ANNALS

OF

PHRENOLOGY.

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ANNALS OF PHRENOLOGY.

Article I.

PHRENOLOGY VINDICATED,

In Remarks on a Discourse of Natural Theology, by Henry Lord Brougham—By Charles Caldwell, M. D.

'*A Discourse of Natural Theology, showing the nature of the evidence, and the advantages of the study. By* Henry Lord Brougham, F. R. S., *and Member of the National Institute of France.*' 190. 12*mo. Philadelphia: Carey, Lea and Blanchard.* 1835.

From its imposing title, and still more from the great ability and illustrious standing of its author, and the popularity he has attained by his zeal and industry in the diffusion of knowledge, this volume is likely to have an extensive circulation, and a corresponding influence on the reading community. It is important, therefore, that its doctrines be true; or, if they are not, that their fallacy be detected and exposed, and their evil tendency counteracted. Hence the principles it contains, and the evidence adduced in support of them, should be scrutinized with a severity proportioned to the serious consequences they may involve, and the distinguished authority by which they are sanctioned. Neither the 'golden opinions' his Lordship has won from his contemporaries, the weight of character he justly possesses, nor the heavy claims he will have on posterity for benefits conferred on them, should be allowed to serve

as arguments to confirm, as a covering to protect, or as reasons to palliate his errors and mistakes. His views should be treated with entire justice, and the most respectful observance, but without partiality, or undue deference to his talents and standing.

Under these impressions we shall proceed to a brief examination of his Lordship's Discourse. It is not our purpose, however, to give an analysis of the entire work. That would render our article too lengthy. Our attention shall be chiefly confined to those portions of it, where an attempt is made to maintain the four following positions—that the existence of *mind* or spirit (*in a distinct capacity*) is *more certain* than the existence of matter—that the human mind is *necessarily an immaterial substance*—that its *immateriality is essential to its immortality*—and that, in many of its operations, it is *independent* of the body.

In these hypotheses our author has distinctly announced his belief, and endeavored to sustain it by the vast resources of his knowledge, wielded by his powerful and disciplined intellect. Under these circumstances, we are warranted in presuming, that he has argued the subject so fully and ably, as to leave but little to be said by any one else, who, possessing sentiments analogous to his own, may have the confidence to follow him. If he has failed in his effort, therefore, the result will furnish ground of suspicion not easily shaken, that his views are indefensible. For, did his modesty permit him, well might he say, with the shade of Hector,

'——————*si Pergama dextra*
'*Defendi possent, etiam hac defensa fuissent.*'

And that he *has* failed, we are convinced ourselves, by an examination of his Discourse, and shall endeavor to produce, by a candid discussion of it, a similar conviction in the minds of others. Yet, in this early stage of the investigation, we positively disavow the charge of *materialism*, which ignorance or prejudice will be likely perhaps to institute against us, and shall show hereafter that, in case of its being preferred, it will have no foundation in truth or justice.

Respecting the *kinds* of substance of which the mind is com-

posed, we have never ventured to form an opinion, because we have no knowledge of facts bearing the slightest relation to the subject. We are indeed persuaded that no facts of the kind can be found among *human* discoveries. The reason is plain. *Such facts are beyond the reach of the human faculties.* Nor are we apprised of any *necessary* connection between *matter* and *mortality*, more than exists between *spirit* and *mortality*. And the converse of this is equally true. We are ignorant of any *necessary* alliance between *spirit* and *immortality*. And it will appear presently, that our author is equally uninformed on these topics with ourselves; and that, in speaking of them, he has dogmatized and denied, rather than reasoned or proved. The duration or annihilation of *spirit* as well as of *matter* depends on the will and power of their Creator. They can neither destroy nor perpetuate themselves. Nor can either of these ends be achieved by *created* beings. But, by the Deity, either can be accomplished on each kind of substance, whether spirit or matter, with equal ease; and he can also endow the latter with the attributes of mind, as readily as the former. Nor is any one privileged to say, that he has not done so. Such an assertion would be equally marked by presumptuousness and folly—but we are running ahead of discussion.

On the general character of the Discourse we are considering, our remarks will be brief, and not very laudatory. Yet did truth sanction it, to praise would be much more gratifying to us, than to condemn. That the work manifests in its noble author much acuteness and vigor of intellect, and no inconsiderable acquaintance with the subject of it, is readily admitted. It shows him to be far more extensively and accurately versed in the knowledge of nature, than most men bred to the bar, and occupied, as he has been, in the toils and distractions of political life. But, neither in point of fact, illustration or argument, does it contain any thing new. Whoever looks for originality in it, will be disappointed. We cannot perceive, therefore, that it has made the slightest addition to the antecedent stock of our knowledge, or confirms a single truth that was previously doubtful. The portion of it relating to the revolutions our globe has sustained, at remote eras, as indicated by geo-

logical strata, and organic remains, might have been greatly enriched and improved, with but little trouble. Its introductory disquisition on Natural Theology and Natural Religion is, *in substance*, but an ordinary production. It savors too much of the lawyer and logician, with his special pleadings, verbal subtleties, and professional formality. Its definitions are labored and somewhat pedantic. Nor do they contribute materially to any further elucidation of the subject they treat of, than had been effected by several preceding writers. We are not indeed sure that any further elucidation was requisite, the matter being already sufficiently understood. To all who have carried their inquiries into that department of knowledge, it must be abundantly obvious, that Natural Theology and Natural Religion are but different branches of the same science —an exposition of the fabric and economy of nature. And, in its relation to these two branches, that science embraces four leading topics—the existence and attributes of God; his government of the universe by a system of laws corresponding to those attributes; our own relation to him, as a portion of the universe; and the obligations and duties, on our part, which that relation involves. Of these topics, the two former belong to the branch called Natural Theology, the two latter to that of Natural Religion.

