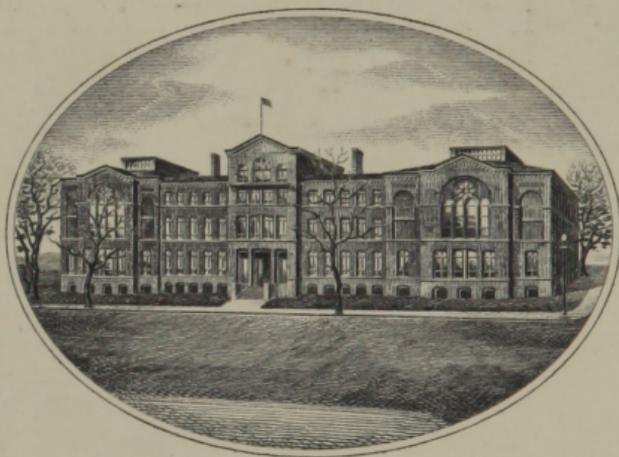


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FIGURE 4

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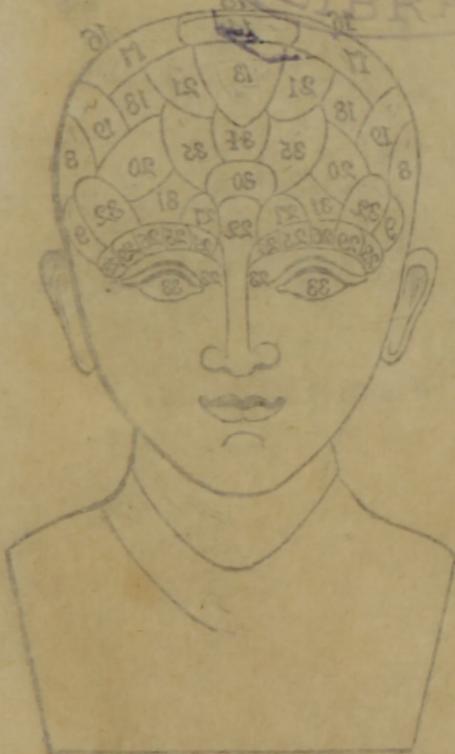


FIGURE 2



Names of the Phrenological Organs,  
referring to the figures indicating  
their relative position.

I. PROPENSITIES.

1. Amativeness
2. Philoprogenitiveness
3. Inhabitiveness, or Concentrativeness
4. Adhesiveness
5. Combaticiveness
6. Destructiveness
7. Secretiveness
8. Acquisitiveness
9. Constructiveness

II. SENTIMENTS.

10. Self-esteem
11. Love of Approbation
12. Cautiousness
13. Benevolence
14. Veneration
15. Firmness
16. Conscientiousness
17. Hope
18. Wonder, or Marvelousness
19. Ideality
20. Wit, or Mirthfulness
21. Imitation

III. INTELLECT.

1. Perceptive.

22. Individuality
23. Form
24. Size
25. Weight
26. Order
27. Locality
28. Number
29. Coloring
30. Eventuality
31. Time
32. Tune
33. Language

2. Reflective.

34. Comparison
35. Causality.

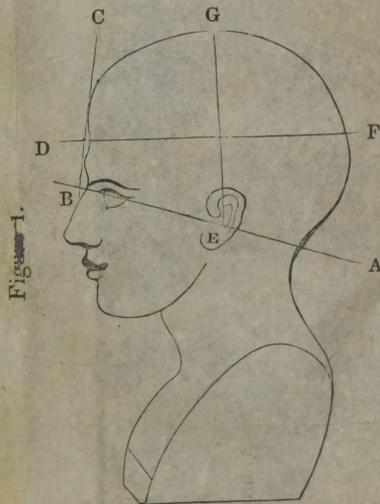


Figure 1.



Figure 2.

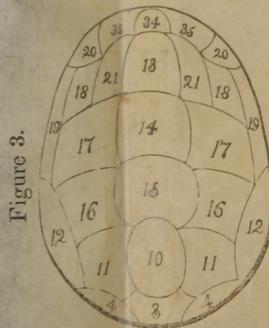


Figure 3.

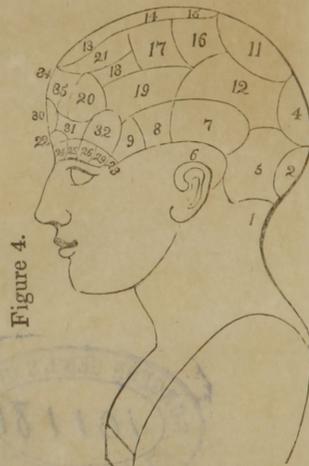


Figure 4.

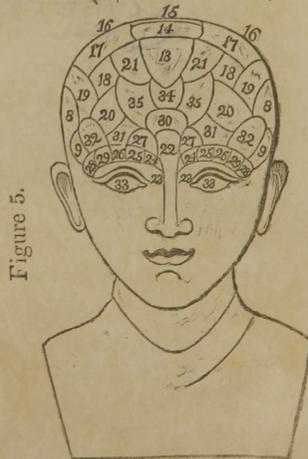
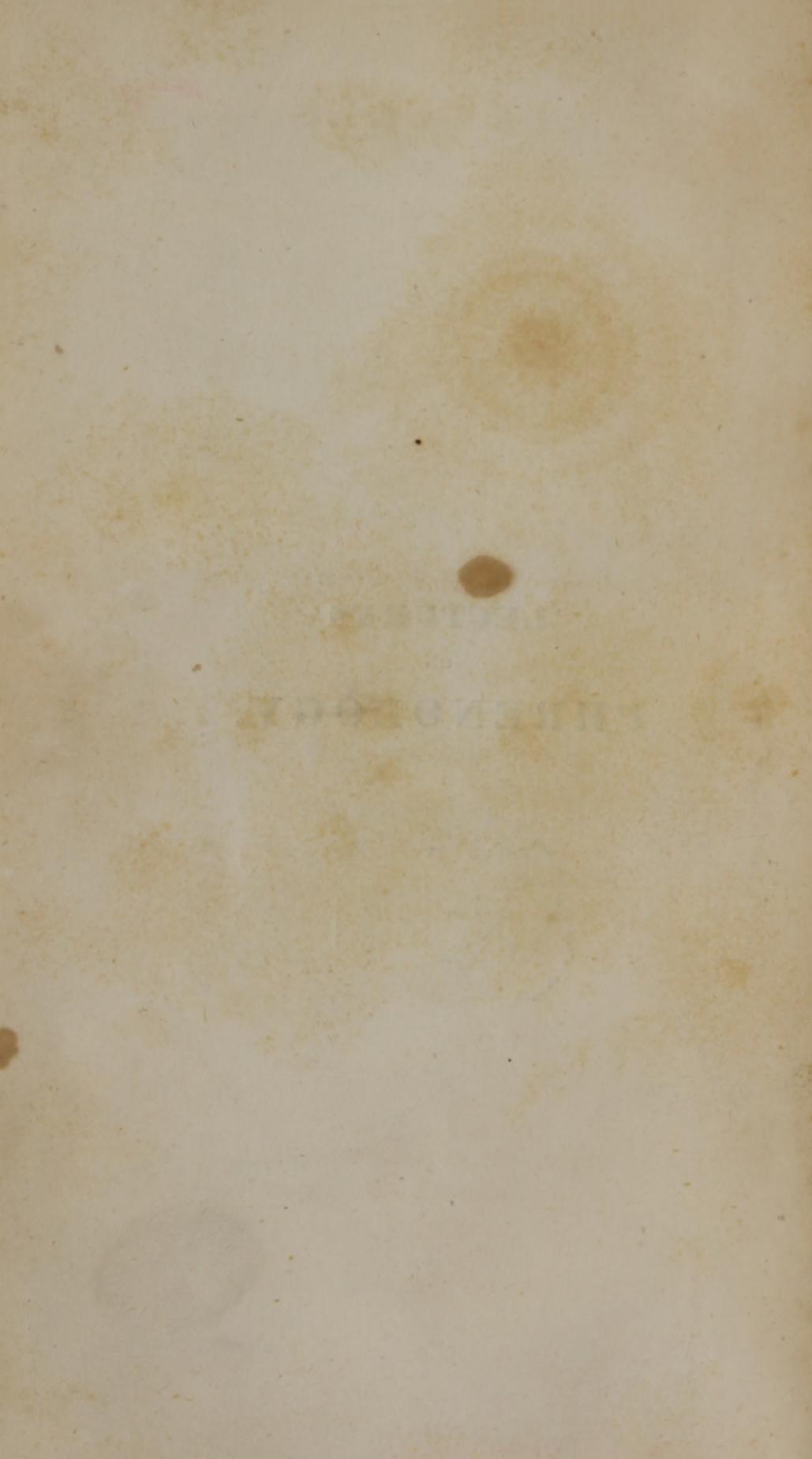


Figure 5.

**LECTURES**  
ON  
**PHRENOLOGY.**





# LECTURES

ON

# PHRENOLOGY:

DELIVERED BEFORE THE YOUNG MEN'S ASSOCIATION FOR  
MUTUAL IMPROVEMENT OF THE CITY OF ALBANY.

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BY AMOS DEAN.

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ALBANY:  
PUBLISHED BY OLIVER STEELE,  
AND HOFFMAN & WHITE.

1834.

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Printed by Hoffman & White.

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## PREFACE.

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THE result of four years' experience in comparing cerebral development with mental manifestation, has convinced me that the doctrine of the Phrenologists, in some of its applications, is true; that certain faculties of the mind are more particularly resident in certain parts of the brain. The admission of its truth in any one of its direct applications, excludes the assumption of its falsehood in any other; because the grand principle upon which the science rests, results from the establishment of a single organ of the brain as the seat of a particular faculty of the mind.

The requisitions of Phrenologists are surely not unreasonable. They require — not unqualified *belief* in the *truth* in their doctrines — but *observation*, *reflection* and *experiment*, with the view of determining their *truth* or *falsehood*. To observe, to reflect, and to experiment, is never a task to the active intellect. It is an agreeable relaxation from

more rigid pursuits. In a world like ours, abounding in brains differently organized, and minds differently constituted, all those disposed to investigate both, and to compare one with the other, can never lack premises to observe, or subjects upon which to reflect.

The following LECTURES were delivered before the YOUNG MEN'S ASSOCIATION for Mutual Improvement of the City of Albany. Their hasty preparation, amid the cares and vexations of a perplexing profession, together with the fact that they were not originally intended for publication, ought, perhaps, in some measure, to apologise for their numerous imperfections. I have been led, although with some reluctance, to submit them to the public at this time, from observing the flattering manner in which they were received, and from the conviction that an elementary work on this science was much wanted.

In the numbering of the organs, I have followed Mr. Combe's original work on Phrenology, considering the method there adopted as the most clear and natural. Dr. Spurzheim numbers differently, and Mr. Combe himself has recently departed, in some respects, from his original mode. It is to be

regretted, that on this subject an uniformity has not been strictly observed. The want of it renders it necessary to designate organs and faculties by their names, not their numbers. The difference here alluded to, is merely in the mode of numbering. No diversity of opinion in regard to the location of the organs, has ever taken place among Phrenologists. Their general position, as far as observation has established them, is the same now as it ever has been.

My sources of information have been the Edinburgh Phrenological Journal, Spurzheim's Phrenology, and the works of George Combe, Esq., of Edinburgh. To the last I feel myself particularly indebted. The mantle of the departed Spurzheim has rested upon him, and long may it be before it falls upon another.



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# PHRENOLOGY.

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## LECTURE I.

It has ever been the fate and the fortune of every thing new, to be subjected to the test of the severest scrutiny, and to the warfare of the most energetic opposition. While Phrenology has experienced this fact, with all its attending consequences, she has drawn upon her organs of Casualty, and assigned for it a reason in the possession of a single faculty—the faculty of Self-esteem. The great majority of mankind are so constituted as to reject a new plan, because of the suggestion of Self-esteem, that it is not *my* plan; and a new truth, because it is not of *my* discovery. The critic Dennis could hear no thunder, unless it was *his* thunder. Old theories, that are in part or wholly destitute of truth, are strong only in the strength of their advocates; new truths are strong of themselves. It is to be expected that those who have early embraced a particular theory or opinion; who have long continued its firm and unwavering advocates; whose reputations are, in some degree, based upon its permanence, should continue to exert their ut-

most possible power in securing it a perpetuity. They will cling to it with the strong tenacity of the giant's grasp on life. That theory or opinion constitutes the cloak that mantles them; and, like the traveler in the whirlwind, they will hold on to it the stronger the harder the wind blows.

This adherence to the old and rejection of the new, like all other general facts, results in individual benefit. It is the safeguard against useless and inexpedient innovation. It protects the existing state of things, until a state obviously preferable is offered. It checks that constant tendency to change, which is sufficiently impressed upon all human phenomena. We are far from complaining that the infant science of Phrenology has been opposed. We rejoice that it has been so. We do not, here, even complain of the spirit with which that opposition has been conducted; although we could have wished its manifestations to have been more humanized than they apparently have been. We even pass over the instruments of opposition, assertion and ridicule, after entering our protest against their use generally in the investigation and discovery of truth. What we do complain of is, unfairness of representation. The Phrenology, or rather Craniology, or Cranioscopy, of the *Edinburgh Review*, just about as much resembles the Phrenology of Gall and Spurzheim, as Paddy Blake's echo did the voice to be echoed. When asked, "How do you do, Paddy Blake?" it would

echo back, "Very well I thank you, sir!" Our opponents have kindly taken it upon themselves to raise up a Phrenology of their own, to clothe it with their own mantle, to invest it with their own properties, and then take to themselves most immeasurable merit for knocking down what could not stand alone. We cannot think it right that they should first wilfully wake up the wrong passenger, and then insist upon it that it's the right one. Their splendid analogical mode of reasoning, however, may have betrayed them into an error. Ascertaining by a recurrence to Murray's Grammar, that two negatives in English are equivalent to an affirmative, they may have supposed that the same kind of thing occurs in the moral world, and that there two wrongs make a right, and two falsehoods a truth. I am not saying that this actually occurred: I am only saying, that its occurrence would be in harmony with *their* general mode of reasoning.

It is not, however, alone the fact that every thing new has met with opposition at its commencement. If true, the result has been an ultimate triumph. What Father Pardies was pleased to term the *hypothesis* of Newton, are now the received laws of the universe. To doubt the truth of what subjected Galileo to the damps of an inquisition dungeon, would now be deemed almost sufficient to warrant the issuing of a commission of lunacy. I suppose no one now has the hardihood to doubt the circula-

tion of the blood, and yet so recently as 1619, it was a heresy that almost deprived its discoverer, Harvey, of his practice. Truth always contains in itself the elements of success. Its ultimate triumph is as sure as its intimate nature is unalterable.

The most effectual commentary that can be passed upon the opposition to the science of Phrenology, is to be sought in the fact, that its grand citadel, the rallying point of its forces, is, at this moment, the city of Edinburgh, under the very wing of the far-famed *Edinburgh Review*. This fact is alone sufficient to induce me to reverence the home of the Scotchman. It is the land where truth is perceived, and felt, and sustained. The serpents sent by Juno found too formidable an opponent even in the infant Hercules, in his cradle; much more then may they fear the club of the mature hero.

I had designed to have devoted some time to considering the history of this science, to have dwelt somewhat upon its progress, to have considered its present state, and its probable prospects. All this, however, I am for the present disposed to waive. What we are most concerned to inquire into is its truth, its use, its pretensions, its essentials. To these, therefore, let us direct our attention.

The term PHRENOLOGY is derived from the Greek words *phren* and *logos*, a discourse concerning the mind. The terms CRANIOLOGY and CRANIOSCOPY are discarded by the friends of Phrenology,

as conveying an inadequate and false idea of the science. These are the gifts of its opponents, who concluded—and in this instance, no doubt, wisely—that *bone* was less formidable than *brain*; and that by artfully substituting the one for the other, with many, they could supplant argument by assertion, and reason by ridicule. The Phrenologist stops not at mere developements of cranium. True he regards these as furnishing indications both of mind and of character. But his science essentially consists in analyzing the complicated machine of mind, in ascertaining, as far as possible, its original elements, its primal instincts, and by observation assigning to each element or instinct a portion of that organ, the brain, which is universally conceded to be the material seat of them all.

The origin of this science is comparatively recent. Its first originators, and most powerful supporters, Doctors Gall and Spurzheim, have left this stage of action. The last took his departure from our own great literary emporium. He had come to instruct the new world in the newly discovered truths of the old. Possessing a devotion to the cause of science which neither time nor space could abate, he overleaped an ocean's barrier, and first erected the standard of the new and true philosophy of mind, near the first great battle field of our country's freedom. Scarcely, however, was the stranger welcomed, ere he passed away. Yet he came not in vain. The great, and the good, and the

gifted, saw and heard, and were convinced. The seed was sown, and its consequences will extend to the yet unborn. Would that our own America might never send into the future world a worse spirit than the soul of Spurzheim. I could not avoid this passing notice. It was due to the merit of the man. It was due to the ashes of the stranger, more especially since from those ashes the voice of intrinsic goodness speaks in louder language than from many a living tongue.

The incident that first led Doctor Gall into the train of investigation which resulted in his conviction of the truth of the science, is not unworthy of narration.

While a boy at school, he observed the readiness and facility with which one of his classmates would commit to memory the tasks assigned them. He made use of all the energy he was master of, to equal him in that exercise, but could not do it. What could be the reason? If the mind were a single general power, according to the then received metaphysical systems, this phenomenon was inexplicable; because the greatest efforts were not wanting on his part, and yet the result was a failure. On narrowly observing the countenance of his rival, he perceived a prominence in his eyes, which he himself did not possess. Hence he was instinctively led to couple a prominent eye with the faculty of committing and making use of language. Subsequent observations, made during his collegiate course,

confirmed him in the belief that a prominent eye was ever coupled with this faculty in its possessor.

After a sufficient number of instances had occurred, he laid it down as an ascertained fact, that such a conformation of the eye was always coupled with the existence of such a faculty; and that, by natural inference, whenever the existence of the one was visible, the existence of the other was clearly inferable. It was precisely the same kind of logic, by which we infer that the sun will rise to-morrow, because our experience furnishes us with a sufficient number of similar instances to justify that inference.

By pursuing this rigid course of observation and inductive reasoning, he was soon enabled to lay down, as ascertained facts, that other peculiar conformations or developments of brain, were constantly coupled with the existence of other faculties. No development was admitted as ascertained to be the organ of a faculty, until a sufficient number of facts had been observed to justify its admission. These facts were instances both of excess and deficiency of development, compared with the strength or weakness of the faculty, in the organ sought to be ascertained.

Doctor Spurzheim became associated with Doctor Gall, soon after the first public promulgation of the doctrine at Vienna. Being prohibited from publicly teaching their doctrine at that place, and conscious that observation was the atmosphere in

which it breathed, they left Vienna, and commenced their travels through different parts of Europe.

Every possible source of information was explored. Neither tomb nor temple, cemetery or church, prison or palace, escaped their observation or evaded their research. Years were, in this manner, devoted to the most unsparing observation—an observation that scanned with its searching accuracy, as well the head on its shoulders, as the scull in its sepulchre; an observation that left no accessible abode of the living, or mansion of the dead, unexplored.

This science is the result of their combined labors. For the premises they refer us to nature; and upon those premises, as they were found by them in nature, this science is their conclusion. They ask no one to take it upon trust. Observation is the kind of coin by which a knowledge of it is purchased. Their uniform language is, “observe for yourself, and let self-conviction be grounded only on self-observation.”

The three positions in which the essentials of this science, as also its practical application, are involved, are the following:

*First*, Mind, including under that term intellect, sentiment and propensity, is dependent upon brain for the proper exercise of its functions.

*Second*, Mind is not an unit, or single general power, but consists of a plurality of innate facul-

ties, each faculty being a power or capacity of thought or of feeling, of a limited nature, and possessing specific functions.

*Third,* These faculties are manifested by means of distinct organs, and these organs are different parts of the brain.

I propose, in the first place, endeavoring to show the truth of each of these positions. The truth of the first position, viz. the dependance of mind upon brain, cannot well be doubted. We have a vague consciousness that thinking is confined to the head. In the universe around us we find every created thing answering some purpose. Not only that, we find every created thing directly calculated to answer some one particular purpose in exclusion of every other. In the human system we find an immense cerebral apparatus, a brain, to which is distributed nearly one-third part of the entire blood of the system; a bony covering envelops it, protecting it from external injury, by combining the strength of the solid, with the advantages of an arched form; a part surrounded by nature with all the guards, and secured by all the ingenious devices, by which we should expect her to protect her sanctum sanctorum; and yet, exclusive of nervous agency, and mental phenomena, it is a palace without a tenant, a creation without an office. I forbear alluding to the numerous facts that negative any other conclusion than the truth of this position. Injuries to the brain, external or internal, insanity,

destitution of brain, each and all possess such weight as to leave no room to doubt. Show me the human being who can think without a brain, and I will direct your attention to one who can move without a muscle. Every metaphysical system hitherto advanced, has been under the necessity of expressly or tacitly admitting the truth of this position.

It by no means follows from its admission, that mind is material. Before we can establish the materiality of mind, we must prove that thought, and sentiment, and propensity, possess weight, tangibility, dimension, and other qualities of matter. The fact that mind is dependant on material organization for its operations, proves only that it was originally given by the Creator, subject to such organization. To infer from this fact that mind must necessarily be material, while the most superficial examination of its phenomena proves the contrary, would be, in effect, to deny the omnipotence of the Creator, by the implied assertion, that he could not have constituted mind dependent on matter, without necessarily constituting it material.

Not only, however, has the brain been conceded to be the material organ of mind, but observation and fact have forced upon philosophers the further conclusion, that the quantity or power of mind is, *cæteris paribus*, directly as the quantity of brain. Magendie says, "the volume of the brain is in direct relation to the mental capacity." And Magendie

will not be accused of favoring the phrenological doctrine. The comparison of the contracted brain of an idiot, with the expanded one of a Magendie or Cuvier, would necessarily negative any other conclusion.

I have, perhaps, dwelt longer upon this position than its apparent simplicity would seem to require. My apology for it is, that I shall endeavor to leave not a single nook, niche or corner, in which can be effected the lodgment of a doubt. This whole thing is susceptible of having poured over it the light of demonstration, and of being made clear to the most ordinary capacity. To be convinced of the facts upon which its truth is based, we have only to question our own experience, and that of others by whom we are surrounded.

The second position, viz., the plurality of the faculties, is directly at war with every hitherto received metaphysical system. All those systems were based upon the assumption, that the mind is a single general power, capable of feeling and operating alike in every direction. This error of the metaphysicians is easily accounted for, from the fact that they confined their speculations to arranging and classifying the subjects with which their consciousness made them acquainted; and that consciousness itself being single, could never inform them of the plurality of the faculties. Had they but once perceived that consciousness could not even inform them of the plurality of the exter-

nal senses, they might have well doubted the correctness of its information in regard to the internal faculties.

The external senses are so many inlets of knowledge. Each has its own peculiar organization and mode of operation. Each conveys to the internal faculties different kinds of information, in regard to the external world. This information is perceived, not by the senses, but by the perceiving power within. We are conscious of perceiving the kind of information given, but not the organ through which it was obtained. We may be conscious of hearing sound, without the consciousness that it was derived through the fine organization of the ear.

But it may be asked, how is the plurality of the external senses ascertained, if not through the medium of consciousness? We answer that experience and observation discover them to us, by "comparing the power of experiencing impressions with the condition of the organization." At mid-day, when the eye is open, we are conscious of experiencing impressions from visible objects, we may not know through what inlet. Close the eye, and those impressions are no longer experienced. From this must result the conviction, that the eye is the organ through which those impressions were derived. If, therefore, consciousness cannot inform us of the plurality of the mental faculties, we cannot thence infer that there is no such plurality, be-

cause the same inference in regard to our external senses, would contradict our experience.

But not alone the probability, but the certainty of their plurality can be shown by the clearest evidence. I will here waive the consideration of the argument derivable from the complete analysis of mind which the assumption of their plurality would afford; the perfect exposition it would give of mental phenomena; and the simplicity which it would introduce, as a stranger, into this hitherto vague and conjectural field of science. Their plurality is rendered sufficiently evident by adverting to facts and mental phenomena, utterly inexplicable on any other supposition.

*First.* It is a fact, that the brain may receive local injuries, to some extent, without sensibly impairing the general power of the mind. Were the mind a single general power, an injury to any part of the brain would, by necessary consequence, affect the whole mind. Yet the whole mind is not sensibly affected. Why? Because the injury accrued to a particular organ: and that organ, perhaps, less prominent than others: and the deficiency in the power of exercising its faculty, of course, less noticed. Besides, the organs of the mental faculties, like the external organs of sense, are all double. And hence, the one might be affected by a local injury, while the other remained vigorous and active.

*Second.* In hemiplegia, there occurs a paralysis

of one side of the head. One half of the organs are, therefore, more or less severely injured. But every organ having a counterpart precisely similar to itself, on the opposite side of the head, which remains unaffected, every mental operation is still carried on, the same in kind, after as before the attack. I say the same in kind, but there may be, and in point of fact is, a difference in degree. Were one ear obstructed, the sense of hearing would be less perfect after than before the obstruction. This duplicity of the organs, and their corresponding faculties, seems to be a wise provision of the Creator to secure to a *part* the impaired powers of a *whole*, when that *whole* is in part impaired or destroyed.

*Third.* The infant in its cradle exhibits through its gestures and the lineaments of its countenance, most, if not all, of the pure and mixed passions and affections of our nature. Where has it served its apprenticeship in acquiring these passions and affections, or their mode of exhibition? Both result alike from the constitution of its faculties, and from the prescribed operation of their functions.

*Fourth.* Were the mind a single general power, capable of feeling and operating alike in every direction, where should we prescribe a limit to its operations? It must be admitted that human nature is definite, and that the channel in which mind has ever run, and will ever continue to run, has been ascertained to a tolerable degree of certainty.

Admitting its capabilities of acting every way alike, what confines it within this channel? Instead of exhibiting the regularity of the planet in performing its movements within its destined limits, why should it not occasionally display the irregularities of the comet, and in its eccentric orbit travel far without the records of humanity? How could we predict with certainty under what form it would exhibit itself, what powers it would manifest, what energies display, or what direction take? No reference is here had to the originating new ideas, but to the actual possession and exercise of hitherto unheard of powers, and in a hitherto unseen and unknown direction.

*Fifth.* When one faculty, or set of faculties, has, for a long time, been devoted exclusively to one subject, a sense of weariness is experienced, and almost instantaneous relief is afforded by directing the attention to subjects entirely different, which call into exercise other faculties. The astronomer, who has for a long time unremittedly exercised the faculty of Causality, can, if possessed of the faculty of Idealty, find relief in poetry and works of fiction.

*Sixth.* Dreaming and somnambulism furnish another proof of the plurality of the faculties. The conversation and acts of the sleep-walker, evince a partial, but not a total, activity of mind. One or more of the faculties are in a state of vigilance, and prompt to the performance of acts, while all the others are in a state of rest, neither receiving im-

pressions nor manifesting energies. Hence result the incoherent conversation and acts of the somnambulist; for the activity of the faculties in action is neither restrained nor modified by others, that in the state of vigilance exert an influence in the mental economy. The equilibrium of mind is destroyed and hence the singularity and incoherence of speech and of act. The incoherence and want of connection in dreams originate from the same cause, and are explained in the same manner. Is it not a little remarkable, that the sleeping man sometimes dreams of committing acts, at the glaring immorality of which the waking man would shudder? And why? Because the faculty of Conscientiousness has, for the time being, ceased from its labors, and with it has ceased the moral power of distinguishing between right and wrong.

*Seventh.* It is a fact, sufficiently confirmed by observing the Cretins of the Pays de Vaud in Switzerland, and idiots generally, that they labor under a deficiency of intellect, but possess the propensities, and some or all of the sentiments, in as ample degree as the generality of mankind. If the mind be a single general power, why is it here restrained in one department, and left free to manifest itself in another? If there must be a deficiency of mind in the idiot, according to the old metaphysical system, it should be a deficiency in the totality, but not in a particular department, leaving, perhaps, an excess in another. A deficiency in intellect should be attended with an equal deficiency in propensity and

sentiment; and the contrary of this, which happens in this case to be the fact, is completely inexplicable on any other supposition, than the admission of a plurality of faculties, some of which are amply endowed, while others are deficient.

*Eighth.* The cause of insanity is to be sought in the brain. In some species of this disease, as in idiocy, the brain is imperfectly formed, or diseased from birth. In those who have suffered from mania the substance of the brain is tough and firm, and the convolutions distinct on the surface. Polymania consists in the deranged state of two or more, or all of the faculties. But many curious instances have occurred, (and their occurrence is not unfrequent,) of monomania, or a derangement of one particular faculty. It is a fact, that a large portion of the brain, is allotted to the organs of the sentiments and propensities. And it is a curious coincidence, that in most of the cases of monomania, the organs and faculties deranged, belong to one of these classes. Amativeness, Combativeness, Destructiveness, Self-esteem, Love of Approbation, Cautiousness, Veneration, Ideality, and Adhesiveness or Attachment, are the organs most liable to deranged affection. The undue activity of a faculty, predisposes to derangement of its functions. That activity depends in a great measure upon the size of its organ. Hence, in monomania we should expect, in the generality of cases, to find the deranged faculty located in an organ fully developed.

We accordingly find it laid down as the result of observation,

That those who are insane from pride, have the organ of Self-esteem large in proportion to the other organs of the head.

Visionaries have a large development between Ideality and Imitation.

Melancholics have the middle of the parietal bones prominent.

Those who are impelled to destroy are broad above the ears.

The fact that one particular faculty or power of mind can be deranged, and every other faculty or power remain in a state of perfect sanity, which actually occurs in monomania, can be explained only on the supposition of the plurality and disconnected functions of the faculties. And when we take into connection with this the further fact, that a deranged faculty is found located in an organ inordinately developed, it goes in proof of the third position, that the faculties are manifested by means of distinct organs, and that these organs are different parts of the brain.

*Ninth.* The phenomenon of genius is entirely inexplicable on the old metaphysical system. Is it the result of education? The name of Homer seems destined to run parallel with the course of time itself. And yet such was the entire destitution of the light of literature and science in his age, that we cannot now ascertain the land either of his

birth or his burial. Notwithstanding, however, this obscurity that rests upon his origin; notwithstanding this gloom that settles upon his history; notwithstanding this deep mental and moral midnight, in which all but the name of Homer seems to be involved and enveloped, we do know that he has kindled the purest fire, upon the highest altar that ever yet sent up its incense, even to Grecian skies. Who, then, were *his* masters? We answer, he had no masters! The same creative power moulded his mighty mind, that moulded and brought within its energetic grasp, the mental and material universe. He had no masters. The fountain of light was within him. He found himself in the possession of poetic feelings. Nature's God had bestowed upon him the faculty that gives birth to those feelings. He had only to follow their impulse and immortality was won. He had only to portray the creations of that faculty, and he is exhibited to all after times a solitary beacon on a benighted shore—an oasis amid the desert of ages.

A genius for painting, or poetry, or music, or reasoning, is never wholly acquired. The opinion of the generality of mankind is correct on this subject, "that genius is the gift of nature, not the acquisition of art." We cannot transform a Hottentot into a Newton, or a New-Zealander into a Raphael. We cannot thaw the brain of a Samoiede, or freeze that of a Guinea negro, into intelligence. They are both at an equally remote remove from

the operation of all animal or chemical agents. The boundaries and barriers that nature's God has thought proper to stamp upon the physical organization, will remain there, till He thinks proper to remove them. To cultivate, to improve, to strengthen, lies directly within human agency: but to create, to bestow that which is susceptible of being cultivated, improved and strengthened, rests only with him who speaks as never man spake.

*Tenth.* If the mind be a single general power, equally susceptible of moving in any direction, what gives it an impetus or direction in its movements? It must be the mere creature of accident, and swing upon the hinge of contingencies. If chance thus gives the impetus and controls the direction of mind, I can see no good reason for objecting to its dominion over matter also. In the constitution of society, different pursuits are followed, and on the theatre of the world, different parts are performed by different actors. The fact that there are different pursuits to be followed, different spheres to act in, different parts to be performed, is, in itself, proof that there was originally a difference between different minds, which by necessary consequence led to this difference in the constitution of things. Yet from all these differences the result is harmony of movement. It is the combined action of the faculties, restrained, directed, influenced, and modified by each other, that constitutes the harmony of the man; and the com-

bined action of men, each impelled by his faculties, so restrained, directed, influenced and modified, that constitutes the harmony of the world.

