice in this place, as they claim to be new discoveries in the science of mind. One relates to the ORGAN OF CONSCIOUS-NESS. He says, page 257, speaking of the corpus callosum, "the seat of the soul is undoubtedly in this commissure, and the corpus callosum undoubtedly serves to impart that concert to all the faculties called CON-SCIOUSNESS, by which one faculty calls up such of the others as may be required to accomplish the end sought."

Spurzheim and all other phrenologists denied that consciousness is the function of a single organ, and no phrenological writer suggested that there is a single and distinct organ of consciousness, before my work was published in 1845, on the Philosophy of Mesmerism and Phrenology.

In 1844 I undertook to show that consciousness is located in the medulla oblongata and that the phreno-organs concentrate there and act upon it. Descartes made the pineal gland the seat of the soul, and some others among the ancients, placed the soul where Mr. Fowler has, in the *callosum*, but since phrenology has been taught, no advocate of this science ever suggested the idea that there is any conscious centre where all the phreno-organs act in concert, until I wrote my work on Etherology, in 1845. I gave my reasons in that work for this important improvement and attempted to reconcile it with Phrenology. Mr. Fowler publishes the American Phrenological Journal; and it was therefore

his duty to inform his readers that I had made, or at least attempted, such an improvement; but I am not aware that he has ever mentioned even the publication of any of my works, except to misrepresent them ; yet two years after my work was published, he comes out with an organ of consciousness that he has just discovered. Such conduct only needs to be mentioned to be appreciated by honorable men as it deserves. But he locates consciousness in the corpus callosum and not in the medulla oblongata where I did. Haller, in his Physiology, written many years ago, refutes this idea and shows that it cannot be in the callosum ; this part has been ruined by disease and rent asunder, without affecting consciousness, so that it cannot reside there. (See Spurzheim's Anatomy of the Brain.) Again, the callosum is not possessed by birds, reptiles nor fishes, and only by the higher animals, yet the lowest animals have consciousness and they have faculties of mind to be "called up and to act in concert." Mr. Fowler must therefore, locate his consciousness some where else,and I advise him when next he commits plagiarism, to take the whole, the organ and its location; such conduct would at least have the merit of boldness if not of honesty.

There is another discovery of Mr. Fowler's, which is ushered before the world in this work on Physiology and that is, that (*I give his own words*):

[&]quot;The heart, lungs, muscles, liver, bowels, pancreas, kidney, and all the other organs of the body have their cerebral organs in the cerebellum; this conclusion is admirably fortified by the fact that all the nerves which connect the brain with the body proceed from

the cerebellum, as seen in the accompanying engraving, none from the cerebrum. This establishes the most perfectly reciprocal interrelations between the body and cerebellum."

Now the truth is, that NO NERVE WHATEVER PROCEEDS FROM THE CEREBELLUM!! and no one but Mr. Fowler can be found who will make such an assertion ; every one, the veriest tyro, who knows any thing of the anatomy of the brain and the distribution of the nerves, knows that this is untrue. "The accompanying engraving" itself, to which Mr. Fowler refers, betrays him; it was evidently not made nor designed by Mr. Fowler, but was probably an old engraving which was originally intended and used for some other purpose; for upon a close inspection, it positively contradicts Mr. Fowler's assertion, that it will exhibit the nerves proceeding from the cerebellum; the nerves, even upon the engraving, proceed from the medulla oblongata, just as they should do, and not from the cerebellum as Mr. Fowler asserts. It seems almost incredible that Mr. Fowler should have lectured upon Phrenology more than a dozen years, and yet make such a blunder as this, but so it is. Any one who will take the trouble to look at a brain, will see at a glance that no nerve proceeds from the cerebellum to any part of the body; but Mr. Fowler says that all the nerves which relate to the body proceed from the cerebellum, and he attempts upon this foundation, to build up a theory of what he very classically terms the interrelation between the body and the cerebral organs of the cerebellum !! This is a fair specimen of Mr. Fowler's writings with which he is now inundating the

country; and although in a scientific point of view they are beneath serious criticism, this does not prevent the half-educated and "superficial" multitude from being misled by them. Nothing, I fear, will put a stop to these mischievous pretensions until an association is formed, composed of men of real solid attainments and sterling worth; a society whose sanction of truth will have extensive influence, and whose censure will annihilate presumptuous ignorance, and send pretenders back to their rudimentary studies.

In Europe there are some indications that Phrenology will be permanently established upon their institutions of learning. I understand that Dr. Robertson or Paris, has, by his will, left \$60,000 to the Edinburgh Phrenological Society, and I have also been informed that a Professorship of Phrenology has been established in one of the Universities of Scotland. In this country a conviction is settling upon the minds of all educated men, that the grand principles and the leading facts of phrenology are true; but there is also a still more general conviction, that it is at present of no practical value-that it is imperfect-that the truth is mingled and adulterated with so much error as to render it merely a dangerous counterfeit—as a science it has been found deficient in system and consistency, and as an art it has been wanting in precision and practical certainty. This is the verdict of the public in this country, upon Phrenology as taught by Combe and Fowler. I propose a reform, and offer a new system which I think is more in harmony with nature. I retain of the sysINTRODUCTION.

tem of Spurzheim all that I find to be true, and reject the rest. Having devoted more than twelve years to investigation, observation and enquiry—this system is the result. I ask that it be examined thoroughly. Let not friendship favor it, nor charity spare its faults; but let the keen edge of truthful criticism lay bare its defects with remorseless justice; error deserves no friends and truth can safely bid defiance to the scrutiny of all its enemies. I have no selfish wish to propagate doctrines merely beeause they are mine; no one can be more eager to worship in the temple of truth, and no one can be more desirous to sacrifice his own egotism at her shrine.

J. STANLEY GRIMES.

Boston Feb. 22, 1850.



SCIENTIFIC CLASSIFICATION.

The organs of the brain may be scientifically and technically classified into Orders, Genera and Species, as follows:

ORDER I. - DIRECTIVES.

These were by Spurzheim denominated Intellectual Faculties. Their office is to receive impressions and transmit them to the mind. They may be divided into two genera, as follows:

GENUS I. - PERCEPTIVES.

They receive impressions through the senses directly from external objects, modify them and transmit them to the conscious centre in the medulla oblongata, (the sensorium) where the mind resides, and operates in a mysterious manner, which is not yet understood.

GENUS II. --- REFLECTIVES.

These differ from the Perceptives in this, that they do not receive impressions directly from external objects through the external senses, but they receive all their impressions by reflection from the other organs through the central mind or sensorium. These organs enable the mind to perceive the relations of all the impressions made by all other organs upon the mind.

ORDER II. - IMPULSIVES.

These were by Spurzheim denominated Affective Faculties and divided into propensities and sentiments. They receive impressions from the various parts of the body directly, and from the Directives indirectly, through the mind; they are excited by our various wants, and *impel* us to those actions which are calculated to relieve them, but these Impulsives are blind and need the guidance of the Directives to reach the objects at which they aim.

This Order is divided into two genera:

GENUS I. --- IPSEALS.

These originate actions that relate to self, and are subdivided into five species, called Ranges.

Species 1. Corporeal.Species 2. Belligerent.Species 3. Prudential.Species 4. Industrial.Species 5. Improving.

GENUS II. - SOCIALS.

Which originate actions relating to society and all intelligent beings.

They are subdivided into three species.

Species 1. Establishing. Species 2. Governing. Species 3. Conforming.

ORDER III. - SENSORIUM.

A central organ of consciousness—the residence of the mind—it is located in the medulla oblongata at the point where the fibres of the brain converge, and where all the nerves of volition and sensation communicate and connect with the brain and with each other.

Each organ of the brain when excited either impels to action or directs action, and at the same time excites the mind, evolving ideas and emotions peculiar to the organ excited. The Sensorium cannot be divided unless by considering the different *states* of mind produced by different organs as subjects of subdivision; this is the province of psychology and cannot be discussed in this treatise.

ANALYSIS

OF THE

PHRENO.0RGANS

ORDER I. — DIRECTIVE ORGANS.

GENUS 1. - PERCEPTIVES.

1. FLAVOR or CHEMICALITY.—This organ enables animals and man to judge of the qualities of food, air and perfumes. When large it bestows the power of nice discrimination in matters of taste and smell, but it does not give any disposition to indulge the appetite to excess. The organ is so situated as when large to give prominence to the bone just under the eye when compared with the prominence of the forehead. The olfactory nerve appears to terminate in this organ. It was discovered by the author in 1837.

2. EXTENSION or SIZE.—Perception of distance, size, perspective. This organ is important in drawing, forming and measuring.

It is my opinion that what we call the organ Form, depends upon a combination of Extension and of Di-
rection aided by Reflection. Form is extension in various directions. This organ when large, gives width and fulness between and immediately above the eyes. The space which others allot to the organs of Form and Size and Individuality, I allot to this one organ. This conclusion is the result of much observation and practice.

3. DIRECTION, commonly denominated LOCALITY.—It gives perception of the points of the compass and the direction of objects. Locality, the perception and memory of places, depends, in my opinion, upon a combination of Extension and Direction, aided by some degree of reflection; a talent for drawing, for mapping and for navigation depends also upon the same combination.

This organ is situated between the centre of the forehead and the middle of the eye brow. It must be acknowledged that after puberty the frontal sinus or ca-

NOTE. INDIVIDUALITY.—I consider this a very doubtful organ; indeed I must confess that I do not believe in the existence of any such faculty, and of course I cannot admit the organ. It was thought by Spurzheim that a fulness of that part of the forehead where it joins the nose, indicates a faculty of perceiving things in general, without reference to their qualities. He considered it the faculty of individualizing and of forming such ideas as God, man, tree. Now to my mind it is clear that such ideas depend upon the Reflectives aided by all the Perceptives. I admit that a person who is full in this part of the head is possessed of the talent for the observation and memory of some qualities of things, and I explain it by saying that the part called Individuality is composed of portions of the organs of Direction, Eventuality and Extension.

NOTE. FORM.—I do not think that this is an independent organ, but that it is composed of portions of the organs of Extension and of Direction. I admit that width between the eyes indicates a memory of faces and forms, and so far Dr. Gall was correct; but I deny that this power depends upon a single organ.

vity in the skull bone, renders it difficult to determine the size of an organ in this part of the head.

4. WEIGHT.—Perception of resistance or momentum. It is the essential organ concerned in giving the talent for mechanical skill and the delicate use of instruments in surgery, music, machinery and engraving. It must of course be possessed in a good degree by most animals, since it gives the power to command the muscles skilfully in balancing, touching and jumping; combined with the Reflectives it gives the engineering talent and the power of calculating the result of combined forces.

When large it gives depth to the brow and an overhanging appearance between the middle of the brow and the side of the nose.

5. EVENTUALITY.—The perception of motion, change and phenomena. The foundation of the talent for history, biography, anecdotes and general knowledge; combined with the organ of Words it gives a talent for learning and literature in general. When the Reflectives are small it gives a tendency to be minute in the details of narrative, but when the organ of Words and of Eventuality are small and the Reflectives large, conciseness and brevity are the result.

It occupies the centre of the forehead and gives it fulness.

6. WORDS OF SOUND OF LANGUAGE. — Memory of words and the perception and memory of sounds. It is possessed by animals and man. It is the foundation of the talent for acquiring languages and also of writing and speaking; but this organ alone will not make a lin-

guist, a speaker, nor a writer; a good combination of intellectual organs is necessary for this purpose. I think this organ is one important element in the talent for a musical perception of sounds. I suppose that the organ of Tune merely gives the *disposition* to use the voice and to imitate it by instruments.

When large it gives prominence to the eyes and crowds them downwards.

7. COLOR.—Perception of hues and tints and nice shades of color; it is large in distinguished painters. I very seldom find this organ so decidedly developed as to give me confidence in the external indication. I frankly acknowledge also that after the age of thirty, the bones of the skull and the *frontal sinus*, (a cavity in the skull bone over the eyes,) render observations in many cases uncertain.

It give fulness to the middle of the eye brow.

S. ORDER.—A perception of the order, succession and arrangement of external objects. It gives a nicety, particularity, regularity and precision in all operations that require it and sometimes in those that do not; combined with Causality it gives *system* to operations. Is it not related to regularity in time, in music and in dancing ?

It gives prominence to the brow between the centre and the outer extremity.

9. NUMBER OF ARITHMETICAL CALCULATION.—The foundation of mathematical talent ; combined with Order it makes a good book-keeper and accountant ; combined with Comparison a good salesman and purchaser,

where rapid computation is necessary; combined with the Reflectives it gives a talent in the higher branches of mathematics.

It produces fulness in the outer extremity of the brow.

10. TIME.—An organ proposed by Spurzheim. He thinks that it gives the perception of time in chronology, dancing and music : but I have not fully confirmed it by my observations; and I strongly suspect that Spurzheim was deceived by some appearances, produced by a combination of Causality, Eventuality and Order. I doubt the existence of the organ of Time, but I do not deny it with entire positiveness.

It is situated just above the organ of color, and outside of Eventuality.

11. TUNE or VOCALNESS.—This is reckoned by all writers upon Phrenology, as an intellectual organ, but all the practitioners seem to admit that they cannot pronounce an opinion with any thing like positiveness or satisfaction concerning the musical talents of any one from his developements. This part of the brain is evidently related in some way to music, but it is not yet agreed in what way it contributes to bestow musical ability. My own opinion at present is, that this organ ought not to be classed here with the Directives, but with the Impulsives. Its function I conceive is to prompt and impel to make vocal sounds, whether musical or not—to exert the powers of voice that we may thus make known our wants. It should therefore be classed with the Ipseals if this view is correct. It gives

a *love* of music merely because music calls the powers of the *voice* into exercise. But this organ needs further investigation before we can speak confidently concerning it.

It is located just above the organ of Number, which is at the outer extremity of the eye brow and extends up to the organ of Experimentiveness. I shall not venture to change it to the Ipseal class, but suspect that it will ultimately be done by future investigators.

GENUS II. - REFLECTIVES.

12. COMPARISON OF CLASSIFICATION.—All the ideas which we acquire by the Perceptives and also by the operation of the Impulsives are analyzed, compared and classed by this faculty, and when this is well done they can be called up as they are wanted, with ease and facility. It is the foundation of the talent for rhetoric, poetry and of scientific classification, and also of analogical illustration in teaching; it originates parables, comparisons and allegories—it gives that kind of judgment which is founded on comparison with past experience, and not upon original reasoning founded upon the nature of things.

It is located in the centre of the upper part of the forehead.