The distinction which our author would establish between *Psychology* and *human Physiology* is visionary and useless. The latter includes all of the *coporeal* as well as of the *mento-corporeal* economy of man (if it be admissible to form a word for the occasion) that can be rendered intelligible to us, or the knowledge of which can be turned to any valuable account. Strictly speaking, we are as ignorant of Psychology, or the *abstract* science of mind, as we are of the science of angels, demons or disembodied spirits of any other description. It is astonishing to us, therefore, that one of the master intellects of the age should refer to it, as a serious and practical study. It is as transcendental to us as would be the study of the natural history of the planet Saturn. Nor can any thing but prejudice and an implicit adoption of an antiquated hypothesis, without examining it, account for the error. Had our author bent his mind to it, as he has done to many other points, he would have escaped

the toil, into which the subtleties of the schools have seduced him —in a word, in whatever light we consider it, the Discourse has disappointed us. It is not the production we expected from Henry Lord Brougham. If it does not impoverish the garland of science and letters, which has so long and deservedly decorated his Lordship's brow, it will not enrich it by a sprig or a leaf. But, waiving all further remarks on the general merits of the work, we shall proceed to the consideration of the points we have designated. And that the reader may be enabled to judge of the fairness of our examination, and decide for himself respecting the issue, we shall exhibit to him the sentiments of our author in his own words. In descanting on the existence of mind and matter, his Lordship speaks as follows:

'The evidence for the existence of mind is to the full as complete as that upon which we believe in the existence of matter. Indeed, it is more certain and more irrefragable. The consciousness of existence, the perpetual sense that we are thinking, and that we are performing the operation quite independently of all material objects, proves to us the existence of a being different from our bodies, with a degree of evidence higher than any we can have for the existence of those bodies themselves, or of any other part of the material world. It is certain—proved, indeed, to demonstration—that many of the perceptions of matter which we derive through the senses are deceitful, and seem to indicate that which has no reality at all.'

* * * * * * * *

'Indeed, it is barely possible that all the sensations and perceptions which we have of the material world may be only ideas in our own minds: it is barely possible, therefore, that matter should have no existence. But that mind—that the sentient principle—that the thing or the being which we call '*I*' and '*we*,' and which thinks, feels, reasons —should have no existence, is a contradiction in terms. Of the two existences, then, that of mind as independent of matter is more certain than that of matter apart from mind.'

* * * * * * * *

'Like all materialists, but far more grossly and dogmatically than almost any other, the author (Mirabaud) begins by assuming that Matter exists, that we can have no doubt whatever of this, and that any other existence is a thing to be proved. Now, what is this matter? Whence do we derive any knowledge of it? How do we assure ourselves of

its existence? What evidence at all have we respecting either its being or its qualities? We feel, or taste, or smell something—that is, we have certain sensations which make us conclude that something exists beyond ourselves. It will not do to say beyond our bodies; for our bodies themselves give us the same sensations. What we feel is something beyond, or out of, or external to, or other than and apart from *ourselves*—that is, from our minds. Our sensations give us the intimation of such existences. But what are our sensations? The feelings or thoughts of our minds. Then what we do is this: From certain ideas in our minds, produced no doubt by, and connected with, our bodily senses, but independent of, and separate from them, we draw certain conclusions by reasoning, and those conclusions are in favor of the existence of something other than our sensations and our reasonings, and other than that which experiences the sensations and makes the reasonings—passive in the one case—active in the other. That something is what we call Mind. But plainly, whatever it is, we owe it to the knowledge that Matter exists: for that knowledge is gained by means of a sensation or feeling, followed by a process of reasoning; it is gained by the mind having first suffered something, and then done something, and, therefore, to say there is no such thing as Matter would be a much less absurd inference than to say there is no such thing as mind. The very act of inferring, as we do by reasoning, that the object which affects our senses exists apart from ourselves, is wholly incapable of giving us any knowledge of the object's existence, without, at the same time, giving us a knowledge of our own—that is, of the Mind's existence. An external implies necessarily an internal; that there may be any thing beyond or without, there must needs be some other thing beyond or without which it is said to exist; that there may be a body which we feel abiding separate from us, namely our own body, one part of which gives us sensations through another part—there must be a *we*, an *us*—that is, a *mind*.'