The *third* position is, that the faculties are manifested by means of distinct organs, and that these organs are different parts of the brain. As the second position was controverted by the metaphysicians, so this finds its opponents in the anatomists.

It is particularly the province of observation to prove or disprove the truth of this position. It is sufficient to show by reasoning, *a priori*, that its truth is neither impossible nor inconsistent with nature.

It is objected by some, that the organs are not separately partitioned off in the brain; that there is no division line between them; and that it is unreasonable to assume, that what is apparently the same continuous kind of substance, should have different uses and purposes assigned it in different places. I notice this objection, because it is admitted to be an objection against the science, and not against its substitute. There are no internal division lines, or partitionment of the organs.

The first answer we have to make to it is that if the brain be a continuous kind of substance, it must be devoted to different uses and purposes, because I apprehend that even in the mind of the objector there is more than one kind of mental phenomena.

But have those who raise this objection made themselves acquainted with the recent discoveries

of Mr. Charles Bell in the anatomy of the nervous system? He had, sometime since, satisfactorily ascertained: 1. That the regular nerves, or nerves proceeding from the spinal marrow, originate from two roots; the one from the anterior, the other from the posterior part of the spinal marrow. 2. That the anterior root is devoted to the phenomena of motion, and the posterior to sensation. 3. That the fascia, or nervous filaments, composing these roots afterwards unite, and are distributed through the system in the same nervous sheath. Nor have his discoveries rested here. Still more recent experiments have rendered it extremely probable, that independent of the nerve of sense, that conveys to the brain the impressions made upon the body by external objects, and the nerve of motion, that is directed to act upon that information, there is another nerve, the office of which is to inform the brain of the condition of the muscle, and that upon the coming in of its report, the brain directs the motive nerve to act. Here, then, are three distinct operations: 1. The intelligence furnished from without to the brain, of the impressions of external objects, with the view of inducing action in reference to those impressions. 2. Intelligence furnished to the brain of the condition of the muscle, or its ability to act with such reference: and, 3. The action predicated upon all this information, proceeding from the brain through the medium of the motor nerve. There is as great a difference

between these operations as there is between different mental phenomena. The division line is as prominently marked between sensation and motion, as between love of praise and love of money. Now I ask, is it more extraordinary, that in different parts of what is apparently the same nervous matter, within the contents of the same nervous sheath, these perfectly distinct agencies should be carried on, than that the different phenomena of mind should take place in different parts of that medulary mass, the brain? I regard the one as in perfect harmony with the other; and both as the grand results of that spirit-stirring inquiry, that has laid aside theory for observation, and gone forth as the interpreter, and not the author, of nature. That same inquiry that is now at work, unfolding the mysteries of our organization, disclosing to the light of intellect the functional play of our living organs, and developing the higher harmonies of that last best part of the Creator's workmanship.

It is objected by some, that however beautiful this science may be in theory, yet its reduction to practice is impossible, for two reasons, viz: 1. The obstructions interposed by the frontal sinus: and, 2. The want of parallelism between the cranium and brain, and between the outer and inner side of the cranium.

The frontal sinus occurs at the root of the nose, and arises from the space intervening at that place, between the two bony tables that together com-

pose the cranium. Its occurrence is indicated by a sharp prominence at that place. Allowance can, generally, be made for the space it occupies. Admitting, however, to the extent claimed, the disturbing force of this sinus, the space it occupies is less than one-twentieth part of the cranium. It would, therefore, by no means follow, from this cause alone, that the general form and outline of the cranium, would not indicate the general form and outline of the brain. As well might we say, that the general form and outline of the skin could furnish no indication of the general form and outline of the body, because in laboring people that part of it which covers the palms of the hands is thicker than other parts of it.

The want of parallelism between the cranium and the brain, and between outer and the inner side of the cranium, has only been discovered to exist, to an alarming extent, since the promulgation of this science. Previous to that, the general opinion seemed to be, that there was a general correspondency between the general form of the brain and that of its cover, the cranium. It was thought correct doctrine that a large expanse of cranium was, at least, *prima facie* evidence of the existence of brain beneath it. Should this general correspondency between the brain and cranium be disproved, we may as well be looking after some other indications of bodily form than the skin which immediately covers it.

On what does the growth and arrangement of the particles composing the cranium depend, if the governing influence in that growth and arrangement is not exerted with express reference to the form of the brain which it closely invests? The cranium is composed of two bony tables, with a diploe between them. A decomposition and renovation of its substance is continually going on. On what principle is the renovating process or arrangement of new particles dependent? On what other can it be, than from the pressure of the brain beneath, the renovating particles arranging themselves with reference to that pressure? If, therefore, there was an original dissimilarity between the brain and cranium, this renovating process of nature would soon bring about a correspondency. But it is hardly to be presumed that nature would originally create a monster with the view of subsequently shaping it to the form and fashion of beauty.

As to the want of parallelism between the inner and outer sides of the cranium, it is idle to pretend that, in healthy subjects, there is a sufficient dissimilarity to create any adequate ground for distrusting the practical application of the system. Some organs are comparatively developed one or even two inches more in some individuals than in others. Will it be contended that this one or two inches is bone and not brain? Or even if it should, if it satisfactorily appear from observation that it is accompanied with the power of manifesting a par-

ticular faculty, what difference does it make whether that power originates from *bone* or *brain*? The fact, in philosophy, is always of the most importance.

The attempt to destroy the foundations of a science or an art, without substituting others in their place, must ever be regarded as insidious, unless supported by the clearest evidence. This is more particularly the case, when the utility of the science or art attempted to be destroyed, is indubitable. So far as relates to this science, there is not even an attempt at substitution. The warfare waged is of an exterminating character. A warfare in which truth is sought to be elicited by ridicule, and fortified by assertion. The omission, however, to substitute other foundations in the place of those attempted in this manner, and by these instruments, to be bestroyed, is, in this instance, excusable; because such substitution is, in fact, impossible. What course, other than that pursued by the phrenologist, can be resorted to for the purpose of ascertaining the location of the several mental faculties, the existence of which we are not now at liberty to doubt? Should we follow in the track of the metaphysician, and trust to our consciousness to inform us of their several localities? We should then lean upon a broken reed; for consciousness, as we have before seen, cannot even inform us of the several localities of the external organs of sense, much less of the internal mental faculties.

Could we ever obtain this desired object, by relying with confidence on the labors of the anatomist? What anatomist ever pretended to predict function from form or internal structure? The optic nerve never was discovered to be the medium through which visible objects were conveyed to the mind, by disclosures in regard to its structure, from anatomical research. No peculiarity of structure, whatever, as disclosed by the anatomist, furnishes sufficient data upon which to predict peculiarity of function. If so, let them kindly disclose to us the uses and purposes of the thyroid gland, and the spleen,—the simplest, and, at the same time, the most incomprehensible parts of the animal economy.

But excluding these two, no other possible mode exists of ascertaining the location of the faculties, except that adopted by the phrenologist. The objection to the mode of investigation adopted in this science, would be equally valid against the same mode of investigating any other, and would thus go to the entire exclusion of observation and inductive reasoning. It is undeniable that there is *some kind* of development of brain. It is equally undeniable that there is some kind of mental manifestation. It is from the comparison of these together, that this science results. Its founders and advocates say, that after a long and laborious investigation, after the most careful comparison of cases similar and dissimilar, they have found such

a development of brain coupled with the power of manifesting such a faculty. Is it for assertion alone to negative their testimony, or for ridicule to blunt its edge? But after the most careful examination and comparison of cases, resulting in their own entire conviction of its truth, they do not dogmatize. They attempt to take no one's mental citadel by storm. They merely state the results of their own observations, the conclusions to which they are irresistibly led, and ask the observing and reflecting world to follow in the same kind of investigation, and establish or negative those results for themselves. It is for this crying sin, that assertion has levelled against them its dogmas, and ridicule unmasked its battery. The one engine is as meritorious as the other, and both will ultimately meet with the same triumphant success—the gain of a loss.

Some object, that the doctrine involved in this science gives it a tendency to materialism. What is materialism? It clearly is not the dependance of mind upon matter; because, as I have before observed, to infer a material mind from this dependence would be detracting from the omnipotence of Deity, by implying that he could not create mind so dependent without creating it material. That doctrine can only be materialism that invests mind itself with material properties. This science has no such tendency. It no where identifies the faculties with their organs. The faculties, in fact, no

more constitute a part of their organs, than the music of a piano forte constitutes a part of the instrument. The organs are the instruments, and the faculties the musical result of their play. This science simply notes that result, it observes phenomena, and from correspondencies deduces conclusions. The fact is indisputable, that there is a dependence of the entire mind upon the entire brain. That the mind is liable to diseased affection in its manifestations, to the explosion of mania, to the weakness of idiocy, is undeniable. I would refer it to the most rigid antimaterialist to decide, which doctrine is the more reasonable, that which refers these mental phenomena to diseased affection of the organ in which the mind is known to exercise its powers, or that which refers them to diseased affections of the immaterial mind itself, implying its liability to maniacal hallucinations, or to the weakness of idiocy. From our knowledge and experience, it is correct to assume, that throughout the ample range of nature, whatever is subject to disease, is also subject to death. They are both parts of one great system. Death is the ocean in which all the rivers of disease find a termination. If disease, therefore, can attach to the mind, what, I would ask, exempts it from the natural termination of that disease, a ceasing to be?

Again, if these diseased affections attach to the mind, I can see nothing in the death of the body calculated to divest it of that disease. The only

legitimate effect of death is to hush the music of our material organs. If, then, the physic of the tomb is inadequate to afford a restorative remedy, mind must cross the dark barrier, subject to this diseased affection, and exhibit in another world the ravings of insanity, and the vacuity of idiocy.

But if it be conceded that diseased affections of the brain are productive of diseased affections of the mind, that concession involves the admission that the whole mind is dependent upon the whole brain. If that be admitted, in what consists the iniquity of making a particular part of the one dependent on a particular part of the other? If the whole of our corporeal acts are dependent upon the action of the whole of our muscles, where is the crying lack of logic in referring a particular act to the exertion of a particular muscle?

It is further objected, that this doctrine tends to fatality. What is fatality? A deprivation of will. A rejection of free agency. An absolute necessity of the performance of acts. What is taught by this science? *First*, That certain intellectual powers, sentiments and propensities are incorporated in our nature: and, *Second*, That each of these possesses for itself a local habitation and a name. Are the existence of these powers, sentiments and propensities denied? I shall hazard the assumption, that their existence will not be controverted: but their existence being once admitted, whence can result the evil of their distinct and separate locations in

different parts of what is conceded to be their general home? Their separate location gives them no new existence, clothes them with no new energy, invests them with no new power, nor imposes upon them any new or additional necessity of acting.

So far as regards materialism and fatality, this science leaves mind precisely as it found it. It creates nothing new; it adds nothing to the old. Any objections, therefore, grounded upon these supposed evil tendencies, are valid only against things and phenomena as they now exist, and ever have existed.

## LECTURE II.

THE Brain, its development, its form, its structure, its parts, its office, its manifestations, are all interesting subjects of phrenological inquiry. Many new and important discoveries have been made by Doctors Gall and Spurzheim, in relation to this grand instrument of "all thought, of all will, of all passion." According to them, the cerebrum, the cerebellum, medulla oblongata, medulla spinalis, and the several ganglions, are governed in their evolution and development, by the same law. They have simplified and rendered intelligible the *physiology*, as well as the *phrenology*, of man. They have investigated as well the form and structure of the mental domicil, as the varied displays and evolutions of its tenant. They have found the one in harmony with the other, and both in harmony with the universe around them.

A general remark or two on this subject is all this occasion will justify. The cerebrum, cerebellum, medulla oblongata, medulla spinalis, and the several ganglions, are all observed to consist of two distinct substances, the one consisting of nervous or medullary fibres, the other of a pulpy or gelatinous substance, of variable color, greyish, reddish, yellowish, dark or pale, and denominated cortical or

cineritious. The color of this cineritious substance seems to vary with the temperament of the individual. In the sanguine temperament it is of a reddish color, while in the nervous, and in old people, it assumes a pale hue.

All the medullary fibres are produced in the cineritious substance. One strong fact confirmatory of this is, that the larger the mass of this substance, the stronger and the more numerous are the medullary fibres proceeding from it. In the more perfect classes of animals, the ganglions and plexuses formed by the intercostal, or great sympathetic nerve, are considered as forming the system of an inferior order of functions.

With these simple facts before us; the fact that the medullary is generated from the cineritious or cortical matter, that the ganglions, spinal marrow, medulla oblongata, cerebellum and cerebrum, in their evolution and development are subject to the same law; the fact that the ganglions are small reddish masses of cineritious and medullary matter, situated in the abdomen and thorax; the fact that the medulla spinalis, or spinal marrow, is made up of the same kind of substances, and is situated in the spine; the fact that the medulla oblongata, cerebellum and cerebrum are similarly composed, although with a much greater degree of complexity, and that they are contained within the cranium or skull bone; with these simple and incontrovertible facts in our possession, let us now proceed on a

voyage of inquiry, and scan, with all the accuracy the occasion will admit of, the living products that abound on our planet.

This globe is a theatre, upon which are performed the acts of many living actors. These actors move in different spheres, and perform different parts, in the grand drama of existence. They were originally created with reference to the different parts they were destined to perform, and endowed with capabilities accordingly. \* Every act must be referable to an internal mental principle, prompting to its performance. Hence the influence and the agency of mind is clearly discernible throughout the animal world. The application of the science of Phrenology is not confined to the human species. It extends to the simplest productions of animated nature, and in every grade of existence, compares mental manifestations with developments of brain.

It is curious to observe the successive steps, or stages, in which nature marches onward in the scale of being, from the least to the most perfect of her productions. These successive stages are marked not less distinctly by mental manifestations, than by cerebral developments. The eye of observation ever finds these coupled together, and bearing to each other an intimate and definite relationship, in every diversified form of being, in every varied mode of existence.

Many of the insect tribes are completely brainless. On these most imperfect of her productions,

nature has bestowed ganglions only. These are small collections of cineritious and medullary matter. They are the organs of the lowest degree of organic life. They subserve the purposes of a mere existence. These simple bodies are alone sufficient to enable those imperfectly organized productions to move and act in the sphere originally designed for them. The polypus and sea-anemone possess ganglions only. The quantity of mind they evince is in a ratio to this simple endowment. In many of their properties they approximate so near to the vegetable tribes, that many philosophers have justly considered them as constituting the connecting link between the animal and vegetable kingdom. The ganglions in these inferior species undoubtedly perform the same kind of office that they do in the more perfect, for uniformity and sameness ever characterise natural laws.

From the simple ganglions nature proceeds to the formation of the spinal marrow. This is that nervous matter, cortical and medullary, included within the spine. The formation of this constitutes the next stage in her progress towards perfection.

The spinal marrow is, in fact, nothing more than a string of ganglions, connected together by medullary fibres, generated in them. This connexion, however, serves to concentrate their powers, to enable them to act with combined energy, and

hence to give them greater point and effect. It is a curious fact that the spinal marrow of a calf is equally as large as that of a man; while its cerebrum, which it will be recollected is the upper lateral and frontal parts of the head, where the intellect more especially resides, is not more than one half or one-third as large as the human cerebrum. From the spinal marrow all the regular nerves, or nerves of motion, sensation, and those which convey information of muscular condition, take their departure. A serious injury to any one part of the medulla spinalis, destroys all power of sensation and motion, upon which those nerves are distributed that take their departure from it below the part injured. These facts would seem to prove that the spinal marrow, together with its systems of nerves, was the essential organ of organic life, superadding to it a limited power of performing animal acts. This superaddition most probably results from the combined and concentrated action of its several ganglions. In the formation of the numerous tribes of worms and caterpillars, nature has gone no further than to bestow upon them this organ, together with the nerves connected with it. Observe their mental manifestations, and they will be found to be in perfect accordance with this endowment.

The next advance made by nature is the formation of the cerebellum, together with a limited portion of cerebrum, and consequently a more or less

perfect medulla oblongata, which results from the crura cerebri and crura cerebelli.

No sooner does nature advance within the cranium, and commence endowing her product with cerebellum and cerebrum, than she, at the same time, bestows a power of mental manifestation in accordance with the endowment. As if to convince us beyond the straining of a doubt, that this is the mode of her operation, and that these endowments are the insignia of her progress, she exhibits to us the same animal possessed of different endowments, and, by necessary consequence, of different powers. The caterpillar and the butterfly are one and the same insect, existing under different forms. This is also the case with the maggot and the fly. In the one state, these insects are endowed with the medulla spinalis only, together with the nerves attached to it: in the other, the cerebellum, together with a limited portion of cerebrum, is superadded. In the one state they feed upon the grossest food: in the other, upon the nectar of flowers. In the one state they are incapable of continuing their race, because destitute of the cerebellum, the agency of which is essentially necessary for that purpose: in the other, they possess the power, because they are then endowed with the cerebellum. In the one state their movements are of the most simple kind, evincing an almost entire deprivation of motive, and destitution of will; possessing merely the power of prolonging their existence,



and of shrinking from impending danger: in the other state, their movements are the most complex and varied, clearly manifesting the possession of will; and if possessed of will, they must be possessed of faculties; because the possession of will necessarily supposes a power of choice, which is inconsistent with the mere possession of one faculty, giving birth to only one impulse. In fine, in the one state their existence is merely organic, superadding to it a limited power of performing animal acts: in the other, they appear more the creatures of motive, acting under the impulse of faculties. This exhibition of nature is of the most conclusive character. In it she demonstrates the use and office of the cerebellum, at the same time that she shows us the inevitable consequences resulting from different endowments in the same product.

A very considerable portion of cerebrum, together with the entire cerebellum, is allotted to the propensities. This portion occupies the lower basilar part of the brain. It is this part, together with a small endowment of intellect and sentiment, that we perceive developed in many of the reptile tribes, in fishes, birds and animals. The same kind of development we find coupled with the power of manifesting the same kind of faculty, from man down to the reptile.

In the carnivorous tribes of animals, the propensity to destroy is, of all others, the strongest. The existence of the organ giving birth to this propen-

sity, is indicated by a width between the ears. Who has not observed the striking difference in this respect, that obtains between the carnivorous and herbivorous tribes? Between, for instance, the tiger and the sheep? This organ is found prominently developed, not only in the carnivorous tribes of animals, but also in many species of birds, many tribes of insects, in reptiles, and very universally in the numerous finny tribes.

It is a curious fact, that among the numerous tribes last mentioned, no parental affection or relationship between parent and offspring is recognised and acted upon, except by the whale, and others of the cetaceous kind: and it is no less curious, that except in that kind, the organ of Philoprogenitiveness, the office of which is to give that specific affection, and to nurture that relationship, has no existence.

Different propensities are developed in different species of animals; stamping upon each species a difference in character. The organ of Secretiveness, or cunning, is developed in the fox; that of Philoprogenitiveness strongly in the beaver.

The organs of the knowing faculties, the tendency and office of which is, to make their possessors acquainted with the external world, are situated in the lower part of the anterior lobe of the cerebrum, directly over the eyes; and it is a curious fact, that wherever the propensities, or any of them, are developed, this portion of the ce-

rebrum is also more or less so : for the propensities would be worse than useless, unless accompanied with a knowledge, or the means of obtaining a knowledge, of the subject matter upon which they were destined to operate. The development of this portion, however, is different in different orders of being. Among the finny, and many of the reptile tribes, it is defectively developed ; and, accordingly their intercourse with the external world is limited, Dr. Goldsmith observes that “ Fishes are inferior both to birds and beasts, and even their brain, that mansion of sensation, is extremely small when compared to their size.” As small, however, as is the cranium, the brain does not fill it, and is almost fluid. The cerebrum consists of two hemispheres, which are without convolutions.

The brain of birds consists of six distinct masses or tubercles ; two hemispheres, two thalami, a cerebellum, and medulla oblongata. The cerebellum is hollow, and the entire surface of the brain presents no convolutions.

The portion of cerebrum allotted to the sentiments and high reflecting powers of intellect, is situated in the upper, lateral and frontal parts of the head. These are the last and best gifts of the Creator. They can discover in the meanest thing that lives, “ thoughts that will often lie too deep for tears.” The highest of these belong exclusively to man, while some of the lower are shared in common by him and the higher classes of animals. In

relation to these, there exists as great, and, perhaps, the greatest diversity of endowment in animated nature. If we examine her attentively in her living products, we shall find her advancing onward in the scale of intelligence, by enlarging the cerebrum upward, laterally, and in front; or, in other words, by making superadditions of cerebral matter. So uniform are the steps of her progress, so continuous the chain of being, of which each species forms so many links, that I would undertake to assert, that, independent of all knowledge of manifestation, each species, or link, might have its true place assigned it in this chain, on the principles of this science alone.

When we examine the brute creation with reference to these high cerebral developments, we observe in most of them a gradual slope backwards, from a short distance above the eyes, leaving the propensities; some of the sentiments, and knowing faculties, more or less extensively developed; but either an entire destitution, or very incomplete development, of the sentiments and reflecting powers. Among the finny tribes this slope is so immediate, as to leave a very incomplete development of the perceptive and knowing faculties. The lower, or basilar part of the brain, except the frontal portion of it, is devoted to the propensities, and these propensities constitute the essence of animal life. It is from this portion that the nerves of the senses take their departure. Its development, therefore,

together with that of the spinal marrow, and its systems of nerves, is always found proportioned to the animal power possessed by the individual or species. Observe, for example, the animal power, activity and energy of the tiger's system, and you will find it in perfect harmony with the strong basilar development of the tiger's brain. In proportion as we leave the basilar region, and ascend upward, we arrive at the intellectual and sentimental regions.

The comparative preponderance of the intellectual or animal power, is not alone indicated by the comparative development of the upper and lower or basilar part of the brain. Experience has also furnished another criterion, and that is, the size or extent of the cranium, or skull, compared with that of the face. Carry with you this rule into the animal kingdom, and observe, as you descend from the human species, as you retrace the links of this living chain, the comparative falling away or recession of skull, and projection of the face, or lower part of the countenance. It commences with the monkey, and attains a frightful extent in the crocodile.

Some species of animals possess, to some extent, this upper, lateral and frontal development of cerebrum, and manifest the possession of powers coextensive with the development. Among these are the horse, the dog, and the "half-reasoning elephant."

In the animal world, an immense field of observation is presented. That field has not yet been sufficiently well observed with reference to this science. Whenever it is, we shall find that the steps of nature can be distinctly traced from the ganglions to the spinal marrow; from these to the cerebellum, together with a limited portion of cerebrum, and a more or less perfect medulla oblongata; and from these advancing onward, by successive layers of cerebral matter, proportioned precisely to the sphere she destines the animal to occupy, until she arrives at man, the *ultimatum* of her labors; the most perfect of her productions; the most extensively endowed with cerebral development. It has been truly said, "that by taking away, diminishing, or changing proportions, you might form from the human brain that of any other animal; while, on the contrary, there is none from which you could, in like manner, construct the brain of man."

We have thus endeavored to trace the gradual ascent of nature, from the simplest endowed to the most complicated of her productions. But we are far from having reached the end of her progressive chain, when we have reached the human species. The different varieties in our race constitute so many successive links of the same continuous chain. I can only allude to these varieties, and their more marked characteristics. There have been commonly reckoned five varieties of our

race, but three of them are more distinctly marked than others, and to these three, therefore, I shall now only ask your attention. These are, the *Ethiopian*, or African; the *Mongolian*, or Asiatic; and the *Caucasian*, or European.

The general form and characteristics of the Ethiopian variety may be summed up in a few words. The forehead is narrow and depressed. The entire cranium is contracted anteriorly, or in front. Its cavity is less, both in its circumference and transverse measurements. Far the heaviest part of the brain is lodged in the back part of the head. The face is greatly developed, and the jaws particularly prominent. The length of the whole skull from the teeth to the occiput is considerable, forming a strong contrast with the globular shape of the Caucasian variety. In this variety, the propensities, more or less strong, and some of the sentiments, are coupled with a defectively developed intellect.

Am I borne out in this description of the African skull, by African history? Excepting the northern parts, which are not peopled by this variety, it has ever been our misfortune to witness as dreary a desert in mental and moral, as in physical Africa.

The Mongolian variety may include those inhabiting eastern and central Asia, as also northern Europe and America. This variety is an advance upon the Ethiopian. The forehead is here, however, low and slanting. The anterior part of the

cranium is less comparatively developed than the posterior part. The jaws are less projecting than in the Ethiopian variety, but the cheek bones stand out more widely on each side. The head has a square form. A higher proportion of intellect is here linked to sentiments, and, I apprehend, in general, stronger propensities, than in the Ethiopian variety. I can only refer, in general terms, to their history, as affording proof of this kind of organization.

The Caucasian variety, including the inhabitants of Europe, except the northern parts, of western Asia and northern Africa, and their descendants in other parts of the world, presents a brain and cranium of the finest intellectual organization. The upper and frontal parts of the skull are more developed than in any other variety: and their ample swell almost conceals the face when the head is viewed from above. The proportions here indicate a vast preponderance of the rational faculties over the instruments of sense, and of the common animal wants.

These developements, or rather their results, have been constantly spreading out upon the page of our history, and to the contents of that page I refer, for proof of the correspondence between what, according to the principles of this science, would have been *a priori* inferences, and the acts and events that have been constantly transpiring

since the first morning sun threw its light over a new creation.

But have we attained the ultimate limit of nature's progressive movement, when we have reached the Caucasian variety? No. We have only achieved a higher station, commanding a wider field of observation and research. One single general truth or fact never exists alone. There are always others in its immediate neighborhood, with which it is in harmony. There is as great an adaptation between different truths in the mental and moral, as there is between different parts in the material universe.

We have seen the progressive movement of nature working upward from the mite to the man: we have seen the same kind of movement in the different varieties of our race, from the Ethiopian to the Caucasian: we are yet to note the interesting fact, that the Caucasian variety has exhibited in the immense volume of its history the same system of progress, the same advance towards perfection.

We have, thus far, seen nature advancing upward, and making displays of intellect and sentiment, by superadditions of cerebral matter. The organs of Veneration and Benevolence are located in the upper frontal part of the head. On them, therefore, would naturally be bestowed the last addition of cerebral matter. The functions of these faculties are obvious from their names. Venera-

tion places man in relations with his God, and Benevolence in relations of mercy and forgiveness with his fellow men. The organs of these faculties were defectively developed in the early periods of our world's history, and the cerebral matter contributing to their enlargement, particularly to that of the organ of Benevolence, which is situated in the upper anterior part of the head, has been in a gradual train of bestowment upon the Caucasian variety, from the creation to the present time. I am not affirming that the modern head is differently organized from the ancient; that new organs have been created, or new faculties bestowed. Organizations change not with times. Man was originally created with all the mental faculties, and all their material organs: but the relative strength of the one, and size of the other, vary in the different periods of our history, as we find them varying in the different varieties of our race, and in the different individuals composing those different varieties.

The old world possessed more Veneration than Benevolence. The first was ill-directed in the objects to which the sentiment attached. The second was weak in its manifestations, and its feeble voice was hardly heard amid the din and tumult of the lower propensities.

All history concurs in the establishment of this fact. The very first event of importance enacted this side of Eden, was the murder of a man,—the

murder of a brother! The first mode of worship adopted by our race was the sacrifice of life. This mode was congenial to the faculties that were then active. Among these Destructiveness was the most prominent, and there was then no sufficient Benevolence to be afflicted by misery and distress.

This melancholy truth is too deeply engraven upon the bloody pages of the old world's history. It is too conspicuously displayed in the recorded character of the most polished and enlightened of its people, the Greeks and Romans. To those people I would by no means deny intellect or taste in particular departments. They lacked neither. But, in common with the rest of the old world, they did lack the "milk of human kindness."

What was the spirit of the laws of the Athenian Draco, and the Spartan Lycurgus? The one prescribed death as the atonement for every offence; the other made theft a virtue, and exposed the sickly infant to certain destruction. Their prisoners of war were deprived of life or liberty, and the slaves far outnumbered the freemen. Toward them was manifested the brutality of the tiger. The treatment of the Spartans to their Helots is recorded on one of history's bloodiest pages.

Their wars, especially with each other, were wars of emulation, ambition and conquest; blighting in their influence, and blasting in their consequences. A state of war would seem to them a necessary state. They warred with each other

when they were at variance with no foreign power. Their wars on account of religion were mere apologies for the gratification of Destructiveness. Few indeed were their wars of freedom.

Their sports were war sports. Look at their games, their races, their muscular displays, their pugilistic exercises, their exhibitions of agility, and strength, and prowess. Recall to your recollection the Roman triumph, the exhibitions of wild beasts, their numerous gladiatorial displays, in which the last groan of expiring nature found its echo in the shouts of an enlightened Roman audience.

Their gods were war gods. Among what people in the ancient world did Mars lack an altar or a priest, or a worshipper? To him every soul sent up its incense. Jupiter was worshipped because he could launch the thunderbolt, and if the aid of Minerva was implored, it was to grant the wisdom necessary to achieve a victory.

Pericles did, indeed, beautify Athens, by the erection of rich and costly edifices. But to what kind of faculties does the gorgeous palace or the sumptuous pile of splendid architecture administer gratification? To the propensities and lower sentiments; to the ardent desire of display.

Demosthenes did, indeed, delight, and astonish, and electrify, his Athenian auditories. But to what motives did he appeal, and what acts were the legitimate results of that appeal? Let his own high-

wrought intellectual efforts, together with the fields steeped in Grecian and Macedonian blood, answer the question.

Go into the different states, and kingdoms, and nations, and empires, of the old world. Distil the essence of their customs; interrogate the spirit of their laws; search into the maxims of their sages; inquire into the motives appealed to by their orators; into the acts that have been responsive to those appeals; into their civic and warlike achievements; and the same language will be told by every custom, and every maxim, and every appeal, and every act, and every achievement.

That language discloses the fact that the ardent desire and wish of the old world was for glory; the glory of victory; the glory of triumph; the glory that rode with the chariot armed with scythes; that sped its way with the flight of the javelin; that performed its mission at the point of the spear: the glory whose delight was in the pulse's last flutter; whose sweetest music was the mingled yell and shout of the battle-field. The old world could not form an adequate conception of the higher glory—the glory of forgiveness for its own sake. It never even entered into the heads of its sages. It was never lisped from the lips of its philosophers—not even of its Socrates.\*

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\* I am aware that the conduct of Joseph towards his brethren may be cited by some as contradicting this doctrine. There was forgiveness, but not for its own sake. Had it

No. The first time that pure sentiment was unequivocally announced upon earth, was in the single but emphatic sentence of "Father, forgive them, for they know not what they do!" That sentence was true. They knew not the extent of the act they were committing. They could not properly comprehend the nature of mercy, much less the mission of its bearer. There was a moral fitness, and a moral beauty in the first strong announcement of this sentiment on earth by the messenger of mercy; and, I almost dread to add, there was a moral grandeur, and sublimity, and terror, in the fact, that its first announcement was hushed by the death cry of a God. Strange, indeed, that the herald of the higher sentiments should have been the victim of the lower propensities.

The sentiment thus strongly impelled to act, has been constantly exerting a more and more salutary influence in the conduct of human affairs. Life

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not been for his father and his own brother Benjamin, no one can undertake to answer for the fate of his other brethren. The true motive that prompted his acts, is rather to be sought in Adhesiveness than Benevolence; in attachment to his father and brother, than in love to his race; in a particular, rather than in a general affection. That particular attachment and affection were by no means inconsistent with his age. On the contrary, they were in perfect harmony with it. To Adhesiveness, combined perhaps with other faculties, it will be found on a strict analysis, are to be referred those acts in our early history, that would at first appear to proceed from the promptings of a pure Benevolence.

ceased to be sacrificed at the shrine of the God of Mercy. A spirit of mildness, and meekness, and benevolent feeling, has been at work, softening human character and infusing its benign influence into human conduct.

This fact is strongly evidenced in the gradual abolition of slavery. That demoralizing practice prevailed to a great extent in the old world. Modern times have not only been characterised by a milder course of conduct towards the slave, but by a gradual restoration to freedom. We have seen a Wilberforce and a Clarkson, raising their voice for the suppression of human traffic, and a nation responding, by their acts, to that lofty eloquence—the eloquence of compassion. The physical fetters binding the slave to his master, will soon be laid aside, and man be left alone to contend with that higher kind of slavery—the slavery of opinion.