13. CAUSALITY OF CONNECTION.—This power, like Comparison, relates to all the other powers as their superior. It perceives the connection, relation and dependence of all ideas and feelings, all appearances and

phenomena. It is the organ which gives the idea of the unity and connection of things that are apparently different, disconnected or confused. It is this that seeks for the cause of things—the unseen nature of things the origin and the ultimate results of all movements; it is this that seeks for the laws of nature which connect together things the most distant, various, and apparently discordant; it gives ability to find new, shorter and better modes of producing results; in mechanics, in science and in poetry, this gives originality, ingenuity, profoundness, foresight and sagacity. But important and powerful as this faculty is, it can only act upon the material furnished by other organs, and therefore we cannot determine what this organ will produce without first knowing the size and condition of the other organs.

It is situated at the outer side of Comparison about an inch from the middle line of the head, and contributes to give prominence to the side of the upper part of the forehead.

REMARKS

ON THE NATURE OF THE IMPULSIVE POWERS AS DISTIN-GUISHED FROM THE DIRECTIVES OR INTELLECTUALS.

What I name here Impulsives, Spurzheim named Affective Faculties. I object to the division of the Impulsives made by Spurzheim, into animal propensities and moral sentiments. There is no ground for the distinction : the reasons given by Spurzheim are utterly erroneous, for he alleges that the moral sentiments (higher Impulsives) are accompanied by peculiar emotions which distinguish them from animal propensities, (higher Impulsives.) I object to this, and appeal to the consciousness of any man, whether his animal propensities are not, when active, accompanied with emotions quite as peculiar and even more powerful than those which attend the operation of the higher powers, which Spurzheim denominates Moral Sentiments. Is not Alimentiveness accompanied with hunger, and Destructiveness with anger, and the lower Socials with emotions of love, and are not these emotions as powerful and as peculiar as those that attend Kindness, Submissiveness, Conscientiousness or Imitativeness? There is then no ground for this division, since each organ produces an emotion or state of consciousness peculiar to itself and different from that produced by every other organ.

The classification by Fowler includes all the faults of that of Spurzheim, besides still greater faults of its own, and has never been deemed worthy of especial criticism.

Instead, therefore, of dividing the Impulsive organs into propensities and sentiments, I divide them into Ipseal and Social, and subdivide them into Ranges and Groups. This classification has received such high and extensive sanction that I think it may now be deemed as permanently established.

REMARKS

ON THE ARRANGEMENT OF THE IPSEALS.

The rule which should be our guide in a scientific classification of natural objects is, to arrange together those things which bear the nearest affinity and analogy to each other. I conceive that the perfection of any science depends almost entirely upon the success of its founders in the arrangement, classification and nomenclature of its elements : for this reason I have always been solicitous to discover the true and natural foundations for a systematic arrangement and a correct nomenclature of the Phreno-organs. In considering the whole Ipseal class I thought I discovered that from Pneumativeness to Hopefulness, there is a regular succession and order of developement which a philosophic mind could not easily mistake; that these organs are connected together as a natural chain, consisting of twelve or more links, each of which upon a careful analysis, is found to have the Ipseal character and to possess an undoubted right to be admitted into the family of Ipseal organs. Again it is evident that the first three Ipseals have one feature in common which is not possessed by any other organs of this class, namely, that they directly relate to corporeal, Ipseal wants. The two organs above these bear also a common character, they tend to violence, for Ipseal purposes; they are unlike the two powers Secretiveness and Cautiousness and are so nearly alike in function, as to be with difficulty distinguished from each other, yet they are both easily distinguished from any other organs of this class, no other has the violent character.

The next or third Range is composed of Secretiveness and Cautiousness; here again the functions are strongly analogous, and the propriety of the association of the two organs into one Range is perfectly obvious, at the same time the utter absence of hostility or violence in their character not only distinguishes them from the preceding organs, but actually affords so powerful a contrast that while oue Range deserves the name of *Belligerent*, the other is equally entitled to the term *Prudential*.

In the fourth Range, consisting of Constructiveness and Acquisitiveness, the analogy of the two organs is less striking at first, but upon examination it becomes not only obvious but highly interesting; they have much in common,—they both relate to the same class of objects—both relate to climate—to *future* Ipseal wants and to those productions of nature which we expect to need; both distinguish the Rodentia and neither is unequivocally manifested by any other quadruped. Spurzheim was particularly struck with the anatomical connection of these two organs.

Finally, we come to the highest Ipseal Range. Here as might be expected, the sphere of action is less confined—there is a greater freedom of choice—a greater variety of objects is concerned; but amid and above the whole there is one grand distinctive feature which marks all the organs in this Range and which can easily be discovered—it is a tendency to change for the sake of improvement.

All human performances are necessarily imperfect; but I doubt whether in the whole round of the sciences any thing more beautifully systematic can be found, than is exhibited in the arrangement of the Phreno-organs as thus set forth

ORDER II. - IMPULSIVES.

GENUS I. --- IPSEALS.

These organs impel to those acts and produce those feelings which relate exclusively to the advantage of *self* and therefore they are denominated *Ipseal*, from the Latin word *Ipse*, self. A person who has the Ipseals generally large and the Socials small may be said to be an Ipseal character, but it rarely happens that they are all large; most persons have some Ipseals and some Socials large while other Ipseals and Socials are small.

The Ipseals are divided into five Species denominated Ranges, as follows :

SPECIES I. - CORPOREAL RANGE.

This Range is related to the corporeal necessities.

I. PNEUMATIVENESS.—The propensity to breathe voluntarily and to make exertions to obtain air when it is required. When sufficient air cannot be produced it is this that produces that agonizing consciousness which is called a sense of suffocation; the Pneumogastric nerve (lungs and stomach) connects the lungs with the brain and with this organ. Persons in whom this organ is deficient, fall easily into sedentary habits and become careless in regard to the ventilation of their rooms. When the organ is developed to excess it produces such a love of exercise in the open air as to disqualify for study and reflection. A comparison of the brains of Indians with those of white men shows that this organ is generally much larger in the Indians. It is generally large in those who have large lungs. The author discovered this organ in 1837.

When large it gives greater prominence forward and greater width to the cheek bones than they would have if it were small.

II. ALIMENTIVENESS. — The propensity to eat and drink—when not gratified it produces a state of consciousness called hunger or thirst. It is large in those who never forget or neglect to attend to matters relating to food. It does not follow that those who have this organ large are great gormandizers or drunkards, they may eat but little, but that little is deemed by them a matter of great importance ; persons, on the contrary, with the organ small although they may occasionally eat immoderately, are very apt to neglect their food and be irregular in their attendance to their meals—their minds being pre-occupied with matter interesting to larger organs. A branch of the Pneumogastric nerve connects this organ and the brain with the stomach.

It gives width just before the orifice of the ear.

III. SANATIVENESS.—Bodily pain, injury and disease; the propensity to protect the constitution from injuries and diseases. When any part of the body is injured or diseased an impression is transmitted along the nerves to Sanativeness, and from this organ to the central Consciousness, thus rousing the mind to a sense of *pain*. Bodily pain is therefore produced by this organ in order to rouse all the powers of mind and body to protect the constitution and remove the cause of the injury and pain. Sanativeness is generally largest on those animals and men who take the most delight in injuring others. The larger the organ the more acute is the feeling of pain; the rabbit, the lamb and the deer receive fatal wounds with much less ado than the cat or the dog. The nerves, which are called the nerves of common sensation, proceed from all parts of the body to the brain to enable Sanativeness to receive impressions when the parts are injured. The word is derived from the Latin *sanitas*, which signifies soundness of the body or mind. The author discovered this organ and announced it several years ago.

It gives width to the head just above the ears and below Destructiveness, and tends to crowd the ears outward and forward.

SPECIES. 2. - BELLIGERENT RANGE.

This range is best illustrated by the lion, tiger, dog and other carnivorous (flesh eating) animals, it has, therefore, sometimes and with some propriety been denominated *the Carnivorous Range*; but the fact that many herbivorous animals are very combative renders it improper to characterize this Range as exclusively carnivorous; I therefore have adopted the term Belligerent as more unexceptionable. I have been the more willing to do this, because some critics objected to the subdivision itself, on account of the names which I used in my first edition, published in 1839. IV. DESTRUCTIVENESS.—The propensity to kill for food—to injure for any other purpose, accompanied with a wrathful or angry state of mind. It is large on all carnivorous animals and men who are constitutionally disposed to eat flesh; it is small on those animals and those races of men who are remarkable for abstinence from flesh-food, the Hindoo for instance. Those who have the organ large are apt to direct it to the destruction of any object that displeases them and to express themselves with severity and bitterness when provoked. It sometimes produces cursing, denunciation and sarcasm in favor of oppressed innocence and in opposition to tyranny and injustice, but it often produces mischief and always needs to be guarded by charity and a good conscience.

It gives width to that part of the head which is covered by the top of the ears.

V. COMBATIVENESS.—This is the propensity to contend, not to *destroy*, but only for mastery—for victory, and to have the privilege of gratifying the impulses in despite of opposition; among some of the most powerful herbivorous and indestructive animals the males contend fiercely with each other for the favor of the females. It gives to men who have it large, especially if Secretiveness and Cautiousness are small, a love of disputation even on slight occasions. It produces in the mind the feeling (consciousness) of *resentment*.

It gives width to the head a little above and behind the ears.

SPECIES 3. - PRUDENTIAL RANGE.

This was formerly denominated the Herbivorous Range, because it was thought to be manifested by herbivorous animals especially, but Professor E. N. Horsford has objected, and I admit with much propriety, that Secretiveness is manifested with more energy by some nocturnal carnivorous animals than by any of the herbivorous; I have therefore thought it better to change the name of this Range and to make it conform to the actual manifestations. It seems to me that the word *Prudential* conveys a just notion of the effect of both or either of the organs of this Range.

VI. SECRETIVENESS.—Propensity to conceal intentions by acting indirectly and cunningly. We have no word in our language to express the feeling or state of consciousness which this organ usually produces; the word *suspicion* conveys an idea of the feeling which it produces when we are watching others. Some have proposed to call this the organ of *Watchfulness*, but I think that Cautiousness might receive the same name with more propriety. Secretiveness is often useful and proper, but it sometimes is excessive while the moral education is deficient, and then it produces falsehood and deception; when this organ is deficient the person is disposed to be open, direct and frank in his manners and conduct.

It gives width to the middle of the side of the head about an inch above the top of the ears.

IMPULSIVES.

VII. CAUTIOUSNESS OF WATCHFULNESS.-Propensity to watch for coming difficulty and trouble-to avoid danger, and to restrain present gratification when it may be hereafter injurious. When first discovered it was called Foresight. It often produces hesitation and irresolution when a bold decided course is required; it causes the feeling of fear and apprehension; when in excess it sometimes produces fright and cowardice; when deficient, carelessness and recklessness are often manifested. The manifestations of Cautiousness are often confounded with those of Sanativeness, but Cautiousness is related to the future, the distant and the doubtful, while Sanativeness is most frequently roused by the actual injury or disease of some part of the body; when the two combine they often produce hypochondria, especially if the liver or stomach is diseased. The skulls of the herbivorous (vegetable eating) animals, can easily be distinguished from those of the carnivorous by the fact that the herbivorous are large at Cautiousness, and the carnivorous at Destructiveness.

It gives width to the upper back part of the head.

SPECIES 4. - INDUSTRIAL RANGE.

The powers of this Range are so well manifested by that class of animals denominated the Rodentia or gnawers, that it is sometimes called the *Rodentia Range*. The beaver, the wood-chuck or marmot, the rat and the squirrel are instances of the Rodentia. The word *Industrial* conveys an excellent idea of the true func-

IMPULSIVES.

tions of the organs, for it includes the manifestations of Constructiveness and Acquisitiveness.

The object of all the arts of industry is, to provide for future necessities, and those who have this Range largely developed have a natural tendency to engage in such arts. The Caucasian race are large in this part of the head, and the African deficient.

VIII. CONSTRUCTIVENESS.—The propensity to change the form and size of natural productions to adapt them to our use. It gives the disposition to construct—build or manufacture; many who have this organ large are *conscious* of a *love* of the useful arts although they have not acquired practical skill. Mechanical talent is not produced by this organ alone, it merely produces a tendency to engage in mechanical operations; the ability to manifest skill in the use of instruments depends upon the Perceptive organs, and an ability to *invent* mechanical engines and instruments depends upon the Reflectives; a love of the fine arts depends upon Perfectiveness : all these combined are necessary to produce a great genius in all the departments of the arts and in mechanical philosophy.

If a line be drawn from the orifice of the ear to the centre of the upper part of the forehead this organ will be just about in the middle of that line.

IX. Acquisitiveness.—The propensity to acquire and store up for future use whatever we expect to want. Beavers and many other Rodents store up during autumn the provisions which they will need the succeeding winter. Man not only stores up provisions for

winter, but he acquires property of all kinds for all his life and for his posterity. This organ, like Constructiveness, only gives the tendency or habit, but not the ability unless combined with intellect and other requisite qualities. Avarice is caused by general selfishness combined with the activity of this organ while the Social powers are deficient. Penuriousness is caused by this organ being active in a timid or weak man. Theft is caused by the activity of this organ upon an ignorant or depraved mind. Profuseness or neglect of property may be caused by a deficiency of this organ and of Cautiousness.

It is situated above and behind Constructiveness, a little above and before the centre of the side of the head.

SPECIES 5. — IMPROVING RANGE.

This is sometimes denominated the Human Range, because it is manifested in a high degree by man only; but as I had resolved to establish a nomenclature which should distinguish the *function* performed by each Range, rather than the class of animals that manifests it in the highest degree, I have adopted the word Improving as more expressive of the distinctive character of the Range than any other term which occurs to me. I think it will be found upon a careful analysis of the organs that constitute this Range, that there is some propriety in giving it this denomination.

X. EXPERIMENTIVENESS.—Playfulness—wit—mirthfulness. No organ has caused so much discussion among Phrenological writers as this. Dr. Gall thought it produced wit, Spurzheim believed that it also produced mirthfulness—various notions were entertained concerning it by the Scotch Phrenologians. In 1839 I announced that I considered it the cause of play and sportiveness in animals and children: Brousais, in France, about the same time, unknown to me, announced that he and also Vimont had made a similar observation. I have lately noticed that it gives a disposition to try experiments in times of necessity and when we are in doubt concerning the extent of our abilities. Much of the play of children and young animals and even of men is but a kind of experimental trial of their powers.

There is a species of apparently spontaneous activity arising from excessive, nutrition and respiration, and a want of serious occupation, which is sometimes denominated a "flow of animal spirits," and sometimes it is called a "love of exercise," but neither of these must be confounded with the manifestations of this organ.

This organ does not, in my opinion, give a disposition to do some thing and any thing merely to gratify the powers that need exercise, but it seems to give a tendency to do something new, as an experimental test of ability.