There is in these extracts such a variety of matter, woven together with so much subtlety and entangling ingenuity, that it is exceedingly difficult to disentwine the sentiments, and examine any one of them apart from the others. There is, moreover, a degree of dogmatism and arbitrary assumption of fact and premises, surpassing any thing of the kind we have almost ever witnessed. It would be hardly extravagant to say of the writer, that he assumes every thing, and proves nothing. His logic alone is generally good; but he has

no fulcrum, for the lever of it to rest and work on. Hence he employs it to little purpose.

His Lordship condemns Mirabaud for *assuming* the existence of *matter*, and, to be on a par with him, assumes himself the existence of *mind*—of mind, we mean, not only as distinct from matter, but *independent* of it. In this assumption, the Frenchman and the Englishman stand on equal ground, and call to their aid the same sort of evidence. They both rely on *sensation*—the former on sensation *from without*, called therefore the *external senses*—the latter on a certain *internal* sensation called *consciousness*. Be its name, however, what it may, it is still *sensation*, and depends, as we shall presently make appear, not on mind alone, but in part also on matter. The question to be solved, therefore, is, which of these two forms of evidence is most substantial and trustworthy? The one gives intelligence of a world *without*, and the other of a feeling, perceiving, and thinking agent *within*, which takes cognizance of that world. Our author asserts, with his characteristic positiveness, that, on the score of truth and certainty, the latter of these forms is greatly the *superior*; and he has attempted to sustain his assertion, by what he calls *reasons*. In our estimation, however, he has offered nothing worthy of so high a name. He deals in assumption and assertion alone, taking every thing for granted, as already stated, and proving nothing. We well know that, against a writer of such celebrity as his Lordship, this is a serious and hazardous charge. Having preferred it, however, we shall endeavor to make it good.

In our attempt to do this, we must ask the reader's special attention to the following clauses of the Discourse. In speaking of the uncertainty of the existence of matter, contrasted with the certainty of the existence of mind, his Lordship says, as if he were cross-examining a witness, 'Whence do we derive any knowledge of it? (matter.) How do we assure ourselves of its existence? What evidence at all have we respecting either its being or its qualities?'

In a serious discussion, these questions are scarcely worthy of a reply. Did they come from a common source, they would not

be worthy of it at all. The name of Henry Lord Brougham gives them all the weight and consequence they possess. Yet even that confers on them no permanent value. They seem intended to puzzle, much rather than to convince or inform. To weak and cloudy minds they may carry confusion; but to strong and clear ones, they are mere phantoms. We reply to them, that matter and its qualities become known to us through the instrumentality of our external organs of sense, which are bestowed on us by the CREATOR for that purpose, and which make as really a part of *ourselves*, as our minds do. Our author's dogma, that our minds alone make up ourselves, is not only a *mere* dogma; it is unfounded. Self means the *entire being*. And in the composition of that, matter and organization are as essential as spirit. Establish the position, that mind alone constitutes *self*—in other words, *the man*, and the resurrection from the dead becomes as wild a fable, as the birth of the phœnix from the ashes of its parent. This is plain common sense, an attribute of mind far more solid and valuable than ingenious subtlety, or fanciful speculation. It is especially much more valuable than *sophistry*, of which the *disputation* of our author (we cannot call it *reasoning*) strongly participates.

To doubt or question the evidence of our external senses, when in a sound condition, is the *madness of scepticism*. Indeed it is but a modification of *real* madness—one of the numerous forms of *monomania* that occasionally presents itself. It is to doubt of the existence of an external creation, which is almost the same as to doubt of every thing. It is moreover to question the truth of Revelation, which expressly asserts the creation of things external and *material*—of things essentially different from spirit. We are told that, 'In the beginning, God created the heavens and the *earth*.' But the 'earth' will not, we think, be pronounced by his Lordship to be *spiritual*. Neither, we presume, will the *heavenly bodies*. We are farther told, that God 'created man out of the *dust of the earth*,' and to complete him, 'breathed into his nostrils the breath of life, and he became a living *soul*.' This clearly shows that mind did not make the whole of 'self,' but that body made a part of it—even the *first existing* part. It evinces, if we mistake not,

that, in the composition of man, external body was deemed as indispensable, as internal spirit. If our author be a believer in Revelation (and we have never heard the contrary suggested) how can he reconcile these truths with the hypothesis of the *possible* non-existence of matter? How, indeed, will he reconcile that hypothesis with Natural Theology, one of his own favorite branches of science? Through that branch we trace and verify the existence and attributes of the Deity, by the existence, arrangement, and faultless economy *chiefly* of his *material* creation. We might say *wholly* of that creation; for were there no *matter* in existence, mind, in its present condition, (we mean the *human* mind) would have, as far as man's information extends, nothing to act on. To speak of its doing, in that case, any thing great, practically useful, or of such a character in any respect, as to be evidential of the existence and perfections of the Creator and Ruler of the universe, is folly. This is another truth, which his Lordship will not deny. As it exists in the body, the human spirit can have no *immediate* communion with other spirits. Assuredly we are *conscious* of none; and *consciousness* is the entire groundwork of our author's Psychology. Its *immediate* communion is with matter alone. In carrying into effect its various purposes, it acts *on* matter and *by* matter. Nor is it possible for it to act in any other way. And it receives from matter all its impressions; and its ideas of every description are, directly or indirectly, the fruit of those impressions. Matter, therefore, is essentially concerned in all it does, suffers or enjoys. In truth, for aught we know or can fancy to the contrary, if matter were annihilated, mind, (we still mean the human mind,) might as well be annihilated also; for its existence would be fruitless. Let imagination revert to a supposed period antecedent to the creation of matter, and the universe *to it* will be a cheerless blank. We speak of mind in its sublunary condition. And beyond that condition, it would be presumptuous in us to attempt to carry our inquiries. Yet, in the face of all these truths, our author makes the following extraordinary assertion, as already quoted.