Another thing in which human conduct has been constantly softening, is criminal jurisprudence. The first codes of criminal law, as we have already seen, were of a demoralizing and sanguinary character. In this department the modern progress speaks a decisive language. Time was when the torture was resorted to as the test of truth; when crimes of a high character were visited with the punishment of the wheel, and the most lingering, cruel kind of death. When the higher powers became more fully developed, man made the interesting discovery, that there was something else be-

sides truth in the tortures of the rack; and that death, without being encircled with horrors, was a sufficient atonement for every offence. Time was when the English statute book, and English practice, inflicted death as a penalty upon no less than one hundred and sixty different offences. But since that time the English nation has been in a state of progress. What has been the consequence? Their milder practice has left, far behind, their more sanguinary enactments; and, previous to the late revision of their laws, more than four-fifths of those enactments remained but a dead letter on their statute books. So far has man advanced, that in our own halls of legislation, it has come to be severely questioned whether the safety and the true interests of society, can, under any circumstances, demand or require the death of any one of its members. Less than half a century will, in this country, give to that question a decided negative.

Another thing strongly evidencing this general fact, is the difference between the ancient and modern treatment of prisoners of war. The ancients reduced their prisoners to slavery or deprived them of life. The moderns exchange or discharge them. No modern civilized nation would venture to deprive its prisoners either of liberty or life. The act would so outrage the higher sentiments, particularly that of Benevolence, as to call down upon it the visitation of the severest kind of vengeance—the vengeance of the moral world.

The evidence of the present activity of Benevolence, and of other higher sentiments, is observable in almost every variety of human conduct. Philanthropy is more and more characterising the spirit of the age. The multiplied means that are in constant operation for instructing the ignorant, reforming the vicious, alleviating the distressed, ameliorating the general condition, and of advancing higher and higher the standard of thought and of feeling, are all so many arguments in favor of the doctrine I am advancing, as they are so many facts showing, both singly and combined, the strong and resistless tendencies of things.

The final cause, or motive, actuating the infinite mind in the constantly increased, and still increasing, bestowment of these organs and their faculties upon this variety of our race, will be obvious from a few reflections.

When this planet was first placed under human dominion, it was rough hewn from the hand of nature. Every element and every living being were at war with man. The storm howled around the head of the newly arrived governor; the whirlwind desolated and scattered his dwelling; the volcano sent forth its warm welcome in its burning stream of liquid lava; and the earthquake rocked him in its dreaded cradle. What the elements spared the wild beast of the forest stood ready to devour. Amid all these perils, and difficulties, and dangers, where would a refined Veneration and

Benevolence have found a fit place for their exercise? Had they been bestowed to an ample extent, they would have retarded the progress, if they had not destroyed the race in its infancy. The first relations were those arising between man and the external universe. These were physical relations; and, accordingly, we find bestowed a great extent of physical power, arising from a large development of propensity, and an incomplete development of the high and refined sentiments, with the view of fitting man's internal constitution to harmonize with those external relations. The first work to be done was to destroy, or at least to subdue; and in accordance with that arrangement, the first bestowments were strong propensities, united to a considerable share of intellect. These were intended to overcome obstacles; to subdue opposition; to transform this globe into a human habitation, and their legitimate operations were not, therefore, to be retarded by a large bestowment of the higher sentiments.

After those obstacles were removed, that opposition subdued, and the globe, so far as its physical characteristics were concerned, was transformed into a comfortable mansion, man began to act more upon man, and human nature became the most legitimate field for human action. Here the fierce play of the propensities was no longer required; and the mild action of the higher sentiments was made necessary to govern and direct them. The

relations between man and man, and between man and his maker, became more numerous, better understood, and more necessary to be acted upon; and to enable him to act in harmony with them, the higher sentiments were called into active exercise, to control the lower propensities, preserve the relations of the faculties with each other, and induce, as a resulting consequence, an union, and concert, and harmony of action.

Thus gradual has been the march of our race. I can compare it to nothing better than the fabric reared by the coral insect. The foundations of that fabric are laid deep in the fathomless depths of ocean. Its progress upward is the work of ages. The labors and the bodies of one generation serve as the foundation for another to build upon. So slow is its advancement, that did the world stop to look on, it could scarcely detect in it the elements of progress. Its march, however, is upward, until it reaches the sunny surface of the liquid wave, connecting the secret depths below with the opening heavens above.

So also have the foundations of our race been laid deep in the play of our lower propensities. These propensities, under the direction of intellect, have achieved for it an habitation, and defended and secured it from external aggression. The foundation once laid, the superstructure has been ever since constantly rearing. Those superadditions of cerebral matter that go to constitute the

organs of the higher sentiments, and, in part, of the higher intellect, have been in a gradual, but constant train of bestowment. The inevitable consequence has been, that the race has been in a state of progress. Like the brain, the great organ of mind, it has advanced upward, story by story. Every thing, even religion itself, which consists essentially in the supremacy of the higher sentiments, has been constantly humanizing. In proportion as man has become possessed of a more ample Benevolence, he has extended the possession of that faculty to his God. The bloody contests of nations are ceasing to form a part of the annals of history. Individual warfare is becoming less frequent and less malignant. Physical force, the agent of the lower propensities, has long been gradually yielding to moral influence, the agent of the higher sentiments. The vow of love has long been supplanting the vow of vengeance. Nor have we yet attained a limit.

The fabric of the coral stays not its progress until it reaches the pure azure of an expanded heaven. So also will the human brain continue its enlargement upward, and the human race its progress onward, until warfare, whether national or individual, shall have forgotten to appeal to its bloody arguments; until physical force shall have entirely ceased, and gone to make its final report; until the propensities shall have been brought into entire subserviency to the higher intellect and sentiments;

until the complete supremacy of these high powers shall remain undisturbed and undisputed; until, in fine, the dawn of the millennial morn shall smile only on the visions of the blest and the hopes of the happy.

Is there nothing in this view of the case? Is there nothing in this never-ceasing system of progression; this step by step progress of nature in the evolution of her animated products; this advancement upward and onward, by means of superadditions of cerebral matter, constantly coupled with the power of manifesting superadded faculties; this ever-continuous chain of organized and animal, and mental and moral being, the various links of which succeed each other in the most harmonious order, commencing at the lowest possible degree of organized existence, progressing upward through the various species of the animal world, the varieties of the human race, and the advancement in the Caucasian variety, until the last link is found attached to the throne of the Eternal?

If there be any thing in this, am I right in asking your attention to the truth of a science which serves as its basis? Can that which is the grand developer of truth; the nucleus around which it gathers; the agent by which the veil is drawn aside from the face of living nature, and her secret mysteries disclosed, and her hidden harmonies unfolded, be itself but the "baseless fabric of a vision," or the unsubstantial dream of an unfounded reality?

### LECTURE III.

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THE powers and capacities of a being, both in feeling and in thinking, depend entirely upon the strength of the faculties with which he is endowed. These alone are the springs of every mental movement, the manufactories of every mental production. These faculties exist independent of each other; and act, each by virtue of its own peculiar constitution. They no more necessarily depend on each other for the due exercise of their powers, than the sense of sight does upon that of hearing, or the sense of touch upon that of taste. Each is in its nature primitive, and designated by the following rules:

A primitive faculty,

1. May exist in one kind of animals, and not in another.
2. May vary in the two sexes of the same species.
3. Is not necessarily proportionate to the other faculties of the same individual.
4. Does not necessarily manifest itself simultaneously with the other faculties.
5. May act or rest singly.
6. Is descendible in a direct line from parents to children.

7. May singly preserve its proper state of health or disease.

If the question is asked, why do you admit a particular organ of this, and not of another function? or why do you admit such a faculty or set of faculties, and exclude another or others?—the answer is, that no mental element or instinct is admitted as a faculty, unless each of these rules may specifically apply to it. The ascertainment of the faculties, therefore, is the result of general reasoning, and of a profound mental analysis; of a general reasoning, that compares mental power with the subject matter upon which it operates, and of an analysis that, from that comparison, and from all other legitimate sources, determines the special function of each special faculty. It is *therefore* that the science of Phrenology is a mental science. It is mind investigating itself in the seat of its power.

The faculties are primarily divisible into two great orders. These are,

1. FEELING,

2. INTELLECT.

Or, they may be termed, 1. *Affective faculties*.  
2. *Intellectual faculties*.

This division has, in fact, been admitted from the remotest antiquity. The two divisions have been known under the various names of soul and spirit; moral and intellectual faculties; understanding and will; heart and head. It is obviously founded in

nature. These two great classes of mental phenomena are each distinct, and independent of each other. A man of intense feeling is not necessarily a profound reasoner, nor a profound reasoner necessarily a man of intense feeling.

The two orders are again divisible each into two genera.

That of *Feeling*, or the affective faculties, are divided into,

1. PROPENSITIES,
2. SENTIMENTS.

That of *Intellect*, into,

1. PERCEPTIVE FACULTIES,
2. REFLECTIVE FACULTIES.

The functions of the several faculties, as well as the location of their respective organs, can be only ascertained by observation and experience. Dissection cannot reveal them, nor can consciousness afford us any information concerning them.

Each faculty is a specific power of feeling in a certain way, or of forming ideas of a certain kind. The objects upon which it acts, or by which it is acted upon, may differ in degree, but are ever the same in kind. The same faculty that in a child is pleased with the possession of a gew-gaw, may, in after life, remain unsatisfied, even though a kingdom were in its possession.

Each faculty has received its constitution from nature, and its functions depend upon that constitution alone. It is not in the power of circumstan-

ces, single or combined, to alter that constitution, or to vary those functions. If it were, they would inevitably be the sport of accident, the creatures of contingencies. It is by virtue of this constitution, that men possess identity of character, steadfastness of purpose, equanimity and fixedness of principle. It is by virtue of this, that they are, in fact, the governors, and not the governed.

The same functions cannot be performed by different faculties. No interchange of labor can take place between them. Independent in their location their respective functions are independent in their action.

The faculties stand in a determinate relation to the external senses, and to the objects of external nature. It is by virtue of these relations that they act, and are acted upon by the external world.

The faculties are excited to activity by the presentment of objects naturally related to them, or from internal excitement. The power of action in each, when excited, is always in proportion to its own inherent native energies, and wholly independent of extraneous influence.

The organs of the faculties are all double, and situated in opposite corresponding parts of the brain.

The first genus of the order of Feelings, is PROPENSITIES.

These are nine in number, and their organs are developments of cerebrum and cerebellum, situated

in the lower, central and back parts of the head. They are productive of desires, inclinations, or instincts, and consist essentially of internal impulses which prompt to the performance of certain actions.

They belong to man, in common with the inferior animals. In the universality of their bestowment, nature seems to have acted on the most liberal policy; for some or all the organs are found developed, and the corresponding faculties possessed, in the numerous classes of animals, birds, fishes, and in most of the insect and reptile tribes. The organs of these faculties are developments of corresponding parts of the brain, and their respective functions possess a similarity of operation, wherever found, from man down to the reptile. This broad ground is alone sufficient to test the validity of the science, and to furnish innumerable instances in complete refutation of its principles and its practice, if any such instances existed. It must furnish the greatest anomaly ever witnessed in the history of our globe, if a science thus appealing confidently to all animated nature to sanction or condemn its conclusions; thus laying itself open to complete refutation, by challenging the production of one single contrary, unexplainable instance, from the numerous tenantry of the earth, the ocean and the heavens, can receive its effectual quietus from assertion and ridicule only.

It will be apparent, from the examination of the several functions of the faculties producing these propensities, that some of them are exclusively self-

ish in their operation, never exerting their energies but with express and direct reference to the being that possesses them, uniformly regarding this world as alone their home. We can readily discern in them the common vinculum, or connecting bond, that, as far as they extend, assimilates the high to the low, the mighty to the mean, thus binding together almost every kind, and degree, and grade of sublunary intelligence. In virtue of this universality of bestowment, a common sympathy, to a certain extent, obtains between almost all orders of being. The existence of this sympathy must be coextensive with the possession of the same faculties, presenting, as far as they obtain, through the wide range of animated nature, an uniformity of motive, and a harmony of movement.

Excess in the action of these propensities is productive of evil. That evil, however, results from their abuse, not from their legitimate use. Their use will be obvious from the examination of their functions. It was with reference to this that they were originally created; and if it be asked why their susceptibility to abuse was given, I answer, that I should deem human reason capable of solving that problem, when it can satisfactorily explain to us why we find death in the midst of life, and vice in the midst of virtue.

The propensities, exclusive of Alimentiveness,\*

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\* The function ascribed to this faculty is the desire of taking food. It is the instinct of nutrition. It is carried out into active manifestation soon after the birth of the ani-

the existence of which is only stated as probable, are,

### 1. *Amativeness.*

The function of this faculty is to produce the feeling of physical love, and to originate sensual desire. Its organ is the cerebellum. This organ is situated at the lower back part of the head, and is indicated by a general fulness of that part. A good criterion of its extent is the space included between the mastoid process, or prominence directly behind the ears, and the protuberance of the occipital spine. There is no uniform proportion between the cerebrum and cerebellum. Magnitude of the one never can, of itself, furnish indications of the magnitude of the other. In the cerebellum

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mal, and continues through its life. Its organ is supposed to be situated in the middle lobe of the brain, before the organ of Destructiveness, and under that of Acquisitiveness. It is in what is called the *fossa zygomatica*. It is observed, that the portion of cerebral matter there situated, is early and well developed in children, and the young of animals. This instinct, or propensity, is particularly assisted by the sense of smelling; and it is to be observed, in connexion with that fact, that the olfactory nerve is, in all animals, in intimate communication with the middle lobes of the brain. In man, its external and greater root is connected with the anterior convolutions of the middle lobes. A sufficient number of observations have not yet been made to raise this to the rank of a probability. It is, therefore, left entirely open for farther investigation.

there are no convolutions, no inequalities of development, as there are in the cerebrum—nature herself indicating by the unity of its structure, that she destined it to be the seat of one faculty only.

The development of this organ is incomplete until the age of puberty, and accordingly its specific function scarce has an existence until that period of time. Where the purposes of nature are thwarted by violence, the organ ceases to grow, and accordingly in eunuchs a flatness and diminution of size is observable in the lower back part of the head, the destruction of the function of the faculty extending its effect to the organ. This is also clearly discernible in the striking difference between the bull and the ox, that difference being created solely by destroying the function of the faculty in one, and leaving it free to operate in the other. A full development of the organ gives a thickness to the neck. This is illustrated by the difference between the bull and the ox, the man and the eunuch. It is in general more fully developed in males than in females of the same species. It gives vigor, and strength, and masculine energy to the system. In *hydrops cerebri*, the cerebral faculties are impaired or deranged by the gradual destruction or derangement of their organs, while the function of this faculty remains unimpaired. In the *Cretins* of the *Pays de Vaud*, this organ is fully developed, while the organs of the intellect are imperfectly developed, or wanting. The exist-

ence both of the organ and faculty is proved from the fact that wounds in the back part of the head, severely injuring the cerebellum, have, in some cases, created so great a derangement of the organ, as entirely to suspend the function of the faculty. Proof equally strong is deduced from analogy. It is a curious fact, that in those imperfect species of insects, in which there is an entire destitution of the cerebellum, they are either, like the caterpillar, incapable of continuing their race in that state, or their mode of continuance is merely vegetable. The polypus has no cerebellum, and accordingly it continues its race by shoots, gradually forming on the body of the parent, until, in time, they become detached, distinct, and perfect polypi. The facts enumerated by Baron Larey, as quoted in the *Medico-Chirurgical Review*, incontestibly establish this organ as the seat of this propensity: and the clear establishment of one organ as the seat of one faculty, establishes, in general terms, the truth of the foundation upon which the science rests.

This faculty is purely selfish, and its use is to provide for the continuance of the various races or species that possess it. The organ, as also the faculty, is considered as ascertained.

## 2. *Philoprogenitiveness.*

The function of this faculty is to produce the instinctive feeling of attachment to children. This feeling is found to exist wholly independent of ex-

traneous circumstances, and is, therefore, the genuine offspring of nature. It is the safeguard she has kindly thrown around her infant productions, to shield and protect them from the perils that impend over them, and the dangers that threaten their annihilation, in the infant state. Reason is not its parent. It is not the province, nor is it in the power of reason, to originate a single feeling. Were it vested with that power, we should find those in whom it most predominates, possessed of the strongest feelings, and that without any exception, for nature admits of none. Were the position of this dependence of feeling upon reason asserted to be true, it would be overturned by observation; for the fact is otherwise. A warm feeling of parental affection exists in the bear towards its cub; and yet no one has ever thought of attributing to that animal an exorbitant share of reason.

This feeling of parental affection exists in different degrees, in high and low life, in all classes, orders and grades of society. Like other feelings of a primitive, peculiar, and specific kind, nature has created it innate, and seated it in a particular organ. The organ of this propensity is situated directly above the preceding, at the most prominent part of the back of the head, corresponding with the general protuberance of the occiput.

In the carnivorous tribes of animals, this organ is imperfectly developed; and, accordingly, in them the faculty is weak in its manifestations, prompting

the extension of parental affection no farther than the imbecile state of the offspring absolutely demands it. Among the numerous classes of fishes, it has no existence, except in those of the cetaceous kind; and, accordingly, among those numerous classes, with that single exception, no parental ties are found to exist.

This organ is found developed to a considerable extent in the beaver, and among the varieties of the human race, the Ethiopian is the most fully possessed of it. It is among that variety that the faculty is found the most active.

The organ is found developed to a much greater extent in women than in men, and in the females than the males of animals. The strength of the propensity is found to be in perfect accordance with the enlarged development of its organ. There are few breathing whose lives are not continued witnesses to the unconquerable strength of a mother's love.

The childhood of the two sexes clearly indicates the predominance of this faculty in the female. While the boy cracks his whip and rolls his marbles, the girl is displaying her excellent taste in the dress of her doll.

It is in this freshness of our early being, ere art has chilled natural impulse, or the conventional forms of society enacted and carried into effect their canons, that the indications of nature are found clearly stamped upon every fibre of our men-

tal, and moral, and physical frame-work. I can never look upon this early exhibition, without feeling an intense glow of delight at detecting the beautiful harmony disclosed in the fact, that the primal purity of Eden, the original birth-place of our race, should be yet allowed to linger around the infant state of our being.

Both the organ and faculty are considered as ascertained.

### 3. *Inhabitiveness, or Concentrativeness.*

The function ascribed to this faculty by Dr. Spurzheim, is the propensity to inhabit a particular place. He grounds the existence of the propensity upon the assumption that nature intended every region should be inhabited, and has, therefore, bestowed upon all her animated productions an inhabitive propensity.

The objection that occurs to me goes to the existence of a faculty possessing this kind of function. The original intention of nature that different climates should be inhabited by different animals, and that, in this manner, every region should be peopled, is clearly indicated by the fact that she has adapted the physical constitution and capacities of the animal to the climate she intends it to inhabit. The same great system of adaptation that fits man to be a tenant of this earth, fits the various races of animals to inhabit the varied climates, where we actually find them. The disposition to inhabit, therefore, is a

general, and not a particular result. A faculty possessing this specific function, for the purpose of being a faculty, must be independent. If in the exercise of that independence, it should select a climate to which the constitution and capacities of the animal are adapted, its exercise would be useless; because, the animal possesses an original tendency to such selection. If it should select one to which the animal is not adapted, its exercise would be worse than useless. To bestow a faculty that at best can do no good, and at worst can do harm, never could have been originally intended.

Mr. Combe and the Edinburgh Phrenological school, name the faculty, which they locate in this part, Concentrativeness; and ascribe to it the function of concentrating and continuing the exercise of mental power upon one particular object; or rather, perhaps, of holding up the object itself, as the only subject of contemplation, at the same time excluding all others from interference. They observe that some individuals are much more abstracted than others, and possess, to a great extent, the power of concentrating and continuing upon one object their intellects and feelings.

There are objections to the existence of a faculty possessing the function here ascribed to it.

The functions of the several faculties are nothing more than their several modes of action, consequent upon the relations existing between them and the objects upon which they are destined to act,

and be acted upon. These relations have the force and effect of natural laws. To allow the existence of a faculty, the function of which is of a supervisory character, and the office of which is to combine, concentrate and continue the action of the different faculties, when nature has already established the relations between them and their objects, would seem to be nothing more in effect, than to suppose that nature made a second provision for the purpose of controlling, and thus rendering nugatory the first, or to save her credit by its efficiency, supposing the first should fail.

If one faculty of mind predominates, its stimulus will arouse, and, in some measure, direct the energies of other faculties, the peculiar action of whose functions can assist it in its investigations. If this stimulus be what is meant by the function of this faculty, it could not, perhaps, be deemed objectionable. But we are precluded from making this supposition, for the reason that if it were, this faculty would be dependent upon the predominating faculty for any the least operation of its peculiar function, and if dependent, could not fall within the definition of a faculty, which is defined to be an independent power.

Between other faculties and external objects, relations exist, and consequent upon those relations are the operations of their functions. But here relations *can only exist* between this and other faculties, not external objects. What these relations

are, I am unable to perceive, unless they consist in the stimulus of a predominating faculty, exciting the function of this into action. But if this be their nature, the function itself is clearly dependent on the stimulus, and, therefore, no faculty at all. Suppose this faculty alone possessed of inordinate strength in a head in which every other organ was equally well developed, and consequently every other faculty possessed of equal strength, could it, under those circumstances, act at all? If its action were obedient to stimulus, it clearly could not, because here there is none. Its dependence must preclude it from ruling, and, under this state of things, leave it to rust in its mansion, a lord in the garb of a menial, a monarch in the bonds of a slave.

But if no dependence exist, its action must be of an arbitrary nature, and an arbitrary power, to coerce two or more faculties to combine, and concentrate, and continue their energies, I should regard as an innovator upon existing relations, and hence doubt the propriety or necessity of its services. Not to urge that the possession of this arbitrary power, which is not intellectual, and, therefore, not susceptible of being enlightened, would be of dangerous tendency. If it be urged that the function of the faculty is rather to continue the object as the single subject of contemplation for the faculties, to the exclusion of every other; it may be answered, that the same original power that is competent to apprehend or seize upon the object, is also com-

petent to retain it as the subject of contemplation, for all the purposes for which it was apprehended.

I have thus given my views somewhat at large in relation to the alleged functions of this faculty. I consider the whole as open to future investigation. An appeal on all sides is made to facts, for the phrenologist is ever more solicitous to have the truth established, than his own particular views.

#### 4. *Adhesiveness.*

Some species of animals are observed to be of a social nature, and to exist together in societies, while the habits of others are of the wandering, un-social and solitary character. The difference perceptible in this respect between the herbivorous and carnivorous tribes, may be adduced as illustrative of this diversity. The one is found in a crude and imperfect state of society; the other immersed in the depths of the wilderness, delighting in the profoundest solitude, and exulting amid the marks of desolation. The wise and provident care of the Creator in this is obvious; for if the carnivorous tribes were possessed of the Adhesive faculty, they might act in concert, and, by an union of power, extend on every side the march of desolation.

This diversity proves the existence of a particular instinct, or propensity, the direct tendency of which is to produce and continue the social state in those who are possessed of it. The function of

this faculty is to produce the feeling of attachment in general, without reference to any particular objects, towards which it may be directed. Hence the objects may be entirely dissimilar in their nature and qualities, but a complete destitution of the faculty must preclude any attachment towards any object.

This faculty is not alone satisfied with being attached. It demands also a return similar in kind from its object. In its vocabulary, *to be beloved* is as essential as *to love*.

It is not necessarily attached to similar faculties that predominate in the individual possessing it. Nothing, for example, is more repugnant to self-esteem than itself. It is often attached to those faculties in others that are supplemental to those of its possessor. A firm would be attached to a yielding nature: Self-esteem to Veneration. In virtue, however, of the sympathy that obtains between the higher powers and sentiments, we generally find Adhesiveness attaching to each other those of the same kind. Benevolence is attached to Benevolence, because between them there is a harmony of feeling.

This faculty, when strong, sends its influence into other faculties. It prompts Love of Approbation to desire and seek the applause of the object beloved. It stimulates Conscientiousness to expect a return. It draws upon Ideality for its pleasing imagery, and inspires Hope to look beyond the pre-

sent, and anticipate for its object a desirable destiny on the yet unturned leaf of the future.

It is this faculty that gives regret at the death of friends. The sundering of the ties by which it is connected with its object, is productive of a painful sensation, the acuteness of which depends upon the strength of the faculty. It even travels beyond this world, and kindles the desire, and inspires the wish, and nourishes the hope, of meeting in another and a better world, with the benign aspect of a friend, or the mild look of a parent, or the sparkling eye of a child.

The organ of this faculty is located rather above and laterally of that of Philoprogenitiveness. It is stated as ascertained. The faculty is much stronger in women than in men.

##### 5. *Combativeness.*

The function of this faculty was denominated by Dr. Gall the instinct of self-defence. That is, undoubtedly, one of its modifications, but not the only one. Its function is of an active, rather than a passive character; a positive, rather than a negative. It gives the propensity to combat in general, without assigning to it any particular sphere of action. The origin of this propensity is independent of reason or reflection. Were all self-defence left entirely in the charge of our reason, its deductions might come too late to accomplish their object. That important matter was, therefore, left origin-

ally charged upon a propensity, the tendency of which is to instantaneous action. The direction of that action, once commenced, is left to the guidance of the higher intellect.

The great difference observable between different animals and different men, in relation to the manifestation of this propensity, together with the fact of its actual exhibition, may be cited in proof of its existence. It is perfectly obvious to men of observation, that its most splendid physical exhibitions are made during a state of intoxication. This is easily explainable.

The effect of introducing stimulus, in the shape of ardent spirits, or in any other shape, into the system, is to *mortgage future energies to supply present exigencies*; or, in still terser terms, it is the *making a present use of future resources*. In the same proportion, therefore, in which the energies of the future are applied to the purposes of the present, will that future, when arrived at, be found deficient in its supply of energy. Hence a state of intoxication ends in the profoundest sleep, arising from the exhaustion of every mental and corporeal function. The living system must cease to act, except for the mere purpose of living, because that future has arrived which had already parted with its energies. From this general view let the science explain the phenomena actually exhibited.

The stimulus introduced creates an excited ac-

tion in every organ of the brain, and hence every faculty feels its power, and is disposed to exercise it. A larger quantity of cerebral matter is allotted to the sentiments and propensities than to the perceptive and reflective powers. From the portion allotted to the propensities, the nerves take their departure. The action of the propensities, particularly of Destructiveness and Combativeness, is ordinarily under the influence of the reflective powers. The stimulating material, through the medium of the nerves, or the circulation, or both, excites to increased action the large quantity of cerebral matter allotted to the propensities, particularly to those of Combativeness and Destructiveness. Those propensities are, therefore, clamorous for the exercise of their functions. But the organs of the reflective faculties are also stimulated to excess of action, and hence enabled, for a time, to exert a controlling influence. The introduction of additional stimulus renders the propensities still stronger, and more clamorous for exercise; and the reflective powers, in order to restrain them, are driven to a preternatural energy of action. The heavy drafts they are compelled to make for this and other purposes, soon exhausts their resources; and, upon the exhaustion of those resources, they must necessarily cease from their labors. Reason strikes its flag. The directing power is removed. The propensities, unrestrained by it, instantaneously rush into a state of unmitigated action, and

the inevitable results you will find recorded in the annals of drunkenness, and on the catalogue of crime.

It is thus that this science explains human phenomena. Its practical utility can only be exceeded by its theoretical beauty. Its agency is essentially necessary in unfolding to our mental vision the hitherto closed book of our hidden nature.

The function of the faculty of Combativeness is not alone confined to physical exhibitions. It forms an element in the composition of the complete disputant, as well as the pugilist. Its aid is essential to the reformer, who interposes the force of truth against the corruptions of an age. It must have formed part of the organization of Luther, nor could it have been wanting in the head of Knox.

“The ancient artists,” as remarked by Doctor Spurzheim, “seem to have known the configuration indicative of a high degree of this propensity; for they have given it to the heads of their gladiators and wrestlers.” They will be found to have constructed them broad between and behind the ears. They must have found that construction coupled with that propensity in nature; and the same language proclaimed from the chisel of the ancient artist, is still proclaimed from nature’s living workmanship.

The organ of this faculty is situated about the posterior lower angle of the parietal bone, or in adults about an inch and a half behind the ear. It

inspires courage, and accordingly is found in all courageous animals. Those of this description have the head, between and behind the ears, of greater comparative width than other parts of it. It usually attends Destructiveness, and is an able assistant of that propensity.

The faculty and its organ are stated as ascertained.

### 6. *Destructiveness.*

The organ of this faculty is situated immediately above, and somewhat around the ear. Width at that part indicates the extent of its development. The remarkable difference in this respect between the heads of carnivorous and herbivorous animals, first suggested the locality of this organ.

The function of the faculty is to produce the specific propensity or impulse to destroy. The records of our race, as also the conduct of the animal world, furnish abundant proof of the existence of this propensity. Destruction, in some of its forms, is a general law of nature. Among most of the animal tribes, life is only nourished at the expense of life. There was, therefore, a manifest propriety in bestowing upon organized animal nature, a propensity of this description. The development of the organ, and the consequent possession of the faculty, obtains, perhaps, more universally through animated nature than any other. The very existence of creatures of the carnivorous kind, depends

upon the exercise of its function. Such is their organization, that animal food to them is a matter of necessity. But this food is only obtainable through the death of the animal. The benevolence of nature towards this extensive class of destroyers is manifest, in making the very means of prolonging their existence administer to the gratification of their predominating faculty. Their general form, and muscular strength, and means or organs of prehension, or of seizing their prey, and mastication, and deglutition, and digestion, are all in perfect harmony with each other, and also with this propensity and organ.

As man possesses an omnivorous nature, it was essential that he should possess this faculty. Had there not been originally a strong bestowment of this propensity, as also that of Combativeness, upon our race, this planet might now have been performing its revolutions without a single human inhabitant upon its surface. The destructiveness of the animal world, added to the elements, would have destroyed the race in its infancy.

The function of this faculty makes an early display of its manifestations. Great and striking differences are observable in children, in the exhibition of this faculty. Some destroy without any compunction. Others are pained at the sight of death under any of its forms.

The endowment of the faculty, to a certain extent, is necessary, for without it scenes of misery

distress and death would be insupportable. It is through the instrumentality of this faculty, that nature steels our sensibilities, and renders us, to a greater or less extent, indifferent to the objects of misery that abound in every walk of life, and to the scenes of distress that every where present themselves unmasked and unsought to our view.

This faculty, combined with Combativeness and Wit, is productive of satire and sarcasm. In the joint effort resulting in these productions, it is the office of Destructiveness and Combativeness, aided by defective Benevolence, to harden the kindlier feelings while the wound is inflicting, at the same time that Wit is wielding the mental sabre, in its infliction. The active energy of each of these faculties is further necessary to give it that pungent edge that enables it to sear while it severs. Those only are capable of uttering a cool, deliberate and unprovoked sarcasm, with the sole intention of wounding the feelings of others, who are incapable of possessing a genial feeling of sufficient warmth to prevent its *shivering*, and even *freezing* in the *heat of their own heart's blood*.

Where this propensity is coupled with extensive Benevolence, its active manifestations are neutralized, so far as regards living beings. The two combined give a tendency to destroy inanimate objects, in which the one is gratified without paining the other, and the end accomplished without causing the distress, otherwise attendant upon its accom-

plishment. When combined with Combativeness, it gives the tendency to *rage*.

Numerous instances are on record, in which this faculty has been diseased in its manifestations. Individuals have felt themselves impelled to destroy, and hence have asked the privilege of being confined, as a means of preventing their yielding obedience to the impulse. An account of some of these instances may be seen by a reference to Combe on Phrenology; and Spurzheim's Phrenology, vol. 2, under the head of Destructiveness.

This faculty is more extensively predominant in men than in women. It is ascertained, as also its organ.

#### 7. *Secretiveness.*

The organ of this faculty is situated immediately above Destructiveness, or in the middle of the lateral portion of the brain. It is not only higher up, but rather farther forward than Destructiveness. And when both organs are highly developed, the lower and middle portion of the side of the head is characterized by a general fullness.

The function ascribed to this faculty is, in the first place, a power of suppressing the open manifestation of the other faculties of the mind. All the mental faculties are, both from internal and external causes, disposed to act. Without a restraining power, each faculty would, upon the first impulse, rush into a state of open manifestation.