I think that if we carefully analyze the sports of the higher animals and children, we shall perceive that they are composed of two distinct elements; one is a mere love of exercise without interest, object or aim, another is a love of experiment—doing something new and dif-

IMPULSIVES.

ficult as a test of ability—as soon as they succeed and it is no longer an experiment they are tired of it and proceed to some new experiment. I consider this the basis of the love of experimental philosophy, and also of ability to resort to new expedients when surrounded by difficulty and danger of a novel kind.

A perpendicular line drawn from the middle of the eye brow will pass through the front inner border of this organ, another line drawn from the orifice of the ear to the middle of the upper part of the forehead will pass through its centre.

XI. PERFECTIVENESS, commonly called IDEALITY.— Love of improvement—self educating propensity—the foundation of the love of the fine arts—invention, planning and improved methods of operating—love of the improved and beautiful in language, in art, in manners, in dress, in every thing. When in excess and not guided by a well balanced intellect and knowledge, it leads to useless contrivances, foolish, fanciful conceits and vain attempts at finery, the mere mockery of im provement and beauty. This organ only gives the dis position to attempt improvements but the ability de pends upon other organs, especially the intellectual directors.

When large it gives width to the upper part of the forchead.

XII. HOPE or MIGRATIVENESS.—Propensity to migrate and to act confidently with reference to the distant, the doubtful and uncertain—to act as if success in future is certain. It bestows enterprize and leads to

great undertakings. It seems to be this which leads to migration from a habitation which is no longer agreeable and when some distant region is more promising; it leads its possessor to expect pleasure and happiness in another and a better place, and to wish to go to the promised land. When in excess it produces visionary schemes and foolish enterprizes; when guided by religious faith it produces a hope of eternal happiness in another and better world.

A perpendicular line drawn from the orifice of the ear will pass through this organ, and another line drawn horizontally from the upper part of the forchead will also pass through it.

GENUS II. - SOCIAL IMPULSIVES.

This class is conveniently and almost naturally subdivided into three groups of five organs each.

SPECIES 1. - ESTABLISHING GROUP.

This is so denominated because its organs tend to establish society by producing the young, rearing them with tenderness, fixing a home and binding the kindred in the bonds of family affection.

1st. AMATIVENESS.—The propensity to propagate the species and to love the opposite sex. When combined with higher powers in a virtuous mind, it is the foundation of true love and matrimonial attachment; in a vicious mind it leads to licentiousness.

It gives general fulness and roundness to that part of the back of the head between the cars where it joins the neck.

2d. PARENTIVENESS or PHILOPROGENITIVENESS. — The propensity to protect and cherish weak and helpless children; it produces a general tenderness towards the delicate, weak and defenceless among men or animals, or even plants.

It gives prominence and length to the central back part of the head above Amativeness.

3d. INHABITIVENESS.—The propensity to remain in a permanent and fixed habitation—love of home. When large it has an effect upon the habits of thought and speech, to render them concentrated and to prevent them from assuming a rambling character—running from one thing to another—but confines the train of ideas to a more limited and concentrated range of objects and topics.

I cannot agree with those who would change the name of this organ to Concentrativeness, nor with those who would divide it into two portions, naming one part Inhabitiveness and the other part Concentrativeness. I consider Concentrativeness as an incidental effect of Inhabitiveness and not as its primary function.

This organ when large prevents a sudden falling off and depression above Parentiveness in the middle line.

4th. Addresiveness.—It is the propensity to form attachments, especially in youth, first to the mother

then the father, and brothers, and sisters, and kindred, and associates, and finally, it combines with Amativeness to produce conjugal attachment. It is generally large in children and females, and in most of those who are constitutionally weak, timid and dependent, but it is sometimes very large upon those who are bold, masculine and strong.

When large it seems to give width to Inhabitiveness. Parentiveness and Adhesiveness combine to make the head long from the ear backwards.

SPECIES 2. — GOVERNING GROUP.

These organs tend to the government of the family and of society with popularity, firmness and justice.

5th. IMPERATIVENESS.—Self esteem—Pride. This is the propensity to command in social intercourse—to direct the operations of others—to acquire social power—to assume authority; combined with the intellect it produces a high estimation of the individual's own importance in the social and political circle in which he moves, and a feeling of the love of independence—prevents him from courting favor, approbation or popularity by manners, dress, language, or excellence in works of art or other performances. The object of this organ is obvious, since without it there could not be even the rudimentary commencement of government among animals nor men; accordingly, wherever we see animals or men living in societies, we see this propensity manifested : natural history abounds with interesting illustrations of this principle, especially among bees, ants and beavers.

This organ when large gives prominence to the upper back part of the head in the middle line; a cord passing around the chin and going half-way between the eye and the ear, to go over the head will pass over this organ.

6th. APPROBATIVENESS.—Love of popularity—desire of the good opinion of others—regard for reputation desire for applause and fame; propensity to conciliate those who have influence. In ignorance it is apt to degenerate into vanity, and in a vicious and depraved mind it sometimes gives a love of dishonorable and wicked notoriety. Dandies, fops and fashionable exquisites have this large and generally combined with refined taste in small and unintellectual matters, such as require no more understanding than children possess; combined with superior powers it sometimes gives a love of fame and immortal renown.

This organ seems to give width to Imperativeness.

7th. FIRMNESS.—Love of consistency—resistance of the persuasive influence of others—disposition to maintain a position once assumed; this must not be confounded with the resistance which springs from Combativeness or Destructiveness. Firmness is of very great importance in the government of families and communities; it prevents a frequent change of plans, opinions and manners; it also prevents the formation of new and sudden acquaintances and friendships to the neglect of those already acquired.

This organ is at the top of the head, back of the centre.

8th. JUSTICE or CONSCIENTIOUSNESS .- Equity-the propensity to act impartially and justly between the different members of society. I do not think that this organ alone, however large, gives the disposition to do right to superiors; nor does it give honesty to mercantile dealings when opposed to selfishness, though even in such cases it has considerable influence. Honesty depends upon a combination of this organ with a fair developement of Firmness, Submissiveness, Credenciveness, Kindness, Approbativeness, and a well instructed mind. The true and primitive function of this organ seems to be to give a disposition to govern impartially, and to treat with equity those who are dependent upon us or in our power ; but though this was its primitive use it is also apt to manifest itself by giving a love of justice and truth in general. What is called remorse of conscience does not depend upon this organ alone, but upon a combination of all the higher social and intellectual powers of the mind. A careful review of all the organs of this Group will render it manifest that they bear an important relation to the government of society.

This organ seems to give width to Firmness.

SPECIES 3. - CONFORMING GROUP.

The tendency of this Group is in many respects the opposite of the Governing Group. It produces a disposition to submit, oblige, sympathise and believe; it

IMPULSIVES.

thus produces loyalty and conformity to existing institutions and to those who have power and influence; when both the Governing and Conforming Groups are large there is a disposition to govern inferiors or to conform to superiors, according to circumstances, and the effect of this combination is very happy and useful.

9th. SUBMISSIVENESS.—Veneration—reverence—propensity to recognize and submit to superior power, authority and influence-tendency to obey, to pay deference and respect to equals, and especially to those who are in power, such as parents, magistrates, and also those supernatural powers whose existence is believed in. When in excess and acting in ignorance it tends to slavishness and to servile following of authority, without proper manly independence. It thus may become one of the elements of superstition. This organ is small and Firmness large in the stubborn, irreverent, unsubmissive, self-willed and impertinent; it is difficult to make such persons understand the duty of obedience; when young they often seem more vicious than they really are, because they will not be guided by the advice, nor influenced by the authority of those who have had experience-their own will is their rule of right, and in ignorance, this rule is generally erroneous: when they become older they perceive and regret their previous folly and disobedience

This organ is in the centre of the top of the head.

10th. KINDNESS.—Benevolence —good nature—courtesy, especially to strangers and new acquaintances and to society in general rather than family friends; it is op-

posed to prejudice, haughtiness, reserve and repulsiveness of manners to strangers; and tends to give amiableness, gentleness, mildness of manner and an obliging disposition. Combined with Submissiveness, if Firmness is small, it produces a degree of good nature, which amounts to weakness, and unfits its possessor for official situations where decision is necessary to repel the solicitations and importunities of associates and friends; but this combination qualifies one to act in a secondary and subordinate capacity where the responsibility and duty of unkind decisions is borne by others.

This organ extends from the middle of the top of the forehead about three inches backwards.

11th. IMITATIVENESS.—Sympathy—Human nature. Propensity to adopt the manners, habits of dress, pronunciations, and expressions of associates. This organ is intimately related to Kindness and Submissiveness, and combines with them to produce *sympathy* or similarity of feeling and conduct to that of others. Mimicking is usually disrespectful imitation, and to be successfully performed requires that previous precision of observation which depends upon large Perceptives.

This organ large, combined with large Reflectives, tends with several other organs, to acquire knowledge of the mental conditions and motives of associates, and a general knowledge of human nature. I pointed out this fact many years ago, and since then some phrenologians have caught up the idea and proclaimed, that at the front part of this organ there is an organ of *Human Nature*. This is plainly an error in theory, though

IMPULSIVES.

in practice it will generally prove correct, since this combination actually produces nearly the same practical result as if it were produced by a single organ. Strictly there cannot be one organ especially related to a knowledge of human nature; but all the Socials in some degree and in some sense, are organs of the knowledge of human nature, since each gives a tendency to learn those things concerning others which are caculated to guide to its gratification; and as the organs of Kindness, Imitativeness and Credenciveness relate to all the members of society, whether friends or strangers, these organs of course tend to a knowledge of human nature in general, especially when combined with Reflection.

This organ runs parallel with kindness and combines with it to give heighth to the forehead.

12th. CREDENCIVENESS.—Wonder—marvelousness tendency to act upon the testimony and assertions of others—to believe what others say, write or publish; it is the basis of *faith* in revealed religion—belief in history—confidence in judicial testimony, such as courts of justice rely upon—it makes one member of society assume the truth of what another asserts, and act upon it as if he had acquired the knowledge by his own experience; it thus enables us to avail ourselves of the experience of all men in all ages—it enables youth to be guided by the wisdom of age—it is the most important element of human institutions. With all the mischief and misery which is produced by erroneous and unfounded belief, such as fanaticism, superstition, bigotry, delusion and exaggeration, still it is productive of infinitely more good than evil; it connects the past, the present and the future-it concentrates the experience and knowledge of all n.en, in all times and from all regions of the earth, and enables a single mind to re ceive the result. If this organ is small and the Go verning Socials large there is a tendency to be sceptical, and to rely upon one's own experience rather than the assertions and experience of others. If this organ is large and especially if all the Conforming Socials are much developed and the Governing Socials are small, there is a tendency to the most unbounded credulity and a total want of independent judgment. In this case a large intellect does not prevent credulity, but rather searches for arguments to fortify it; for it should be remembered that the intellect is the mere servant and instrument of the larger impulsives ; the intellect does not control the propellers, it only directs them to the objects which they desire.

This organ is parallel with Imitativeness and combines with it to give highth to the head and width also to the upper part of the forehead. This is the highest Social and is bounded by the highest Intellectual and the two highest Ipseals.

TEMPERAMENTS.

A professional examination should commence with an estimation of the SIZE of the WHOLE constitution, compared with other persons of the same sex, age and race; for, all else equal, the largest man will be capable of exercising the most extensive influence.

The next consideration is the relative size and condition of the six classes of Organs or Systems, which together constitute man.

1. THE OSSEOUS SYSTEM, or System of Bones.— The frame to which all the muscles and other organs are attached. The bones have but little influence upon the character, except that when large they indicate strength without much activity: animals or men that have large bones are seldom rapid or dexterous in their movements.

MUSCULAR TEMPERAMENT.

2. The *Muscular System* is composed of fibres that contract to produce motion. If the muscles be large they may be contracted powerfully and bestow personal physical strength, but the motions, though powerful, will be slow. The operations of the mind are generally slow when the motions of the body are so. The bones and muscles combine to give strength but slowness of motion; they may therefore be considered as one system of machines which is moved by the Brain and Nervous System.

PHRENO-NERVOUS TEMPERAMENT.

3. The Brain and Nervous System, when large produce the Phreno-Nervous Temperament. When the muscles are small and slender, and the Brain and Nervous System much developed and well nourished by good blood, there is a capability of moving with rapidity though not with strength equal to the Muscular Temperament; the mind partakes of the tendency and there is a high degree of mental activity and sensitiveness.

DIGESTIVE LYMPHATIC TEMPERAMENT.

4. The Digestive System is the apparatus which receives food and prepares it to enter the blood vessels to nourish the constitution. Every motion that we make consumes more or less substance, and nourishment replaces it. When this System is predominant and the Arterial System deficient, it produces a pale and fat appearance which is the sign of the Lymphatic Temperament.

ARTERIAL OR SANGUINE TEMPERAMENT.

5. The Arterial System, including the lungs and the blood vessels, receives air and conveys vermillion colored

blood to all parts of the constitution. The air received by the lungs is conveyed to the minutest extremities of the blood vessels, and there unites with the substances which were originally received in the stomach. Every motion, mental or muscular, which we make is, (in my opinion,) produced on galvanic principles, in the minute capillary blood vessels, by the union of the oxygen from the lungs with the food (carbon and hydrogen,) from the digestive organs. If the Arterial System is in excess, it causes the food, the fat, and even the flesh to be consumed, and the person will be lean but florid. This is the Arterial Temperament, and denotes a love of action. When the Digestive System is well balanced by the Arterial, the person is fair, florid, ruddy and animated, the eyes generally (but not always) blue, especially in the white Caucasian. Very florid Arterial persons cannot keep quiet enough to study without being dull and sleepy-they soon become restless and uneasy, and their thoughts wander.

VENOUS OR BILIOUS TEMPERAMENT.

6. The Venous System or System of Veins, receives the blood from the minute capillary vessels where the arteries convey it, and returns it to the heart, from whence a portion of it goes to the liver to manufacture bile and the rest goes to the lungs, and undergoes a change which restores it from the dark purple color to its original vermillion, such as it possessed before it entered the capillaries. It is estimated that four-fifths of the blood (some say five-ninths) is in the veins and only one-fifth in the arteries. In some persons there is a Venous or Bilious Temperament, produced by an excessive developement of the Venous System and liver, while the Arterial is less developed. This (in my opinion) causes the complexion even of pure white Caucasians to be dark, sallow and bilious—they are not as easily excited but are more continuous in their operations both of body and mind.

BALANCED TEMPERAMENT.

In many persons it is exceedingly difficult to determine whether any one system is predominant—they all seem to be developed in nearly an equal degree. In such cases, of course, the individual has a *Balanced Temperament*, and will manifest activity, strength, vigor, continuance, sensitiveness and steadiness of nerve, all or each but not one more than another.

DEBILITATED TEMPERAMENT.