'Indeed, it is barely possible that all the sensations and perceptions which we have of the material world *may be only ideas in our own*

minds: it is barely possible, therefore, that *matter may have no existence!*'

In this sentiment, *we* think it 'barely possible,' that his Lordship can be in earnest. The extravagance and caricature of the allegation remind us of Sterne's account of the discussion held in a convocation of the Fathers, respecting the power of the Deity over the *human nose.* One church dignitary declared, that that power was competent to make man's nose as large as the 'steeple of Strasburg;' and, that he might not be surpassed by his reverend brother, another asserted, that God, if he pleased, could make man '*all nose!*'—To speculate and trifle thus about 'bare possibilities,' is unworthy of a philosophical writer. Philosophy deals in *facts*, not in *fancies*; and there is an abundance of the latter in our author's Discourse.

It is hardly possible that Lord Brougham can have reflected seriously on the true character of the conception he has expressed. 'All the sensations and perceptions we have of the material world, may be only *ideas* in our own minds!' and its being 'possible that matter may have no existence!'—Such is his Lordship's conceit; and although it is really unworthy to be analyzed, still, to expose the more fully the boundlessness of its absurdity, we shall consider it briefly, in the form of analysis.

The human races, in common with a large portion of the inferior animals, are so organized and endowed by their Creator, as to be convinced of the existence and properties of matter. Every action they perform, every idea they receive, every thought they indulge, and every sensation they experience, is indissolubly connected with this belief. This is palpable to our observation, as well as to our consciousness. Admit the hypothesis, then, that matter does not exist, and creation throughout is a *deliberate falsehood!* an unbroken scheme of *intentional deception, on the part of its Author!* The Deity contrived and formed it, *as it is.* If, therefore, it be a mass of delusion, instead of reality, he is the fountain of that delusion, and the entire economy of the universe is a juggle. There is as little reality in virtue and vice, religion and impiety, as there is in matter. All earthly manifestations of these goods and

evils are essentially material. And without manifestations, the things to be manifested are but *dead letters*. We speak in relation to this world. Ratify the notion of our author, and the entire system of nature is unhinged, and something worse than chaos prevails. For matter is the basis and the bond of every thing sublunary. Realize his Lordship's dream, and murder, and arson, war, famine and pestilence, tempests and inundations, earthquakes and volcanoes lose their reality, and become mere 'ideas in our own minds!' And the Deity has solemnly denounced *some non-entities*, and proclaimed their punishment! and spoken *falsely* of *others*, as real existences! Of the heavenly bodies, their movements and laws, the same is true. Under the hypothesis we are considering, they exist only as delusions and fancies! The discoveries and calculations of Newton and Lagrange, Laplace and Herschel, are as positive *unrealities* as Ovid's 'Metamorphoses,' Spencer's 'Fairy Queen,' or Shakspeare's 'Tempest!' Nor is the worst yet told.

Were our author's hypothesis confirmed, the connection between cause and effect would be dissolved, and there would be effects *without* causes, unless, like certain hermaphrodite animals, the mind should act on and impregnate itself. Though our author would, we presume, be unwilling to avow this sentiment expressly, he does so virtually. The condition of his hypothesis is, that the mind should be *sound*; yet that it might have sensations, perceptions, and ideas of an external world consisting of matter, while there would be nothing existing to produce them. Impressions would be made, yet there would be nothing in existence to make them. Ten thousand men would look at the same animal, and pronounce it to be of the same size, form, and color; ten thousand men would smell the same flower, and give the same opinion of its odor; they would taste the same fruit, and declare its taste to be the same. Yet this perfect concurrence is all a delusion, there being nothing external to the mind—neither animal, fruit, nor flower —nothing indeed but the mind itself, acting on itself, to produce the idea of either form, size, color, taste, or odor! Two armies meet in conflict, and a thousand men on each side are slain, and two or three thousand wounded, the latter of whom suffer great

pain. But there are neither swords nor bayonets, guns, balls, nor powder, nor any other implements of war in existence. Wounds, pain and death have nothing therefore to produce them—nothing to act as their cause; nor is there any reality in them. They are mere fancies, or 'ideas of the mind!' Such would be the consequences of the realization of the notion we are examining; and they are positive foolery. We repeat our confident belief, that Lord Brougham never seriously examined the consequences of his allegation of the non-existence of matter, else he would not have committed so gross a mistake.