This faculty prevents that manifestation, by restraining the open action of the other faculties, until the propriety of that action has been passed upon by the reflective powers, and the award of the understanding obtained. In this view its office is invaluable, and its services in the mental economy, to some extent, indispensable.

But its entire function is not confined to this. From the general but temporary suppression of the manifestation of the faculties until the reflective powers have passed upon the propriety and expediency of that manifestation, it proceeds to a permanent suppression of all those manifestations that are, on the whole, deemed inexpedient for exhibition. Its general function, therefore, is to secrete, or conceal, without determining the objects to be concealed, or the means or manner of accomplishing it.

This propensity exists in the animal world. It was to have been expected that where nature had denied strength, for the purpose either of attack or defence, she would have bestowed the power of concealing. The cat evidences it in the secrecy of her movements, and more particularly the fox in all his actions manifests a resort to cunning expedients.

This faculty, in man, is essential to the formation of a prudent character. Time, and place, and attendant circumstance, are the fundamental rules of its arithmetic, and without the favorable concir-

ence of all these at will, when strong, put an effectual veto upon all mental manifestation. Those in whom it is weak are too open for the intercourse of general society. A great many of the leading, and even the minor events of life, are the results of stratagem.

This faculty not only prompts to conceal its own secrets, but also communicates the desire to discover the secrets of others. It gives a shrewdness in detecting the secret springs of action in others, and in this manner, of aiming at clear and correct conclusions in regard to individual character. It gives to its possessor what we technically term tact, which essentially differs from talent. Talent regards the general bearings and tendencies of actions and of things: tact, the particular bearing and tendency of individual acts and things. The one would exist independent of particular time, or place, or circumstance: the other, without these, could have no existence, because it acts in reference to them. The one prescribes the general sphere, and gives the general direction to human action: the other is the individual director within that sphere, and subject to that general direction. In fine, the one may be compared to the combined action of those elements that push forward the bark of our being on the ocean of life: the other, to the agency of the skilful pilot that steers that bark clear of the rock and the quicksand.

This faculty extends its influence into other fa-

culties, and when combined with them exhibits a combined result. When in combination with large Cautiousness it gives a tendency to extreme reserve, and to the suspicion that dark plots are constantly hatching against the unfortunate possessor. Combined with small Conscientiousness, it predisposes to lying, and combined with Acquisitiveness to theft. It is essential to the composition of the successful hero. Then it should also be combined with Combativeness and Destructiveness. Combined with Ideality, it goes to the formation of the poet and the novelist, in the assistance it renders to the latter faculty, in the construction of interesting plots. In the production, however, of any great results, the high powers of intellect must also lend their aid. Combined with Firmness, it produces the power of repressing the outward expression of pain. Even torture cannot wring from this combination a response to its inflictions. The unparalleled fortitude of the American savage under the most intense severity of suffering, will readily occur to you as an eminent instance of this combination; and in connexion with this, you will not fail to recur to the further fact, that their mode of warfare is a combination of savage cruelty and refined cunning, where the meed of merit is rather awarded to the depth, than to the deadly nature of the plot.

The abuse of this faculty is productive of the most profound dissimulation. Indirect means are

resorted to to accomplish an end, when the use of those which were direct would sooner effect its accomplishment. Men who possess it in its strength avoid traveling in the great open highway of human movement. They take the first by-path that presents itself, and the more covert and concealed the better. Like the mole, they prefer rather to move under ground than above it. They are ever attributing secret and concealed motives to others, and regard life itself as a "continued stratagem." The true character of such men can never be arrived at, as they never appear unmasked. In them are observable a slyness of look, a rolling cast of the eyes, and a stiffened approach of the shoulders to the head.

This might not inaptly be styled the political faculty, and as such it would not form an uninteresting subject of study about these days.

The organ and faculty are ascertained.

## LECTURE IV.

8. *Acquisitiveness.*

THE organ of this faculty is situated in the temple, in front of Secretiveness.

The function of this faculty is to give the desire of acquiring, and whatever constitutes worldly wealth, is a legitimate object, towards which its energies may be directed. In the same sense in which Adhesiveness is the instinct of society, is Acquisitiveness the instinct of property. It has been objected that property is an institution of society, and that an organ cannot exist in the brain for a factitious desire. The answer to this objection is, that the institution itself is founded upon the instinct, and that the laws regulating it are themselves the consequences, and not the causes, of its existence. Nothing can more clearly prove the existence of the propensity, than the existence of laws regulating its exercise.

This propensity impels its possessor to hoard up treasures, without any reference whatever to their instrumentality in alleviating wants, in procuring conveniences, in affording the means of enjoying luxuries, or in the bestowment of power on their possessor. It is asserted by some metaphysical writers, that riches are desired only because they

afford the means of enjoyment, and are instrumental in the gratification of the passions. Were this the truth, poor indeed would be the miser; foregoing the enjoyments of earth, and I had almost said, the hopes of heaven, for what in itself can afford him no pleasure or gratification. But how can this alleged truth evade this question. Why then are they not devoted to those purposes? One part of the object is attained by the acquisition. Why is the other part neglected? A monarch overcomes the forces of an adjoining kingdom with the express view of taking possession of it, and annexing it to his own dominions. It would be curious indeed, if he should attain his object so far as to overcome all opposition, and then, without any perceptible reason, suddenly stop short of the possession when it was entirely within his power, and depended simply upon his fiat. The fact that the miser is poor in the midst of riches, starving in the midst of plenty, and joyless in the midst of the most ample means of enjoyment, is proof the most conclusive that he derives more gratification from the bare possession of wealth, than he could from the enjoyments for which that wealth might be exchanged. But what does that possession gratify? It gratifies the same faculty that prompted to the acquisition of it.

This propensity is very subject to abuse. Combined with defective Conscientiousness, it produces theft; the strong desire of acquiring over-leaping the use of proper means in effecting the acquisition.

In the writings of Combe and Spurzheim on this faculty, a number of instances are mentioned in which individuals, otherwise highly respectable, have been impelled by a strong impulse to steal, and this impulse has continued through life. One individual, in particular, was subject to the impulse in his infancy. He early embraced the military profession, in the hope that its severe discipline would furnish a corrective. There, however, he narrowly escaped being condemned to death. He next studied theology, and became a Capuchin friar. But change of profession brought not with it the desired change in disposition. He stole, even in the solitude of the cloister.\*

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\* Some may be inclined to infer from this, and other instances of a like nature, that this doctrine tends strongly to fatalism, and to the destruction of accountability. If, however, they will allow themselves a moment's time to reflect, they will perceive two things. First, That in the very argument they employ, a strong mental or constitutional tendency to a particular course of action is admitted: and, Second, This strong tendency being once admitted, whether it depends upon material organization, or upon any other cause, cannot affect its existence. *It is in the fact of its existence*, that the tendency to fatalism, if any there be, is to be sought and found, and not in the *mode of explaining it*. Until, therefore, it can be shown that Phrenology *creates the fact*, let it not be charged with the injurious consequences flowing from it, if there be any. But there are none. It would be as unjust to require of a being possessing these strong constitutional tendencies, the same correct course of

This faculty, combined with defective Conscientiousness and large Secretiveness, in the absence of the high reflective powers of intellect, produces the pick-pocket, cheat and fortune-teller. If large Locality be added, it leads to a traveling, vagabond mode of life, and constitutes the complete Gipseey. Combined with large Combativeness and Destructiveness, in the absence of Conscientiousness and Benevolence, it impells to violence and to the com-

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conduct that would flow from a high moral development, as it would be to require of man, constituted as he is, that he should visit the depths of the ocean with the fish, or penetrate the mid-heavens with the eagle. Man is only answerable for the proper exercise of the faculties he possesses. Hence different degrees of accountability result from different combinations of faculties. It may require as strong an effort in one to prevent the murder of a man, as in another to avoid the killing of a fly. "To whom much is given from him much will be required." A less happily constituted organization will be subjected to a less rigid account. This mode of explanation accords to no one the plea of complete exemption from accountability; because no one, this side of idiocy, is entirely destitute of any one faculty or organ, and the possession of all is coupled with an accountability for the proper exercise of all, according to the different degrees of strength. It is in this way only, that the free and moral agency of man is reconcileable with the justice and benevolence of Deity. It is, however, in defence only of things as they exist, of the general economy of the universe, of the justice and benevolence of Deity, and not of this science, that this, or any other explanation of this nature can be demanded.

mission of deeds of death for the sake of gain. With defective Conscientiousness and large Benevolence, it will give to the relief of the poor, what it had feloniously taken from the abundance of the wealthy.

The propensity exists in the lower animals. Lord Kames observes, that "the beavers perceive the timber they store up to be their property; and that bees seem to have the same perception with regard to their winter provision of honey." The same pair of storks, swallows and nightingales, return in spring or autumn, and establish themselves on the same steeples, under the same roofs, and in the same bushes, they occupied the preceding year. If the place is pre-occupied, war is immediately waged against the intruder—Combativeness and Destructiveness being called upon to assert the claim of Acquisitiveness. Many animals lay in their winter stores of provisions.

The possession of this propensity combined with large Self-esteem, and moderate sentiments and reflective powers, produces the miser, whose acquisitions are accumulated simply because they are acquisitions. This propensity appears to be strengthened by age. Its manifestations, however, at advanced periods of life, are more obvious to observation, from the circumstance that as man approaches the termination of his earthly career, his propensities, in general, become feebler in the exercise of their functions; nature, in this respect,

kindly appearing to endeavor to wean him from that earth he must soon leave, by drying up his sources of enjoying it; and as a consideration for her rendering other propensities less active in their manifestations, we may well excuse her for continuing the exercise of this with unabated vigor, even though it would seem to inspire its possessor with the belief that he could pave his road to heaven with the gold of earth.

The reason for implanting this propensity in man is apparent. Old age is ill fitted for accumulating. The winter of life is better spent in enjoying the harvest, than in sowing or reaping it. Under the impulse of this faculty, the vigor of middle age is employed in accumulating that which will sustain it when the weakened intellect and the trembling limbs have almost ceased to do their office. Had it no existence, old age would be afflicted with more miseries than ordinarily falls to its lot, for starvation would be added to exhausted nature. By this admirable bestowment, the stores for an unknown future are provided by an impulse that acts only upon the present.

The legitimate exercise of this propensity is one of the great springs of human movement. It drags from the mine its concealed treasure. It whitens the ocean with the canvass of commerce. It despatches into every possible channel the spirit of industry, and diffuses activity and enterprise through every part of the social system.

The organ is established,

9. *Constructiveness.*

The organ of this faculty is situated at the lower part of the temples, in front and rather lower down than Acquisitiveness. If the base of the brain is narrow, this organ holds a situation a little higher than usual. Those who have it largely developed, have the head nearly as thick through at the temples as at the cheeks.

The function of this faculty is to produce the desire or impulse to build or construct in general. The existence of this instinct as an original propensity, is clearly inferable from the fact that the manifestations of its existence among men and animals are independent of reason, or the higher powers of intellect. The Cretins often display some degree of mechanical skill, at the same time that they show a destitution of intellect. Among animals the horse, dog, and elephant, display far higher powers of thought than the beaver; while the latter constructs habitations of such solidity as to be impenetrable, except to the steel of man or the fire of heaven. In the animal world, the instinct is of a specific character, and ever prompts, in the same species, to the erection of the same kind of habitation. The bee, that extracts its sweets from our own gardens, constructs the same kind of habitation with those celebrated in the flowing verse of Virgil. In man the constructive propensity is not particular. It is subject to the direction of other powers, and acts in obedience to that direction,

whether in the construction of the hovels of the poor, or the palaces of princes, or the temples of God.

It is an essential element in the composition of a mechanical genius. It assists the experimenter in physical doctrines, and aids in the composition of the good operative surgeon.

There are instances in which this faculty alone has been diseased. Dr. Rush mentions two cases, in which a talent for design had unfolded itself during a fit of insanity; and he adds, that there is no insane hospital in which examples are not found of individuals, who, although they never showed the least traces of mechanical talent previously to their derangement of understanding, have constructed the most curious machines, and even ships completely equipped.

The busts of eminent artists of former ages, display a great development of this organ; and it is observed in general to be fully developed in the Italian head.

This faculty has nothing to do with the taste, and skill, and ingenuity, displayed by the architect. Every thing except the mere impulse to construct is referable to other faculties. This gives the original impulse to construct a machine. Its valuable properties in saving time, in abridging labor, in contributing to the advance of improvement, and in meliorating the human condition, are owing to the exercise of other faculties, particularly to those of

Causality and comparison. It was these faculties, combined with that of Constructiveness, that produced the printing press, that originated the steam-boat.

As this science, metaphysically considered, affords the most complete analysis of mind ever yet exhibited, it is important to keep in view the distinct agency each faculty performs in the multiplicity of human acts that are every day exhibited, for it is doubted whether one single individual act can be cited of so simple and elemental a character, as to be referable to one faculty only.

The organ is ascertained.

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#### GENUS II.—SENTIMENTS.

We now, for the present, take our leave of the propensities. In ascending to the regions of the sentiments, we also ascend to a higher grade of feeling. The sentiments belong to what metaphysicians term emotions. They never form ideas. They produce a propensity to act, joined with an emotion or feeling of a certain kind. Several of these are common to man and the lower animals, others are peculiar to man. The former may be styled the inferior or lower sentiments. These are Self-esteem, Love of Approbation and Cautiousness.

10. *Self-esteem.*

The organ of this faculty is situated in the middle of the upper posterior part of the head, or the top of the back part. Its location is precisely at the crown of the head, and the extent of its development and the strength of the faculty is indicated by the projection of that part. When large the head rises far upward and backward from the ear.

The function of this faculty is to inspire the feeling of self-esteem. Its legitimate results are a satisfaction with the acts of its possessor; not because they are meritorious in themselves, but because they are *his* acts. It inspires its possessor with the belief in his own self-sufficiency. It arms him with the conviction that whatever is attainable through the most enlarged sphere of human agency, is attainable by himself. It sends him forth an actor amid the ever-varying scenes of action and passion, with an unwavering reliance upon his own native energies—upon his own unaided resources. It inspires self-confidence, and confers the feeling of self-importance. It will be perceived that the services rendered through the legitimate operation of the function of this faculty, are indispensable in the mental economy. It is true, that unless we err egregiously in our estimate of ourselves, the world will take us at our own valuation. A small variation above or below the reality, will not be perceived in so thronged a market, where so many mental bales are offered in exchange for their

equivalents. It is this faculty that in each individual instance fixes the standard of value. If, in consequence of its strength, this standard should graduate a little above the reality, so much will be gained; but if, in consequence of its weakness, it should fall below, so much will be lost, and, in too many instances, poor indeed the purchase.

This faculty exists in the animal world. It is manifested in the gorgeous display of the peacock, in the lofty bearing of the war-horse.

In man, when properly developed, it gives dignity and elevation to character. In its manifestations, the influence of other faculties is clearly traceable. This, combined with ample perceptive faculties, renders their common possessor proud of the facts he can adduce, the number and dimensions of his premises; combined with the reflecting, of the depth of his research, and the force of his conclusions; and combined with Ideality of the vividness of his fancy, and the enchantment of his imagery. It is thus that this faculty can be seen through the medium of others, and tinged, to a certain extent, with their colors.

The organ of this faculty is better developed in men than in women. It is better developed in some nations than in others. The English possess this as a national characteristic, while the French have it far less developed.

This faculty is one element in the love of power. It is large in the heads of the ambitious, and is dis-

tinctly recognized in those who are puffed up, and acquire a largeness of dimension in the exercise of a little brief authority.

The defective development of this faculty combined with large Veneration, is productive of deep humility. The defect of the first disposes its possessor to place no reliance on his own powers; the large development of the other disposes him to regard with a feeling of awe the display of power in others. The joint influence of both must dispose him almost to "apologize to every body for being in this world."

The large development of the organ and the abuse of the faculty, is productive of pride, arrogance, superciliousness and selfishness; the curl of the lip and the toss of the head. It is then that the emphatic *I*, is made to constitute the alpha and omega of its alphabet; that to *me* and *mine* is attached a great deal more consequentiality, than to *thee* and *thine*; that *my* views, and *my* opinions, and *my* conclusions, are altogether indisputable, and absolutely unquestionable; that the universe itself would have been exceedingly incomplete without the existence of its possessor; that he is the center of all systems, the main-spring of all movement, the nucleus around which perfection itself is honored in the high privilege of centering and attaching. In excess it disposes to censoriousness and envy. Loftiness of aspiration, unaccompanied with Conscientiousness and Benevolence, where it cannot

raise itself to the level of others, is disposed to bring others down to its own level. Envy results from Self-esteem and Love of Approbation, offended by the excellencies of others, and calling upon Combativeness and Destructiveness to revenge their wrongs, and to hate the object.

Even the abuses of this faculty are, however, productive of one good. Its possessor feels himself too nobly constituted, and of too much importance in the scale of being, to yield to the solicitations of the lower passions and propensities. They obtain little indulgence from him. The proud man is rarely guilty of meanness.

Self-esteem, when powerful, causes the individual to carry his head high, and reclining backward in the direction of the organ. It gives a cold and repulsive expression to the manners, and a stiffness to the general mode of conduct. Individuals laboring under a disease of this organ, have imagined themselves to be kings or emperors, or transcendent geniuses, or even in some instances have clothed themselves with the attributes of the Supreme Being, and arrogated to themselves the ability and the privilege of presiding over the destinies of creation.

This sentiment exists independent of others, and is found combined with large and small intellect. You will often observe the upper back part of the head, called the occipital region, largely developed, while the upper fore part, called the sincipital, is

small, so much that the top of the head forms an inclined plane, descending gradually from the crown or upper back to the upper fore part. Wherever this formation of head is observable, it is obvious that nature is proceeding in accordance with her great system of compensation established so universally through her ample dominions, the *real lack being compensated by the imagined possession.*

The organ is ascertained.

### 11. *Love of Approbation.*

The organ of this faculty is situated on each side of that of Self-esteem, or in the posterior, upper and lateral part of the head. When large it produces a remarkable fullness and breadth in the upper and back part of the head.

The function of this faculty consists in the feeling of pleasure we experience when our acts receive the approbation of others. It renders us strictly attentive to the opinions which the world may entertain in regard to us, and experiences pleasure or pain, according as those opinions are favorable or unfavorable. Its function has been too frequently confounded with that of Self-esteem. No two faculties, however, can be more widely variant. The one seeks only its own approbation for the acts of its possessor; the other, the approbation of others. The one, therefore, never travels out of itself in the legitimate exercise of its function; the other knocks at every door but its

own, for admission into the good graces of the occupant within. The one might continue to act, although every other being in creation of a kindred nature were erased from the record of existence; to the action of the other, the existence of kindred beings is essential. The one, with a moveless rigidity, looks down from the lofty summit of the perfections of its possessor upon the moving mass of inferior beings beneath, regardless alike of their applause or censure; the other looks up to those same beings for the smile of approval. Their functions are not only unlike, but the contrary of each other. It is possible for an individual to be too proud to be vain.

The function of this faculty loves approbation in general, without determining the means or the manner of acquiring it. The approval of others for acts noble or mean, great or insignificant, may furnish this faculty with aliment, according to its combination with others. Its office is simply to desire and love the approval of others for the acts of its possessor. The performance of the acts, and the shaping of the course of conduct, with the view of securing that approbation, are referable to other faculties that are found combined with it in the same individual. Those other faculties determine the kind of approbation sought, while the degree of it depends entirely upon the strength of this faculty.

This faculty, combined with Combativeness, in

the absence of the higher sentiments, originates the desire of obtaining the approval of others for the possession of those qualities that go to constitute the successful combatant. If to these Destructiveness be added, the desire is not confined to those qualities that constitute the successful combatant merely, but the combatant triumphing in the field of carnage, successful in the accomplishment of ruin, and in the spread of desolation; exulting in the reflection that his name will be borne down to succeeding ages by the tide of human blood he has been instrumental in shedding.

When coupled with the higher sentiments and strong reflecting faculties, it gives the desire of approval for high and noble attainments, such as exalt our nature, and dignify the species. Whoever, therefore, inquires the worth or value of a splendid reputation, or a laudable fame, or a high and noble glory, may receive for answer, that they gratify a particular faculty with which human nature is endowed, in combination with other faculties; and that the extent of that gratification which measures that worth or value, is dependent upon the strength of this particular faculty, together with the strength of the high and noble faculties combined with it.

When this faculty is coupled with those of minor magnitude, the functions of which possess less comparative dignity and worth, it leads to vanity, which is nothing more than the love of approbation for

trifling accomplishments, where superfcials take the place of substantials, and the foppery of the coxcomb is substituted for the wisdom of the philosopher.

It follows, as a necessary deduction from these premises, that the ascertainment of the kind of approval desired by the individual, or the acts to which that approval is desired to attach, would furnish us with the true barometer by which to measure the mental and moral worth of the individual. This ascertainment is, therefore, a great desideratum in the investigation of individual character. How is it accomplished? By observing the acts of others, that meet the approval of the individual we are endeavoring to fathom. We almost instinctively approve those acts in others, which, if they were our own, we should desire that others should approve. Hence that approval of the acts of others, voluntarily bestowed, furnishes us with the key to unlock the mental machinery, and enables us to compare the workings within with the developments without.

This faculty obtains among some species of animals. The horse, the dog, and the elephant, appear desirous of securing the approbation of their owners. In the dog in particular, the bestowment of this approval appears often productive of the most lively emotions.

In mankind, a due endowment of this faculty disposes to amiability of character. It originates in

the individual possessing it, the desire of pleasing others; for the approval of others can hardly be expected, or even desired, unless resulting from the pleasure of those bestowing it. It restrains the active exercise of those manifestations, the natural tendency of which would be to incur the disapprobation of others, and hence exerts a powerful agency in producing the courtesies and amenities of life. It is this faculty to which ridicule most powerfully appeals. It possesses an invincible repugnance to being laughed at.

The difference between the amiability, or disposition to oblige conferred by this faculty, and the feeling of kindness resulting from Benevolence appears to be this: that the first is exercised towards those who least require our aid; the second towards those who most require it: the first is most manifested towards our superiors; the last, to our inferiors: the first is governed more by the probable amount of good derivable to its possessor from others, in consequence of its exercise; the last, by the probable amount derivable to others from itself.

As a compensation for the greater bestowment of Self-esteem more generally upon men, this faculty is often found better developed in women. Its activity enters, as no small element, into the composition of the French character. With them it has been well observed, that "compliments and praises are the current coin of conversation, and glory the condiment of the whole feast of life."

This faculty presents a strong means of governing and guiding the passions and foibles of youth. Its susceptibility of being affected by ridicule, and its desire of approval, point it out as the rudder through the instrumentality of which the bark of our being can be properly directed through life's troubled ocean, avoiding on the one hand the Scylla of error, and on the other the Charybdis of folly.

This faculty, when strong, renders its possessor too tremblingly alive to the opinions the world may entertain of him. He imagines it has little else to do but to observe his conduct, scrutinize his acts, and speculate on his motives. The dicta of society are to him the originators, controllers and directors of his actions. Individuals who possess an imperfect development of the organs of this faculty, manifest a more or less complete indifference, an independence of character, and an undisturbed fixidity of countenance. Those, on the contrary, in whom it is largely developed, approach you with the beaming eye, the open countenance, the soft solliciting tone of voice, the whole appearance indicating that all the pleasures of their being had been for the moment summoned from their various homes, to bask in that sunshine of their soul, the approving smile of the one they love.

The organ is ascertained.

12. *Cautiousness.*

The organ of this faculty is situated in the upper posterior part of the sides of the head, upwards and backwards from Secretiveness. It is near the middle of the parietal bones. The difference between a large and small development of it, often exceeds an inch in extent. Its situation is particularly easy of observation.

The function of this faculty is to produce the instinctive impulse *to take care*. The emotion of fear is felt simultaneously with this impulse, and results directly from the operation of this faculty. Some have considered fear as a mere negative quality, arising from the want of courage, and hence have denied that it was derived from the active operation of any faculty. "It is a principle in Phrenology, that the absence of one quality never confers another." Every feeling is something positive in itself, and not a mere negation of a different emotion. The feeling of fear has something positive in its nature. Were it a mere negative, it would necessarily arise in the mind whenever that which, by its presence, prevented it from arising, was absent. Darkness is the negative of light, and the consequence is, that whenever light is absent, darkness must necessarily be. If fear be a negative, it must necessarily have a positive, in the presence or absence of which its existence or non-existence must essentially depend. The emotion, however, is found to spring into existence, in obe-

dience to external circumstances, and in this respect partakes of the nature of a positive emotion.

This faculty is the sentinel placed by nature at her out-posts, with instructions to give immediate notice of approaching danger. Its alarm gun is fired on the approach of any thing in the least degree calculated to injure or destroy. Danger and destruction exhibit themselves under so many diversified forms, clothed with so many varying circumstances, and not unfrequently on a sudden, without sending forth one warning voice to avoid them, that were the individual exposed deprived of a faculty like this, he might be destroyed before he could have time to dream of danger. Before the deductions of reason could arrive, the light of reason would be extinguished. This nature foresaw, and has accordingly provided against the necessity of delay, by bestowing a faculty, the emotion and impulse of which are instantaneous, and independent of reason. They spring into being on the presentiment of objects and circumstances in their nature calculated to excite them, and by their promptness of action ensure, if not safety, at least a provision for it.

This faculty is observable in the lower animals. It is largely developed in those of the timid kind. As might have been expected, from the harmony of her works, where nature has denied Combative-ness and Destructiveness the means of meeting and overcoming danger, she has bestowed Cau-

tiousness, to give timely warning of its approach, and to suggest an early flight in its avoidance. It is largely developed in those animals that place sentinels to warn them of approaching danger, as the wild-goose, chamois, cranes, starlings, and buzzards. In animals it is larger in the females than the males.

It is more largely developed in children than in adults. Its great use must be apparent during the helpless years of infancy, before a thorough knowledge is acquired of the properties and qualities of the objects surrounding the infant being.

This faculty is essential in the formation of a prudent character. It produces circumspection and considerateness of mind. Those who possess it are ever on their guard. They are well aware of the fact, that it is more difficult to sustain a reputation than to acquire it, and are therefore cautious in the acquisition of what they feel themselves incompetent to sustain. They readily recur to all the *buts* and *ifs* with which language abounds, and are particularly partial to the *subjunctive mode*.

This faculty is also vested with an important agency in restraining the undue action of the propensities. Were the combatant, for instance, to yield to the impulse of Combativeness only, he would fearlessly face the greatest peril and danger, entirely regardless of consequences. But when the odds against which he has to contend are fear-

ful, this faculty interposes, and wisely suggests that "discretion is the better part of valor."

When this faculty is too powerful, it is productive of doubt, irresolution, and wavering. Its possession to any considerable extent, is inconsistent with decision of character, and promptness of action. A too great and involuntary activity of this faculty, is productive of a *panic*, in which all the faculties seem unsettled, and swing for the time being from their firm moorings into the depths of doubt, irresolution, and despondency. The preponderance of this faculty, accompanied with a deficiency in the faculty of Hope, is productive of melancholy forebodings, dark doubts, and dismal expectations. To such the future presents a cheerless prospect. Instead of being illuminated by Hope, it is darkened by doubt and despair. The cherished beauties of our earth are birds of evil omen, and the clear sunshine of our heavens the deadly harbinger of woe. To live is the most intolerable of all burdens, and hence self-destruction is often resorted to as a relief from the distress of living. The occurrence of suicide may be expected when the fear of the miseries of life exceeds the fear of death.

The organ is considered ascertained.

From the department of feeling we have hitherto examined, man can rise only to the dignity of an animal. It is true he possesses the faculties we

have been considering to a greater extent, and susceptible of a greater variety of modifications, than are possessed by the animal world. Yet without the superaddition of others, he would remain at best but a superior animal. We now, therefore, ascend into the human region of the head, where we meet with the higher sentiments proper to man, whose duty and whose office it is to regulate the action of the lower sentiments and propensities.

### 13. *Benevolence.*

The organ of this faculty is situated in the upper part of the frontal bone, in the coronal aspect. It gives a height to the middle of the front part of the head.

The function of this faculty is to produce the feeling of Benevolence in general. It gives the desire of the happiness of others, and disposes to compassion. It is of the social, not of the selfish character. It is excited into activity on the presentment of objects in which distress and misery overbalance enjoyment. Its instinctive impulse is *to relieve*, and the emotion at the same time produced, is that of pity. In affording relief to distress, and alleviation to misery, this faculty experiences a gratification proportionate to the extent of its strength; but it never of itself forms ideas of the proper mode in which its gratification can be effected. Nature in this, and in all similar instances, seems to have wisely acted upon the principle,

that the faculties which feel should be directed by those which reason: that reason should have an agency in pointing out the objects most deserving of the exercise of their respective functions, and to suggest the proper means for accomplishing a desired object. Were it not for this provision in this instance, the means of affording relief within the power of the individual might be expended upon undeserving objects.

The acts legitimately resulting from the exercise of this faculty, cannot be mistaken. There is a kindness of manner, and an intrinsic goodness so evidently manifested in their performance, as to exclude their reference to any other than this faculty endeavoring solely to benefit its object. The springs of the selfish and social feelings are so essentially different, as almost to preclude the possibility of mistaking the one for the other.

This faculty has been considered by some as possessed by the animal world. The agency ascribed to it there, is the production of mildness and docility of disposition in the animals possessed of it. Whether these qualities actually do result from this faculty, or whether they ought not rather to be referred to defective Destructiveness and Combativeness, combined with large Adhesiveness and Love of Approbation, might, perhaps, be an interesting subject of inquiry.

This faculty is a great source of happiness to its possessor. In the proper and well-directed exer-

cise of its function, the highest possible delight is experienced. Nor is this delight, although of a nature high and holy, the only reward of the benevolent. He experiences the good will, and kindly feeling, and beneficent acts of others towards himself. It is a law to which there are few exceptions, that the same kind of spirit which we manifest to others, will in return be manifested by those others to us. There is a reason for this law, deducible from the principles of this science. Every act and every manifestation of ours in relation to others, results from one or more special faculties. Those acts and manifestations address themselves to the same kind of faculties in others from which they resulted in us. The faculties in others thus addressed, respond by making a similar return. You have seen the storm of passion met by a storm of the same description. You have also seen acts of goodness responded to by similar acts.

This faculty is the instrument a provident God has furnished to alleviate, as far as human agency is permitted, the miseries of the wretched, the distresses of the afflicted, and the woes of the disconsolate. It induced a Clarkson and a Wilberforce to exert their energies in the suppression of human traffic. It led a Howard into every prison in Europe, with the view of relieving poor, debased, distressed humanity, of whatever name, or tongue, or creed, or color. In its operations it is unconfined by artificial distinctions. It only asks whether

there is distress to be relieved, or misery to be alleviated, or wounds to be healed. It inquires not of the Brahmin his caste, of the Christian his creed, or of the fashionable world its mandate. It is man only who originates distinctions. The gifts of nature are general, and free and unrestrained as the range of her own mountain zephyr.

This, like every other faculty, is liable to abuse. When too vigorous, it produces profusion, and thus, although "its errors lean to virtue's side," yet it would tend to encourage imposition, by attempting to relieve alike, real and pretended wretchedness.

The organ is ascertained.

#### 14. *Veneration.*

The organ of this faculty is situated in the middle of the upper part of the head, directly in the rear of Benevolence. The development of both gives a high appearance to that part of the head. This faculty is better developed in women than in men.

The function of this faculty is to produce the sentiment of veneration in general. It has no agency in selecting the object towards which that sentiment is directed. It feels a respect, and deference, and awe, towards any being decided by the understanding to possess superior powers to its possessor. Hence the deference paid to wealth, and rank, and station. It is the general preserver of political order. It reverences present power.

It feels a respect for existing authority. To its dictates the monarch, in a great measure, owes his safety; the nobility their security; the agent clothed with delegated power, his respect. It is excited into activity, even by the manifestation of superior power. It looks with awe upon the lofty temple, gives solemnity to church-yard musings, and deeply affects our feelings while standing before the tomb of departed greatness. But if its agency be important in securing to earthly power its proper influence and continuance, by the respect inspired by its exercise, it is not less so in elevating our feelings to the source of all power, the spring of all energy, the cause of all causes.