There is often a debilitated condition of the nutritive powers which greatly modifies the mind and character. Some are born with a *Debilitated Temperament*, and marked with the effects of the diseases and debility of their parents or grand parents—others are born with good constitutions but become debilitated afterwards. Some are born with a curious but indescribable condition of body, and irregularity of temperament, which are not healthy, but yet are such as tend to give uncommon and abnormal activity and energy to some powers of the miud, or a peculiar eccentricity to the character; this is perhaps a kind of genius allied to insanity. Some also are peculiarly situated, educated and associated so as to have their native character modified in a particular manner which is not easily understood.

The practical Phreno-Naturalist should be careful not to be deceived by these circumstances; notwithstanding the numerous and varied forms which they assume he should endeavor to detect them and assign them, as far as he can, their true value.

LARGE HEADS AND SMALL LUNGS.

The author has lately made an observation which seems to him to be of considerable importance, and to which he begs leave to call the attention of physiologists. It is, that the largest and most vigorous lungs are generally accompanied with moderately sized heads. The form of the head in such cases is also peculiar the upper parts of the head being less developed than the lower, the forehead being generally retreating. On the other hand the very reverse is true of persons whose lungs are small; that is to say, their heads are generally

Note.—Size is a measure of *power*, but not of *correctness* of mind. This is an important distinction which no writer upon phrenology seems to have made. A man may think, or feel, or act *correctly*, but not powerfully. The town clock may operate with a degree of *power* in proportion to its size, and may be heard throughout a whole city, thus exercising an extensive influence; and yet a small watch may excel in point of correctness. So a small man with a small head, may excel in correctness a large man with a large head, on account of a more perfect proportion and cultivation of his powers.

sarger, and the upper parts more developed than the lower, being in some degree like those which we call ricketty. I strongly suspect that this discovery will lead to important results when it comes to be fully explained. I will venture to suggest an explanation. The reason of small lungs being often accompanied with a large head is, that the small lungs and imperfect respiration are the cause of the brain growing larger. For, the brain is the organ of motion; and it can only produce its motions by means of oxygen, which oxygen is furnished through the lungs by combining with the food from the stomach. If the stomach and lungs do not furnish blood sufficiently charged with oxygen to enable the brain to produce the necessary motions, the motions must become less, to correspond with the quality of the blood. Under these circumstances, larger brain will be equivalent to larger lungs: just as in galvanic operations a weak and adulterated acid, when applied to a large surface of zinc plates, will produce as powerful effects as a more concentrated acid applied to a smaller zinc surface. Now the question is, does not the brain tend to grow larger and to extend its surface when the blood is weak, adulterated and imperfect, in consequence of indigestion, badly ventilated rooms and imperfect respiration. Is not this the cause and explanation of rickets ? It is admitted by physicians that rickets originate in indigestion and imperfect respiration, but why should this cause the brain to grow so large? Why do not the hands or the feet grow large as well as the brain ? I answer,

TEMPERAMENTS.

that the brain being the Phreno-Galvanic fountain of motion, and being deprived of concentrated and oxygenated blood, it extends its surface to avail itself of a arge quantity of imperfect blood, and thus it is that the same causes which produce imperfect blood produce ricketty shaped heads.

CRITICAL REMARKS UPON THE TEMPERAMENTS.

Ancient Physiologists as well as modern Phrenologists have all admitted that there are certain proportions and conditions of the body denominated Temperaments, which indicate certain peculiarities of character. The first division of the Temperaments seems to have been made as long ago as the time of Aristotle, into the Lymphatic, the Sanguine, the Choleric and the Melancholic, and was supposed to depend upon the predominant quality of the various humours or fluids, red, white, black, or yellow, which the body contained. After the circulation of the blood was discovered and the Lymphatic vessels were known, the Sanguine Temperament was attributed to the predominance of the arterial blood; and the Lymphatic Temperament to the lymphatic fluid and the digestive organs predominating over the arterial. The author of this work was the first to suggest that the predominance of the venous blood and the liver is the cause of the Bilious Temperament. The author's theory of the Temperaments is very simple : it is that the office of the brain and nerves is to move the bones and muscles, and that the brain and nerves
are therefore antagonistic to the bones and muscles, or in legal parlance, it is bones and muscles versus brain and nerves. The principal bones and muscles to which I refer are those especially which constitute the limbs and face. Now I insist that ceteris paribus, when the brain and nerves are weak and the limbs large, there cannot be as much rapidity of action as when the reverse is the fact; although there may be more strength, it will be manifested slowly. But what do we mean by ceteris paribus or all else equal ? Why is it that the largest brain, compared with the limbs, is not always accompanied with the most rapid motions ? Why is it, indeed, that we sometimes see a large head and slender muscles on one who habitually moves but little and then reluctantly and moderately? Why is it that a brain of a given size is not always of a given power? It ought to be if no interfering causes prevented. Phrenologists generally assume that it is so, but they are constantly met and annoyed by the fact, that the same size and form of head on one manifests genius, and on another stupidity-on one body it produces rapid and vigorous movements, and on another, with bones and muscles no larger-perhaps even smallerit produces slow, weak and merely necessary movements ; again, we see a small brain with large muscles, producing rapid and vigorous motions and an energetic character.

The solution of this whole difficulty is found in the fact that the brain acts on *chemico*-galvanic principles, by decomposing the blood; and that the power of the brain is dependent upon the qualities of the blood. The brain acts like the plates of a galvanic battery, while the blood acts like the acid liquor of a galvanic pattery. Now the liquor of a galvanic battery is composed of several ingredients, only one of which (oxygen) acts upon the plates to produce the galvanic movement. The oxygen may be combined with a large amount of other ingredients, which only serve to dilute and adulterate the liquor-or the oxygen may be combined with just a sufficient quantity of other ingredients to hold it. This is precisely so with the blood-the blood is composed of several ingredients, only one of which (oxygen) acts upon the brain to produce movements of the mind and muscles ; the oxygen of the blood may be combined with just a sufficient quantity of other ingredients to hold it until it reaches the brain.

Now let us see what difference this would make in the size of the brain. Every electrician knows that when an adulterated acid is used a larger surface of plates is required than when a properly concentrated acid is used. This also is true of the brain—when the blood is adulterated it requires a large surface of brain to produce the same effect which a smaller brain could produce, when acted upon by blood properly and thoroughly oxygenated. Here we have a plain and simple explanation of the matter, and the proposition now is, that *the power of the brain depends upon its size and the quality of the blood*. A small brain may therefore be more powerful than a large one, if the small one has the advantage in the quality of the blood. This is no contradiction of the proposition, that the larger the brain, and the slenderer the muscles, the greater the relative power of the brain, all *clse* equal; on the contrary it is but an illustration of it.

Another branch of the subject, and one that is not without difficulties, is that which relates to the modes of ascertaining what is the condition of the blood, and what is its quantity when compared with the other parts of the constitution.

The Bilious or Venous Temperament is supposed to be caused by the predominance of the dark venous blood or bilious apparatus. The Arterial or Sanguine Temperament depends upon the predominance of the lungs and vermillion colored blood, which contains a large quantity of oxygen. The Digestive or Lymphatic Temperament is supposed to be caused by large developement and powerful action of the digestive apparatus, while the dark and red blood is comparatively less in quantity. These three Temperaments, then, are all founded upon the idea, that the oxygen is adulterated and concentrated in a greater or less degree in each case. The lymph and chyle when acted upon in the lungs by oxygen, are changed from white to red and thus become blood-the red blood when acted upon in the capillaries is changed to dark purple-so that the very dark and the very light colors indicate a deficiency of oxygen.

The Lymphatic or Digestive Temperament is indicated by soft, full, rounded forms, and in the white race by a very light complexion, indicating that the colorless lymph is abundant—the muscular fibres are not as compact, the bones and particularly the skull is more round and smoother, with less prominences and depressions, the skin delicate, pale and fair; the movements are not very energetic, rapid nor long continued, and mind and body require frequent *intervals of rest*. This Temperament is also generally, but not always, accompanied with width in the pelvis and abdomen. The Arterial Temperament is indicated by large lungs and in some degree by a florid, ruddy complexion; when accompanied by small muscles and narrower pelvis and abdomen, the movements are very vigorous, energetic and various. The Venous Temperament is indicated by a dark complexion and generally compact muscles, in consequence of a deficiency of lymph and fat.

According to these premises, three men may have brains of the same size, but if one possesses the Arterial Temperament, a second the Venous and a third the Lymphatic, they will differ in character, in energy, endurance and continuance.

The very lowest animals (the radiata and molusca) are of the Lymphatic Temperament, they have colorless blood. These were among the first inhabitants of the earth and are supposed to have lived before fishes and reptiles were produced. The next animals were of the Venous Temperament, these were mostly fishes and reptiles. The quantity of oxygen in their fluids at any one time was exceedingly small, but their muscles were large and powerful. The next higher animals, are the present races of the Arterial Temperament; their lungs are larger and the air that they breathe is more pure and free from carbon and moisture.

We may infer from this view of the subject that the Lymphatic Temperament is the lowest, the Venous next and the Arterial the highest of the three that depend upon the fluids. The Phreno-Nervous is also higher than the Muscular. The combination of Arterial and Phreno-Nervous is the most perfect Temperament that can be conceived for Intellectuality. The lowest Temperament (by which I mean that which is the least favorable to the manifestations of mind,) is the Lymphatic and Muscular; next, the Venous and Muscular; next, the Arterial and Muscular; next, the Lymphatic and Phreno-Nervous ; next, the Venous and Phreno-Nervous, and the next and highest, is the Arterial and Phreno-Nervous. For long continuance the Phreno-Venous is best, but for the manifestation of much power in a short time, the Phreno-Arterial is best.

The Temperament changes at different periods of life. In the commencement of human existence—in embryo—the Temperament is purely Lymphatic; not a particle of red blood is seen; next, the Venous Temperament prevails a short time before birth, and man is like the fish and reptile; at birth, the Lymphatic and Venous Systems still predominate, though the Arterial has commenced its career; as the child progresses to maturity the Arterial System gradually increases, until it arrives at its climax; if at this time the Arterial is still inferior to the Lymphatic or Venous, it always will be—it is constitutional. In some persons the Lymphatic always retains the predominance, though at times there may be a struggle made by the Arterial and Venous for the mastery, especially at puberty. Some, again, are naturally Venous, and this system early predominates over the Lymphatic, but never rises to the Arterial. Some are also constitutionally predisposed to the Phreno-Arterial; in such persons, at a very early stage, even in childhood, the Arterial predominates over the Lymphatic and Venous, and the Phrenic over the Muscular; in such cases it is precocious and liable to exhibit premature genius, decay and death.

It seems to be more indicative of health and longevity, to see the Lymphatic and Venous predominate until the age of puberty, and then the Arterial gradually take the lead and keep it until after middle age, when the Venous and Lymphatic again resume their sway, and lead to second childishness, and mere oblivion.

The Lymphatic and Venous is the Temperament of childhood, and is apt, when it predominates at maturity, to be accompanied with something of the characteristic imbecility of childhood.

The Arterial is the Temperament of boyhood, and the Arterial, Lymphatic and Venous of girlhood, and is accompanied with beauty, vivacity and a love of variety, with aversion to long continued exertion.

The Balanced Temperament is the prerogative of manhood when all the powers are in equilibrium; but the Digestive, Lymphatic and Venous soon acquire a predominance which the Arterial never regains.

REMARKS

ON NEW ORGANS.

HUMAN NATURE.—The author was the first to call the attention of Phrenologians to the fact, that those who have high foreheads are most disposed to study Human Nature ; such are Shakspeare, Scott, Burns, Rosseau, Voltaire, Jonathan Edwards and most of those who have excelled in their knowledge of character. But I account for this by saying, that the Conforming Socials, when combined with the Reflectives, give this peculiarity. Kindness makes us notice strangers, Imitativeness makes us sympathise with them, Credenciveness makes us listen curiously to what they say, and the Reflectives make us philosophize upon it; these, together with the operations of the other powers, give us a knowledge of character. I deny that there is any one organ of Human Nature, as Mr. Fowler, Dr. Buchanan and some others pretend.

SUAVITY.—The same reasoning which refers Human Nature to the Conforming Socials, also refers Suavity to the combination of Kindness and Comparison, and not to any distinct organ.

SUBLIMITY.—I know not who it was that first suggested this organ and located it precisely where I do the or-

gan of Hope, but I do not hesitate to say that its existence is a mere phantasy. Sublimity cannot have a distinct organ-I mean distinct from other well known organs. Submissiveness may be considered as one element of Sublimity, giving a consciousness of the power and grandeur, and awfulness of great things. Credenciveness is another element of Sublimity, by giving the consciousness of the probability of that which is really exaggerated and unnaturally elevated. Many other organs may thus contribute to produce sublime ideas. But, after all, scarcely two can be found to agree as to what they mean by Sublimity, and it is a pity to encumber this noble science by such follies as the organ of Sublimity. Any man who will carefully examine the heads of his acquaintances, will find Hope in the very place where Sublimity is located by Combe and Fowler.

CONCENTRATIVENESS.—It is undoubtedly true that those who are small where Inhabitiveness is located, are disposed to be wandering, not only in their habits of living but also in their conversation; but this fact by no means justifies the idea of Concentrativeness, as it is generally adopted. I regard Concentrativeness as an incidental effect of Inhabitiveness, not as a primitive function of that part of the brain.

MATRIMONIAL ATTACHMENT.—An organ which gives a tendency to matrimony has been proposed, but not a particle of evidence has been adduced of its existence nor of its probable location.

NEW ORGANS OF PHRENO-MESMERISM AND NEUROLOGY.

A large number of new organs have been proposed by experimenters, who fancy that they have discovered them by means of exciting the organs of mesmerized subjects; and Mr. Fowler actually declares, that he has himself established and verified these new organs, thus discovered, by his examinations of the head. I can only say in this place, that all these pretensions are ridiculous and unworthy of serious notice; though in my Philosophy of Mesmerism and Phrenology, I have taken the trouble to refute them for the benefit of those who are entire novices in the matter.

GROWTH OF ORGANS.

Notwithstanding all that has been asserted, it is not true that by exercise the Phreno-Organs grow during one generation, so that an organ can be made large which otherwise would have been small. I do not think that by ever so much exercise the form of the skull can be varied the twentieth part of an inch in twenty years.

Observers have been misled on this subject, by several circumstances, some of which I will mention.

1. The skull is covered by muscular integuments which vary in thickness, in some places, at different periods of life, and in different conditions of the health, so as to make a difference in the diameter of the head of more than an inch. This circumstance has led some to suppose that the Phreno-Organs had grown to this extent during a certain brief period, when in fact they had not grown at all.

2. The bones of the skull and of the face change by a regular law of development, in all healthful persons alike, and nearly in the same degree in all. The bones of the forehead in childhood and in mature age, are very different; the frontal sinus becomes developed, the superciliary ridge, the zygoma, and the mastoid and corrugator muscles all develope and enlarge, so as to entirely change the appearance of the head, and induce unskilful observers to suppose that the growth of the brain has produced all this difference in the external appearance.