For want of a thorough examination and due reflection, our author has deceived himself in this matter. His position is, that the senses are *often certainly* delusive, and *may* therefore be *always* so. Hence, though they seem to inform us of the existence of matter, yet no matter may exist. His Lordship does not however appear to be aware of the fact, or he has forgotten it, that when *one* of the senses furnishes deceptive information, another may be made to correct the mistake. Place a straight stick in water, and the eye pronounces it crooked. Examine it by the touch, and the mistake is rectified. A vessel is filled with a limpid fluid, which to the vision seems to be water. Test it by the taste and the smell, and it is found to be alcohol. When the body, including the brain and nerves, is in perfect health, the external senses never deceive us, as to any thing, on which all of them that take cognizance of it are brought fairly to act. Their evidence, therefore, taken collectively, is conclusive, and may be safely relied on. Our author is mistaken, when, to show the fallacy of the senses, *he* pronounces *hardness* and *solidity* to be the result of *reasoning*, not of *feeling*. Hardness is as much a matter of sensation, as taste or smell. That there are different degrees of solidity, is true; and so are there of all other forms of sensation. His Lordship's logic, though generally sound, is sometimes so subtle, obscure, and enigmatical, as to seem little else than a play on words. The following is an instance of this.

'The very act of inferring, as we do by reasoning, that the object which affects our senses exists apart from ourselves, is wholly incapa-

ble of giving us any knowledge of the object's existence, without, at the same time, giving us a knowledge of our own—that is, of the *mind's* existence. An external implies necessarily an internal; that there may be something beyond or without, there must needs be some other thing beyond or without which, it is said to exist; that there may be a body which we feel, abiding separate from us, namely our own body, one part of which gives us sensations through another part—there must be a *we* and *us*—that is, the *mind*.' [P. 394 of this work, as previously quoted.]

Were we inclined to play back on our author *in words*, he gives us here an opportunity to do so. True, as he says, the existence of an 'external' implies the existence of an 'internal.' But surely the converse is equally true. An 'internal' implies with equal clearness the existence of an *external*. In truth, internals and externals are essential to one another. Destroy either, and you destroy both,—at least the relation and the name no longer exist. The entire passage resembles too much a manœuvre in sophistry to deserve respect.

As to his Lordship's '*us*' and '*we*'—that is, the *entire personality* of man consisting in *mind* alone, no mistake can be grosser. As clearly stated, mind alone does not constitute the man. Common sense revolts from such a fancy. Man is a compound being. Nor, as already shown, is body less essential to his composition than mind. If he cannot think and project without spirit, neither can he execute and accomplish without matter. All this is so plain, that no reasoning or illustration can make it plainer. Nor can any thing short of scepticism, we had almost said *insanity*, hold it doubtful.

In a word; though we have engaged in it, and pursued it perhaps to an unnecessary length, yet do we consider the discussion of the question, which is most certain, the existence of mind, or the existence of matter? much more worthy of wrangling school-boys, than of reasoning philosophers. They are alike certain, and rest on evidence of the same description—*sensation*. For consciousness is as real sensation, as seeing or hearing. Nor is it of a more substantial or trustworthy character.

We are not a little surprised at the importance Lord Brougham attaches to the oft-repeated apothegm, '*cogito, ergo sum*'—*I think, therefore, I exist.* Just as logically and truly may it be said, *video*, or *audio, ergo sum—I see*, or *I hear, therefore I exist.* For we can no more see or hear, than we can think, without existing. True, we may exist, without either seeing or hearing. And so may we, without thinking. The apoplectic and the deeply fatuous do nothing that deserves the name of thought. Certainly we have no evidence that they do. Neither do we think, when in a state of syncope, or when *perfectly asleep.* Dreaming is *imperfect* sleep. The mind, therefore, is exercised imperfectly. But we must pass to the examination of another of our author's dogmas, as fully expressed in the following extract.

'The immateriality of the soul is the foundation of all the doctrines relating to its future state. If it consists of material parts, or if it consists of any modification of matter, or if it is inseparably connected with any combination of material elements, we have no reason whatever for believing that it can survive the existence of the physical part of our frame; on the contrary, its destruction seems to follow as a necessary consequence of the dissolution of the body.'

The doctrine here laid down is equally extravagant, dangerous, and unfounded. It places the immortality of the soul, and all its accompaniments and consequences, whether of rewards or punishments, on a mere hypothesis—its 'immateriality.' Should that hypothesis therefore prove fallacious, the doctrine of immortality is but a dream, and man perishes entire, like the flowers of the field, and the leaves of the forest. We would ask our author, or any one prepared and inclined to answer for him, on what he founds his creed of 'immateriality?' Revelation gives no countenance to it. Yet it positively affirms the *immortality* of the soul. Indeed it is that alone, that has 'brought immortality to light.' But not on the plea that the soul is immaterial. Far from it. The true and only *Christian* ground of immortality, is the *Resurrection from the dead*, which shows, we think conclusively, that the soul alone is not the *perfect man.* Whether true or false, immateriality is not a Christian doctrine. It is *rank paganism*, derived from the writings