Its highest and noblest function is the feeling of adoration inspired by the contemplation of a being supreme in his attributes; who is the end of all thought, the conclusion of all premises, the ultimate result of all conclusions. The human mind has ever been disposed to recognize a power higher than itself; and the being exercising this power, this faculty has ever been disposed to venerate. The qualities and attributes with which this being has been invested, have depended upon the faculties possessed by those who selected it. The Grecian venerated his Jupiter, the Aboriginal of America his Great Spirit, the Hindoo his Ganges, and the Egyptian his Crocodile. The great variety in the objects venerated, proves that they were selected by different faculties, or by the same facul-

ties possessing different degrees of strength. The ruder the people the ruder the gods they worship. It is ever the same faculty that gives birth to the sentiment, but the objects toward which that sentiment is directed, have ever been found to vary with the march of improvement. There is a regular advancement, from the Apis of the Egyptian, through the Jupiter of the Grecian, the jealous Jehovah of the Hebrew, up to the mild and benevolent God of the Christian. Were we thoroughly instructed in the theology of different nations and ages, we should be possessed of a perfect barometer to measure the extent of intellect, and the depth of feeling possessed by different nations in different ages.

The existence of this faculty is proved by the universality of its bestowment, and by the distinct and independent nature of its function. From the palace of the prince to the hovel of the boor, all nations and ages have possessed their deities and modes of worship. The emotion or feeling itself is independent of reason. It may prevail to the same extent in the solid and superficial reasoner. It is not when deeply engaged in investigation, or in reasoning upon the structure and operations of universe, that this emotion arises. It is when we cease to reason, and merely contemplate, that it springs voluntarily into existence. The faculty being once admitted, the existence of the Supreme Being, as its object, is easily proved. The facul-

ties are all placed in relation to certain objects or things, either internal or external. These faculties prove as clearly the existence of the objects or things with which they are in relation, as they prove the existence of themselves. The faculty of Individuality, for instance, perceives individual existences. Those individual existences are the objects or things with which it is in relation. But for their existence, it is clear the faculty that perceives them could have none, as there would then be nothing for the exercise of its function. The faculty of Veneration is in relation with the Supreme Being. It proves, therefore, the existence of the Supreme Being, as clearly as it proves the existence of itself. The true phrenologist can no more doubt the existence of a God, than he can doubt his own existence—which last cannot very consistently happen as long as he continues his belief in the existence of faculties and organs.

This faculty rushes into exercise whenever and wherever are perceived displays of strength, and terror, and grandeur, and sublimity. Is nature convulsed in the deep and deadly heaving of the earthquake? We may then and there expect to witness its manifestations. Does she mantle her polar regions with the wide-spreading luminous sheets of her aurora borealis? We may look for them there. Does she dispatch her fiery bolt, bearing her message of mercy or of misery, almost with the celerity of thought to a returnless dis-

tance from its starting place? We shall find it running parallel with its immeasurable rapidity. Does she light up her mountain flambeau on the blazing brow of the volcano? We may there look for and seek and find the home of its spirit. In fine, wherever the intellect discovers evidences of design, or traces of causation, or displays of power, or manifestations of energy, we may there find this faculty, with firm fidelity, and unshaken confidence, and unwavering constancy, reposing upon the bosom of the being, whoever he may be, to whom that design, and those traces, and displays, and manifestations, are all referable. The phrenologist can only cease to believe that religion is an element in human nature, when he ceases to believe in the great principles of his science. That element is found in the existence and exercise of this faculty; and this faculty is the same in its nature, whether it be ill or well directed in its exercise: whether we find it bowing at the shrine of an Indian pagod, or worshipping in the mosque of the Moslem, or sending forth its chastened and subdued aspirations from the church of the Christian. In extending its range, and thus embracing the whole human family, it overlooks particular creeds, and sects, and denominations. The universe is its temple, nature's music its orisons, nature's creator and sustainer its God, and its own deep gush of feeling its spontaneous offering.

## LECTURE V.

15. *Firmness.*

THE organ of this faculty is situated at the top of the head, directly in front of Self-esteem. It was early observed by Lavater, that persons endowed with perseverance and firmness, had the top of their heads very much developed. The deductions of the physiognomist, and the observations of the phrenologist, in this respect coincide.

The function of this faculty is to give constancy of effort and perseverance of purpose. Its situation is in the midst of the other sentiments, and its office essentially consists in giving continuance to their action. Those in whom it is weak easily yield to solicitation, and are more accommodating to events, more the creatures of circumstances. When excessively strong, it is productive of a pertinacious obstinacy, that yields to no solicitation, and is only strengthened by entreaty. It then gives a stiffness to the gait, and to the voice a tone peculiarly emphatic. Its effects are often termed *will*, but they are not strictly acts of volition. They are a continuance in the same purpose, the same mode of thinking, and the same course of action.

This faculty continues in sustained action those

faculties with which it is combined. With Combativeness, it produces determined bravery; with Conscientiousness, uncompromising integrity. It is productive of fortitude and patience, and is largely developed in the head of the American Indian. It communicates the quality of perseverance, and thus contributes to success in enterprize, and is essentially necessary to the attainment of individual eminence. Its function is mainly summed up in two words, endurance and perseverance.

The organ is ascertained.

#### 16. *Conscientiousness.*

The organ of this faculty is situated on each side of that of Firmness, upward and forward from Cautiousness, forward from Love of Approbation, and backward from Hope. It is established.

The function of this faculty is productive of the sentiment of justice. It is, so far as regards its peculiar feeling, the "moral sense" of the metaphysician. It gives the feeling of what is right, just, and correspondent to the moral fitness of things.

The acuteness of this feeling is never necessarily proportioned to the strength of the intellect. It cannot be too thoroughly understood, that the understanding or intellect never feels. That is no part of its office. It is alone the province and the privilege of the sentiments and propensities. Were they in this instance combined, dishonesty, immo-

rality and knavery, would be confined to the weak in intellect, and a strong minded knave would be an inexplicable anomaly. We have all seen this feeling in its strength combined with the intellect in its weakness; and this feeling in its weakness combined with the intellect in its strength. Neither is its strength or weakness dependent on the existence of any other sentiment or propensity. A man may be just without being benevolent, and benevolent without being just.

Intellectual operations are, however, necessary to lay a foundation, or rather to furnish materials upon which this faculty can act. It never, of itself, forms ideas. The subject matter upon which it exercises its peculiar function, first passes through the alembic of the understanding. One of the great beauties of this science consists essentially in the distinctness of the office assigned to the primitive faculties; in the nice ascertainment of their different boundaries, or spheres of action; and in the determinateness of their action within those spheres. All are independent, because one is as much so as every other; and all are, in one sense, dependent, because mutual relations exist between each. These mutual and reciprocal relations are more obvious when we include within the same view, the department of feeling and intellect. Feeling is dependent upon intellect for the original perceptions and ideas upon which its own peculiar action is consequent; and, in return, intellect is de-

pendent upon feeling for the stimulating motives that induce its sustained action. As intimate a relationship is thus established between the two, as exists between the circulating and nervous systems of the organized body.

In regard to the function of the faculty we are at present considering, before the moral nature of an act can be felt, the understanding first scans the motives that prompt to its performance, and investigates the long train of consequences resulting from it. When the ultimate tendency of the act to the production of good or evil is once determined by the understanding, this faculty operates upon the motives thus scanned, and pronounces upon their justice or injustice, their morality or immorality. The motive is inferred from the character and circumstances of the act. This, therefore, is the peculiar province of the understanding. The justice or injustice, the morality or immorality attaching to the motives that produce that act, according as its ultimate tendency is to good or evil, are felt by this faculty. The one is an inference, the other a feeling.

The different codes of morality that have at different times been promulgated, have, in some respects, been accommodated to the spirit of the age that produced them, but more especially to the combination of faculties immediately instrumental in their production. Hobbes maintained that, "We approve of virtuous actions from self-love, know-

ing that whatever promotes the interests of society has on that very account an indirect tendency to promote our own."

Mandeville maintained that "Man is utterly selfish, that he has a strong appetite for praise, and purchases this praise by the practice of moral virtue."

Hume thought that "Utility is the constituent or measure of virtue."

Dr. Adam Smith endeavors to show, "that the standard of moral approbation is sympathy on the part of the impartial spectator with the action and object of the party whose conduct is judged of."

Even the popular Dr. Paley has adopted, to some extent, the selfish system. According to him, "Virtue consists in the doing good to mankind, in obedience to the will of God, and for the sake of everlasting happiness." The will of God is here alleged to be our rule, but private happiness our motive.

The science of Phrenology excludes the selfish doctrine, and ascribes to this faculty the feeling of right and wrong, or justice and injustice, independent of the particular circumstances or situation of the individual, or of the manner in which that feeling may affect him. In its dicta are to be sought and found the essentials of our moral nature—of that nature that elevates man above the animal, and serves to direct his own animal nature.

It is interesting to observe the manner in which

inferior yield to superior laws. The laws of attraction, which are common to all matter, yield to the action of chemical laws. The elective supplants the general attraction. Both these and all the laws of mere matter cease their action in organized bodies. They yield to the laws of organization or mere life. These last are more or less modified by phrenic laws or laws of mind. In these phrenic laws there is also a system of progression. The laws regulating the action of the lower animal and selfish nature, either cease, or are essentially modified or directed by those regulating the higher, social and moral nature of man. This faculty originates that nature. It feels the justice or injustice of acts, according to their good or evil tendency. It is immaterial, as regards that feeling, whether those acts affect the individual himself beneficially or injuriously; whether they advance his weal or woe. Standing upon a proud pre-eminence, above where the cold calculations of self ever dare their flight, it stimulates the intellect to take a wide survey of the causes and consequences of human actions, and if the ultimate tendencies of an act be to the production of good, no matter how injurious may be the immediate consequences of its performance; no matter what amount of pain it may immediately inflict upon the actor or upon others, it pronounces with oracular solemnity, "*Fiat justitia ruat cælum.*"

This faculty, when strong, is attended with a

feeling and a consciousness of its own paramount authority over every other. It may well possess this feeling. It is a tribunal before whose tremendous decision even the strong solicitations of self are hushed into the silence of non-existence. It ceases to be appealed to when it becomes weak in the exercise of its function, or when the animal or lower nature strongly predominates. That man may safely calculate that he has reached the lowest possible degree of moral degradation, who has ceased endeavoring to justify his actions even to himself.

This faculty is greatly instrumental in properly directing the other faculties. It restrains the undue action of the propensities, by reminding its possessor of the rights of others. It even resists the promptings of Benevolence, by issuing its authoritative mandate, "Be just before you are generous." From it, combined with Benevolence, arises the sentiment of gratitude. A mere matter of right has no claims to a grateful return. We must feel, therefore, that the favor conferred cannot be claimed as a right, before we can experience the feeling of gratitude. Repentance and remorse are also among the consequences of its active exercise. Without feeling that we have erred from what is just, repentance could never take place, or remorse be experienced.

Conscience, or sentiments of duty, are divided by Dr. Spurzheim into three kinds.

*First.* Natural or absolute sentiments, which arise from the dictates of this faculty in union with the dictates of all the other faculties proper to mankind. These sentiments constitute one important line of demarcation between man and animals.

*Second.* Individual, particular or relative sentiments, which result from the dictates of this special faculty, modified by the influence of the other faculties which predominate in the individual. From these arise the differences in moral judgment among mankind. They, therefore, vary often among different people, in different ages, and in different conditions of society.

*Third.* Positive sentiments, which are fixed by legislation. These last, however, can only be said to be ascertained and settled by positive enactment. They existed as fully before that ascertainment and settlement as the equality of the sides of a square, existed before it was protracted upon paper.

This faculty is easily experimented upon. We are enabled to judge very correctly of its strength or weakness in others, by the kind of moral judgment we find them passing upon human actions. That kind of judgment flows legitimately from this faculty, and speaks a true language in regard to it, because when defective it cannot even appreciate the acts of others that originate from a strict sense of justice. By comparing the strength or weakness of the faculty thus ascertained, with the magnitude of external development, we can test, so far

as this faculty is concerned, the truth of the science, so far, at least, as concerns its reduction to practice.

### 17. *Hope.*

The organ of this faculty is situated on each side of that of Veneration, and extends under part of the frontal and part of the parietal bones. It is regarded as established.

This faculty produces the sentiment of hope in general, but never forms ideas. It gives a tendency to believe in the possibility of attaining what the other faculties desire. It is different from desire itself. That appertains to all the faculties that feel, each, in its own peculiar manner, desiring that, the possession of which administers to its gratification. This faculty stimulates that desire, by inspiring a belief that the possession of the object or thing desired is obtainable. Its function is more strongly displayed in the direction of other faculties. Combined with large Acquisitiveness, it hopes to become rich; with large Secretiveness, to maintain a secrecy of movement; with large Self-esteem, to secure the respect of others; and with large Love of Approbation, to achieve a splendid reputation, and become encircled with a brilliant halo of glory. When combined with defective Acquisitiveness, it often disposes to indolence, as it inspires the belief that the future will provide for itself.

The function of this faculty seems to be the reverse of Cautiousness. It encourages the progress onward by its specious illusions, regardless of the obstacles in the way of its progress. It affords anticipations of the future not reflected from the mirror of the past, but adorned with its own imagery, and heightened by its own coloring. It is the parent of disappointment, because realities are seldom found to square with its inspirations. Notwithstanding, however, the frequency and severity of disappointment, it still hopes on, and thus continues till its function terminates.

This faculty in religion is productive of faith. Faith is, in fact, defined to be "the substance of things hoped for." It inspires a reliance and a confidence in the attributes of the being adored by Veneration. It is therefore an essential element in man's religious nature.

We have seen that theology is indebted to this science for the direct proof it furnishes of the existence of a Supreme Being, in the fact of the bestowment of the faculty of Veneration. Based upon the same chain of reasoning, may we not recognize in this faculty evidence of the existence of a future state? With such a state this faculty seems to be in relation. Its home is the future. Nor is it confined within that limited horizon, that bounds our earthly vision. It penetrates the thick gloom that settles over the final resting place of its organ, and dares its flight into the illimitable

future beyond it, with untiring wing and unquailing spirit. Even in time it stretches into eternity, and revels upon the joys and delights that can cease only with the capacity for enjoying them.

United with the faculty of Conscientiousness, the pure feeling of right and wrong is experienced, from which arises the conviction of accountability, and from the union of both results the belief in a future state of rewards and punishments.

It is thus that man's moral and religious natures are found to harmonize with each other. Veneration adores a Supreme Being; Idealty invests him with its beauty, Benevolence with its goodness, Conscientiousness with its justice, while Hope, with undrooping pinion, carries forward their joint possessor to experience the exercise of the attributes of that being, through a never-ending eternity.

It is one of the great beauties of this science, that it adapts man at the same time to earth and heaven. That it makes him a composition of various faculties, some of which are so framed as to place him in relation with the elements and irrational beings around him; others place him in relations with his own species; others again, of a nature still higher and holier, place him in relations with his Creator as the moral governor of the universe. He may thus be compared, (although the comparison is defective in the length of its reach,) to the tall tree of the forest, whose roots are embedded, and absorb the grosser fluids of earth, while its

leaves, and buds, and blossoms, are drinking in the purified dews, and refined ether, and clear sunshine of the heavens.

18. *Wonder, or Marvelousness.*

The organ of this faculty is situated above Ideality, and anterior to Hope. A great development of the convolutions on which it depends, enlarges and elevates the superior and lateral parts of the frontal bone, or bone of the forehead. It is regarded as ascertained, as also is the general function of its faculty.

The function of this faculty is to give the feeling of the marvelous. Events that are strange and unaccountable, and miraculous; that require the exercise of supernatural agency in their production, are peculiarly the food of this faculty. It travels beyond the established laws of nature, and seeks for the immediate interposition of supernal power in the production of events consistent only with the suspension or violation of those laws.

Many entertain a strong belief in the existence of ghosts, phantoms, and beings clothed with a power that is not of earth. Socrates had his spirit or demon. Tasso conversed with familiar spirits, and Swedenborg communicated immediately with angels and spirits. Some are gifted with what is called second sight. Some believe in magic, sorcery and witchcraft.

The earliest traditionary accounts of our world,

when fable is substituted for history, and what might have been takes the place of what actually was, furnish this faculty with the fullest freedom of exercise. It then swells men into heroes, heroes into gods. It peoples the streams with mermaids, and the earth with centaurs.

This faculty essentially assists the commanding genius. It prompts to the introduction of machinery, thus assisting the agents of power in this world by reinforcements from the imagined domains of another.

The faculty has, at times, been exhibited in a diseased state. Many curious instances of diseased affection of this organ, may be found in Sir Walter Scott's work on Demonology. The numerous spectral illusions there mentioned, continued their existence, although the intellect was convinced of their fallacy.

### 19. *Ideality.*

The organ of this faculty is situated a little above the temples, over the organ of Acquisitiveness, extending back as far as that of Cautiousness. It is ascertained. When largely developed it gives a ridgy appearance to that part of the head.

The function of this faculty gives the feeling of the sublime and beautiful. It deals in loftiness of conception, grandeur of idea, and beauty of imagery. It seeks in every thing the beau ideal of perfection. All magnificence of scenery—the cloud-capped

mountain, the tumbling waterfall, the descending avalanche, appeal to this faculty, and find a ready response in the depth of its emotion.

There are qualities in the things around us other than those that administer to pure usefulness. This globe would have been habitable to man, had nature denied him the soft undulatory landscape, the variegated flowers of the field, the winged music of the groves, and all those harmonious arrangements that develope the spirit of beauty. But she bestowed upon man this faculty, and at the same time she threw over creation the mantle of loveliness. She never bestows a faculty without at the same time bestowing that with which she destines it to be in relation.

This organ is the hallowed sanctuary of poetry. The poet is at home in nature's vastness, sublimity and beauty. He etherializes every thing. He gives to the tree a tongue, to the landscape a language, to the mighty agents that fulfil the high behests of heaven, a glowing and impassioned eloquence. He rocks in the earthquake, lives in the lightning, desolates in the tornado, and blasts in the siroc. In the bust of Homer this organ appears extraordinarily developed.

This faculty is easily detected in the style of the writer possessing it. It gives a fullness and a flow of imagery, a vividness of conception, and an amplitude of expression. No one can fail to discover it in the writings of Chalmers.

In combination with other faculties, it enlarges, their sphere of action, and carries them forward by imparting to them, to some extent, its own high inspiration. It gives to Acquisitiveness a buoyancy in search of wealth; inspires Love of Approbation with a keener relish for approval; and imparts to Veneration a deeper adoration of the being it venerates.

It gives sprightliness and life to conversation, striking by the force and novelty of its arrangements, and by the singularity and aptness of its illustrations.

This faculty is not alone satisfied with natural arrangement. It delights in fiction, and feels all the beauty and sublimity of an arrangement of things, circumstances and events that never occur in the order of nature. It never of itself forms ideas, and cannot, therefore, immediately originate the fictitious arrangement from which it experiences delight. That arrangement is the work of the faculties that form ideas, but those faculties are stimulated to this work, through the predominating influence of this faculty. It uses those faculties as instruments, through which those novel arrangements are effected, and then itself feels the force and beauty, and sublimity of those arrangements. It inspires exaggeration and enthusiasm; for when once the creations of intellect are substituted for the realities of nature, the mind grows enthusiastic from the view of the perfection of its own work.

When powerful, this faculty gives a tinge to all the others, employing them solely in splendid creations for its own gratification. Were it solely to predominate, it would render its possessor scarcely a fit tenant of this world; for its own creations, however beautiful or splendid, would be but an ill substitute for the sober realities of life.

This faculty would seem to form one connecting link between man and beings of a higher order. From its own inherent gratification in novel arrangements, we have seen that it stimulates the faculties that form ideas to intellectual creations, in that respect approximating man to higher orders of being, who can create in fact, as he can in fancy.

#### 20. *Wit, or Mirthfulness.*

The organ of this faculty is situated in the upper and lateral parts of the forehead. It is on each side of the organ of Causality. The width of the forehead in its upper region, indicates the extent of its development. It is ascertained.

The function of this faculty is to give a sense of the ludicrous. It expresses its inward feeling by an outward display of mirth, and gaiety, and laughter. These must not be confounded with satisfaction and contentment. They appertain alike to every faculty, and result from the healthy action of each, in its undisturbed freedom of function. The gay and the mirthful are not always the most at

ease. The sickly heart is often concealed under the mask of gaiety. Like the blazing fuel, it is itself consumed by the very brightness that enlivens those around it.

The faculty of Secretiveness in combination with this, is productive of humor. The essentials of humor are rather to be sought in the manner of utterance and action, than in the thing uttered or acted. To Secretiveness it is indebted for its slyness, and to this faculty for its ludicrous appearance. These faculties are also essentially assisted in this mode of exhibition by Imitation. The latter faculty is often the channel through which humor displays its curious workings. Satire and sarcasm, as we have already seen, result from this faculty, in combination with Combativeness and Destructiveness.

Wit is, perhaps, the best understood, and the least susceptible of being defined, of any mental phenomena. It is styled by some metaphysicians, a "habit of association." This is solving a less difficulty by the adoption of a greater. It is enlightening twilight by midnight. No original cause of mental phenomena can ever be explained by habit. All there is of it is a mere facility in the performance of an act, in consequence of the frequent repetition of it. It is itself, therefore, an effect, and not a cause, and hence entirely inadequate to unravel or explain first principles. If it be a habit there must have been some original pre-

disposition or bias towards associations of that kind otherwise the habit could never be formed.

Wit may be defined to be a "mixture of congruity and incongruity," or rather, "an incongruity appearing where a congruity was expected." As, for instance, in the similie in Hudibras:

"When, like a lobster boiled, the morn  
From black to red began to turn."

Or,

"He had been beaten till he knew  
The wood whereof the cudgel grew,  
And kicked until he could tell whether  
The shoe was Spanish or neat's leather."

The true genuine exhibition of wit often consists in the association of things together that are remotely related to each other. Such associations strike us by their occurring suddenly and unexpectedly. In their production, the faculties that form ideas must necessarily have an agency. What we have already found Ideality to be in the regions of poetry and fiction, we now find this to be in those of wit and mirthfulness. It stimulates the faculties that form ideas to associate together those objects and things from which this peculiar quality results; and then itself *feels* the whole force of those associations. When strong, it can manufacture wit out of every thing around it. The laughing eye, and the peculiar risibility of countenance, admonish you of its approach.

21. *Imitation.*

The organ of this faculty is situated in the superior part of the forehead, on each side of the organ of Benevolence. When strongly developed, it forms an elevation, of a hemispherical form, at that part of the forehead. It is regarded as ascertained.

The function of this faculty gives the desire to imitate in general, and feels the force of all apt and appropriate imitations.

This faculty has a wide sphere of action. Men, manners, the animal world, are all within its range. It prompts to imitation generally, without determining its kind. Its particular direction is governed by the predominating influence of other faculties with which it is combined in the same individual. The imitation of the ludicrous is prompted by this, in connection with Wit, or Mirthfulness. The joint possession of these constitutes the complete mimic. One of the most extraordinary conjunctions of these faculties ever yet witnessed, was exhibited in the person of Garrick.

Combined with large Form, Size, Coloring, &c., it produces the portrait painter: with Locality the painter of the landscape. Combined with large Form, Size, Individuality, &c., it constitutes the sculptor. It gives to the canvass its living glow, and to the productions of the chisel the mimicry of life.

The organ is more fully developed in children

than in adults. To them the faculty is more necessary. It enables them to act in trifling matters before reason has become sufficiently strong to investigate the principles of action. A large development of this faculty is an ingredient in the composition of an accomplished actor. The commanding speaker, whose gestures enforce the language that accompanies them; who throws around him the radiance of thought; whose external expression is the mirror of his internal feelings, is indebted mainly to this faculty, in combination with Secretiveness and Ideality, for this power, and force, and impressiveness of manner.

We have now completed the view of one great mental department—the department of Feeling. It cannot be too thoroughly borne in mind, that the distinct duty of this department, and all the office the faculties composing it perform, is to feel in a certain way, and to produce tendencies to act in a certain direction. They never form ideas, and are properly under the direction and guidance of the superior intellect. They are not, however, for that, the less essential to constitute man what we find him—a mingled compound of feeling and reason. Without their necessary agency he would be perfectly feelingless, and passionless: as cold as the “stone that is sprinkled with the damps of the sepulchre.” With the pleasures and the pains of the sensitive beings around him he could entertain

no sympathy, no community of feeling. He would look upon the most extatic exhibition of delight with the same dead repose, the same moveless indifference, the same coldness, that he could witness "the death damp wiped from the brow of the dying." In them is to be sought the grand manufactory of motives. They diversify the varied scenes of existence. They disturb the otherwise placid surface of reflection with the ripple of action. They supply the force that continues the machinery of intellect in motion.

No knowledge of external nature could ever be acquired through their agency alone. True they act upon the knowledge of the external world acquired through the medium of the intellectual faculties, in return for their vigorous promptings to intellectual action; but they could never, of themselves, acquire that knowledge. The individual might be in the amplest possession of them, and yet, if destitute of intellect, would be a stranger to every thing earthly. The perceptive faculties, through the instrumentality of the external senses, draw aside the curtain, and introduce man to the world he inhabits. Some of these make him acquainted with individual objects and their physical qualities, while others acquaint him with the different relations existing between different objects. These faculties form ideas, each of a certain kind. The higher the functions of the faculties rise, the less vivid is the emotion attending their active

state. The activity of these faculties during the day is almost incessant; and were the emotions attending that state of a vivid character, their continued existence could hardly be endured. Our acutest pleasures and pains have one property in common—a brevity of being. A long continuance of either would be alike insupportable.

The intellectual faculties are under the dominion of the will, and the ideas they form may be recalled by an act of volition.

### 22. *Individuality.*

The organ of this faculty is situated immediately above the root of the nose, between the eyebrows. When largely developed it produces breadth between the eyebrows, and enlarges the forehead at that spot. A depression of that particular part always indicates a defective development of the organ; but a prominence cannot always be calculated upon as affording infallible indication of its large development, as the frontal sinus, wherever it obtains, is a disturbing element in the estimate.

When the newly arrived being first opens its eyes upon this world, it perceives around it individual existences. It requires no previous instruction to create an ability to perceive that one thing is not another, and that the existences around it are distinct, separate, and independent. It is the peculiar function of this faculty to vest in the being

possessing it the sense of individuality, or perception of distinct existence.

The general qualities and properties of the material world are taken cognizance of by other faculties. The faculty of Form perceives the form of bodies; that of Size, their size; that of Coloring, their colors; that of Number, their numbers; that of Eventuality, their acts: but neither of these takes cognizance of the combined result, and apprehends the individual. It is the special function of this faculty to embody all the elements furnished by the other faculties, and to recognize in them the mere individual, possessing a distinctness from every other; a separateness from the common mass; an independent source and centre of life, and power, and existence. Thus, if the object be a man, the faculty of Form perceives the form of the different parts that compose him, that of Coloring their colors, that of Size their size, that of Order their orderly arrangement. Yet all the information conveyed to us by these and other faculties, without the agency of Individuality, would never acquaint us with this lord of the lower world.

This faculty, in general, will be found largely developed in children. To its early activity in them is owing the facility with which they acquire individual knowledge.

The changes that are observed to take place in the heads of individuals, in the different stages of their being, when properly observed, will be found

to furnish irresistible proofs of the truth of this science. In the infant state the cerebellum is comparatively nothing. The other propensities and the sentiments, with the exception, perhaps, of Veneration and Benevolence, are more or less developed. It is necessary they should be to stimulate the perceptive faculties. The reflecting are less ample. The cerebral energies of the young system are, therefore, more expended upon the perceptive faculties, and the infant mind is more busily employed in laying up facts and phenomena, than in reasoning upon them. The development of the high reflecting powers, and the sentiments of Veneration and Benevolence are of later date, and belong to the mature man, after all the phenomena are observed, and facts accumulated.

The progression of mind is from perception to reflection—from facts to inferences—from premises to conclusions. I can compare it to nothing better than to the snow-ball, that, with exceedingly contracted dimensions, commences its progress from the lofty summit of some Alpine cliff. At its starting point, the might of an insect might arrest its motion. As it continues to progress onward, over tracts unsoiled by the footsteps of man, it increases in velocity and size, and consequent power, until at length, its journey performed, it reaches the mountain's base, a tremendous, resistless and overwhelming avalanche. So also the infant intellect, when it first starts forth on the career of its young

existence, is of a humble and teachable nature. It asks of every thing around it, instruction. It seeks for its own proper and appropriate aliment, in the earth beneath, in the things around, in the heavens above. As it continues its progress, its progression becomes expansion, its powers are increased, its energies developed, its reach lengthened, and its grasp more tenacious—until, at length, in the perfect physical frame, it stands forth in the complete amplitude of all its gigantic dimensions, armed with a kind of fearful omnipotence, for the production of good or evil upon earth, and capacitated in itself alone to render this globe a palace or a prison, a paradise of pleasure or an abode of pain.

This faculty is an essential ingredient in the composition of the artist. It confers upon him the ability of imitating nature more perfectly in the production of individualities, and of investing the marble block with, at least, the tangible properties of humanity. It enables him to give to every product the appearance of substance and reality.

When this faculty is strong, it is productive of errors in philosophy, in the strong propensity it originates to individualize abstract ideas. It is then that motion, life, wisdom, judgment, &c., enact their parts in the garb of individuals.

When weak, it leads to utter inattention in observing things. Its extremely defective development may, perhaps, form an important ingredient in the formation of that curious production, the

doubting philosopher, who continues most sturdily to deny the reality of external existences, notwithstanding the crack of his head against a post would tend so feelingly to convince him of the reality of pain, as would lead him, one would suppose, to infer the reality of its cause.

### 23. *Form.*

The organ of this faculty is a development of brain at the internal angle of the eyes, and within the orbit. The tendency of it is to push the eyeball towards the outer angle, and thus create a greater distance between the eyes. The organ is ascertained.

The function of this faculty is to perceive clearly the form of bodies. This quality of material objects is made known to this faculty through the medium of two senses: namely, touch and seeing.

This faculty exists in the animal world. Honey bees distinguish those of their own hive from any others. Elephants and dogs recognize their keepers after a long absence. In some nations this faculty is better developed than in others. It is large in the Chinese and French.

It is this faculty that takes cognizance of the roughness and smoothness of bodies. It gives the power of cutting or carving figures with accuracy, is useful to the painter, and enters as an important constituent into the formation of a mechanical genius.

When strong, this faculty gives the powerful tendency and disposition to invest every thing, whether material or immaterial, with some kind of form. It assigns to the Creator the form of a man, annexes wings to Time, and recognizes Death in a fleshless skeleton, regarding that either as the symbol of its office, or the trophy of its triumph.

#### 24. *Size.*

The organ of this faculty is placed at the internal corner of the superciliary arch, on both sides of Individuality. It is, to some extent, obscured by the frontal sinus, wherever that obtains. It is stated as only probable.

The function of this faculty perceives the size of bodies. This is a perception quite distinguishable from that of form. The form of two bodies may be the same, and yet their size materially differ. Some easily judge of form, and yet are unable to judge of the proportions of size. The power conferred by this faculty is important to geometricians, architects, carpenters, mechanics, portrait painters, and to all who deal in dimensions. Together with locality it produces conceptions of perspective.

#### 25. *Weight.*

The organ of this faculty is situated in the superciliary ridge of the eyebrow, between the organs of Size and Color. It is observed that upon each of the minute organs situated in that ridge,

which are already ascertained, only one convolution of brain is bestowed. Between Size and Coloring lies a convolution which is supposed to constitute this organ. Its existence is stated as probable.

The function ascribed to this faculty is the apprehension of the weight or resistance of bodies. These qualities of bodies are essentially different from every other, and require, therefore, the agency of a distinct faculty in their apprehension. A large endowment of it, is necessary to constitute the perfect mechanician. The mechanics, in fact, essentially consist in the strong effort to overcome resistance by means of contrivances. In them we recognize the warrant of nature, authorizing a temporary suspension or violation of her own laws for human convenience. This faculty, by means of its clear conception of resistance, avails itself of every possible means of overcoming it. It is largely developed in the bust of Archimedes, in the head of James Watt, and in the bust of Perkins. The faculty is possessed by all those who readily avail themselves of mechanical means in the accomplishment of ends.

An additional and more extensive function is ascribed to it, namely, the perception or the sense of equilibrium. It is observable that the state into which every thing is brought, through the operation of natural laws, if there were no disturbing force, would be that of equilibrium. This state,

however, is constantly disturbed, and there is as constant an endeavor to regain it. All muscular movements, the flight of the bird, the swim of the fish, the motions of the animal, the walk of the man, are constant departures from, and restorations to, a state of equilibrium. The clear perceptions of that state lead to a more perfect action in accordance with it. The centre of gravity is preserved with much greater ease by some than by others. The feats performed by the rope and wire-dancers are inexplicable, except as the results of a strong sense of this state. It gives gracefulness and ease to all muscular movements.