The brain itself undergoes changes by the regular and natural developement of its parts-some parts being more developed at certain ages. Whether the organs are exercised or not the head will tend to assume the form which was possessed by the ancestors at the same age. Now if it were true that the organs of the brain are capable of being developed by exercise in the manner claimed by phrenologists, there could be no such thing as national forms, nor family forms; a negro might by peculiar exercise, have at thirty, or even at twenty, the superior Caucasian features of skull. Surely no one can believe this ! no phreno-physiologist who deserves the name, will pretend that a Hottentot can become a Franklin in one generation, by any amount of exercise of his organs : yet if the assumptions of some of our zealous but unreflecting friends are admitted, this is a legitimate result.

No one insists more than I do upon the importance of exercise and knowledge to give power to organs that are small. Exercise, and education and knowledge bestow skill and facility in the use of even small organs, but they cannot make them large in one nor even in six, generations. I wish, therefore, to be distinctly understood as denying the common doctrine, that exercise, during one generation, can convert a small organ into a large one, or even to one of medium size.

THE BRAIN.

THE BRAIN IS NOT THE ORGAN OF THE MIND.

The Brain is, in my opinion, the organ of voluntary motion, and I entirely dissent from the received opinion, that it is the organ of Mind in any other sense than any other collection of nerves of sensation and voluntary motion are its organs. The hand may be said to be the organ of the Mind with as much propriety as the Brain may be so denominated. The motions which animals and men make when they eat, proceed from Alimentiveness; those which they make when they breathe, from Pneumativeness; those which they make when they kill, from Destructiveness; and when they fight, from Combativeness; but these motions are not mind, as we generally understand it. By mind we mean thought and feeling-we mean consciousness; but consciousness is not the function of Alimentiveness nor Destructiveness, any more than it is the function of the hand. Consciousness is possessed by animals that have no Destructiveness nor Constructiveness. Consciousness is possessed by all animals, however limited their other powers. All the results of Physiological, Anatomical and Phrenological reasoning and experiment, seem to me to point to the medulla oblongata as the seat of Consciousness, and to the Phreno-organs which constitute the Brain, as the source of peculiar muscular motions. The Phreno-organs cannot excite the muscles to produce their peculiar contractions without sending their influence through the medulla oblongata, where the conscious power resides, and rousing it to action. Thus an active state of consciousness is produced by the impressions which the Phreno-organs make upon the medulla oblongata. But this does not make the Phreno-organs themselves the organs of Mind any more than the optic nerve or the finger is so. The Phreno-organs are so many avenues or passages which conduct an impressive influence to and from the medulla oblongata where consciousness resides.

ANATOMY OF THE BRAIN.

The anatomy of the Brain and spinal cord and nerves harmonizes in a remarkable manner with my division of the Phreno-organs of the Brain, into three classes, Ipseal, Social and Intellectual.

1. The Brain and spinal cord are in two equal and essentially symmetrical halves, called *hemispheres*. Why, this is so—why the brain is in two halves, I cannot tell. Probably the same reason that a bean, a pea, or a leaf is in two halves, and so are all seeds that are denominated dicotyledons. Is this in any way related to the positive and negative forces? I leave this for those who are more skilful than I am, to investigate. I have never seen any enquiry upon the subject, yet there is probably some important principle of nature involved in this fact.

2. The two halves of the brain are connected by commissures or bridges, three of which are possessed by all animals that have distinctly organized brains which can be dissected; these three are called in man, the anterior, middle and posterior commissures; and it should be noticed that this fact coincides with my division into Intellectual, Ipseal and Social Classes; and each of these commissures probably connects the opposite halves of one of these Classes.

There are several other parts which seem to perform the function of Commissures, that is to say, they unite the two hemispheres in the manner of bridges; but they are not possessed by the lower animals, and are therefore not essential, though they may perform important and useful functions. One of these is the *corpus callosum*, another is the *pons varolii*, another is the pineal gland.

Each hemisphere is divided into three Lobes by all anatomists, the Anterior, the Middle and the Posterior; and it was so divided before the time of Dr. Gall; though no one suspected, until I called attention to the fact, that the three lobes were the local habitations of three distinct classes of organs.

4. Each lobe has a distinct artery to nourish it; and thus we have the anterior, the middle and the posterior arteries of the brain. 5. The spinal cord, besides being divided like the brain, into two halves, right and left, has each half subdivided into three columns, anterior, middle and posterior; the anterior column terminates in the anterior or Intellectual lobe of the brain; the middle column terminates in the middle or Ipseal lobe of the brain, and the posterior terminates in the posterior portions of the brain, where the Social Class originates.

6. The functions of the body and limbs to which the brain and spinal cord are related are divided by Richerand, into those related to self, those related to society and those related to the acquisition of knowledge.

7. A careful and philosophical analysis of the functions and nature of the Phreno-organs, which havebeen discovered, demonstrates to a moral certainty, that the organs on the side of the head are *Ipseal*, or related to self, that the organs on the back and top of the head are *Social*, or related to society, and that the organs on the front of the head are *Intellectual*, related to knowledge of the surrounding objects which is needed to gratify the Ipseal and Social propensities.

8. As animals rise in the scale of being, as it is commonly called, that is, as they become more and more intelligent, the organs of each class receive superadditions in a way which shows that they (the three classes) are in some respects, independent of each other, but all the organs of one class are intimately connected, being, as it were, mere modifications of each other, or rather, each superadded organ being a mere modification of its predecessor in the same class.

THE BRAIN.

USES OF THE BRAIN.

When we speak of the Brain we refer to it as an organ possessed by the vertebrated animals only. Vertebrated animals are so called because they possess a back bone containing the spinal cord and a cranium containing a brain. The skull is in truth but a continuation of (a superaddition to) the back bone, and the brain is but a continuation of (a superaddition to) the spinal cord. In all vertebrated animals there is a set of nerves, called nerves of sensation, which convey impressions from the external part of the body and head to the brain, and also another set of nerves which convey from the brain to the limbs and muscles an influence which produces voluntary motion. We have the brain then receiving nerves of sensation and sending forth nerves of motion.

There is a small central portion of the brain where the nerves of sensation and the nerves of motion are only separated from each other by a small space. This central portion is possessed by all vertebrated animals, whatever other parts are wanting or deficient. It is called the *medulla oblongata* and is, in my opinion, the organ of Consciousness—the *sensorium*, where all the fibres which constitute the Phreno-organs, concentrate and communicate with the nerves of motion and of sensation. In this central sensorium the mind resides. The number of nerves and the directions in which they run, to and from this centre, differ in different animals, according to their forms and the circumstances in which they are usually placed. The number and character of the Phreno- organs also differ in different animals according to their dispositions and talents. Man has a greater number of Phreno-organs superadded to the medulla oblongata than any other of the vertebral animals have, and it is believed that the simplest fishes have the least.

Naturalists divide the vertebral animals into four classes, according to their degree of simplicity or complexity of mental character.

Thus : FISHES, REPTILES, BIRDS, and MAMMALS.

In *fishes* the spinal cord and nerves are nearly perfect, but the brain is little more than a continued nerve or mere oblongata.

In *reptiles* the brain is a very little more developed.

In *birds* it is much developed compared with the size of the animal, but still it is smooth upon the surface and deficient in some apparently important parts, such as the corpus callosum and pons.

The mammals are so called because they nourish their young with milk from teats or mammæ. At the head of this division is man, with his complicated brain, its furrowed surface and convolutions, and its commissures. Next below man is the ourang, and the only difference in the structure and appearance of this animal's brain from that of man is, that a few convolutions upon the surface of the human brain are wanting in the ourang. The brain of the dog is still more deficient in the higher convolutions, and differs from the ourang even

THE BRAIN.

more than the ourang does from man. The cat's brain is yet more simple; and the brain of the Rodents (squirrel and rat) resembles the bird, and has a smooth surface and no corpus callosum nor pons. Now it is worthy of especial remark, that all these animals have the *central* part—the top of the spinal cord, which is commonly called the *medulla oblongata*; and they all have the nerves of sensation and motion connected with it, and the fibres from the circumference of the brain all concentering in it just as in man.

Now, when to these facts we add, that disease, and injuries and surgical operations have often destroyed the upper portions of the brain without taking away consciousness, we shall readily conclude that consciousness is dependent upon another portion of the brain—the oblongata—which cannot be taken away or seriously injured, without destroying consciousness.

If, then, the medulla oblongata is the true sensorium —the organ of the mind—what is the use of the large mass of brain which rises above and around it, like the leaves of a rose above and around the stem ? What is the function of the Brain if it is not the organ of the mind ? I answer, that

THE BRAIN IS THE ORGAN OF CONSCIOUS MOTION.

The real use of the Brain is to cause the voluntary muscles to contract. I do not mean to be understood that all the *power* which moves the muscles proceeds from the Brain alone, and none of it from the nerves and spinal cord. When we consider the small size of the Brain in the fish and the reptile-the shark and the boa constrictor for instance-and yet when we consider their tremendous strength, we conclude that in them the brain cannot be the exclusive seat of power; the brain in these cases undoubtedly originates and directs the Impulsives, but it does not supply the muscles with all the nervous energy which enables them to contract with such terrible force, and much of the energy must in them reside in the spinal cord and not altogether in the brain. The brain receives impressions from surrounding things, and transmits them to the muscles through the spinal cord ; and in passing, the current of impressions rouses and excites the nervous influence which resides in the spinal cord and nerves, and thus the combined forces of brain and nerves act upon the muscles to move them. This view is confirmed by the fact that the vertebrated animals which have the smallest brains, compared with their bodies, generally have the largest spinal cords and nerves-indeed it would seem that the size of the nerves is generally in proportion to the muscular force which they excite.

The voluntary motions of animals and man commence in the surface of the brain, pass through the conscious centre, then through the motor nerves to the muscles.

The exciting cause of these motions is the impressions made by external objects upon the senses connected with the brain; the brain being thus roused, sends a nervous current of influence to the muscles, causing them to contract and move to or from the external objects which sent the original impression. The whole operation may be well represented by a circle H, the top of which B may represent the brain, and the bottom ms the muscles; the right half the nerves of sensation S, and the left half the nerves of motion mo. Now let ms be touched by any external object, and a movement will take place along the line S from ms to B, and then from B along the line from mo to ms. Now make another circle \mathcal{N} in such a manner as to touch the circle H at B, make another circle D and another E and so on, but all these circles coming in contact at B, and in all of them let the point opposite Bbe represented by ms, and let one half of each circle be S and the other mo. Now in such a diagram the function of the brain is truly represented, for there is but one B for all the circles and that B is opposite to the ms of each and every circle.

In the foregoing illustration the Brain is not represented as a single organ, for the truth is, that each Phrenoorgan is to all the intents and purposes of muscular motion a distinct brain, and needs, therefore, the *size* of a brain. The real function of a Phreno-organ is, to cause muscular movements and to rouse consciousness; and if one class of animals performs twice as many kinds of motions as another, it must be possessed of twice as many Phreno-organs; accordingly, when any animal habitually moves in a manner peculiar to its class and different from animals of other classes, we may be certain that the animal has a peculiar developement of the brain, (a Phreno-organ,) which those classes have not that do not perform those movements : thus, animals that sing, and those that tear flesh, and those that build huts have certain peculiar developements of brain, (Phreno-organs,) which are related to those ope rations, and in which those movements originate.

Each Phreno-organ may be represented by a circle K, at one point of which C is the conscious centre or sensorium; opposite the point C is the surface of the brain E, where it is bounded by the skull; one half of the circle S conveys movements from C to E, and the other half, mo, conveys from E to C.

This explanation is such as to simplify the Phreno-Nervous Philosophy in a remarkable degree; for it is only necessary to understand that there are several circles (constituting one set) touching at one common point \mathcal{A} , to constitute a brain and several other circles of a different character, (constituting another set connected with the body,) touching at the same common point \mathcal{A} ; and that a movement in any one circle tends to produce a movement in the others, and to impress the common point \mathcal{A} .

I consider then, that the Brain is composed of nervogalvanic circuits which may be set into motion by external impressions; and when thus set in motion they impress the central sensorium, producing *consciousness*; that from the sensorium the motion is *continued* through the motor nerves to the muscles, which contract in consequence of this nervo-galvanic influence. After becoming acquainted with an electro magnetic telegraph it is easy to understand how a motion may be propagated around a circuit composed of nervous fibres; and when we find a Nervous System composed of such fibrous circuits, the telegraph teaches us to understand them and their modus operandi. When we find that the muscles are attached to these fibres and are moved (contracted) by them, we at once understand the uses of the fibrous circuits. When we find the Brain composed of fibrous circuits, in each of which peculiar muscular contractions originate, we conclude that the use of the Brain is to originate and regulate those contractions. When we uniformly find certain portions of the Brain large on animals that are remarkable for certain actions, and deficient on animals that do not perform those actions, we conclude that such portions of the Brain are composed of fibrous circuits in which such motions especially originate, and that such motions do not originate in the other parts of the Brain.

When we find all the fibres of the brain connected with one common point we deem that point to be a very important one. When we find all the nerves which communicate with the muscles, connected also with the same point, we are still more impressed with its importance. When we find that all animals, from the highest to the lowest, possess the same structural connection with this point, whatever else they may be deficient in, and finally, when we find that any other part but this may be destroyed without destroying consciousness, we are prepared to admit that if the mind has an especial central seat, here is its location. All these things we can easily comprehend and understand, for they are analogous to the laws of mechanics, chemistry and electro magnetism, with which we are already familiar : but when we are called upon to explain the nature of mind unconnected with organization, mind in its own disembodied essence, we can give no answer, no explanation, not even a conjecture ; the light of nature goes out, and we must rely upon the supernatural illumination or content ourselves in darkness. I consider consciousness an ultimate fact in philosophy, as incapable of explanation as the origin of matter, of motion or of God.

MEASUREMENTS.

The first step towards a correct examination of heads is, to obtain a standard of proportion and size. An indefinite idea of proportion is obtained by practice. After noticing a thousand faces, or trees, or buildings, we naturally form some notion, more or less definite, of the general and average form and proportion of their parts, so that when we see one which has some part proportionately larger or smaller than the other parts of the same thing, we almost unconsciously compare it in our minds with an ideal average or standard which we have thus acquired Just so it is with the examination of heads : the first time a tyro examines a head he is struck with the prominence of Cautiousness and pronounces it enormous, but after he has examined a thousand heads he would perhaps return to the first which he examined, and pronounce Cautiousness to be no more than of medium size : for by this time he has learned that any well balanced head has certain prominences. The same remarks might be made of Parentiveness, Causality and Firmness-while on the other hand Submissiveness would be pronounced small, and so also would Inhabitiveness, Eventuality and Amativeness, because in the normal head these parts are usually somewhat depressed, or at least it may be said that they do not present any prominences unless when very large.