of the philosophers of Greece, especially of Pythagoras, Aristotle, and Plato. Neither the Prophets, the Messiah, the Apostles, nor the primitive fathers of the church have made the slightest reference to it. Much less have they proclaimed it a *condition of immortality*. It was *smuggled* into the doctrines of Christianity, as a supposed improvement, by some of the speculative divines of the third or fourth century. Nor has it been universally believed in, even since that period. Some of the most learned, pious, and enlightened of the clergy have always held it doubtful, while others have positively rejected it. And very many disbelieve in it now, or deem it a matter of no moment, because, in their opinion, neither the immortality nor the accountability of the soul depends on it. Matter is, in its nature, as indestructible as spirit; nor has the Deity avowed his intention to destroy it by his own act. He can render immortal or destroy either or both, at his pleasure, with equal facility. And he can bestow on either the attributes of feeling and thought, and form out of it a moral and accountable being. No one, moreover, is authorized to say, which of the two he has selected for that purpose. We mean, that no one knows whether the human mind is material or not. To dogmatize on the subject, therefore, is presumptuous. Our author would seem inclined to compel the Creator to make the mind immaterial, or to complain of him for non-compliance—instead of leaving him to the counsels of his own wisdom. We repeat, that though immaterialism has reference chiefly to heavenly concerns, it is a creed of human invention, the Divine oracles leaving the subject wholly untouched.

Whence then, we ask again, does Lord Brougham derive his testimony in favor of the mind's immateriality? We know he will reply, *from his consciousness*. That great Delphic interpreter of mysteries, on whose responses orthodox metaphysicians so confidently rely, assures him, he will say, that that internal agent, which he calls '*self*,' and '*we*,' and '*us*,' is *immaterial*; and that it is not possible for any 'modification of matter,' or any thing partaking of materiality to feel, and think, and act as it does. This, to say nothing of its dogmatism, is *high language* to be employed by a *mortal*, in relation to any of the productions of the Creator. Such

an allegation can hardly be accounted respectful to Heaven. It involves an assumption of much more knowledge than is attainable by the limited powers of our race,—of much more, assuredly, then is yet attained by them. Worse, still; it virtually questions the omnipotence of the Deity. It implies, indirectly, that there are certain things, which ALMIGHTINESS cannot do. We ask his Lordship seriously, whether he is confident that all existing kinds of matter have been yet discovered? and whether he has himself a perfect acquaintance with all the properties of the mater al substances already known? To answer these questions affirmatively would be exceedingly hazardous to him. Yet such an answer alone, or rather a competency in him to render it, could justify him in the declaration, that no modification of matter can feel, think, and be immortal. In truth, he knows no more about the *substance* of the mind, than *we* do; and we confess ourselves entirely ignorant of it. An inquiry into that point is transcendental to us *now*, and should be referred to wiser beings, or to a more enlightened period, and improved condition, of our own being.

As to 'consciousness,' the boast of all metaphysicians, and of our author, as one of them, it is but *an internal feeling*, much less distinct and definite in the intelligence it communicates, than the external senses. It gives us no thorough and accurate knowledge of any thing. In a special manner, it does not inform us what our minds are made of. It simply apprises us of the fact, that we possess a *feeling* and *thinking* power; and there its revelation ends. It does not tell us, whether that power belongs to spirit or matter, or to both united, the latter of which is known through other channels to be most probable. As to the *substance* of mind—the kind of article we mean of which it is formed, nothing short of intelligence FROM ABOVE can disclose that to us. Fortunately, however, our ignorance of the matter does us no injury. For all practical purposes, our information is sufficient. No one can doubt that the mind is made of the substance most suitable to its character and destiny. With that assurance it is our duty and interest to rest content, instead of disquieting ourselves and consuming our time in fruitless speculations.

A want of physiological knowledge leads metaphysicians into the belief, that consciousness is exclusively an attribute of mind. This is a mistake. And it is an abundant source of other mistakes, as might be readily shown, were it admissible in us to dilate on the subject. Consciousness is but a *sense of being*, and of the *present condition* of it—active or passive, healthy or diseased. It is what the German physiologists first called *Caenesthesis—a feeling of self*, a term which is beginning to be generally adopted. Hunger, thirst, and all other forms of internal uneasiness, are but modifications of it. So are the internal pleasant feelings of health. Hence its division into a sense of *well-being*, and a sense of *ill-being*. And it is as essentially connected with nervous and cerebral matter, as any of the external senses. This is demonstrated by the fact, that an injury done to the nerves or brain impairs or destroys it, according to its extent. A paralysis of the nerves, or a severe concussion or compression of the brain, is as fatal to consciousness, as to vision or hearing. This is a truth familiar to every one. That Henry Lord Brougham, therefore, who ranks in some respects with the most resplendent luminaries of the age, should, in the very face of it, contend that consciousness belongs exclusively to mind, detached from corporeal matter, and independent of it, is truly surprising. As rationally would he contend that chewing, swallowing, dancing, or any other sort of muscular action, is independent of matter. In fine, as long as the mind and the body are united, they are equally essential to the action and efficiency of each other. They are, moreover, equally essential to the constitution of *personality* or '*self.*' The mind no more makes the man, without the body, than the body does without the mind. For all earthly purposes, the lifeless carcass of an idiot is just as efficient, as the disembodied mind of a Newton. However extravagant this assertion may appear to some, and offensive perhaps to others, it is notwithstanding true. And when error is boldly advanced, and sustained by all that consummate talents and learning can effect, truth should be fearlessly arrayed in opposition to it. In no other way can science and the interests of man be promoted. But we can dwell on this topic no longer. For our senti-