This faculty, like all the others, is weak in infancy. Hence the inability of the infant to walk, or to preserve a perfectly erect attitude. In advanced life also, when age has seared the faculties, this is a sufferer in common with others, and, from its weakness, gives rise to the uncertain totter of the feeble frame.

The weakened or deranged function of this faculty is also exhibited in the state of intoxication. It is then productive of the stagger of drunkenness. The man in the intoxicated state has no central point. Perpendiculars are confounded with horizontals; and the body is often in a state of parallelism to the surface of the earth before the owner dreams of a proximity to so close an acquaintance.

**LECTURE VI.****26. Order.**

THE organ of this faculty is situated between those of Coloring and Number, in the superciliary ridge. It is regarded as ascertained.

The function of this faculty is delighted with an orderly arrangement. Although a plurality may be necessary for the purpose of effecting that arrangement, yet the perception itself is of the order, not of the number. Some are distressed with the appearances of disorder, and are delighted with a perfect regularity or orderly arrangement. The arrangement here referred to, differs essentially from that systematic, philosophical arrangement with which the higher intellect is gratified. The order perceived by this faculty is based upon the physical relations existing between objects. It originates the desire, and produces the pleasure of seeing things complete.

**27. Locality.**

The organ of this faculty is situated on each side of the organs of Individuality and Eventuality extending upward as far as the organ of Wit. When strongly developed, there will be found to be two large prominences, commencing near each side of the

nose, and going obliquely upwards and outwards, almost as high as the middle of the forehead. It is ascertained.

This is one of the faculties whose special function it is to perceive the relations of external objects. The infant, when its unclosed eye for the first time lets in external nature to its internal faculties, has as clear a sense of the space between the different objects or individualities around it, and the relative situation of each to every other, as it has of the objects or individualities themselves. That sense constitutes the function of this faculty. The great natural differences that are observable in different men in regard to the perception and recollection of different places and localities, clearly establish the truth of the faculty. Some individuals are lost every where, others are always at home wherever they have once been. If they have once traversed the most intricate windings of a city, they require no other guide than the suggestions of this faculty to traverse the same again. We are all familiarised to the phrase, "local memory," and can no doubt bring to our recollections strong instances of the possession of it.

This faculty is possessed by animals, otherwise they would be unable to return to the same spot they had left. The migratory instinct of birds is dependent upon the exercise of this faculty. However extensive the journeys performed by them they return to the same spot, the same window,

chimney, or tree, from which they departed. Those animals whose home is the wide-spreading forest, possess a singular acuteness and facility in threading its intricate mazes, and are at home where man, with his stronger reason, but less powerful locality, is completely lost.

As this faculty gives the clear perception and recollection of different localities, so it inspires the desire of seeing them. It was largely developed in Columbus, Cooke and Mungo Park. It is one of the essentials that go to constitute the traveler, and practical geographer. It is necessarily well developed, where there is found an extensive and accurate power of topographical description. In the head of the astronomer it is generally large, and, as pure geometry treats of the relations of space, is an element in the composition of the geometrician. In the landscape painter its agency is essential.

The full development of the organs of Locality, Form and Size, are necessary to constitute the good practical phrenologist.

### 28. *Number.*

The organ of this faculty is a development of cerebrum at the external angle of the eye within the orbit. The effect of its large development is to press the external angle of the eyebrow outwards. The organ is ascertained.

To this faculty belongs the sense of plurality. It is active whenever and wherever there is a de-

parture from unity. It gives the quick apprehension of numbers, and their different combinations. It is largely developed in the head of Zerah Colburn, and a few others of the same description, who can perceive, as if by intuition, the ultimate results of different combinations of figures. It gives, however, merely a facility in calculation. In arithmetic and algebra, and in the mathematical department generally, wherever calculation is concerned, its agency is important. Geometry, and the higher branches of the pure and mixed mathematics, are far more dependent upon the reflective powers, than upon this.

### 29. *Coloring.*

The organ of this faculty is situated in the middle of the arch of the eyebrow. A full eyebrow, and much arched, indicates its full development, particularly when the arch is drawn outwards and upwards, so that its outer part is more elevated than the inner. It is considered as ascertained.

It is the peculiar function of this faculty, to perceive the relations of colors, their harmony and discord, and to treasure up the memory of their various tints. This perception is independent of the goodness of the eye. An individual may possess a clear perception of form, or size, or individuality, without possessing a nice discrimination of colors.

Great natural differences are observable in differ-

ent men in regard to their power of clearly perceiving different colors. Some are almost destitute of this power, who nevertheless possess an acute vision. This fact is so striking, that it has been remarked by the old metaphysicians. Stewart in particular remarks it, and says, in a parenthesis, it is "probably owing to some early *habit of inattention*." The old metaphysical school certainly possessed a very instructive and satisfactory mode of explaining the most interesting mental phenomena by a single line enclosed in a parenthesis, as if the explanation itself were of very little consequence. In this last, however, they were undoubtedly correct; for unless a better explanation could be afforded, the more closely it is concealed within the folds of a parenthesis the better. It will, I presume, be readily admitted, that there would be some little difficulty in attempting to form a conception of the habit of not doing a thing. If they should tell us that the continuance of life was owing to the habit of breathing, they might, perhaps, be understood; but they would certainly be verging hard on the incomprehensible, when they would inform us that death was owing to the habit of not breathing.

The great energy of this faculty gives a powerful passion for colors, but not necessarily a correct taste in their arrangement. Goodness of taste results rather from the perfect, than the powerful action of the faculties.

This faculty will be found strongly developed in those writers who introduce into their works a profusion of colors. The predominating faculties in an author can always be inferred from the character of his work.

This faculty is more developed in women than in men. It is found strongly developed in the oriental, or eastern nations. It is easily observed in the representations of the Persian, the East-Indian and Chinese; the full and much arched eyebrow, proclaiming the ample development of this faculty. This fact has been observed, but it has not, that I am aware of, been further remarked, that it is in the east that nature has bestowed her strength and beauty, and variety of colors. The tint of its sky; the hue of its landscape; the beauty of its bird and its blossom; even the gay attire of the insect that sports away life in the beams of its summer sun; all announce, in language too clear for contradiction, that nature has selected the land of the east to leave there the loveliest hues of her pencil. Is the striking coincidence between the full development of this faculty in the east, and the ample bestowment of that with which it is in relation there one of those stray events that has accidentally wandered from the fountain of light, and found its way to this earth uncalled for and uncaused, or is it one of those beauteous harmonies, arising from the mutual adaptation of things, that, together with every other of the same kind, was originally cast in the

grand scheme of creation? Let the old metaphysician, if his "*habits of inattention*," be not too inveterate, just advert to these things. They are at least worthy of a passing notice.

### 30. *Eventuality.*

The organ of this faculty is situated directly above that of Individuality. It is called by some upper Individuality. It is in the middle of the forehead, and extends between the organs of Locality upward, as far as Comparison and Causality. It is ascertained.

It is the peculiar function of this faculty to take cognizance of events. It is found well developed in those who know a little of every thing, and are not over profound in any thing; and who know about as much of one thing as another. Such make up the greater part of the world; thus compensating in number, what is wanting in personal power.

This faculty inspires a fondness for historical relations, and forms an ingredient in the character of the historian. Combined with Ideality, it is gratified with the relation of fictitious occurrences.

Individuality takes cognizance of the actor—Eventuality of the act. The one seeks the kind of knowledge indicated by nouns; the other, that designated by verbs. The one exercises jurisdiction over individuals; the other, over the acts or events proceeding from them. Both of them in conjunc-

tion inspire us with a curiosity to pry into the nature of the beings by which we are surrounded, and into the acts and events to which every hour is giving birth. A curiosity which makes us attentive spectators to the busy, bustling scenes around us; thus preventing the occurrence of stagnant pools in the midst of living waters: a curiosity which will be proportionate to the energy and activity of these faculties, oscillating between listlessness and extreme inattention, to that searching and prying kind which would attempt

“ To wrench even from death  
Something to shake or make a faith.”

This faculty is more developed in children than in adults, and in boys than in girls; and strongly in that class of people called Yankees. Where it is powerfully predominant, the possessor would desire to live more for the purpose of continuing to know what was going on in the world than from any other motive.

### 31. *Time.*

The organ of this faculty is situated outward from the organ of Locality, extending upward to Causality and Wit, and outward to Tune.

The function of this faculty is to form conceptions of the duration of phenomena, their simultaneousness, or succession. Aided by Number it remembers events in the order of their dates. Time is to facts and events analogous to what Order is

to objects. Some individuals seem to possess the power of recalling events simply by resorting to their occurrence in the order of time. They are a kind of standing chronology; a table of dates. Others recall them by connecting them with places or with individuals, or by means of some other associations. Clear conceptions of time are necessary to constitute the complete musical performer.

### 32. *Tune.*

The organ of this faculty is situated in the lower lateral parts of the forehead, but its form varies according to the direction and form of the convolutions composing it. Some possess it of a pyramidal form. In others the external corners of the forehead are only enlarged and rounded. It is higher up in individuals whose brains are narrow at the base. The extent of its development is indicated by a comparative prominence with the external angle of the eye.

The function of this faculty is to recognize the harmony and melody of concordant sounds. It bears the same kind of relation to the ear that the faculty of Coloring does to the eye. There is supposed to be a primitive arrangement of colors, from the sense of which the faculty of coloring derives delight. So also the concord of sounds, as well as their melodious succession, administer to the gratification of this faculty.

Dr. Spurzheim remarks, that the organ of this

faculty is conspicuously developed in the heads of singing birds, and that among them the males can be distinguished from the females by the predominance of this organ in the former. To constitute the perfect musician, Time is essential, to give the clear perception of intervals. Ideality elevates, Secretiveness and Imitation give expression, and Constructiveness, Form, Weight and Individuality, supply mechanical expertness in the production of the successful performer.

Every nation has its songs and its bards. National songs are about as much diversified as national physiognomy. Where man is highly civilized, music is polished and refined. Like manners, it is susceptible of cultivation. How different is the savage style of music from the Italian. The one is the harsh growl of the propensities; the other, the softened emanation of the sentiments. They both appeal to the same faculty, and that faculty recognizes in both harmony and melody, although so essentially different in their peculiar characteristics.

The propensities originate the low or bass sounds in music. The more the lower or basilar region of the brain is developed, the rougher and harsher the voice. The predominance of the sentiments gives the counter, tenor and treble. In women the sentiments preponderate over the propensities, and accordingly their sweetness of voice is fit only for tenor or treble. Shakspeare seems to have been

aware of this, when he makes his King Lear thus announce one excellency of his favorite Cordelia.

“ Her voice was ever soft,  
Gentle, and low—*an excellent thing in woman.*”

### 33. *Language.*

The organ of this faculty is a developement of Cerebrum in the posterior, upper part of the orbit of the eye. The effect of this development is to protrude the eye forward, to give it a prominence, and sometimes a depression towards the lower part of the orbit. It is the relative protrusion of the eye compared with the parts below, that indicates the development of this organ; because the large development of the organs situated in the ciliary ridge might give to the eye the appearance of being deeply sunk, and hence furnish the inference that the organ of Language was defectively developed, when in point of fact it might be otherwise.

It is the special function of this faculty to invent, learn, remember and apply the arbitrary signs that stand as the representatives of ideas. The sentiments and propensities possess, each for itself, a natural language, the language of expression. No one can mistake the mild look of Benevolence, or the hauteur of Self-esteem, or the soft solicitation of Love of Approbation, or the murderous appearance of Destructiveness. This language rests upon laws as universal as the faculties. It would form of itself a strong bond of union, independent of

every other. This kind of language obtains among animals as well as among men; its perfection always depending upon the strength of the faculties. To man was assigned the highest possible privilege of organized life, the privilege of acting in accordance with the impulses furnished by the propensities and sentiments, under the guidance of reflection. He was not, like the mere animal, to be the creature of the past and present. In his composition the future forms an important element. His responsibility runs parallel with his privilege. By him the consequences of action can be foreseen, and for them he is accordingly made responsible. To meet the exigences of his situation, he is enabled to travel beyond his own experience, and to avail himself of that of others, and of those who have gone before him. As the world grows older, its business and concerns become more complicated, and there is, therefore, a propriety in growing wiser. Hence the experience of one age becomes the recorded wisdom by which the next succeeding is directed. That experience is obtained through the function of this faculty. Artificial language was originally the result of an agreement, tacit or express, to designate particular things by particular signs or words. In the infancy of nations it is confined almost entirely to material things, of which the external senses take cognizance. Hence the abundance of metaphors made use of by early writers, indicating the deficiency of their language

in their attempt to convey indirectly by comparisons and other figures of speech, what they could not directly by words. The number of artificial signs in a language increases with the march of intellect. A language, to be complete, should furnish artificial signs not only sufficiently numerous to cover every material thing existing, but also every mental and material phenomenon. The use of figures of speech might then be superseded as useless, and resorted to only for the purposes of ornament or illustration.

There is no necessary connection between the thing signified and artificial signs. The one may be entertained or acquired without the other. Defective Language furnishes no inference against the possession of ideas, and we often see such an exuberance of words as to render it extremely difficult to detect the idea, if there was any to be detected.

This faculty never exercises any control over the ideas which it clothes with language. It is that solely which it prompts to the use of. Whether ideas, or mere apologies for them; whether sense or utter nonsense results, it is equally gratified. It is never, therefore, a correct criterion to gauge a man's intellect by the quantity of breath he can manufacture into words in a given period of time. Some go into that species of manufacture with so much emphasis that the supply very much exceeds the demand. They roll on with such an everlasting volubility, that they appear just as near ending

at one place as another; and for all the purposes of conveying instruction, might perhaps just as well end at one place as another. Others speak with great difficulty, but with great force. The one is like the unceasing flow of the noisy rivulet, the other like the deep, slow heaving of a mountain wave.

Many interesting cases have been related, in which this faculty has been diseased, and the ability to make use of language either impaired or destroyed. At the same time the individual manifested the possession of the ideas, which he was unable to clothe in language. Many instances are mentioned by Baron Larrey, chief surgeon to Napoleon's army, in which wounds to that part of the brain lying above the orbiter plate, corresponding with the location of this organ, have either impaired or totally destroyed the power of using language; at the same time that the possession of the ideas and the full operation of the other faculties was unequivocally indicated.

The meaning attached to the language used, is learned by other faculties. Hence the lower animals, although, like the parrot, they may be capable of verbal utterance, and repeat by rote, yet owing to the destitution of the higher faculties, they are incapable of comprehending the meaning of what they utter. This also explains the reason why some individuals can commit to memory language in which a certain kind of ideas are convey-

ed, much easier than that which clothes ideas of a different kind. Some learn songs with facility, others speeches. The combination of Language and Wit, will collect, retain and communicate witty associations. That of Language and Ideality, that swell of expression and vividness of imagery, and glow of inspiration, in which both can experience delight and gratification.

All metaphysical writers have complained of the uncertainty and indefiniteness of language. Were all faculties possessed of the same extent of strength and activity, all language would be understood alike, because all would attach to the terms used the same ideas. The certainty of the mathematical sciences results from the fact that they are mostly conversant with the things perceived by the perceptive faculties; with space, and number and quantity, in regard to which men perceive alike, and where, consequently, the same ideas are attached to the same things. It has often been a matter of severe regret that the same degree of certainty cannot be introduced into moral science. That, however, deals with feelings and sentiments, and to those different meanings will be attached by different combinations of faculties. You will scarce find any two to attach the same meaning to the terms goodness, or gratitude, or duty. He in whom Conscientiousness is defective, will be incapable of properly understanding the term justice. If very defective, he will err almost as much in

assigning a meaning to it, as the blind man who was so thoroughly convinced that light resembled the sound of a trumpet.

The second genus of the intellect is composed of the reflecting faculties. All ideas of things and their physical qualities and relations, are conceptions of the perceptive and knowing faculties. The distinct office of those faculties is to take cognizance of those qualities and relations. That done, their duty ends. The conceptions or ideas thus treasured up, serve as premises upon which a higher order of intellect acts. They are then the aliment of reflection; the materials out of which fiction adorns her tale, and reason perfects her edifice. The comparison of these ideas with themselves, the tracing the relations of cause and effect, and the ultimate conclusion forced upon the mind as the result of that comparison, and the tendency of those relations is peculiarly the province of the reflecting faculties. Their conceptions are of a higher nature, and their influence more decidedly manifest, in the evolution of mind, and the formation of character. They are more especially appurtenant to our human nature, and are either denied, or defectively given to the animal world. To their guidance the destinies of our world are more especially committed. The reflecting faculties are two in number, Comparison and Causality.

34. *Comparison.*

The organ of this faculty is situated in the middle of the superior part of the forehead, between the organs of Causality; with Benevolence above, and Eventuality below it. When large it presents an eminence in the form of a reversed pyramid in that portion of the forehead. It is ascertained.

To this faculty belongs the sense of analogy. Its peculiar province and function is to take cognizance of the resemblances and differences between objects and things. It perceives all the relations of those descriptions existing between things. It gives the tendency to comparison generally, without determining its kinds. Its direction will be mainly dependent upon the predominance of other faculties. To them it looks for its sources of illustration. Large Locality, Individuality, Eventuality, Form, Size, or other perceptive or knowing faculties, induce comparison in the direction of their functions. It is, however, a part of the function of each perceptive or knowing faculty, to compare with each other those objects or things of which it takes immediate cognizance. Coloring, for instance, perceives the harmony of colors; Tune, of tones in music; and Individuality the points of resemblance and dissimilitude between individual beings. To the faculty of Comparison is assigned a wider sphere of action. It awaits the results of the action of the other faculties, and then compares those different results with each other. It compares co-

lors with objects, and adapts tones of music to occasions. It would perceive the incongruity of transferring the music of the ball-room to the solemnities of worship. In this view it is the organ of general harmony.

National languages of the same age and opportunities of improvement, exhibit, by their possessing a more or less figurative character, the degree in which this faculty is bestowed upon the majority of the individuals composing the nation. In the early origin of all language, man is indebted to the function of this faculty for enabling him to convey indirectly by figures, what he could not directly from the paucity of words. In its progress the figurative character it continues to sustain will be proportionate to the energy of this faculty in those who make use of it.

This faculty is not alone active in things external. Its peculiar function is exercised upon the functions of other faculties. It compares not only perceptions with perceptions, but sensations with sensations. It compares, and often to the no small prejudice of truth, mind with matter. Wherever there is a real or fancied resemblance or dissimilitude, it is laid hold of with the quickness of intuition. The individual possessing it strongly reasons analogically. His attempts to convince others of the truth of a position will be by strongly urging its points of resemblance to others of admitted correctness. This species of reasoning is always in-

conclusive, because it is always, at bottom, based upon assumption. After Causality has proved the truth of the position assumed, Comparison may then well be admitted to prove the truth of another resembling it.

It is to the function of this faculty that we owe the formation of abstract ideas. From points of individual resemblance it forms the abstract idea of the species to which all the individuals composing it belong. The idea of the species comprises all those qualities and peculiarities enjoyed in common by the individuals. From the resemblance of different species with each other, is formed the abstract idea of genera. From Genera in the same manner, arises the notion of orders; and from orders that of races. It is thus that this faculty is essential in the studies of botany, zoology, and all the branches of natural history. It is to natural history what Causality is to natural science. It commences with the individual, and in its ascent upward, like the pyramid reversed, continues to enlarge its sphere of generalization, until, arriving at its expanded base, it has amassed together such an assemblage of resemblances, as to cover all the possible individual developments within the different orders, and genera, and species included.

### 35. *Causality.*

The organ of this faculty is situated in the superior upper part of the forehead, on each side of

the organ of Comparison. Its positive development is indicated by a prominence, its relative by a fullness of that part. It gives, when large, a hemispherical configuration to that part of the forehead. It is ascertained.

The function of this faculty is to trace the relations, and to perceive the force of cause and effect. Like the immediately preceding, it takes cognizance of relations. The two together give, to a certain extent, the power of fore-cast, and of predicting future occurrences, grounded on the well-established principle that similar causes are productive of similar effects. Were all the relations of cause and effect thoroughly understood, the future would be as open as the past, and human movement, for all the purposes of novelty, might as well be over the past as the future, for all the barriers would then be broken down between history and prophecy.

This faculty perceives the dependencies of phenomena. It regards something beyond the mere succession of events. It lays hold of that power or energy by which one thing is productive of another. Individuality apprehends the actor, Eventuality the act, and Causality the principle efficient in its production. While Comparison is more directed to things, this is directed to phenomena. While that acts more upon the information afforded by those perceptive faculties that take cognizance of external objects and their physical qualities, this acts upon that furnished by those taking cognizance

of the relations of objects. While that is more immediately productive of natural history, this is rearing the fabric of natural science. While that, like the pyramid reversed, is ascending upward from more limited to more extensive generalization, grounded upon the analogies and resemblances of things, until it arrives at an abstract idea so universal as to cover all the modes of existence possessing properties in common; this also, like the same reversed pyramid, is rising from one productive principle to another, and from that to others covering more extensive ranges of phenomena, and thus upward and onward, until it can arrive at a principle or power that is itself the principle of principles; that is adequate to account for all possible phenomena; that is as much at home in one part of the universe as in every other; that is no more and no less developed in the motions of an orb than in those of an oyster.

The possession of this faculty is essentially necessary to constitute the conclusive reasoner. Without it a man may possess propensities and sentiments. He may acquire or destroy. He may be proud or humble. By virtue of his possessing the perceptive and knowing faculties he may amass facts and phenomena; he may accumulate a knowledge of the various appearances and modifications, the qualities and attributes of matter and mind, but like the useless contents of a lumber waggon, they would oppress without benefitting, and burden

without enlightening. By virtue of the faculty of Comparison, this mass of matter may be compared, and arranged, and classified according to its resemblances, but without any reference to the relations of Causality. It is this faculty that puts the finishing stroke to the mental fabric; that gives it the power of operating upon men and things; that invests it with the honey of persuasion and the force of conviction.

The agency of this faculty is essential in the guidance of others with which it is combined. It perceives the injurious effect of excessive indulgence of the propensities and sentiments, and operates as a restraint to their indulgence. It restrains the conversational powers of its possessor. Its deductions are too abstract, too far removed, and require too deep and profound an exposition for the purposes of familiar intercourse. The rigidity of its judgment prevents the escape of a thought, unless it partake, to a greater or less extent, of the high nature of its function. Hence it remains silent while the perceptive and knowing faculties, through the medium of the faculty of Language are busily employed in exchanging with each other their various commodities. When its excessive development is accompanied with defective perceptive and knowing faculties, it gives the strong propensity to reason without facts, and leads to lame deductions, and vague generalities based upon in-

sufficient premises. It gives the superstructure, without a foundation.

This faculty is equally capable of exerting its energies in every direction, and of tracing the relations of cause and effect, wherever they are traceable ; but its power of inducing conviction may be more efficient in one province or department than in another, because some of the perceptive and knowing faculties with which it is combined, being more energetic than others, may furnish it with more abundant materials, from whence to deduce those relations.

It is the operation of this faculty combined with Comparison, that constitutes reason, that grand prerogative of man ; that deep scanner of motives ; that profound investigator of the principle of things ; that essential guide of human conduct ; that high tribunal before which is discussed and decided the expediency or in expediency of measures.

As an instance in which this faculty is inadequate to account for phenomena, I might mention the fact, that no particular reason can be assigned why the different organs and faculties are located where they are found to be. As well might we think of determining the cause why this revolving orb was assigned to this point of space, and not to another, as that one particular faculty is located where it is actually found to be, and not elsewhere. In neither case can we travel beyond the fact ; nor in either case is it necessary for us to do so.

The location of the organs of the several faculties, is the work of observation and experience. There is, however, discoverable, an admirable harmony in the arrangement of the several organs of the faculties, and this is the more wonderful, as it resulted from the location determined by other means, and was not, therefore, productive of it.

In the lower basilar region of the brain are located the propensities and perceptive faculties. They give tendencies to act, and perceive objects. The action is prompted in reference to the objects perceived. It is in this portion of the brain that the nerves and spinal marrow all terminate. Is there not a high harmony discoverable in the fact, that all the channels of sensation and all the instruments of action should terminate in that portion of the brain that recognizes the one, and enacts the other?

Again, in the lower back part of the cerebral mass, are located the organs producing the propensities of Amativeness, Philoprogenitiveness, and Adhesiveness. These are located together, and constitute the domestic group. They bind their possessor, by the strongest of earthly ligaments, to his fireside, his family, his friends. It is their mingled streams that constitutes the current of domestic affection.

What organ next occurs? That of Combative-ness, which immediately adjoins this group. Is the quiet of that fireside invaded, the safety of that fa-

mily endangered, the peace of those friends periled? This propensity sends through the frame the thrill of combat, despatches from the eye the glance of defiance, and deals from the muscle the blow of resistance. Is the invader possessed of superior power and energy, and does it, therefore, become necessary to entangle him within the meshes of a net of wiles; to encircle him with plots and counter-plots; to visit him with all the cunning expedients of stratagem, and thus supply by artifice what is lacking in strength? The propensity of Secretiveness, the organ of which is located next adjoining Combativeness, above Destructiveness, proffers its services, and is delighted with the opportunity of using, or rather, in the instance supposed, of abusing its peculiar function. Is it feared that the invader will again disturb the quiet, safety and peace of fireside, family and friends? The propensity of Destructiveness, the organ of which is also located next that of Combativeness, below Secretiveness, wakes to its peculiar action, and prevents a future recurrence of the same difficulty by achieving the death of the invader.

But the objects embraced within the circle of that domestic group, are not alone to be defended. They are also to be preserved. Accordingly when we move forward from Destructiveness and Secretiveness, what next occurs? The organ of Acquisitiveness, inspiring the specific propensity to amass together, and to accumulate, for all the pur-

poses that can be answered by it. What is one important purpose? Move forward in that region of the brain to the next adjoining organ, that of Constructiveness, and you will receive an answer in the peculiar function of its faculty, namely, that one purpose, at least, is answered in the construction of those habitations that defend alike from the summer's sun and the wintry storm.

But all the materials of construction, and all the objects embraced within this group, are to be perceived. How is that accomplished? Travel forward in this same basilar region of the brain, until you reach the lower, anterior, frontal convolutions, and you there find the organs of the perceptive faculties, whose functions are to perceive objects and their qualities. In their location we observe no less than four harmonies. 1. They are located next adjoining the propensities, to which they furnish materials for action. 2. They are located in that region of the brain that is in relation with the nerves, serving as the channels of sensation. 3. They are located immediately around and over the eye, the grand instrument that supplies them with their most valuable information: and, 4. They are located immediately below and next adjoining the reflective faculties to which they furnish food for reflection.

The propensities and perceptive faculties appropriate to themselves entirely the basilar region of the brain. As we ascend upward from that region

we meet with faculties possessed of a higher order of function. Among those faculties also exist harmonies resulting from their locations and respective functions. Commencing from the upper middle part of the forehead, and extending from thence in either direction in the same plane, we meet with the organs of Comparison, Causality, Wit and Ideality. These perceive and feel the different relations of objects, and their physical qualities. These relations become more and more remote, in proportion to the extent of our departure from our starting point, Comparison perceives only the relations of resemblance and difference. Causality those of cause and effect. Wit feels most keenly those relations that are sufficiently remote to be unexpected, and Ideality those that rarely exist in nature, in the order in which they are felt by this faculty, and in which the only connecting tie is that of beauty.

The different faculties possessing the organs already enumerated, the functions described, and the harmonies alluded to, are placed in relations with external nature, through the medium of the external senses. Each of these is endowed with a constitution of its own, and performs its functions in consequence of that constitution. Between each sense and external objects are established relations, by virtue of which impressions are made upon them. Each in virtue of its constitution receives impressions of different qualities in bodies. No two

perceive the same. Hence there can be no rectifying of one sense by means of another. There may be qualities in bodies which we have no senses to apprehend; but those with which we are acquainted, are conveyed to us, each by the sense originally constituted for that specific purpose. Different senses may enable us to perceive the same object as a whole, but each sense perceives in it different qualities from every other. In this way they produce, by their joint co-operation, an extent of accurate conceptions, of which in an unconnected state they would be utterly incapable.

Not unfrequently difficulties occur in marking out the precise limits of the functions of the senses, because the internal faculties often co-operate with them, and the perception experienced is the joint product of both. The perception of harmony and melody in music cannot take place without the co-operation of both the sense of hearing and the internal faculty of Tune. The true rule for ascertaining the limits of the functions of the senses in cases of this kind is laid down to be this :

That whatever perceptions or impressions received from external objects, can be recalled by an act of volition, cannot depend exclusively on the senses, but must result from their operation jointly with the internal faculties. Whatever perceptions or impressions we are not able to recal by an act of volition, must depend on the senses alone. Thus the impressions made by the rattling of a carriage

over the pavement, we are unable to recal by an act of the will, because their existence depended alone on the apparatus of the ear. But the notes of a tune may be recalled, because the perceptions of melody and harmony in music depend not alone on the sense of hearing, but also on the internal faculty of Tune. This rule is grounded on the fact, that the internal senses are wholly independent of will, and perform their functions in virtue of their constitution alone.

Another rule, not less founded in nature, is this : That where the same ideas are acquired through the instrumentality of two or more senses, the ideas or perceptions thus acquired, cannot possibly be derived from the senses alone, because nature never endows different instruments with the same functions, in the same individual. Thus ideas or perceptions of figure, may be derived through the instrumentality of the sense of seeing, and also of that of touch ; and hence the necessity of an internal faculty to perceive figure, which internal faculty must be adapted to both senses.

Determinate relations exist between all the external senses and internal faculties. These relations are fixed and settled, and have the force of natural laws. By virtue of these, the impressions made upon the external senses, are communicated by them to the internal faculties. The perceptive and knowing faculties appear to be those which more particularly avail themselves of the instru-

mentality of the external senses. The organs of those faculties are in more immediate relation with the terminations of the nerves of those senses. Through their medium external nature is treasured up, and becomes a part of mind. Those faculties, through that medium, store the mental magazine with facts, and then their energies cease. Those facts, thus acquired, are the materials upon which faculties of a different nature operate. They are the fuel that feed the propensities and sentiments, and the aliment by which reflection is nourished.

## LECTURE VII.

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WE have investigated the organs of the faculties, their functions, and their mediums of communication with external nature. From the examination of their functions, we have observed them to possess a general action within their respective spheres; but that those spheres are circumscribed and determinate. We have seen that the faculties mutually influence each other, but that their functions are limited and independent. Were we to stop here, the most legitimate inference from the doctrine would be, that what we have been in the habit of denominating mind, consists in fact of a great number of minds, existing and acting independent of each other, and connected together by no other tie than that of mutual influence.

There are, however, modes of activity in which the faculties, some or all of them, participate in common. These serve as ligaments or bonds of union, connecting together by one common tie, distinct and independent faculties. In these modes of activity, the will is an important agent. It, therefore, becomes essential to understand what is meant by that term.

Will has been defined to be the "power of choice." This is synonymous with the term will,

and hence is no definition. Will has been by some confounded with inclination or desire, but we often will to act contrary to either. To will an action, it becomes necessary to know its consequences. If those consequences at all conflict with each other, it becomes necessary to compare them together. Those consequences are known and compared together by the understanding. That knowledge and comparison will be more perfect in proportion to the extent of the understanding, or reflective powers. Will is the most free and the most enlightened, where mind is the most advanced.

The understanding, however, acts upon the presentment of motives; and these are presented by the propensities and sentiments. Will may, therefore, be defined to be the decision of the understanding upon the motives presented by the propensities and sentiments. It is the point of union between the faculties that feel and those that know and reason.

The faculties were all framed for action, as fully as the muscles were framed for movement. From that action results their health and harmony.

The faculties which produce propensities and sentiments cannot be excited to activity by any direct effort of the will. They act,

1. From an internal excitement of the organs.
2. Upon the presentment of external objects fitted by nature to excite them.

These two are the only primary exciting causes.