How are we to determine what is the standard of size and proportion? It has not yet been done by any phrenologist, and can only be done by very great labor and the most consummate skill. I frankly confess that although I have attempted it, and have done something towards it, the task is yet incomplete. It is easy for any arrogant person to publish a bust and say that it is a true standard-a perfect head; and most people will perhaps suppose that it is so, provided they have never taken the trouble to reflect on the matter, or are so constituted as to be naturally disposed to be influenced by the dicta of those who assume to have infallible knowledge by instinct and intuition. To men, however, who are imbued with the true inductive spirit of modern science, such pretensions will only seem to be the offspring of vanity. But how are we to obtain a true standard ? I answer that it must be done by the actual measurement of an immense number of heads of persons of the same age, sex and race, and then these measurements must be averaged; this average will be a standard; but it will only be a standard for that class thus measured. It will be no standard for persons of a different age, or sex, or race.

The head of an Iroquois and the head of a Hottentot, the head of a German and of an Irishman, will be found so different that the measurement of a million of the one race, would give no proper standard for judging the average of the developments of the other; so also the

MEASUREMENTS.

heads of women and the heads of men are different, and one can afford no standard of the other: the heads of children are different from those of youth, and both from those of adults, while old age presents another form peculiar to itself.

Certain organs also are developed at certain ages and their activity characterises those ages. Now I acknowledge again that I have not, and never have had, in my possession the proper data for forming a correct idea of the standards for the different races sexes and ages, and I have no reason for believing that any one else has a better standard than myself. No man has probably made more or more careful examinations; and of course I have acquired some notion of the sizes and proportions which approximate to the true standard; but much is yet to be done. What we very much need, and what we have not yet obtained, is a set of measurements correctly taken, by persons whose skill is undoubted, of subjects whose sexes ages races names and histories we know: measurements of the head in various directions. length breadth and highth, by some fixed and judicious rule of measurement which will give a correct idea of the actual dimensions in one direction at least, of the person's head at the part where each Phreno-organ is claimed to be located. Nothing should be left to caprice, nor to the discretion of the one who measures. He should be tied inexorably down to some definite rule, so that when he made his report it would not be his opinion but his performance which could be submitted to our examination.

The only plan which I have ever heard suggested which is unexceptionable, is that of Professor Jocelyn, of New-York city. He proposes (if I recollect aright) a craniometer founded upon principles similar to those by which we determine the latitude and longitude of the various places of the earth, or in the heavens; and this so arranged that we can measure the length of a radius from a given centre to the surface of the head, at as many places as there are, or are supposed to be, Phreno-organs. Having, by means of a sufficient number of measurements, obtained under the sanction of a scientific association, determined upon the average size of heads and proportion of heads, so as to fix a standard of proportion,-we may then tell a person precisely how large his head is compared with such standard, and also the proportion of one organ of his head to the rest of his head compared with such standard of proportion.

It would be difficult to imagine any thing more ridiculously absurd than the present mode in which all the practical phrenologists in this country at present examine heads, and pretend to tell with scientific and professional gravity, that one organ is precisely three and another is six and another is seven; and what is worse, in utter defiance and contempt of common arithmetic and common sense, they persevere in marking a majority of the organs above the average : doubtless this is done to flatter the persons examined. If the plan which I propose could be carried out thoroughly and faithfully, any one could examine a head as well as the most experienced practical phrenologist, for it would all be reduced to a simple matter of measurement. For instance, suppose it were found that by examining several thousands of Anglo-Saxon heads, that the average highth of the head from the orifice of the ear, is, in a man at the age of 30, five and a quarter inches to Firmness; four and a half the distance from the orifice to the most prominent par' or Parentiveness; four and three-fourths to Eventuality; six inches from Destructiveness to Destructiveness, and five and three-quarters from Cautiousness to Cautiousness. Now if we wished to determine the proportionate size of Firmness to the other parts thus measured, we might add all the numbers together and compare the measure of Firmness with the sum of all the others. Thus, take the above numbers :

From	the orifice of th	ne ear	to	Pa.		•	41
do	do	do	to	Eve	nt.		44
From	Destructiveness	s to D	est		•		6
From	Cautiousness to	Caut.					53

In this case Firmness bears to the other organs measured the relation of 54 to 21, or of 21 to 84. Now suppose another person comes to us to have his head examined. Having this standard for our guide, we might measure from the orifice of the ear to Firmness and find it four and a half inches; to Parentiveness five inches; to Eventuality five inches; from Destructiveness to Destructiveness five and a half; from Cautiousness to Cautiousness five and three-quarters, amounting to twenty-one and a quarter. Then we should sav his Firmness MEASUREMENTS.

is to the other organs as four and a half is to twenty-one and a quarter, or as eighteen is to eighty-five. We should have a sum in the rule of proportion, thus : as eighty-four is to twenty-one, so is eighty-five to the answer required, which is twenty-one and a half nearly; now the actual measurement is but eighteen, whereas to be up to the standard it should be twenty-one and a half.

By measuring the head of one person with whom we are well acquainted, we can obtain a standard for comparison which will be perfect as far as it goes; for we can measure afterwards any other whom we do not know, and just so far as his head is in the same proportion as the known head, just so far, all else equal, he must agree with him in natural character; and just so far as the proportion departs, so also does the character; assuming Phrenology to be perfectly reliable.

In most cases I have no doubt it would be more interesting to compare with some well known person than to compare with a general average standard. Take a person whose character we know well, measure his head carefully, then compare others with him—for according to phrenologic rules, the difference of heads and characters must correspond. Even if the practical phrenologist should, after measuring the head carefully, proceed in the present indefinite manner of numbering organs, he would be likely to be much more exact—being thus guided and restrained by actual measurement.

If I were now to have a friend at a distance whose head I was desirous to have examined, I know of no

97

person in this country in whose skill I have confidence, and upon whose opinion I could rely as I could upon actual measurements—let me have these and I could compare them immediately with those of others whom I know, and thus ascertain the comparative character.

MEASUREMENTS OF THE BODY TO ASCERTAIN THE TEMPERAMENTS.

Many remarks which I have made concerning the measurement of the head to obtain certain and definite knowledge concerning the size and proportion of parts, apply equally to the Temperaments. Examiners are in the practice of pronouncing authoritatively that such a person has the Nervous, the Sanguine, or the Lymphatic Temperament; but it would be much better if some definite and well grounded facts could be given as the foundation of their opinions, or if they have no such facts, it would be better to say that their decision is merely conjectural, or at best an approximation.

The Phreno-Nervous Temperament, in my opinion, depends upon the relative disproportion of the size of the Brain, (and perhaps of the nerves also,) to the muscles. I think that a large head connected with small and slender muscles is indicative of a Phreno-Nervous Temperament, but a small brain connected with large muscles is indicative of a Muscular Temperament.

Now, this being admitted, it follows that a correct measurement of the principal limbs and muscles, and a correct measurement of the brain, will give us much

98

more useful information than the present unscientific method of conjecturing from the general appearance. It is now quite common for two practical phrenologists to give opinions directly opposed to each other concerning both the Phreno-organs and the Temperament of an individual; not only so, the same phrenologist sometimes gives different opinions at different times, especially if he does not know that he has examined the person before. This is enough of itself to prove the imperfection of the present system of examinations. It is useless to attempt to disguise the fact, that phrenological examinations have degenerated into the merest quackery. Madame A ******, the fortune teller, proceeds upon precisely the same principles as our practical phrenologists, that is, she guesses from appearances, and sometimes guesses aright and sometimes wrong, she judges by the dress, speech, manners and attendant circumstances, and avails herself of every hint which the credulous subject drops, and mixing up some actual but indefinite knowledge of phrenology and physiognomy; all this, with the occasional aid of a few runners and tattlers, she really tells more than any of our most boasting phrenologists, without half their egotistical pretensions to science. She looks into futurity and pasturity-tells the number of your children-how many wives or husbands you have had, and how many you may have yet to enjoy. In short she will tell any thing which she is paid for telling ; she charges you fifty cents and sends you away. If you tell her it is all a sham she laughs at you and offers to tell a different story for

another fee. I am quite serious in saying that I would as soon give half a dollar for her opinion, as that of any practical phrenologist who is now perambulating the country, and I assure my readers that one is worth just as much as the other; that is to say, they are both worthless. Perhaps I ought, in justice, to go further and say that they are not only worthless, but the scientific pretenders are absolutely injurious, on account of the discredit which they tend to throw upon a science which is capable of being made of immense value, if fairly and honestly applied in an accurate and judicious manner.

I cannot better illustrate these remarks than by referring to Mr. L. N. Fowler's Phrenological Almanac. (I have not the article before me and I quote from recollection.) He there gives an account of his examining the head of a Dr. Pitman : he says, that he pronounced the organ of Self-Esteem (Imperativeness) to be small-in a scale of one to seven it would only be ranked three. Not more than five years afterwards he was called upon to examine the same head again, and not recollecting that he had examined it before, he pronounced the organ of Self-Esteem to be large, so that in a scale of one to seven it would be ranked six. Being called upon to explain this blunder he said, "that the Doctor had been during the five years much of the time engaged in politics, which had exercised his Self-Esteem so as to make it grow from three to six in that time." !!

Now I do not hesitate to assert that the normal exer-

cise of an organ would not produce this difference in less than a thousand years. The probability is, that the Doctor's head had not perceptibly changed at all.

Another illustration of the same character, is found in the examinations which Mr. O. S. Fowler made to determine the truth or falsity of the new organs, which the Rev. Le Roy Sunderland and Dr. Buchanan pretended to discover, by Mesmeric Neurology and Pathetism. (See Introduction.)

It is now admitted by Mr. Sunderland himself, that the organs of the brain cannot be excited in the way that he and Mr. Fowler supposed that they had been. In my work published in 1845, on the Philosophy of Mesmerism, I exposed those errors thoroughly, and since that time they have been abandoned. But what shall we say of Mr. Fowler's accuracy in examining crania ? He says that he has examined hundreds and even thousands of heads and the result is in favor of the new organs, yet no such organs exist !! Is it not evident that there must be something wrong in his method of examining ?

Since it is now known that the new organs thus discovered never had existence, except in the regions of fancy, I ask, how could Mr. Fowler verify them by his examinations of heads ? Shall we be permitted to say that he must not be believed when he asserts that he has thus verified them ? or shall we say that his examinations are so loose and inaccurate that nothing can be established or disproved by them ? Whichever view we take of the matter, the result is equally discreditable to

MEASUREMENTS.

Mr. Fowler, and the friends as well as the sceptics in phrenology may reasonably refuse to rely afterwards upon any other scientific assertions which he may think proper to make.

In a moral point of view there could be no objection to the present method of making examinations, if it were frankly stated to the persons examined that accuracy is not attainable, that there is a great liability to error, and that the decision of the phrenologist is merely his judgment, founded upon indefinite knowledge. If such an honest n ethod as this were adopted no one could complain ; and if errors were committed, the grossest mistakes would only lead to more careful examinations, and the adoption of more accurate methods. When men pretend to be already infallible, it is in vain to attempt to improve them, and the only alternative is to expose them and put the public on their guard.

The developement of the chest is, when compared with the developement of the pelvis, an indication of the relative amount of the Arterial Sanguine Temperament; and I should much prefer to have a person tell me the precise measurement around the trunk at three points, viz: under the arms, at the waist, and the pelvis, than to be told by some pretender that the Temperament is Sanguine or Lymphatic. Again, in regard to the complexion, it might be stated directly and definitely that a person has light blue eyes and yellow hair, and soft pale skin, or dark blue eyes and chestnut colored hair and florid skin, or black hair and eyes and yel

102

low skin, with leanness. This would be definite and would be a good foundation for the judgment—or at least we should know what the judgment is founded on and could judge for ourselves of its accuracy.

Tell me precisely a person's complexion, and his height, and then tell me how much he measures around the chest, waist and pelvis; then how much he measures around the instep, ankle and leg, the length of his foot and limbs; and the measurement around the wrist, the middle of the fore arm and half-way between the elbow and shoulder, and around the neck; tell me all this, and let me also know the size and form of the head, and I will not ask you to tell me his Temperament, nor to show me his chart. Any one can apply this rule for himself, and decide according to the rule what the Temperament is, and what the character is according to Phrenology.

The head might be measured from the orifice of the ear, (the meatus auditorius) to each Directive organ, and also to each Social. Each Ipseal might be measured from the organ on one side to the corresponding organ on the other side, and in addition to this the three highest Ipseals should be measured from the opposite meatus to its centre. Amativeness should be measured from one mastoid process to the other, besides being measured from the meatus to the mesial line. Number should also be measured from one organ to its opposite and from one meatus to the organ on the opposite side. Perhaps it might be a good rule to measure each organ that is near the mesial line, but not actually on it, from the opposite meatus. I am now supposing the measurement to be made with callipers, but it would be much better to use a graduated craniometer, which might be easily so contrived as to give the latitude and longitude of each part measured so as to prevent any misunderstanding as to the precise location of organs. A craniometer may be made in the usual manner, like the bale of a kettle, exactly a half circle with its axis passing through each meatus, and held in its place by small knobs passing into the meatus. The centre of this semi-circle might come exactly to the mesial line; to one of the knobs at the meatus might be attached another smaller semi-circle at right angles to the large one, and so marked and graduated as to correspond in degrees with the larger one. Now the degrees on the large semi-circle would show the latitude of an organ, and the degrees on the smaller semi-circle would show its longitude; and by means of a moveable slide, the distance from the skull to the edge of the large circle might be measured ; deducting this from the semi-diameter of the large circle, the remainder would be the distance from the centre of the brain to the surface of the skull; assuming the centre of the brain to be in a line with the axis of the circle, which axis passes through the meatus. A phrenological society would do well to employ a man to use such an instrument for a sufficient time to obtain a standard of proportion as a guide for future examinations.

After every means in our power has been exhausted to obtain exactness, we shall still have more than

104
enough uncertainty in our results; for we have not yet learned the *boundaries* of any of the organs, nor have we learned the precise functions, nor even the very existence of all of them; and their modes of operation are still unsettled. Nothing is yet perfect in this beautiful science but the vain self-conceit with which it is promulgated and practiced by some of its noisy advocates.

OF THE PECULIARITIES OF THE PHRENO-SYSTEM OF PHI-LOSOPHY, SET FORTH BY THE AUTHOR, AND WHICH ARE NOT TAUGHT BY ANY OTHER PHRENOLOGIST.

1. He denies the brain to be the organ of the mind, and considers it the organ of voluntary motion, each organ being the fountain of a class of peculiar motions and the medulla oblongata being the seat of the mind.