ments on it more at large, the reader is referred to an article entitled 'Phrenology Vindicated,' published in the October number, 1835, of the Transylvania Journal of Medicine. The article is also published in pamphlet form, and contains, somewhat extensively, our views on several other points in the metaphysics of Phrenology. The third topic in the Discourse, on which we expressed our intention to offer a few remarks, is the *fashionable* hypothesis, that

The *Immateriality* of the mind is essential to its *Immortality.*

This point, though incidentally noticed under our last head, calls, we think, for further illustration. Not only is it very imperfectly understood; it is a source of groundless but inveterate prejudices against Phrenology, and acts as a serious barrier to liberal inquiry. Our author's sentiments on it appear in part in our last quotation. Some additional views by him are contained in the following clause.

'The mind differs from the body in this, that it *has no parts;* it is absolutely one and simple; therefore it is *incapable of resolution or dissolution.* These words, and the operations or events they refer to, have no application to a simple and immaterial existence. Indeed, our idea of annihilation is wholly derived from matter.'

Here is another instance of as unqualified dogmatism and assumption, as English literature can furnish. The *petitio principii* is complete. It may be true, as Lord Brougham asserts, and perhaps is so, that the mind 'has no parts;' that 'it is absolutely one, and simple.' But how does his Lordship know this? As already mentioned, Revelation does not tell him so; nor, unless he be more than man, has he any faculties, or means, by which to make the discovery himself. But two other sources remain. He must have received his knowledge by a *divine Revelation to himself alone;* or he must have assumed it—in other words, *guessed at it.* Nor do we think it difficult to decide on which of the two bases his assertion rests. The era of heaven-derived knowledge is gone by; and men must now work for the information they possess, as they do for their daily bread. In truth, the positiveness of our author's dogma, connected with its utter destitution of any solid foundation,

is matter of astonishment to us. For his own sake, as well as for the sake of truth and science, a writer of such standing, especially of such a high reputation for correct reasoning, ought to see that his premises are sound, before he ventures to draw from them conclusions so infinitely momentous.

But there is, in the passage just extracted, another assumption not much less striking and exceptionable. Though it is true, that, in the *literal* meaning of the terms, a substance 'absolutely *one* and *simple*,' can be neither *resolved* nor *dissolved*; it by no means follows, that it may not, in some other way, cease to exist. Our author's assertion to the contrary is *purely gratuitous*. Not only then, is his premis unsound; it does not warrant the conclusion he draws from it. Hence the proposition is as wanting in logic, as it is in philosophy. This surprises us the more, in consideration of the logical powers of the writer. And it forcibly evinces the indefensibleness of his cause. Were it susceptible of fair defence, he would not be compelled to practise sophistry, as its advocate.

But, for the sake of the argument, we admit his position. A 'simple' substance cannot be dissolved, and must therefore be *immortal*. By this admisssion nothing is gained by him. For aught that is known to the contrary, there are forms of matter as simple, and therefore, on our author's principle, as indestructible as spirit. This is true, in a special manner, of light, caloric, electricity, and galvanism, supposing the two latter substances to be different from each other. It is also true of the bases of most of the gases, as well as of the metals, and several other kinds of matter. It will be distinctly understood, that we do not mean to represent either of these substances as analogous to mind in any of their properties. Our only object is to show, that Lord Brougham's reason for pronouncing spirit alone indestructible, is fallacious. We repeat, that no sufficient cause for the immortality of spirit, founded on its own nature, can be assigned. The reason is plain —its nature is unknown to us. True, the ancients, especially the philosophers and poets of Greece and Rome, were believers in immateriality. But they were *faint* believers. Their views on the subject were dreamy and obscure, and their reasons inconclusive.

Even Plato's discussion of the matter is a failure. Nor is that of our author any better. In truth, all reasoning on the subject is worse than fruitless. It leads to scepticism, rather than conviction. We have never witnessed an attempt to prove the immortality of the soul, *by a process of reasoning*, that did not, *in our opinion*, leave the matter worse than it found it. Hence we never ourselves engage in the discussion. We say again, that our only hope and assurance of immortality rests on the *gospel promise* to that effect. The Deity has there given earnest of immortality, on which alone reliance can be placed. To contend that spirit carries in itself the *essence* of immortality, because it is 'one and simple,' is futile, if not in other respects exceptionable. It represents spirit as too independent of its Creator. It would give to that substance, as soon as formed, the attribute of indestructibility, whether the Deity wills it so or not. Yet, we repeat once more, that immortality is the fruit exclusively of the pleasure and power of the Deity; and he can give it to matter as readily as to spirit. Nor does our author know that he has not done so. The subject is far beyond the reach of the human intellect. We therefore dismiss it, as transcendental and unintelligible.