To these has been added a third, namely, that they act,

3. By an indirect effort of the will.

This last is effected by the stimulus they afford to the perceptive, knowing and reflective faculties to form ideas. Those faculties, under the influence of the will, form ideas of objects fitted by nature to excite them; and on the presentment of those objects these faculties act. For instance, the idea of a being in distress excites to action the faculty of Benevolence. It is, however, obvious, that the activity of the propensities and sentiments is assumed in the fact, that they stimulate the intellectual faculties to form ideas, in their nature calculated still stronger to excite them. The third cause may be rather regarded as the means of continuing action once caused from internal excitement of the organs, than as originally exciting it.

The perceptive, knowing and reflecting faculties, constituting the intellect, become active from three causes:

1. From internal excitement of the organs.
2. Upon the presentment of external objects fitted by nature to excite them.
3. By acts of volition.

All the faculties, when excited, possess certain modes of acting. These modes are either common to all the faculties, or to particular classes of them. It is in these modes that mind displays its powers, and enacts its parts on this theatre of action and

of passion. Of all the varying modes of activity of the faculties, the first that occurs is

*Sensation.*—This mode of activity is independent of will. It is confined exclusively to the propensities and sentiments. They only *feel*; but when their organs are internally excited, or when external objects in their nature calculated to excite them are presented, and the attention cannot be otherwise directed, they have no choice but to feel. The organs of the external senses are possessed of feeling, but of a kind obviously different from the feeling of emotions. The feeling experienced on the amputation of a limb, varies essentially from that of fear. The external senses feel the impress of a material substance, the propensities and sentiments a mental movement. The object of the one is to afford information of that which creates the sensation, of the other to induce action.

The perceptive, knowing and reflecting faculties form ideas, perceive relations, and are subject to the will. Of the modes of activity peculiar to them, the first and lowest is

*Perception.*—This occurs from the second cause of the activity of these faculties before mentioned, namely, from the presentment of external objects in their nature fitted to excite them. It is entirely independent of will. When the objects are presented the faculties cannot but perceive them. Each faculty perceives only those kinds of qualities objects and relations, which it was originally formed

to perceive. The faculty of Form perceives form; that of Size, size; that of Eventuality, events; and that of Causality, the relations of cause and effect. The difference between this science and the old metaphysical systems in this respect, is this: that while we consider perception as a mode of activity of all the faculties that form ideas, each perceiving the ideas it was framed to form, and thus satisfactorily account for the fact why an individual has a much clearer perception of one thing than another; why, for instance, he perceives colors better than forms: the old metaphysical systems consider this as a *general faculty* of the mind, and are, therefore, utterly at a loss to explain how a *general power* equally competent to act in any direction, should perform some of its functions with great effect, and yet manifest an entire incompetency to perform others equally or more essential to the well being of its possessor. This is hardly susceptible of explanation even by a resort to "early habits of inattention."

When the perceptive, knowing and reflecting faculties are active from the first cause before mentioned, namely, from the internal excitement of their organs, the second mode of activity occurs, which is,

*Conception.*—And if the acts amount to a high degree of vivacity, it is then called *Imagination*. Although these modes are mainly dependent on the internal excitement of organs, yet the agency of

the will is by no means excluded. Imagination, in the sense here used, is the power of "forming ideal pictures." In this sense it varies from conception only in the vividness of its formations.

Conception and imagination reproduce previous perceptions. Each faculty conceives and imagines within its own appropriate sphere. Large Form and Individuality easily conceive and imagine forms and individual existences. Large Locality the relative situation of objects and places.

When the faculties that form ideas become preternaturally active through a morbid excitement, or from other causes, the objects conceived or imagined become fixed, are invested with a fearful reality, and thus constitute a species of insanity. If we suppose this morbid affection confined to the perceptive faculties, leaving the reflective free, the individual may, on some points, possess diseased perceptions, and by means of the reflective, discover the erroneousness of the impressions.

The phenomena of apparitions or spectral illusions are explained upon these principles. Involuntary conceptions of outward objects, are produced through the internal excitement of the organs. The perceptive and knowing organs, together with the organ of Wonder, appear to be the chief seats of these diseased perceptions.\*

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\*The following interesting case was originally communicated by William Simpson, Esquire, to the Phrenological Journal, and subsequently republished in Combe's System

It is the conceptions formed by the internal activity of the organs that constitute dreams. Their

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of Phrenology, second edition, p. 332. The facts can be relied upon. Its interest will apologise for its length.

“Miss S. L., (says Mr. Simpson,) “a young lady, under twenty years of age, of good family, well educated, free from any superstitious fears, and in perfect general health of body, and soundness of mind, has, nevertheless, been for some years occasionally troubled, both in the night and in the day, with visions of persons and inanimate objects, in almost all the modes and forms which we have already related. She was early subject to such illusions occasionally, and the first she remembers was that of a *carpet* spread out in the air, which descended near her, and vanished away.

“After an interval of some years, she began to see human figures in her room as she lay wide awake in bed, even in the daylight of the morning. These figures were *whitish*, or rather *gray* and *transparent*, like *cobweb*, and generally above the *size* of life. At this time she had acute headachs, very singularly confined to one small spot of the head; on being asked to point out the spot, the utmost care being taken not to lead her to the answer, our readers may judge of our feelings as phrenologists, when she touched with her forefinger and thumb, *each side of the root of the nose, the commencement of the eyebrows, and the spot immediately over the top of the nose, the ascertained seats of the organs of Form, Size, and Lower Individuality!* Here, particularly on each side of the root of the nose, she said the sensation could only be compared to that of running sharp knives into the part. The pain increased when she held her head down, and was much relieved by holding her face upwards. Miss S. L. on being asked if the pain was confined to that spot, answered, that sometime afterwards *the pain extended to right and left along*

incongruity, as I have before had occasion to mention, is owing to the fact, that in the dreaming state

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*the eyebrows, and a little above them, and completely round the eyes, which felt often as if they would have burst from their sockets.* When this happened, her visions were varied precisely as the phrenologist would have anticipated, and she detailed the progress without a single leading question. Weight, Coloring, Order, Number, Locality, all became affected; and let us observe what happened. The whitish or cobweb spectres assumed the natural *color* of the objects, but they continued often to present themselves, though not always above the size of life. She saw a beggar one day out of doors, natural in size and color, who vanished as she came up to the spot. Coloring, being over-excited, began to occasion its specific and fantastical illusions. Bright spots, like stars on black ground, filled the room in the dark, and even in daylight, and sudden and sometimes gradual illumination of the room during the night often took place, so that the furniture in it became visible. Innumerable balls of fire seemed one day to pour like a torrent out of one of the rooms of the house down the stair case. On one occasion, the pain between the eyes, and along the lower ridge of the brow, struck her suddenly with great violence,—when, *instantly*, the room filled with stars and bright spots. On attempting, on that occasion, to go to bed, she said she was conscious of *an inability to balance herself, as if she had been tipsey*, and she fell, having made repeated efforts to seize the bedpost; which, in the most unaccountable manner, eluded her grasp, *by shifting its place*, and also by presenting her with *a number of bedposts instead of one*. If the organ of Weight, situated between Size and Coloring, be the organ of the instinct to preserve, and power of preserving equilibrium, it must be the necessary consequence of the derangement of that organ

some of the organs are active, while others that in the waking state act with them, and thus pro-

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to upset the balance of the person. Over-excited Number we should expect to produce multiplication of objects, and the first experience she had of this illusion was the multiplication of bedposts, and subsequently of any inanimate object she looked at—that object being in itself real and single; a book, a footstool, a work-box, would increase to twenty, or fifty, sometimes without *order* or arrangement, and at other times piled regularly one above another. Such objects deluded her in another way, by increasing in *size*, as she looked at them, to the most amazing excess—again resumed their natural size, less than which they never seemed to become—and again swelling out. *Locality*, over-excited, gave her the illusion of objects which she had been accustomed to regard as fixed, being out of their places; and she thinks, *but is not sure*, that on one occasion a door and window in one apartment seemed to have changed places: but, as she added, she might have been deceived by a mirror. This qualification gave us the more confidence in her accuracy, when as she did with regard to all her other illusions, she spoke more positively. She had not hitherto observed a great and painful confusion in the visions which visited her, so as to entitle us to infer the derangement of Order. Individuality, Form, Size, Weight, Coloring, Locality and Number, only, seemed hitherto affected.

“For nearly two years Miss S. L. was free from her frontal headaches, and—mark the coincidence—untroubled by visions, or any other illusive perceptions. Some months ago, however, all her distressing symptoms returned in great aggravation: when she was conscious of a want of health. The pain was more acute than before along the frontal bone, and round and in the eyeballs; and all the or-

duce a modified result, are in a state of rest. Destructiveness, in that state, might act undisturbed

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gans there situated recommenced their game of illusion. Single figures of absent and deceased friends were terribly real to her, both in the day and the night, sometimes *cobweb*, but generally colored. She sometimes saw friends on the street, who proved phantoms when she approached to speak to them; and instances occurred where, from not having thus satisfied herself of the illusion, she affirmed to such friends that she had seen them in certain places, at certain times, when they proved to her the clearest *alibi*. The *confusion* of her spectral forms now distressed her. (Order affected.) The oppression and perplexity was intolerable when figures presented themselves before her in inextricable disorder, and still more when they changed—as with Nicolai—from whole figures to parts of figures—faces, and half faces, and limbs—sometimes of inordinate size and dreadful deformity. One instance of illusive *Disorder*, which she mentioned, is curious; and has the farther effect of exhibiting (what cannot be put in terms except those of) the derangement of the just perception of gravitation or equilibrium (Weight.) One night, as she sat in her bedroom, and was about to go to bed, a *stream* of spectres, persons' faces, limbs, in the most shocking confusion, seemed to pour into her room from the window, in the manner of a cascade! Although the cascade continued apparently in rapid descending motion, there was no accumulation of figures in the room, the supply vanishing after having formed the cascade. *Colossal* figures are her frequent visitors. (Size.)

“Real but inanimate objects have assumed to her the form of animals; and she has often attempted to lift articles from the ground, which, like the oysters in the pot-house cellar, eluded her grasp.

by Benevolence; and Acquisitiveness accumulate unrestrained by Conscientiousness. We dream of seeing a person long since deceased, without being at all surprised at the sight. Individuality being active perceives the person, while the slumber of Eventuality prevents our recurring to the event of his death. Even, however, that event sometimes occurs to us without exciting surprize. How can this happen? The slumber of Comparison and Causality, the reflecting, discriminating powers of intellect, prevents our perceiving the incongruity.

When the faculties that form ideas are excited to action by the direct influence of the will, the mode of activity is

*Memory.*—This mode implies past time and a consciousness of the previous existence of the ideas

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“More recently she has experienced a great aggravation of her alarms: for, like Nicolai, she *began* to hear spectral visitors speak! With Mr. R. of Hull, the spectres always spoke. At first her crowds kept up a buzzing and indescribable gibbering, and occasionally joined in a loud and terribly disagreeable laugh, which she could only impute to fiends. These unwelcome sounds were generally followed by a rapid and always alarming advance of the figures, which often on those occasions presented very large and fearful faces, with insufferable glaring eyes close to her own. All self-possession then failed her, and the cold sweat of terror stood on her brow. Her single figures of the deceased and absent then began to gibber, and soon more distinctly to address her: but terror has hitherto prevented her from understanding what they said.”

recalled. The power of recalling is always proportioned to the strength of the faculty acting. We all possess different strength of memory in relation to the different objects, qualities and relations remembered. While some can easily remember different forms, others recal with facility words, others individuals, others different places. The explanation of this is obvious. The same faculty that originally perceives the object, quality or relation, is alone instrumental in recalling the perception. Hence large Form, or Locality, or Individuality, possessing a strong original power of perceiving different forms, or places, or persons, will possess also an equal power of remembering them. An equal development of all the perceptive, knowing and reflective faculties, can only endow with the capacity of remembering one thing as well and as perfectly as every other.

We have thus seen that all the faculties that form ideas are active in their different modes; these modes corresponding to the causes originally productive of activity. An external object, quality or relation presented, is perceived. The internal excitement of the same organ conceives or imagines it. The act of the will recalls or remembers it. These modes of activity vary in different individuals, in proportion to the extent of development of the organs acting. By the old metaphysicians they were denominated faculties, and thus presented the singular and inexplicable anomaly of general

powers active in one department but defective in another, like a being possessed of the instruments of locomotion, who could move east, but not west, although no greater obstruction was to be overcome in the one direction than in the other.

This difference in the activity of the faculties consequent upon their different original strength in different individuals, has been productive of a far greater extent of accurate information in regard to the objects, qualities and relations of external nature, than could otherwise have been furnished. This is undoubtedly the final cause of that difference. An equality of bestowment would have led to a mediocrity of exercise; and by producing the same strength of tendency in every possible direction, would have equalized effort, and thus have prevented the attainment of excellence in any one department. The progression of the race results from the joint efforts of all its members. These efforts become more effectual for that purpose, in proportion as the different departments in the sciences and the arts become more cultivated. The degree of cultivation in those departments depends upon the original development of the faculties destined by nature to labor in them. Is nature desirous of awaking man to the beauties of a high harmony; of enkindling rapture at the shrine of music; of softening the asperities of character, by its soul-subduing influences? She bestows upon her Handel and her Mozart the organs of Time

and Tune. Does she wish to acquaint man with the different parts of her world; with her islands, oceans and continents; with the characteristics of her varied climates? She bestows upon her Cook, her Park, and her Ross, the organs of Locality, under the strong influence of which they explore her in all her aspects, and feel at home, whether amid the wild waste of her waters, or on the bleak surface of her earth, or under the chilling scowl of her heavens. The same general principle that advances the wealth of the world by the division of corporeal labor, advances the acquisitions of intellect by the division of mental energy.

The modes of activity we have been considering are common to all the perceptive, knowing and reflective faculties. There is one additional mode, confined entirely to the reflective; and that is

*Judgment.*—A sound judgment results from a powerful development of Comparison and Causality. It arises from a clear perception of the fitness of one thing to every other, and of the mutual relations existing between things. Strongly developed perceptive and knowing faculties may be eminently powerful in the different modes of perception, conception and memory: and yet the individual may be lacking in the power of exercising a severe judgment. It is even asserted by Lord Kames, that a great memory and a sound judgment are incompatible. This may be owing to their being seldom found coupled together, for where large

quantities of brain are bestowed upon the perceptive and knowing, a less comparative quantity may fall to the lot of the reflective faculties. Nature is seldom equally beneficent to all the departments of intellect and feeling. There is no natural incongruity between this and the other modes of activity. On the contrary there is between them the greatest harmony.

Correctness of judgment, however, is not alone dependent upon the reflective powers. The perceptive and knowing must furnish premises upon which it can act. Nor is the department of feeling to be disregarded, The motive arises from that department, and there we are accordingly to look for the medium through which objects, and relations, and qualities, are viewed. This renders a proper development of the sentiments essential. A perfect judgment, therefore, arises from a strong development of the faculties that judge; of those that furnish the materials upon which judgment acts; and of those productive of the medium through which those materials are viewed.

It is through the instrumentality of these modes of activity that mind becomes familiarized with every thing around it. By their means external objects are perceived, conceived, remembered and their relations with every other subjected to the rigid decision of the judgment. It remains to examine some mental phenomena, which, although not strictly modes of activity, are, nevertheless, inti-

mately connected with the action of the faculties. Of these phenomena one is,

*Attention*.—This is not a faculty, nor a mode of activity of the faculties. It consists merely in the application of the perceptive, knowing and reflective faculties to their different objects. The attention given will furnish a true criterion of the extent of the faculty giving it, because it will ever depend upon the inherent energy possessed by the organ. A weak Causality can never attend strictly to the steps of a logical argument, because it cannot attend to what it cannot perceive, conceive or remember.

*Association*—expresses the mutual influence of the faculties. Its principles are to be sought for in their constitution, and not in the relations of particular ideas. The old metaphysician dwells much upon the association of ideas, the phrenologist upon that of the powers that produce them.

The faculties that are productive of propensities and sentiments are associated with those that are productive of ideas. The conceiving an object in distress excites the faculty of Benevolence; of a contest that of Combativeness; of scenes of blood and havoc that of Destructiveness. Association is the mutual bond through which the action of the one generates the activity of the other. Those faculties, the organs of which are situated in the neighborhood of each other, are generally found acting together. The perceptive, knowing and re-

flecting faculties are associated with, and mutually assist each other. The reflecting faculties alone reason; but all reasoning would be useless without premises; and these premises can alone be furnished by the perceptive and knowing faculties. The one genera are found laboring for the other, that both in the end may reap a mutual benefit.

Associations are found to exist between faculties and external signs. The appearance of an object in misery excites the faculty of Benevolence, scenes of carnage that of Destructiveness, and scenes of fervent worship that of Veneration.

Artificial language is formed by associating arbitrary signs with particular things. To be able to comprehend the meaning of the sign, we must be able to form correct conceptions of the thing, or to feel the propensity or sentiment which it is intended to represent. To comprehend the word justice, requires the exercise of the faculty of Conscientiousness. The doctrine of mnemonics, or artificial memory, is dependent entirely on the power of association. It consists in the recalling of particular ideas, through the medium of their association with particular things. The different heads of a discourse, for instance, are associated with the particular rooms or distinct places in a building, in such a manner that the idea of the room or place calls up the head or topic associated with it. Hence the phraseology so frequently adopted, of "in the first place, in the second place," &c. It is obvious

that the perfection of this mode of association will depend upon the strength of the faculties that associate. In the instance just cited, a large Locality would be essential.

The faculties will generate associations corresponding with their functions. Those in whom Combativeness is powerful, will easily associate the ideas connected with a battle. Veneration will collect all the insignia of worship. Secretiveness all the plots and wonderworking machinery of politics. The predominating faculty, if there be one possessed by the individual, or a predominating set of faculties, will form a common centre, and the images will be produced, selected and associated with express reference to their general subserviency in producing a result in harmony with itself or themselves. Form, Constructiveness, and Causality will associate with facility ideas of mechanical skill and contrivance. Every individual will associate ideas with things which he has the greatest natural facility in perceiving. He in whom Form is powerful will most easily associate things with figures. Eventuality will associate things with events. Those in whom the reflecting faculties predominate will associate ideas according to the relations of necessary consequence. When the perceptive and knowing faculties predominate, associations will be according to the relations of time, place and circumstances. The different facilities with which different kinds of associations are formed, depending as they do upon the strength

of the fundamental faculties, will always furnish clear indications what those faculties are, and to what extent they predominate in the individual.

*Taste*—is the decision of judgment upon the modes of activity of the perceptive and knowing faculties. Genius arises from the strong predominance of particular faculties in the mental economy; Taste from the equalized harmony of the whole. Its departments are as various as are the functions of the faculties. Taste in painting is the decision of judgment upon the perception, conception and memory of the faculties of Locality, Order, Coloring, Form, Imitation, of all the faculties to which the glowing of the canvass affords gratification. Taste in music is the decision of judgment upon the same modes of activity of Tune and Time. Taste in poetry is the decision of judgment upon the splendid creations of Ideality. The correctness of the taste in its several departments, depends upon the strength of the perceptive and knowing faculties, and the soundness of the judgment; which in its turn is dependent upon the strength of the reflecting faculties.

*Consciousness*—may be defined to be mind recognizing itself in the varieties of its action. All the modifications of mere matter are effected through the operation of influences from without; and from laws acting upon, and not arising out of, its own constitution. Its very existence is unknown to itself. It is not until we ascend to phrenic phenomena, and contemplate the existence and the ac-

tion of mind that we find a power capable of recognizing itself. That power is expressed by the term consciousness. It is no faculty itself, but appertains equally to every fundamental faculty. It is, therefore, a common tie of union between the faculties, and one of the main ingredients in the composition of that personal identity, which is so easily felt and so difficultly explained.

*Pleasure* and *Pain* are also affections of every faculty. They appertain more particularly to the sentiments and propensities, but every faculty experiences a kind of pleasure in the unobstructed operation of its functions, and a kind of pain in their derangement. The kinds of these affections are, therefore, as numerous as the faculties, and their degrees differ in different individuals in the same ratio that the faculties themselves differ in strength and weakness. Corporeal pleasure and pain result from the nervous constitution; mental, from the constitution of the faculties. Each faculty possessing different functions, experiences enjoyment or painful sensation in its own peculiar manner, and according to its own peculiar mode of action. Acquisitiveness is pleased while contemplating its stores, and pained when deprived of them. Veneration is delighted in contemplating the fervor of devotion, and pained at profanity, sacrilege and irreligion.

These affections are the grand motive powers to all animal movements. All diversity of proceed-

ings, all complexity of action, all multiplicity and variety of pursuit, depend entirely on the bearing they are deemed to have upon these ultimate, opposite and controlling forces. To acquire the one and avoid the other, lies at the bottom of every mental and corporeal process. Between the tendencies of actions to this acquisition and avoidance, hangs suspended every sentient being. They are the ultimate and opposite principles that control every varied form of action. In the universality of their operation, they are to the motions of an animal what the centripetal and centrifugal forces are to the movements of a world.

*Sympathy*—may be defined to be a feeling in one individual, excited by the existence of emotions in another. It is the response of faculties in the one to those in active exercise in the other. Each faculty, as we shall hereafter have occasion more particularly to mention, possesses a natural language; by means of which its existence and active state are easily made known to corresponding faculties in another individual. The cold, rigid, upright attitude of Self-esteem, can never fail of appealing to the same sentiment in another, and of inducing in that other the same coldness, rigidity and perpendicularity of appearance arising from the excited activity of the organ. In the same manner, the powerful activity of other faculties, evidenced externally by their natural language, calls forth responses from the same description of facul-

ties in others, evidenced externally by the same kind of indications. This sympathetic fact is witnessed in nothing more strikingly than in the production of panics. These arise from the great and involuntary activity of Cautiousness. Whether there be a sufficient or insufficient cause for apprehension, is immaterial, The over-excitements of the faculty in one individual is communicated to others by sympathy. A kind of insanity for the time being prevails. The mind is unsettled, and finds nothing stable to rest upon. Its universal prevalence in an army is productive of certain defeat, in the common concerns of life, of disaster; for it produces action beyond the collected coolness of self-control.

The speaker who can perfectly control a popular audience, understands the effects of sympathy, and the power of producing it. He assumes himself the garb of the passion he would excite, and seconds its natural language by the aid of a powerful intellect. In this manner he brings his audience to the possession of one mind, of one will, of one wish, and having mingled every individual stream into one, pours its resistless current in one direction.

Those possessed of similar faculties, or faculties that sympathize with each other, are, for that reason, inclined to associate with each other. Those possessing powerful Destructiveness will readily join with others in schemes of murder and destruction, In this manner it becomes one of the strongest causes that originates different orders, classes, and grades in society, where human nature is left

unshackled, and man is not compelled to "rank and size," under the lash and spur of artificial distinctions. It is the friendship of nature; the tie by which she binds together her animated products; the instrument by which she marshals the hosts she has created. But like other principles of universal operation it may be productive of evil as well as of good. If it bind the soldier of freedom to his band, it is not less efficient in connecting the robber with his brotherhood.

Although the same kind of faculties are excited to sympathetic action in different individuals, yet the objects towards which their energies are directed, may essentially differ. Sympathy regards the action of the faculty, not the object. The selection of that object is dependent upon other faculties. The appearance of a man strongly enraged, arising from the excessive activity of the propensities of Destructiveness and Combativeness, may excite the same rage in another possessing the same kind of faculties throughout, and then their joint efforts may be directed against the enemies of the man enraged. In another, possessing also the propensities of Destructiveness and Combativeness, in combination with faculties of a different and higher order, the same appearance may excite the feeling of disgust. In what manner is this affected? The faculties of Destructiveness and Combativeness are excited to act; but the object of their action, instead of being the enemies of the man enraged, is the man himself. The higher in-

telleet and sentiments disapprove of the ungovernable fury manifested, and the object is selected in accordance with that disapproval. It is thus that fury is made to feed upon itself; and an additional reason is furnished for admiring that happy arrangement that subjects the lower propensities to the action of the higher intellect and sentiments. The inference arising from this fact is, that a similarity of development in two individuals of the same kind of faculty, is not necessarily productive of a perfect and enduring union or concert in action, between them. That can only be expected to occur where there is a similarity of development and corresponding strength of faculties throughout, in such a manner that the excited action of any one shall be subjected, in every case, to the same influences from other faculties.

*Passion* is the highest degree of activity of every faculty. The passions are, therefore, as numerous as the faculties, and their kinds as various as the functions of the faculties. Thus the passion for glory results from the highest degree of activity of Love of Approbation. Passion for wealth from that of Acquisitiveness; passion to destroy from that of Destructiveness; and passion for traveling from that of Locality. Some passions appear to be compound, and are referable to the activity of more than one faculty. Thus anger and revenge result from the activity of Combativeness and Destructiveness. The same kind of faculties exhibit

in different individuals the most opposite phases, and appear to be antipodes to themselves, because they arise from the activity of faculties of entirely different functions- Adhesiveness joys at the approach of a friend, Destructiveness at the death of an enemy. The former experiences the passion of grief at the loss of a friend, the latter at the escape of a foe. In the one case the passion is of the purest nature, and is based upon the most amiable traits of character. In the other it is of a demoniac complexion, and results from the most brutal of the faculties.

The largest portions of the cerebral mass are allotted to the organs producing the propensities and sentiments. It is not, therefore, surprising, that among them we find the most powerful of the passions. Their injurious influence in obscuring the mental vision, in clouding the light of intellect, in producing alienation of mind, and in deranging the general relations, and in disturbing the harmony of society, have ever been the fruitful themes of regret by the benevolent philanthropist. Since passion is the highest degree of activity of every faculty; and since the organs producing the sentiments and propensities, contain the greatest quantities of cerebral matter, need we wonder at this? Need we be surprised that in so many instances their fierce play has shrouded the feebler torch of intellect in darkness, and sometimes even extinguished its light? Need we marvel that reason

has been often compelled to strike its flag to their repeated assaults, and that to their unmitigated action the citadel of intellect has been unconditionally surrendered? Need we be astonished that their results have been carried out in the great volume of our past history, or that at different times, and in different places, they should have made our world their record, and inscribed their characters, with the edge of the sword, on its page? All this was to have been expected. Nay, more, it might have been foretold. Were the principles of this science clearly unfolded to the intellectual vision of a superior being, who was entirely ignorant of the history of our race, he might, from those very principles, deduce that history. Not the particular events that compose it, or the times or places of their occurrence, but events similar in kind to those which have actually transpired. The web would be essentially the same, although different kinds of threads might compose the woof. And all that for the simple reason, that this science unfolds the human character; that character that has been constantly developing at all times, in all places, under all conditions; that has exhibited its manifestations beneath a torrid sun, in temperate climes, amid polar ices; that in early times was displayed in the play of the propensities; and is now evidencing, in the enlightened portions of our world, the exercise of a high intellectual, moral and benevolent nature.

This science might well claim the attention of

all those who delight in studying nature as she is, and in contemplating her in her simplest garb, were it confined to theory only. We here see her divested of her scholastic attire, unincumbered with the learned lumber of metaphysicians, unobscured by the mists of human subtlety. "She is herself again." Simple in her means and instruments, certain in her end and aim. The metaphysical systems that have hitherto obtained, have commenced and closed with theory. This science regards practical results as well as theoretical conclusions. The reduction of the theory to practice will be now more fully considered.

The whole head acknowledges not the dominion of this science. Suppose a line, or more properly a plane, (as in plate figure 1, is represented by the line A B) to pass from the pupil of the eye through the auricular openings of the ear, and follow a straight forward direction to the back part of the head, it will sufficiently near for all practical purposes, separate brain from bone, and leave the part above it the legitimate subject of Phrenology. That part, therefore, constitutes the phrenological head, the general size of which should be the first object of inquiry. As accurate conceptions as possible should be formed of small, middling, and large sized heads. The common size of head should be taken as a standard, and the ability as far as possible acquired of perceiving a departure from it, either by way of enlargement or diminution. The

conclusions resulting from this general inquiry can only be of a general nature. The only result arrived at is, the general quantum of mind, including intellect, sentiment and propensity possessed by the individual.

The next general object of inquiry should be, the different regions of the brain respectively allotted to the propensities, sentiments and intellects. It is so ordered by nature that the organs of the faculties giving birth to propensities and sentiments, those of the perceptive and knowing faculties, as also those of the reflecting, are all arranged together, so that the regions of brain allotted to each class are distinct, and the subjects of separate investigation.

In the plate, figure 1, the different regions or portions of brain allotted to the different classes of faculties, are exhibited. The line running directly through from one ear to the other, thus connecting the two meatus auditorii together, is taken as an axis, and the proportion of brain lying in different directions around it, as the measure or criterion of intellect or of feeling. If the mass of brain between this axis and the forehead is large, the organs of the perceptive, knowing and intellectual faculties are fully developed. If that which lays behind and immediately above, (forming the back and lower central part of the head,) is extensive, it indicates a full development of the organs, and consequent possession of the faculties common to

man and animals. A large quantity of brain in the upper, lateral and horizontal region of the brain, indicates that the organs of those faculties which manifest the sentiments proper to man are voluminous.

With the view of arriving at the relative proportions of these different regions with as much accuracy as possible, suppose a line drawn from the centre of that axis to that point in the top of the head where the frontal and sagittal sutures meet, EG. The region behind this line is called the occipital, that before, the frontal. The length of this line measures the height of the head. Again, suppose a line drawn from the middle of the forehead, or from the organ of Eventuality to the point of union between the parietal and occipital bones, or to what is called the organ of Inhabitiveness or Concentrativeness, DF. The part below this line is the basilar, that above the sincipital or coronal region of the brain. The basilar is the region of the propensities; the sincipital or coronal that of the sentiments. In estimating the development of these regions, the width of the head must be compared with its height. A low head, with the basilar or lower region of the brain widely and largely developed, indicates the predominance of the animal nature; a high head, with the sincipital or upper region similarly developed, indicates the predominance of the moral nature. While the propensities are located in the lower or basilar region of the

brain, and the sentiments in the upper or sincipital, the intellectual faculties are situated in the frontal region. The perceptive and knowing occupy the lower, and the reflecting the upper part of that region.

There is a mode by which the comparative development of these two classes of faculties can be estimated. In figure 1, suppose the line AB, to represent a plane passing through the pupil of the eye to the axis, or line connecting the two meatus auditorii together. Suppose another plane to be represented by the line BC, passing from the surface of the reflecting faculties over those of the perceptive and knowing, until it intersects the plane represented by the line AB. The angle ABC, formed at the point of intersection of the two planes represented by the lines AB, and CB, will indicate the comparative development of those two classes of faculties. The larger the angle the more will the reflecting faculties preponderate over the perceptive and knowing. The more acute the angle, the greater the comparative strength of the perceptive and knowing over those of the reflecting.

The general form of the head is the subject of this inquiry. The almost infinite diversity observable in the form and relative proportions of this mental factory should, of itself, furnish the inference that something was intended by it. Point me to the solitary instance in which nature ever formed without design, or originated differences

without an object. Her creations are never meaningless, and her diversities ever speak the language of design, as well as her uniformities.

The result of this inquiry into the general size of the brain, and its relative proportions is the ascertainment of the general quantity of power, its general nature, and general direction. We arrive at conclusions in regard to the general extent or preponderance of propensity, or sentiment, or intellect, in the mental economy. The acquisition of clear and distinct ideas in regard to the different regions of the brain, renders it easier to locate the different organs that go to compose them.

So far as relates to those different regions, and the general character of the faculties situated in them, the application of Phrenology will hardly be denied. A large expanse of forehead, at a great distance from the ear, has long been considered by the common sense of mankind as an indication of intellect. This common conclusion must have been grounded on their common experience. In regard to the portions of brain allotted to the other classes, namely, to the propensities and sentiments, the observation of mankind has been of a less searching character, because those regions were less obvious to the view. Nature deserves applause, rather than censure, for this kind of arrangement. In the forehead are arranged faculties the highest and noblest surmounted by Benevolence. There is more especially stamped the seal of a god. This

high evidence of a divine origin is left exposed to the most casual glance. The estate of talent is here vested, and even he who "runs can read" the title. The same amount of observation will not fail in detecting an equal extent of truth in the other departments; and a low head greatly developed at the base, and a high head largely developed at the upper part, will afford as clear indications, in the first case, that nature has there planted her propensities, and in the second that she has there located her sentiments, as that to a large expanse of forehead at a great distance from the ear she has affixed the label of her intellects.

## LECTURE VIII.

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ACCURATE knowledge in regard to the different regions of the brain, gives facility in the location of the different organs. There are several bony prominences on the skull, which do not indicate development of brain. These are the mastoid processes or prominences, situated behind the ears; the crucial spine of the occiput, or bony projection situate below Philoprogenitiveness; the zygomatic process, extending from the cheek bones to the temples; and the ridge in the middle line of the coronal surface of the skull, occasioned by the longitudinal sinus.