2. He denies that any of the organs grow in consequence of exercise during one generation as much as phrenologists pretend that they do; and he denies that the changes which the size and the form of the skull undergo, at different periods of life, are caused by education, employment or any voluntary exercises of the individual. He deems it improbable that the brain grows or varies more than the sixteenth of an inch during life, in consequence of any amount or kind of exercise.

3. He denies the common doctrine of phrenologists concerning large heads, and he thinks that a very large head (unless it is accompanied with large lungs) is an indication of weakness, and a want of proportionate energy of character, while, on the other hand, a small head and large lungs indicate a tendency to prompt

and vigorous action without much tendency to sedentary deliberation.

4. The nature of consciousness or mind is unknown, but in this life its only real *use* is to enable us to *move* in such a way as to gain the objects which our natures require—mind is subservient to muscular motion.

5. The brain is constituted essentially of three classes of organs, which are developed from three different radical points at the base of the brain, like three trees; one class originates Self-Relative (Ipseal) actions, a second class originates Society-Relative (Social) actions, and a third class (the Directives) directs the actions to their proper objects.

6. The Bilious Temperament is related to the dark venous blood.

7. The organ of *Sanativeness*—this is situated just below Destructiveness, and in proportion as it is developed animals and man are capable of experiencing the feeling of bodily pain. No other phrenologist has ever suggested this idea and no organ for this feeling has been proposed.

8. The organ of *Pneumativeness* which contributes to give prominence to the anterior portions of the middle lobe of the brain, and causes the cheek bones to occupy a more prominent position, was first suggested by the au hor. It was denied by other phrenologists, and afterwards admitted, (and so also were Sanativeness and Flavor,) by some of them, because that they found (as they supposed) that it could be excited in mesmerised subjects; but since it has been found that the or-

gans of the brain cannot be excited in this way, they have been silent upon the subject. This organ conveys impressions of suffocation to the mind from the lungs.

9. The organ of *Flavor* or the perception of the odor, savor and chemical qualities of food &c. The author discovered this organ and published an account of it in 1839.

10. The author denies the existence of the faculty of Individuality and also of Form, and appropriates the space which has been allotted to these organs by Spurzheim, to the other organs around these, namely : Extension, Direction and Eventuality.

11. The author denies the existence of any especial organ of Sublimity, of Human Nature, of Suavity or of Matrimonial Attachment; but he was the first to announce that the persons who excelled in the knowledge of character have high foreheads.

12. The author thinks that Hope is the propensity to migrate.

13. He regards the organ called Wit, Mirthfulness, or Playfulness as the organ of Experimentiveness—the impulse to experiment. He considers the cause of sport and play, to be an excess of the arterial stimulus producing activity, which during leisure is apparently spontaneous, and is called *sportive* or playful action. This condition of things is favorable to the manifestation of Experimentiveness, and it is apt therefore to show itself in a sportive form, but its primary function is to impel to experiment, to extricate the individual from difficulty.

14. The organ which Gall called Poetry, and Spurzheim Ideality, the author denominates Perfectiveness, the impulse to improve; and instead of regarding it as related exclusively to the fine arts, he deems it as properly related to the useful arts only, and the fine arts are the results of its operation in leisure, or in excess, or under peculiar circumstances.

15. The organ which Gall called the organ of Pride and Spurzheim Self-Esteem, the author denominates Imperativeness—the impulse to command.

16. The organ which Spurzheim called Veneration, the author denominates Submissiveness—the impulse to submit to superiors.

17. The organ which Spurzheim called Marvelousness, the author denominates Credenciveness—the impulse to act upon the assertions and testimony of others, and thus to substitute what we suppose to be their perceptions for our own actual perceptions.

18. The author considers each organ of the brain as related to a certain class of objects, which are adapted to stimulate the organ to its proper action. The office of the Directive or Intellectual organs is to discover and point out the proper objects for the action of the Impulsive organs.

19. The Directive organs are often imperfect or inexperienced, so that they miss the true objects which the Impulsive organs demand, and are misled by the resemblance of false objects to true ones, so that they direct the Impulsives to act upon erroneous objects. This is *idolatrous* action. The account of each organ

110

should therefore distinguish the action of organs when excited by their proper objects from their idolatrous actions when excited by counterleits.

20. In 1838 the author discovered and published an account of the relation which exists between the developement of the Belligerent, Prudential, and Industrial Ranges of Ipseals and the teeth, lips, nose and ears, showing that the uncommon developement of one of these Ranges with an uncommon deficiency of the others, was in animals and man harmoniously accompanied with a peculiar form of the mouth and nose; all other phrenologists at that time were silent on the subject of Physiognomy. Spurzheim had published a work in which he attempted to show that there is no foundation to Physiognomy. But the author flatters himself that he has discovered the true and natural foundations of what he has denominated Phreno-Physiognomy, or the harmony between the form of the brain and of the face.

21. A person resembling most the parent of the same sex is generally smaller, and has a deficiency of the qualities of the opposite sex.

EXPRESSIONS OF OPINION.

Extract from a Report on the Phrenological Classification of J. STANLEY GRIMES; by E. N. Horsford, Professor of Natural History and Mathematics in the Albany Female Academy. Adopted by the Albany Phrenological Society, September 3, 1840.

"The considerations which Mr. Grimes has presented in support of his division of the cerebral organs into three classes are of three kinds :- ANATOMICAL STRUCTURE, NATURAL HISTORY OF ANIMALS, and ANALYSIS OF THE MENTAL POWERS. Of these, the committee have heen unable to perceive the value which Mr. Grimes seems to attach to the anatomical facts. As a class of truths, they harmonize with this classification, and may therefore be said to lend it some support; but alone they must be regarded as far from contributing sufficient ground for this division. The occurrence of the fundamental organs of each class at the base of the hrain, and the regular gradation of the powers, from Amativeness to Credenciveness, through the socials; from Alimentiveness to Hopefulness, through the Ipseals; and from Individuality to Causality, through the Intellectuals, corresponding with the succession of animals in the scale of heings, from the lowest orders up to man, are certainly in heautiful harmony with. and go to sustain the last and most important consideration upon which the classification rests. In the analysis, Mr. Grimes shows that all the powers of each class perform certain specific functions that have a generic character in common. All the powers of the Ipseal class are related to the individual, those of the Social class to society, and those of the Intellectual class to knowledge. He also shows that each of the powers of the several groups in each class have a sub-generic character in common. The first four socials, Amativeness, Parentiveness, Adhesiveness and Inhahitiveness, have for their object the continuation of the species and the establishment of society; those of the governing group, Imperativeness, Approhativeness, Firmness and Conscientiousness, have for their object the maintenance of government in society, and the administration of justice ; those of the conforming group, Suhmissiveness, Kindness, Imitativeness and Credenciveness, have for their object the perfection of society, hy 'obedience to government, condescension and kindness to all our associates, and conformity to their manners, habits and opinions." In the Ipseal class he shows, that the powers of the corporeal range are related to the nourishment and preservation of the body; that

those of the earnivorous range are most strongly manifested in the animals that feed upon flesh, and procure it by the destruction of life; that Cautiousness in the herbivorous range characterizes the peacesecking, ruminating animals ;* that those of the rodentia range distinguish the whole order of animals to which the beaver and squirrel belong; that those of the human range arc fully developed only in man. He makes Playfulness the link in the Ipseal chain, which conneets man with the lower animals; the other organs of this range being exclusively human. He shows that men who have a developement corresponding with that of animals, belonging to either the earnivora, herbivora, or rodentia, are, so far as their Ipseal character is concerned, enstamped with the dispositions peculiar to the carnivorous, herbivorous, or gnawing animals. The Intellectnal class, with the exception of a division into ranges, he considers as a whole, and treats the organs in their order of succession, commencing at Individuality, and proceeding through the first and second ranges of perceptives to the reflectives.

"From this hasty view of the principal systems of arrangement among the powers of the mind which have hitherto received attentior, the committee pass to the more direct comparison of the classification of Mr. Grines with that of Dr. Spurzheim. In doing this, it may be well to notice some of the principles of classification in nature, since correspondence with them can alone give perpetuity to any system; and since they constitute the only true standard of merit. Among those which, in phrenology, are obviously important, may be enumerated the following :

"I. Powers immediately related in functional character should be arranged in the same division.

" II. Powers not directly related, but differing in attributes, should be arranged in different divisions.

"III. The order of succession of the organs anatomically considered, and the relationship of the powers according to metaphysical analysis, should harmonize with each other.

"If a classification is defective when viewed in the light of either of these principles, it is manifestly imperfect; and that classification against which, when tested by these principles, there are found fewest objections, is the most perfect.

"In noticing Spurzheim's classification, it was observed that Language, manifestly low in the scale of perceptives—inasmuch as it is possessed by almost every individual of the animal kingdom, and the organ of which is at the very base of the brain—is ranked next to the reflectives. It was also seen, that Alimentiveness, a propensity related wholly to the individual, is associated with Amativeness and Philoprogenitiveness, which are beyond question related to the speeies. He has placed in separate subdivisions, Adhesiveness, Approbativeness and Benevolence, making the first an animal propensity proper, the second an affective power common to man and animals,

^{*} Secretiveness is thought by Mr. Grimes to distinguish the Herbivora. It is also manifested in a high degree by the Carnivora. The essential question, however, is whether the associated organs perform analogous functions.

and the last a power proper to man. While it is plain that Adhesiveness characterizes man, even in his higher walks. as much as animals, and more so than most, and that Approbativeness, though common to man and some animals, cannot be claimed to be possessed oy all inferior creatures, it is equally plain, from facts adduced by Gall, Spurzheim and Combe, that Benevolence distinguishes several orders of lower animals. This view leaves the alternative of regardung those instances where animals present a developement of the powers not in conformity with the classification as exceptions to a genecal rule, or as considering the lines of distinction as improperly drawn. As no arrangement like the above is proposed by Mr. Grimes, none of the above objections apply with force to his classification.

"Since the authors of the classification before us draw the same line, and give it the same direction between the intellectual faculties and the affective faculties, or propensities, the further question of relative merit resolves itself into the following inquiries.

"1. Is the distinction between sentiments and propensities main tained by Spurzheim, founded in nature?

"2. If it be not founded in nature, are all the powers of the Ipseal class according to Grimes, related to the individual; and are all the powers of the Social class related to society?

⁴ ⁽¹⁾ Combe says in his remarks upon what distinguishes sentiments from propensities, that 'Acquisitiveness is a mere impulse to acquire ; but Veneration gives a tendency to worship, accompanied with a particular emotion.' Acquisitiveness is made the representative of all the animal propensities, and Veneration of the moral sentiments; and the argument based upon them is applied to the two genera.

"It is true that the evidence here to be adduced is in Consciousness, and therefore may perhaps be thought difficult to present; but as the laws of the mind are immutable, and as the germ of every mental power is possessed by every sound mind, it may be fairly presumed that testimony upon a point of such importance is not altogether shut out from view. Let there be taken Firmness from the moral sentiments, and Combativeness from the animal propensities. When the former is in action, the possessor feels an impulse to resist the influence of others, and to maintain any position he may have assumed a tendency to fixedness—and this feeling or impulse is called an emotion. When the latter is aroused, the possessor feels an impulse to oppose whatever may be in his pathway. Now between the two, is there any difference beyond the particular *character* of the attribute **?** Is there any thing amounting to a superaddition? If there be not, this distinction of Spurzheim is without existence in nature.

"2. Are all the powers of the Ipseal class, according to Grimes, related to the individual, and those of the Social class to society? In other language, it may be asked, could each power of the Ipseal class be brought into legitimate exercise, though the whole species besides the individual were annihilated—and could any of the Social class be legitimately exercised without the being of society?

"A detailed reply to these interrogatories would involve an analysis of all the powers of the two classes, a task whose execution it cannot be conceived could be brought within the limits of this report.

"That these two generic functions are respectively characteristic of the two classes, it may be remarked, is not denied, since Carmichael and Besseires have admitted its truth among the lower powers of the two classes, though they were unable to perceive its extension through the whole. From a careful examination of the analyses, the ground of distinction between the two classes, and their limits seem to be well established. The subdivisions of the two classes appear among the obvious arrangements of nature. Of the Ipseals, the corporeal range has relation clearly to the demands of the physical system. So nearly allied in function are Combativeness and Destructiveness, that the language of their respective analyses almost seems to be applicable to a single power. No two, in many respects, appear so nearly related as Secretiveness and Cautiousness; and the propriety of associating Acquisitiveness and Constructiveness is obvious, for the hoarding of possessions demands a place of reception. The powers of the last range, according to Mr. Grimes' analyses, appear all related to the improvement and the perfection of the individual ; they seem to point to higher and nobler spheres of action than any of the preceding ranges, and are therefore justly separated from the lower powers.

"Of the Socials, all the powers of the *establishing* group have the distinguishing generic character expressed in the name under which they are arranged. This remark is equally true of the *governing* and the *conforming* groups.

"While the division of the powers into three classes, and their subdivision into ranges and groups, may be considered important and useful, the distinguishing feature, and that which to the committee constitutes the highest merit of the new classification, consists in this, that it traces the chain of functional relationship, from the lowest organ to the highest of each class.

"If Mr. Grimes' elassification is founded in nature, the following are some of the advantages which may be expected from its adoption.

"1. It will facilitate the application of phrenological principles in deciding upon character from an examination of the head. Upon noticing the predominance of one class of organs, it may be said of the individual thus marked, he is Ipseal, Social, or Intellectual; or, upon observing two classes prevailing over the third, it may be said, he is Ipseal and Intellectual, or Social and Intellectual, or both Ipseal and Social. The same principle will be applicable in speaking of the developement of one group, or of two groups of the Socials, and also of the ranges of Ipseals and Intellectuals. The effects of a combined developement of particular groups in the different classes will be more readily understood.

"2. It will aid analysis, in ascertaining the ultimate function of each organ. Upon knowing its position, and the relation it sustains to others—with what organ it would probably act, and whether in the centre of a class, or joined to organs of other classes, its manifestations will be more readily perceived, and more clearly comprehended.

"3. It will aid in discovery, by directing the eyes of all phrenologists to limited regions of the brain, when in search for the seat of a

faculty, in whose existence they have been induced to believe. For example, if the seat of a supposed power related to corporeal wants be sought, the attention will be directed to developements and defidirencies in the corporeal range. If the function of the organ occupying the region marked upon the bust of Mr. Combe as unknown, be the object of discovery, several aids will be alforded. It must, in the first place, be either Ipseal or Social; and in the second place, it must oc either a Social of the conforming group, or an Ipseal of the human range.

⁶⁷4. It will furnish phrenology with new claims to the character of an established science; and by its simplicity and consistency, will induce the student to pursue its investigation with the same kind of satisfaction that now attends his study of the older sciences.