The individual organs extend from the medulla oblongata, or top of the spinal marrow, to the surface of the cerebrum or cerebellum. The line or axis, formerly mentioned, passing through the head from one ear to the other, connecting together the two meatus auditorii, or openings of the ear, would nearly touch the medulla oblongata, and hence is assumed as a convenient point from which to estimate length. The distance from the centre of this line to the peripheral surface of the brain, measures the length of the organ there situated. A line, for instance, drawn from that point to that part of the surface of the brain where the organ of

Comparison is situated, measures the length of that organ. But the size of an organ depends upon its breadth as well as its length. That breadth is estimated by its peripheral expansion at the surface. Each organ resembles an inverted cone, having its apex at the centre of the axis, and its base at the surface of the brain.

As a general rule the size of the organ indicates its power. The same general law that, under like conditions, proportions the strength of a body to its size, and is every where found coupling power with enlarged dimension; applies as infallibly to the cerebral organs, as to all other organs in the animal system, and all other parts in the system of things. The same rule that ascertains the contents of a cone, ascertains the contents of the cerebral organs.

The size of an organ is, therefore, essentially different from its prominence at the surface of the brain. If an organ possesses an ample development, while its neighbors that bound it on every side are defectively developed, then it will present a prominence. But if the organs surrounding it are equally well developed, no prominence at the surface will be perceived, but a general fullness, indicating an equal extent of development. It is precisely the same in regard to a defectively developed organ. Both the prominences and recessions presented at the surface, speak only a relative, not an absolute language. The only true mode of ascertaining size, is to estimate, as near as possible, the

dimensions of the organ at the surface of the brain, and the distance of that surface from the centre of the axis.

In an equal relative development of the organs, a difficulty may occur in estimating the dimensions of an individual organ at the surface; as no prominence will then be presented: and hence, as many would infer, no positive data upon which to ground an estimate. In a case of that kind, the superficial dimensions may be calculated from the general size of that region of the head where the organ is situated. In the equal development of a number of organs, their superficies will increase in proportion as they recede from the axis. The periphery of the whole head must obviously increase in the direct ratio to its size. The periphery of its several parts must follow the same general rule. It, therefore, follows as a necessary consequence, that in equal developments of different organs, the breadth of each organ will increase in proportion to the increase of its length. Hence, in cases of that kind, the length of an organ affords the data from which its breadth may be estimated.

In regarding size as indicative of power, care must be taken to distinguish between power and activity. The one has reference to the *energy*, the other to the *rapidity*, with which the faculties act. The one accomplishes by a slow but sure movement, the other by a quick and sudden turn. While the balance wheel of a watch exhibits acti-

vity, the elements of power are manifested in the walking-beam of the steam engine.

The same quantum of power, other circumstances being equal, ought to be attended with the same degree of activity which is, in fact, nothing more than a facility and quickness in the exercise of it by the individual. The general rule that size of organ indicates its power, must, of course, be subject to the condition of other things being equal. All particular affections of the brain must, therefore, be excepted, because there other things are not equal. The circumstances under which individuals have been placed, and their agency in calling forth the faculties into active manifestation, together with the different temperaments of individuals, or the strong original tendencies of their constitutions, are disturbing elements in the application of the general rule. Their disturbing forces can, to some extent, be estimated, and the effects they produce calculated upon, in the modification of size. Exercise in effect varies power, by rendering it more available. The size of the organ gives the tendency to the proper exercise of its functions. The tendency to that exercise is also given by the presentment of external objects, fitted by nature to excite it to activity. Let those objects be wanting, and the power itself might slumber, and would possess less aptitude to exert itself in proportion to the paucity of objects that could call it into exercise. Men are variously situated in regard to the condi-

tions under which they act, and the circumstances that surround them. Hence faculties of the same degree of strength in different individuals may have been exposed in different degrees to the action of those objects that constitute their natural aliment. From this results the difference in the opportunities afforded for their exercise. To estimate properly the influence of this modifying cause, the circumstances in which the individual has been placed must be considered. That influence, under ordinary circumstances, seldom forms a large item in the estimate, because the *kind* of objects fitted to call into exercise the faculties of the mind, may be found in almost every sphere of human life. We all breathe the same atmosphere, tread the same earth, are overhung by the same heavens, and surrounded by the same kind of natural objects. Had the destiny of Franklin penned him within the limits of a sheepfold, we might not, at this time, have seen the lightning of heaven controlled by human agency; but his faculties would, nevertheless, within a limited sphere, have sought and found the objects they were framed to act upon. To estimate properly the disturbing force of exercise as a modification of size, it becomes necessary to be acquainted with individual history.

The modification of size most important to be attended to, results from the original constitution or quality of the body. These are indicated by the temperament of the individual. The ancients, ob-

servicing that natural differences obtained sometimes to a great extent, between different individuals, both as regarded constitution of body and mind, originated the temperaments for the purpose of arranging and classifying those differences.

The temperaments have been variously divided, but the simpler, and, therefore, the better division seems to be into these four, namely, the Lymphatic, the Nervous, the Sanguine, and the Bilious. Each possesses characteristics peculiar to itself, by which its occurrence is always designated.

*First.* The lymphatic temperament is indicated by a round form of body. The muscles are soft, smooth and flexible. An ample repletion of the cellular tissue presents a fullness and smoothness of outline. The hair is fair, and the skin clear and rather pallid. The vital actions are performed in a languid manner, and the circulation is marked by weakness and slowness. The brain partakes of the same sluggishness of action, and performs its functions in a steady but rather feeble manner.

The individual possessing this temperament is easy and contented under almost any circumstances, in almost any situation, and subject to almost any condition. He is carried through life on a feather-bed, and is, therefore, screened from the lightning of passion, from whatever point in the human horizon it may emanate. The mental faculties are slow and somewhat weak in their operations, but steady and uniform in their character. The same size of organ

in this temperament is coupled with a diminished power and activity of function.

*Second.* The nervous temperament is recognized by fine, thin hair and thin skin. The muscles of the body are thin and small. Muscular motion is performed with great celerity. The countenance is pale and the health frequently delicate. The brain and whole nervous system are predominantly active. Excess of sensibility is the peculiar characteristic of this temperament. Hence the liability of the individual possessing it to be affected by small advantages, and slight reverses; to vibrate between joy and sorrow, to enjoy the imagined possession, and suffer in the fancied reversion. His moral character is tinged by the medium through which he views men and things.

The mental faculties partake of the activity of their organs, and exhibit a strength in their operations, to which the lymphatic temperament is a stranger. The same size of organ is here coupled with increased strength in its manifestations.

*Third.* The sanguine temperament is indicated by well defined forms, by regularity and beauty of outline. The person is tolerably plump, and the flesh of a tolerable degree of firmness. The hair is light, inclining to chesnut; the eyes blue, clear and vivacious; the complexion fair, and the countenance ruddy. The expression of the countenance is animated. The sanguiferous system is active in the discharge of its functions, and the blood runs

on its rosy errand through the system, with all the vigor and freshness of highly organized life.

The individual possessing this temperament is ever of a disposition the most happy. Gay, lively and mirthful, he possesses much buoyancy of temper, and an elasticity of spirit, that reverses may bend but cannot break. He is ever a welcome companion, and enlivens the circle in which he moves. He is inclined to the softer passions, and the net woven by love finds him an easy victim. He is well calculated to tumble about on the rough side of the world, without being subdued and overcome by its asperities.

The brain partakes of the activity of the sanguiferous system, and the mental faculties are active, but more active than powerful. They can make a powerful effort, but are incapable of long continuance of action. They can descend in a shower, but cannot abide the protracted storm. The same size of organ is here coupled with increased activity in its manifestations.

*Fourth.* The bilious temperament is distinguished by a sallowness or darkness of skin, moderate fullness and great firmness of flesh. The hair is coarse and generally black, or of a dark color. The outline of the person is harshly expressed. Hogarth's waving line of beauty is entirely wanting in the angular and ill-defined exterior. The eye has a deep-fixed, and penetrating glance. There is little vivacity, but much of fixedness in its move-

ments. The general aspect of the countenance is steady, strong, fixed and decided. All the functions of the body possess great energy of action. Their movements are not quick, but slow, measured and certain.

If the sanguine temperament inclines to love, this inclines not less to ambition. Venus cannot find in the bilious temperament an Adonis, but ambition has found a Napoleon. It is the individuals of this temperament that overcome opposition by patient endurance, and determined perseverance. They are characterised by inflexibility of purpose, unyielding tenacity of opinions, and steady, uniform, determined adherence in the use of means once employed. A wrong treasured up by them breathes in the atmosphere of vengeance until it can wreak the ruin it meditates. It is the individual possessing this temperament that stamps a people with the impress of his own mind, and then leaves a name behind him to float down to after ages. The sanguine temperament accomplishes more by celerity of movement, this by continuance of application. That takes by storm, this by a ceaseless blockade. That overcomes by adroitness of manœuvre, this by annihilation of the object. That frequently changes means to attain the same end, this fortifies those it has already employed. That more resembles the frisking cascade or sudden cataract, this the continuous flow of the majestic river.

The mental faculties perform their functions,

not with rapidity, but with great and continued energy; and the same size of organ is here coupled with increased power of manifestation.

The temperaments are supposed to depend upon the constitution of particular systems of the body. In their production these different systems follow the general law of nature, and act with a degree of energy proportionate to their size. The lymphatic temperament is referable to the glands and assimilating organs. In proportion to their size will be their energy, and in proportion to their energy will be the extent of the temperament resulting from it. The roundness of form, softness of muscle, fullness of cellular tissue, plumpness and smoothness of outline, and easy disposition, which form the characteristics of that temperament, all proclaim its dependence upon the glands and assimilating organs. The energies of the living system are more expended upon them, and hence the deficit in the quantum distributed upon the brain and mental faculties.

The bilious temperament is referred to the muscular and fibrous systems of the body; and hence the fullness and firmness of flesh, the decision of countenance, the angular and harshly expressed outline, and the continued energy of body and mind which form its most peculiar characteristics. The fibrous system embraces the medullary fibres of the brain, as well as those of the body. Hence the increased size and activity of the muscular and fi

brous systems would be productive of strength of body and energy of mind.

The lungs, heart and blood vessels produce the sanguine temperament, and hence that is indicated by well-defined forms, plumpness of person, animated and ruddy countenance, and buoyancy and elasticity of mind. From the florid appearance of the blood, through the epidermis of the skin, is not only inferred the activity of the heart and blood vessels, but also the healthy action of the lungs in affording it a due degree of oxygenation.

The mutual dependence of the sanguiferous and nervous systems upon each other would render increased action in the one productive of increase of action in the other. Hence, in this temperament, the organs of the mental faculties are affected by sympathy, or by some other cause arising from the intimate connexion of the sanguiferous and nervous systems with each other, and the faculties themselves rendered more active in their manifestations. As they are not, however, directly affected, the mental character possesses more buoyancy than solidity, and more height than depth.

The brain and nerves originate the nervous temperament. Hence the fine hair, thin skin, small muscle, quick motion, pallid countenance, delicate health, and extreme sensibility, which are the insignia of that temperament. The size and activity of the brain and nerves preponderates over the size and activity of other functions of the body. The

balance of living energy inclines to that side of the equation, and hence strength of mind, excess of sensibility, and delicate health of body are the results. In excess, it becomes a malady of the most immedicable kind, because stamped upon the organization.

In characterising the temperaments, and in setting forth the insignia by which the existence of each is indicated, their pure, unmixed, and elemental state has been alone considered. That simple state, however, rarely occurs in nature. There they are blended with each other, and exist under modified forms. But however mingled they may be in actual life, they still carry with them their distinct characteristics. The union of two may form a compound, but still the existence of each be indicated by its own peculiar properties. The predominating temperament is ever indicated by the predominance of its characteristics in the organization. The mixtures that are of the most frequent occurrence in actual life, are the sanguine-lymphatic, nervous-lymphatic, and the nervous-bilious. The extent of each must be determined by the extent of its characteristics. That extent once ascertained, allowance must be made for the influence it exerts upon the brain, for that influence is independent of the size of the organs. The estimate of the power, strength and activity of the organ, must result from the consideration of its size, slightly modified by the influence of exercise, but

more particularly by the temperament of the individual. Great general size, and great power, strength and activity combined, constitute the natural elements of the highest genius. It is to largely developed organs, urged to action under favorable circumstances, by a strong and energetic temperament, that the small craft of this world have looked up to as the master-spirits in the guidance of their affairs. They have controlled the senate, displayed their energies at the bar, thundered from the pulpit, and led the army to victory. History has made them the property of their race, and they are handed down as the samples of their age, the representatives of their numerous, nameless, but perhaps not less happy, constituents.

The ascertainment of the size of the organs, and the consequent strength, power, and activity of the faculties, is not alone sufficient without further reflection to enable one properly to estimate character. The knowledge of size, power, strength and activity once acquired, the faculties must then be considered as a whole, and the modifying influence of each upon each duly estimated. An entire result is sought, but that result is derivable not from one faculty only, but from all the faculties that may happen to be combined in the individual.

To enable the arrival at a correct general result, a knowledge of the faculties themselves, their respective functions and modes of activity is absolutely necessary. Although those functions are

distinct and independent of each other, yet the results of their action may in part neutralize, or vary the character of the combined product.

The manifestations which any faculty is instrumental in producing, will always, to a greater or less extent be in accordance with its function, but they will be considerably modified by the other faculties with which they may happen to be combined in the same individual. Suppose, for instance, large Destructiveness were combined with large Benevolence. Although the functions of each are distinct, and perfectly independent of each other, yet the results of their action possess a neutralizing tendency, and originate the desire to destroy inanimate objects only. If large Destructiveness be combined with weak Benevolence, the course of carnage will be uninterrupted.

Powerful Acquisitiveness combined with strong Conscientiousness, leaves the first at liberty to follow its own inclination, and to amass its stores, but prompts to the adoption of lawful means in its acquisitions. Combined with weak Conscientiousness, mere right is disregarded, a furtive disposition manifested, and a pocket picked without compunction. Combined with strong Destructiveness and weak Benevolence, it prompts to deeds of death for the sake of gain.

The predominance of some faculties carry their influence into almost every department of intellect and of feeling. Powerful Ideality stamps its im-

press upon the reasonings, the comparisons, and the wit of its possessor. The dictates of Self-esteem have reference to the dignity of the act; those of Love of Approbation to the honor, admiration and applause secured by its performance. Amativeness, Philoprogenitiveness and Adhesiveness, enjoy domestic life, and bind their possessor to his home and his fireside. Wit delights in the gaiety of the social circle, and seeks there a field for the flash of its merriment. Individuality and Eventuality observe the world, Comparison perceives the similarity or dissimilarity in its parts, while Causality creates it. The faculty of Conscientiousness is the great moral barrier interposed by nature to prevent high-handed injustice, unrestrained license, and the unbridled play of the propensities. But this alone, in too many instances, would be insufficient for that high purpose. Were nothing more necessary, all criminal jurisprudence would be superceded as useless. The fact that every nation has found itself under the necessity of resorting to penal laws for the preservation of order among the members that compose it, is, of itself, sufficient to show that this faculty is not alone adequate for that purpose. The penalty in laws of that character, addresses itself to the faculty of Cautiousness, and creates in it a motive to interpose for the prevention of wrong and the restraining of outrage. The will, which is nothing more than the decision of the intellect upon the motives presented by the propensities and sen-

timents in reference to the performance or non-performance of particular acts, yields its obedience to that which suggests the stronger motive. Acquisitiveness, for instance, prompts to the commission of larceny, for the purpose of attaining its own gratification. If no other faculty interposed, the will would yield prompt obedience to its impulse, and the desired object would be obtained through the commission of the crime. Powerful Conscientiousness decides against its commission, as being opposed to moral rectitude, and therefore the individual wills not to do it.

If Conscientiousness is weak, and insufficient to prevent the threatened mischief, the next appeal is made to Cautiousness. The existence of the penal law is made known through the medium of the perceptive and knowing faculties; the effect of its infringement, together with the chances of a discovery, through that of the reflecting; and the result, as affects the individual, of detection and conviction, is *felt* by cautiousness. If that *feeling* is sufficiently strong, the individual wills not to commit the crime, however weak may be the dictates of Conscientiousness. If weak, the act is committed, and the result left to take care of itself.

Excess of activity in the higher sentiments is productive of weakness; in the lower propensities, of positive vice. Both arise alike from their own relative strength, or from the comparative weakness of the high reflecting faculties; but the one

extends its injurious influence no further than the individual, while the other poisons the springs of social intercourse. The unrestrained action of the propensities would terminate in the ruin of their possessor, in annihilating the social fabric, and in destroying the elements of social order. It is for the perceptive and knowing faculties to *inform*, and for the reflecting to *judge* of their dangerous tendency. The higher sentiments then *feel* the result of that judgment, and allowing adequate information is furnished, and properly judged of, the individual wills to act or forbear, according to the strength of that *feeling*, as compared with the strength of the *impulse*. Hence strong propensities, combined with weak understanding, or with weak sentiments, tend to evil. In the one case, adequate information of their dangerous tendency is *not furnished*, or *not properly judged of*. In the other, although the necessary information is furnished, and a sound judgment predicated upon it, yet the resulting evil is *not properly felt*. There was, therefore, a manifest propriety in establishing this *double barrier*, found in the *dictates of Conscientiousness*, and in the *appeal of penalties to Cautiousness*, for the purpose of preventing this *double tendency* to the commission of crime. Conscientiousness sanctions the penalties that appeal to Cautiousness; and Cautiousness, in its turn, provides against the occurrence of weakness in Conscientiousness. Thus the faculties labor for each

other, and the weakness of one is supplied in some degree by the strength of another.

The tendencies to individual action result from all the faculties possessed. Each faculty desires gratification in proportion to the size of its organ, modified by its activity, and the temperament of the individual.

In the reduction of this science to practice, after ascertaining the general size of the head, the next point to be settled is, are the different regions of the brain and the organs that compose them, equally well developed. If so, the tendencies to action will be every way alike; the individual will exhibit the most opposite phases of character, and his actions will be called forth, not by the predominance of faculties, but by the preponderating influence of the circumstances in which he may happen to be placed. If those circumstances are in their nature calculated to excite the propensities, the rein will be given to them; if to call into exercise the higher sentiments, they for the time being will exert a controlling influence. The one would lead to sin, the other to repentance, and these together would form no insignificant items in his biography. In the estimate of such a character, or rather such an absence of all fixed character, circumstances should be alone considered. But these are varying every hour. An individual of that description would, therefore, be a subject that would set calculation, and estimate, and every kind of conclu-

sion, at defiance; excepting always the conclusion that nothing could be concluded upon. Possessing tendencies to action, and capacities of acting every way alike, he would properly belong to the old metaphysical system, and in common with all others, in accordance with that system, would be the unresisting subject of circumstances. A case of this kind can seldom occur in practice.

The next object would be to ascertain whether any one organ was developed to any considerable extent beyond all others. If so, its controlling influence will pervade, in a greater or less degree, every department, whether of feeling or of intellect. It would constitute what is usually denominated a leading feature or prominent trait in the character. A large Love of Approbation would seek its appropriate aliment through all the means that could be rendered available for that purpose by the faculties that were combined with it.

The next inquiry would be, are any particular regions of brain, or sets of organs more extensively developed than other regions or sets in the same head. If so, their combined action will strongly influence the general course of conduct. Is the region around, above, and just behind the ear, better developed than any other? Secretiveness, Combativeness, and Destructiveness may be presumed to predominate. Does the same occur in regard to the region in front of the ear? Acquisitiveness and Constructiveness preponderate, the

former seeking its gratification in accumulating through the medium of the latter.

Is the upper back part of the head more largely developed than other parts? Self-esteem, Love of Approbation, and Firmness, may be expected to communicate their modified result to the entire character. Is the upper central part of the head similarly developed? Cautiousness, Conscientiousness and Ideality, may be expected to carry through the entire mental economy their sense of fear, of justice and of beauty. Is a larger comparative quantity of cerebral matter found in the upper frontal region of the brain than in other parts of it? We may calculate that Hope will clothe the future in brightness, that Veneration will look up with awe and reverence to a superior being, and that Benevolence will be ever ready to extend relief to the wretched: or, in other words, we may expect that the great outlines of character will be stamped with the insignia, not of greatness, but of goodness. In the large development of the frontal region of the brain is to be sought the strong operations of an ever active intellect. In seeking to arrive at the elements of character, we are to regard the propensities and sentiments as the most material agents in its composition. The true source of action is to be sought and found in the faculties that feel. They present the motive and give the impulse. The intellect, speaking in general terms, is their handmaid. Its power is wielded for their purposes,

and through the ways and means which it devises, they are enabled to attain their ends.

After acquiring a facility in estimating the influence of one predominating faculty, and of one particular region of the brain, or set of faculties, possessing some common characteristics in their several functions, the next object to be attained is to estimate the modifying influence of one faculty or set of faculties, the organs of which are largely developed over another, or others, possessing functions entirely different, and organs equally well developed.

Veneration looks up to a superior being. Combined with Benevolence, Hope and Conscientiousness, it regards a being supreme in his attributes. Combined with large Acquisitiveness, its object is a being superior in wealth; with large Self-esteem, a being superior in power, rank or station. Large Benevolence, combined with large Acquisitiveness, bestows upon distress its kind services, but reserves its money. Large Ideality, with small reflective power and weak Cautiousness, constitutes the wild visionary projector. Such a combination, with large Acquisitiveness, prompts to the formation of splendid schemes, with the view of accumulating wealth; with large Constructiveness, to experimenting in machinery for the purpose of producing perpetual motion. Large Cautiousness, with large Love of Approbation and small Combativeness, lead to extreme timidity and bashfulness. In such

a combination, there exists the continual apprehension of doing some act that will not be approved of. Large Self-esteem, combined with large Acquisitiveness, desires wealth for self-gratification. Large Conscientiousness, combined with large Acquisitiveness, desires it for the purpose of discharging obligations. Large Benevolence, combined with the same propensity, desires it for the purpose of relieving the wretched. The first combination constitutes the miser; the second, the man of justice; the third, of goodness. Large Destructiveness, Combativeness and Secretiveness, combined with large Firmness, Self-esteem, and Love of Approbation, in the savage state, are essential elements in the composition of the warrior. Deeds of death, accomplished through the instrumentality of wiles, secure, in that state, as well the approval of self, as that of others. As society advances, arising from the more complete development of the sentiments proper to man, of the upper frontal region of the brain, embracing the organs of Hope, Veneration and Benevolence, deeds of a sanguinary character are less approved, unless their tendency be to establish a particular creed or church or mode of religious belief. It was this kind of combination that produced the Crusades, precipitating half of Europe upon Asia, and drenching the fields of the east with the noblest blood of the west.

An additional advance of man, arising from a still more complete development of the same upper

frontal part of the cerebrum, is productive of other phenomena. Sanguinary deeds now meet with entire disapproval, except so far as they advance the combined interests of the higher sentiments. We still, therefore, meet with wars, but they are wars of freedom—wars in which existence is periled upon matters of right—wars in which the lower propensities are allowed to perform their peculiar functions for the purpose of giving the higher sentiments a freedom of action—wars in which the propensities accomplish their work under the guidance of the higher sentiments—wars, in fine, that have impressed their character upon our country's conflicts, that have lifted up their voice from the heights of Bunker's Hill, from the blazing battlements of Charleston, and from the sanguinary field of our own Saratoga. In times of peace this same combination of faculties may exist, and they then constitute the disputant, and party politician. Large Secretiveness, Combativeness and Destructiveness are still to be gratified; but being combined with large Firmness, Self-esteem and Love of Approbation, they are to be gratified in such a manner as will secure self-approval, as also the approval of others. That approval can only be secured by acts of that character, that are not in themselves calculated to outrage the higher sentiments of Conscientiousness, Hope, Veneration and Benevolence. Hence the wars carried on by these propensities thus combined, and at these times, are wars of opinion. Their generals are political leaders; their

ambuscades political plots; their couriers of intelligence the newspaper; their arms the printing press; their army roll the poll list, and the polls their bloodless battle fields.

From these illustrations it will be perceived that the propensities take their direction from the higher sentiments. If left to their own unrestrained action, unmodified by any governing influence, they would soon exhaust the energies of the living system in supplying the fuel to feed their wasting fires. The last pulse of life would convey to the extremities of the system the thrill of unregulated desire, while the return to its message would be delayed and delayed, until the last trump should dissolve the chill of many winters, unbind the fetters that ages had been riveting, and unseal anew the fountains of existence.

The propensities can only continue to be gratified while they continue to act. And since their continuance in action through life is impossible, they will leave many an aching void, many a mental want, which can only be supplied from higher and nobler faculties. These are the intellects and sentiments proper to man. Their impulses and emotions are less powerful, but more lasting. What they loose in immediate effort, they gain by a continuance of action. When properly developed their pleasures outlast the summer day of life, and dispel the gloom and shadows of its evening with more than lunar and stellar brightness. In the per-

formance of acts from which they experience gratification, the soul feels it unnecessary to send up an apology to its maker. The acts are felt to be in accordance with the privileges granted, and the duties imposed, and hence the delight experienced. When the lower propensities are brought into a complete state of subserviency to the higher sentiments and intellect, man acts in accordance with his whole nature, physical, intellectual, moral and religious. The relations within and without him are then perfect in all their parts and proportions.

The metaphysics have inquired into the relations existing between man and the external universe; morality into those existing between man and his fellow men; and religion into those existing between man and his maker. It remained for the science of Phrenology to lay a proper foundation for all these different kinds of investigation by commencing the inquiry at home; and first ascertaining the relations between the different faculties that make up the man, this common centre of relations. It remained for that science to teach the all-important doctrine, that when man acted in harmony with himself, he also acted in harmony with the universe around him. That then, and not till then, the relations existing between him and the external universe, and between him and his fellow men, and between him and his creator, could be understood and acted upon, with the certainty of knowledge, and the assurance of success. Does man seek after happiness? He will find the sour-

ces of it in himself. The external frame work of the universe; the immutable relations existing between its different parts, between each part and the whole, and between that whole and its creator, are unalterable by human agency. It is for man to bring himself to act in harmony with those relations; and that high object is attained when all the organs are properly developed, and all the relations between the faculties are properly established, when each can perform its part without violating any other, and all can act together in perfect union and harmony.

The practical applications of this science are numerous and important. In mental derangement, in education, in jurisprudence, its principles and practice become interesting objects of inquiry. The phenomena of disease can only be understood by a reference to healthy action. This science, by investigating the action of the faculties in health, their relations with each other, and their connexion with the organization, with the view of arriving at the conditions under which they act, is prepared to take enlarged views of the phenomena of disease, and to suggest the proper remedies for every mental malady.

Education is, or should be, the cultivation of the mental faculties, by supplying each with its appropriate aliment. With the view of ascertaining the quantity and quality of aliment which should be apportioned to the different faculties, how essential that the faculties should be known; their relations

ascertained; their functions, modes of activity, and wants, fully understood. How necessary that in each individual instance the extent of organ and power of faculty, should be known for the purpose of strengthening the weak and remedying the defective. Another kind of knowledge becomes important—the knowledge of the influence which the faculties possess over each other, arising from their functions and ascertained relations. It is through that influence that all the faculties may be rendered accessible, and a due degree of cultivation bestowed upon each. Is Love of Approbation, for instance, largely developed in a head in which Conscientiousness and Benevolence are defective? The sentiments of justice and goodness may be improved, and cultivated, and strengthened, by awarding the smile of approbation to those acts which are the outward expression of those sentiments. This influence of the faculties has been long known and in part acted upon. Man, in his infancy and youth, maturity and decline, has been sufficiently long attempted to be governed solely by appealing to his hopes and fears; his faculties of Hope and Cautiousness. It is time he recognized in himself other faculties worthy of being appealed to, and of setting to his acts the seal of their sanction.

What is the object and end of all jurisprudence, civil and criminal? It is the collection of general principles and their application to human acts, so far as those acts affect the rights or privileges of others; or in other words, it is the ascertaining and embodying

all the relations existing between man and his fellow men, arising from the familiarity of intercourse, and the enforcing of those relations only that tend to the continuance of that intercourse. But all those relations will be understood and acted upon, when all the faculties are brought to act in harmonious concert with each other. Then man will have attained the ultimate perfection of his nature, and the same general principles that are now reposing in black letter, and slumbering beneath the lumber of ten thousand volumes, will bind together the frame work of society, and be constantly evolving in all the beauteous proportions of life, from the ware-house of the merchant, and the shop of the mechanic, and the farm-house of the farmer.

The extent of practical application of which this science is susceptible, should be clearly and definitely settled. It is no where pretended that it admits the prediction of specific acts. Although they result from the faculties, yet they are influenced by the situation and circumstances of the individual. That influence is without the pale of Phrenology, and any prediction grounded on the principles of the science would be unsafe, because specific acts result as effects, not from the operation of the faculties alone, but from that operation jointly with this influence. All that can be confidently asserted, are the general tendencies of individuals.

It no where pretends that the means to be employed in the accomplishment of an end, can be designated by an appeal to its principles or its prac-

tice. The character of the ends sought to be attained generally, might, perhaps, fall within the scope of the science. We might also judge of the kind or character of the means to be employed in their accomplishment, whether they would be covert or open, fanciful or real, theoretical or practical, ill or well calculated to attain the end. But the specific means employed being in a great measure dependent on the circumstances and resources of the individual, would elude all phrenological research.

It is no where pretended that the particular ideas treasured up by any individual, are within the ken of phrenological optics. Those ideas are dependent upon the circumstances in which the individual is placed. They differ essentially from the power that forms them. The kind or character of the knowledge acquired might be arrived at, but particulars would still be wanting.

To determine the quantum of intellect, to sound the depth of the understanding in any individual instance, is comparatively an easy task. We have the map of it protracted before us, and have only to scan with accuracy, and to estimate with judgment. Far more difficult is it to arrive at the elements of character. To unravel that mysterious web, so intricate and perplexing, so abundant in its materials, so recondite in its phenomena, so modified in its result, requires all the searching accuracy of perception, all the soundness of judgment, all the resources of ingenuity.

The deductions of Phrenology are susceptible of being strengthened by the indications of Pathognomy. Pathognomy is the natural language bestowed by nature upon her productions. It is the language of expression, and is communicated through the motion of the soft and mobile parts of the body. The nerves of motion are the instruments through which this language is derived. These nerves find their origin or termination in the brain, and are stimulated to act through the influence of the faculties over the material organization. Hence the motions produced by their action are generally in the direction of the organ of the faculties.

Self-esteem draws the head and whole body upward and backward, and presents a rigid and unyielding appearance. The body would seem to be easier broken than bent. In Love of Approbation, all the expressions of the face, voice and motions are pleasant. Every thing is inviting. Every pore seems to be open for the reception of its proper aliment. Cautiousness lifts the head up and a little backward. The ears are erect, the muscles motionless, and every sense is attentive and active.

In Benevolence all the expressions are quiet, lively, and pleasing. A cloudless serenity is beamed from the countenance. The motions are free and easy, and every appearance is indicative of harmlessness and goodness. Adoration directs the head upward and forward in the direction of the organ of Veneration. The eyes are also directed upward, as to a superior object.

Of all the sources from whence pathognomonical indications are derived, that of the eye is the most fruitful. Its soul-searching and soul-disclosing character is displayed in the infinity of its motions, in the lightning of its flash, and in that undefinable something that is felt and understood, but cannot be expressed. It is the prompt conveyancer of sentiment, and the clearest mirror of passion.

The indications of pathognomy evidence the existence of power in a state of action. This undeniable fact strengthens the position, that the action of the nerves of motion, causing those indications, is owing to the influence of the mental faculties over the material organization. The power in those faculties is roused into action, and the nerves of motion, obedient to its stimulus, display, through the movements of the soft and mobile parts of the body, but more particularly of the countenance, the internal workings of its energy. Let that power return to a state of rest, and those indications are no longer visible. When mind is in the actual display of its manifestations, pathognomy is the mirror from which its powerful operations are reflected; but when those manifestations cease, pathognomy can afford no criterion, because it, in fact, ceases to be. Pathognomy enables us to perceive the lightning while in the actual display of its resistless energies: but recourse must be had to Phrenology for the purpose of enabling us to perceive its existence "while slumbering in its cloud."