"In conclusion, the committee state, that distrusting their own abili ties to discharge the duties assigned them, they entered into corres pondence upon the question to be determined with several phrenological writers. They have also examined all the published works relating to the subject which they could command. And with these materials before them, after weighing the whole matter, the result is the opinion, that the classification of Mr. Grimes is a decided improvement, as it arranges the powers of the mind more nearly in accordance with the laws of natural relationship than any of the systems which have preceded it.

E. N. HORSFORD, Chairman of Committee on Grimes' Classification.

"At the elose of Mr. Grimes' lectures, delivered in the Chapel of the Albany Female Academy, the class organized by appointing Charles D. Townsend, M D., Chairman, and Thomas W. Olcott, Esq., Secretary. Whereupon Henry Green, M.D., introduced the following resolutions, which were unanimously adopted :

"Resolved. That we have listened with exciting interest to the Lectures of Mr. Grimes, President of the Phrenological Society of Buffalo, on the science of phrenology.

"Resolved, That we believe Mr. Grimes has made new and important discoveries in Phrenology; that his arrangement of the brain into three classes of organs, viz:--the Ipscal, Social and Intellectual, together with their subdivisions into ranges or groups, is founded in nature, the anatomy of the brain, and the natural gradation of animals as they rise in the scale of being.

"Resolved, That we are forced to believe that Phrenology, as taught by Mr. Grimes, may be learned by persons of orcinary intelligence and observation, so as to be useful to them in their every day intercourse with society—that it is destined to improve our race, remodel the present mode of education, become useful in legislation, and in the government of children in families and in schools.

"Resolved, That we not only esteem it a duty, but regard it a pleasure, to encourage talents, genius and enterprise, wherever we

discover them, and in whatever pursuit, if the object and effect is the improvement of mankind—that we regard Mr. Grimes as possessing the highest order of intellect, as original in his observations and deductions, and as destined to fill a distinguished place in the scientifio world.

⁴ Resolved, That we confidently recommend Mr. Grimes to the attention of our fellow-eitizens in different sections of our extended country, believing they will find him an accomplished lecturer, a close, accurate, foreible reasoner, and inimitable in his illustrations of the science he so triumphantly advocates.

"Resolved, That Henry Green, M.D., and Professor McKee, of the Albany Academy, be a committee to present a copy of these resolutions to Mr. Grimes, and request their publication in the daily papers of the city.

"C. D. TOWNSEND, M. D., Chairman. "T. W. OLCOTT, Secretary."

" Prof. Grimes, whose lectures on phrenology, at Buffalo, Albany, and other cities, have excited unusual interest, and elicited the warmest approbation, proposes to deliver a course of lectures in this city immediately. His System differs materially in its details from that of Gall, Spurzheim and Combe, though resting on the same general foundation. We have not yet heard him; but from the testimony of friends on whom we can place reliance, we know that he handles his subject like a master, and that those who can find time to attend his lectures will be entertained and edified."—New-Yorker.

"Professor Grimes, the phrenologian, whose original and ingenious views on phrenological science have eaused his lectures to be very much followed in our western cities, has arrived here, and puts up at the Astor. He brings with him most flattering testimonials, from his Excellency the Governor and others of Albany, where his last course was delivered. He proposes, we are pleased to hear, to give an opportunity to the citizens of New-York to judge of the merits of his discoveries and deductions, in what he justly terms the science of phreno-physiognomy, embracing all the phenomena developed in the brain, features, and whole organization, and character and habits of the individual, as divided into three great orders of mammalia, viz: the carnivoræ, the graminivoræ and the rodentiæ—corroborated by illustrations from every tribe of animated nature—the only true and exact base of this interesting science."—N. Y. Star.

"New Theory of Phreno-Physiognomy, by James Stanley Grimes, Esq.—Mr. Grimes delivered his first leeture last night, at the American Institute, to a respectable and intelligent audience. Every body present seemed impressed with the truth, force and originality of his new views on the science of phreno-physiognomy. Mr. Grimes has the merit of making himself clearly understood, and of presenting his subject under its natural divisions, and with great distinctness. He appealed, in strong and effective dcclamation, to the common sense of all present, and gave such familiar, graphic illustrations of his analysis of the temperaments, and of the language of the passions,

displaying the powers of mimicry and eloquence to great advantage, that all present, we believe we may with truth say, were convinced that the theory of the Professor is based upon practical sound sense and indisputable facts."—*Ibid.*

"Lecture on Phrenology.— Professor Grimes, we are happy to hear, has consented to repeat his introductory lecture on phrenology this evening, at the rooms of the American Institute, rear of the City Hall. The views on the science of phrenology, presented by Professor Grimes on Monday evening, were entirely new, and clicited a universal request from the audience for a repetition on this evening, and we trust all who feel an interest in the subject will attend." N. Y. Times.

"The Lectures on Phreno-Physiognomy, by Professor Grimes. Mr. Grimes will continue his course to-night, at the American Institute. The subject being one of particular interest, viz :—the highest range of the *ipseal* facultics, as he calls them, or those peculiar to man, as distinguished from all other animals. Mr. G.'s last lecture was received with great approbation, and fully sustained his bold original theory, which has the merit of producing conviction, because we have before remarked, its illustrations are drawn from the only sure foundation for these investigations."—N. Y. Star.

"Mr. Grimes commences a third course of lectures to-night, having been engaged to deliver the same before the Mechanics' Library Association, at their lecture room in Crosby-street, near the corner of Grand. The popularity of this gentleman is increasing daily, as is evinced by the flattering demands upon him by the most respectable literary institutions of our city.

⁶ We understand, the lectures of Mr. Grimes, at the Crosby-street Institute, before the Mechanics' and Tradesmen's Library Association, are so crowded that it is next to impossible to obtain admission-Last night a great number had to go away. We felt sure that when this gifted and luminous expounder of the only true laws of phrenological science should have a hearing, he would daily gain more and more converts to his views on this interesting subject."—N. Y. Star.

"Phrenology.—This science, which seems strongly based upon truth, however erroneous may be some of the theories deduced from it, and however mistaken some of its professors may be in its application, nevertheless appears to be slowly gaining a strong hold upon the faith of the multitude. A new and popular lecturer on this subject is now in this city, and will deliver a course, as will be seen by the advertisement. Mr. Grimes gave an introductory lecture last evening. His first regular lecture will commence this evening. His mode of illustration is exceedingly happy and forcible. Possessing a great fund of humor, he tickles his audience into a roar while conveying much important information—so, his hearers are both instructed and exceedingly amused at the same time. We cannot tell, of course, how the lectures will wear; but he seems to have made adecided hit in the beginning. We understand that he has made some practiced

experiments of his theory at the College, with great success, hitting the characters even of those who attempted to mislead him. We perecive that Mr. Grimes brings with him flattering testimonials from a number of well known individuals in the larger citics, and the Phrenological Society of Albany have published resolutions highly commendatory of him and his system."—New-Haven Palladium, 1841.

" (G Mr. Grimes' Phrenological Lectures have been exceedingly well received in this city, by the class in attendance. As he progressed with his course, his hearers increased, and those who were in constant attendance were apparently more and more interested with every succeeding lecture, to the close of the series. We do not believe Mr. Combe is his superior, in any sense, as a lecturer on this science, and we know he is altogether his inferior in many particulars. The following resolutions express the opinions of most if not all of Mr. Grimes' hearers in this eity."—New-Haven Palladium.

On Friday evening last, after J. Stanley Grimes, Esq. had delivered his concluding lecture on Phrenology, in the Exchange Saloon of this city, the audience remained and a meeting was organized by calling His Excellency, Gov. EDWARDS, to the Chair, and appointing W. E. ROBINSON, Secretary. Whereupon the following resolutions were proposed and unanimously adopted :

Resolved, That we have listened with increasing interest and delight to the course of lectures just concluded by James Stanley Grimes, Esq., on the Science of Phrenology. Resolved, That we believe Mr. Grimes has made many valuable

Resolved, That we believe Mr. Grimes has made many valuable discoveries and improvements in the Science: That we admire his lucid explanation of the connection and harmony between the organs of the brain and those of the body, and that his classification and arrangement of the Phrenological organs appear to be founded in nature.

Resolved, That we take pleasure in recommending Mr. Grimes as a pleasing, original and able lecturer, that, whether in this country or in Europe, where we understand he intends to lecture on this seience, he has our best wishes for his success and happiness.

Resolved, That the Secretary of this meeting be appointed to present a copy of these resolutions to Mr. Grimes.

WM. E. ROBINSON, Secretary."

New-Haven, Dec. 12, 1840.

"Mr. Grimes' last Lecture in Hudson.—On Friday evening last Mr. Grimes completed his second course of Lectures on Phrenology, in this city, before a numerous and highly respectable audience. At the close of the lecture JOSIAH W. FAIRFIELD, Esq. made a few appropriate remarks complimentary to Mr. GRIMES, and proposed that the audience should resolve itself into a meeting for the purpose of passing resolutions, expressive of its sense in regard to Mr. Grimes' lectures. Whereupon Col. CHARLES DARLING was called to the Chair, and J. R. S. VAN VLEET appointed Secretary.

J. Sutherland, Esq. then rose, and after some remarks expressive

of the pleasure and gratification with which ne had listened to Mr. GRIMES' able exposition of his system of Phrenology, offered the following resolution, which, on motion of J. W. Fairfield, Esq. was adopted :

Resolved, That we have listened with high gratification to the course of lectures on the science of Phrenology delivered in this city by Professor Grimes, and which have been this evening completed. That we feel it due to Professor Grimes to express our thanks for the instruction and pleasure his lectures have afforded us, and the interest we have felt in his able exposition of the principles of Phrenology. That his manner of lecturing is admirable, combining amusement with instruction, and well calculated to impress favorably all who hear him with the principles of the science. That we highly commend his zeal and ability in advancing a science the aim of which is more perfect knowledge of intellectual Philosophy and of ourselves.

The Secretary of the meeting then offered the following, which, on

motion of CYRUS CURTISS, Esq., was also adopted : Whereas, the labors of Mr. Grimes are for the present ended in this city, we deem it a duty we owe to him-to the cause of truth, and to ourselves, that we give an expression of the high gratification with which we have listened to his interesting and instructive lectures.

Therefore, be it Resolved, That we approve of his classification of the Phrenological organs-of his explanation of the temperaments, and of his new system of Phreno-Physiognomy.

Resolved, That we cheerfully recommend Mr. Grimes to the public, as an able advocate for his new and beautiful theory of the human mind, and from whose teachings we have derived in a high degree, intellectual pleasure and instruction.

On motion, it was resolved that the proceedings of this meeting be signed by the Chairman and Secretary, and published in both the newspapers of the city.

CHARLES DARLING, Chairman. J. R. S. VAN VLEET, Sec'y."

Hudson, June 6th, 1840.

UNION COLLEGE, October 23, 1844.

PROF. J. STANLEY GRIMES :

" Dear Sir-At the conclusion of your lectures, just delivered before a portion of the students of this Institution, a meeting of the class was duly organized, and the following resolutions were adopted, as expressive of their sentiments in reference to your lectures.

Resolved, That we have listened with deep interest and the highest satisfaction, to the series of lectures on the Philosophy of Mesmerism, just delivered before us by Mr. Grimes, and that we unanimously concur in tendering to him this testimony of our approbation and respect.

Resolved, That the experiments delivered before us, have without exception been of such a character-thc subjects being our fellow-students and classmates, known to us to be men of intelligence, firmness,

and Christian integrity—as to forbid a doubt of the facts, and leave us not the slightest ground for scepticism.

Resolved, That so far as we are competent to judge, the theory of Mesmerism, as presented by Mr. Grimes, is not only novel and excitingly interesting, but in perfect accordance with admitted principles of science.

Resolved, That should Mr. Grimes, as we understand it is his intention to do, publish to the world his views upon this subject, we believe they will meet with that favor from the public, and from men of science in particular, which, in our judgment at least, their present novelty demands.

Resolved, That wherever Mr. Grimes may go, we would respectfully solicit for him a candid hearing from an enlightened public, feeling assured that their experience will accord with our own, and prejudice give place to conviction, and scepticism to confirmed belief.

Resolved, That a copy of these resolutions be presented to Mr. Grimes, to be used according to his discretion.

A. NEWKIRK LITTLEJOHN, Chairman."

"Professor Grimes' Lecture on the Philosophy of Intemperance.-This gentleman appeared last evening at the Tremont Temple, before a large and respectable audience. Intemperance is an old and somewhat hackneyed subject, but the able Lecturer gave quite a new form to it, and deeply interested his audience for an hour and a half.

We freely give Professor Grimes great credit for the very able and increasing manner in which he handled his subject. We hope we shall hear from him again."—Boston Daily Mail.

"Lectures on the Science of Human Nature.—It will be seen on reference to our advertising columns, that Prof. J. STANLEY GRIMES, of New-York, commences a series of lectures on this subject at the Masonic Temple, on Monday evening next. Mr. G. is eminently known as the author of several philosophical works, among which are "A new System of Phrenology," "Etherology," "The Philosophy of Mesmerism," etc. The opinions and positions assumed by this gentlenan in relation to the human mind, as connected with the above mentioned subjects, are entirely different from those hitherto assumed by other gentlemen who have lectured upon them. Mr. Grimes comes among us with the highest possible recommendatious."—Boston Daily Mail.

"Professor Grimes.—This gentleman is slowly, but surely gaining a merited popularity among our citizens, without resorting to any of the usual means to acquire notoriety; hardly advertising in the public prints to inform our people that he is present with us, his audiences are nightly increasing, and are of a class which neither humbugs nor mediocrity could satisfy. His great merit is a quaint and hearty originality. He appears to be a close observer of human nature, the foibles of which he illustrates with infinite faney and sarcasm. His

manner of discourse is peculiar; he is exceedingly impressive in depicting the different emotions of the mind, a capital mimic, when relating the many droll anecdotez in which he abounds, and yet soher and serious when treating of the more profound themes of his discourse.

The basis of his lectures is Phrenology, being a modification of the systems of Spurzheim and Comhe. He does not confine himself to the hrain alone, but to the whole structure and constitution of the frame, to judge of the tendencies and capabilities of the individual.

Mr. Grimes, we understand, is a lawyer of some eminence in the State of New-York. Having had much success as a lecturer, he em ploys the vacant time hetween the sessions of the court, in promulgating his peculiar views on men and things. This is his first visit to our city in this capacity, although originally a Boston hoy, where at school, we have heard it hinted, he was chiefly remarkable for the fact that he could thrash every boy in it. He seems disposed to come off victorious even now with any one, either physically or mentally, who is inclined to grapple with him, or is anxious to feel the weight of his calibre. His lecture this evening is on Hope, at the Tremont Tem nle."—Boston Daily Whig