Once more. His Lordship contends, that, in many of its operations, the mind of man is independent of his body. This, though a very general belief, among those who are strangers to Phrenology, is notwithstanding utterly fallacious. It is difficult to conceive of a more palpable error. Not a fact that bears on it speaks in its favor—but the reverse. Throughout life, from the cradle to the coffin, *as is the condition of the body, especially of the brain, so is the condition of the mind—or rather of its manifestations.*

In infancy the body is immature and feeble; so are the operations of the mind. In the progress through childhood to juvenescence, both are correspondingly altered and improved. Through juvenescence to manhood, the same is true. During the meridian of manhood, both are in their zenith of activity and vigor. As the evening of life advances, they both decline alike in buoyancy of action; and they sink together into the imbecility of years. In extreme old age, they both experience a second infancy, which, as

far as matters of time are concerned, terminates at length in the extinction of both. Thus in rise, progress, decline, and dissolution, their concomitancy is complete. In no case do cause and effect keep more perfect companionship. That there exist between them, therefore, an essential connection and dependency, it is impossible to deny, consistently with what are regarded as the laws of causation.

We know that reputed exceptions to this exist. But they are *only* reputed—not actual. We are told of octogenarians, nonagenarians, and centenarians, with their mental faculties unimpaired! A phenomenon of the kind would be miraculous. As well might we be told of such individuals, with the bloom and elasticity of corporeal youthfulness unimpaired. The stories are fabulous. That of Melmoth the Wanderer is not more so. We have repeatedly verified them as such, by satisfactory observation. To be real and unimpaired, strength of both mind and body must have two qualities—*vigor* and *endurance*. Neither of these singly constitutes genuine strength. A person whose strength is much wasted, may make a *vigorous* exertion; but it will be *momentary*. He will soon be exhausted. Another person of moderate strength, and incapable of very vigorous action, may, notwithstanding, maintain a protracted struggle. Men very far advanced in years often manifest themselves mentally in the former mode. They converse or speak in public, with much sprightliness, and sufficient vigor, *for a short period*. But it is *necessarily* short. Exhaustion overtakes them, and compels them to pause, or stop entirely, until their strength is renovated, when they again proceed. In the few last years of their lives, Mr Jefferson and Dr Priestley furnished striking examples of this. At table and elsewhere, their mental powers would exhibit themselves *briefly*, with the apparent vigor and freshness of youth. But exhaustion soon came, and constrained them to be silent—sometimes to slumber for a few minutes, when they would wake and join again in sprightly conversation. When in the vigor of life, those two individuals could have maintained for *many* hours the same degree of mental exertion, which, near its close, would have exhausted them in *half an hour*. And of every one bowed down in body with years, the same is true.

We know that Lord Brougham contradicts all this, and endeavors to refute it. But his effort consists in a tissue of dogmatism, unsustained by a single fact. It is assertion throughout, and very extravagant and groundless assertion, too, as the following singular extract evinces.

'It is certain that the *strength* of the body, its agility, its patience of fatigue, indeed all its qualities, decline, from *thirty, at the latest*, and yet the mind is improving rapidly from thirty to fifty; suffers little or no decline before sixty; and therefore is better when the body is enfeebled, at the age of fifty-eight, or fifty-nine, than it was in the acme of the corporeal faculties, thirty years before. It is equally certain that when the body is *rapidly* decaying, between sixty or sixty-three and seventy, the mind suffers hardly any loss of strength in the generality of men; that men continue to seventy-five or seventy-six in the possession of all their mental powers, while few can boast then of more than the remains of physical strength; and instances are not wanting of persons who, between eighty and ninety, or even older, *when the body can hardly be said to live*, possess *every faculty of the mind unimpaired.*'

We venture to say, that this passage, from beginning to end, is directly in the face of correct observation. It is unquestionably so in the United States, and, we believe, equally so in England, Scotland, Ireland and continental Europe generally. Indeed it is so, in every temperate and healthy region of the world known to history.

In the first place, man's coporeal *strength*, instead of *declining* from the age of thirty, is not more than fully *confirmed*, by the age of *thirty-five*. Certainly it is undiminished at that period, except it be diminished by disease, intemperance, or some other form of excess. Nor is agility yet reduced, in those who practise it. This is evinced in the persons of tumblers, rope-dancers, equestrians, opera-dancers, and others. The reason why many, perhaps most men, have lost *some* of their agility, by the age of thirty-five, is because they have ceased to practise the pliant muscular sports of their youth. Their *minds* having become *sobered*, are really more changed than their *bodies*. In the change produced, therefore, the mind *leads*, and the body only *follows*. We are convinced that

our author has been much more accurately observant of many *other things*, than of the progresss of man from infancy to old age. It is, perhaps, unfortunate for his reputation, as a writer, therefore, that he has not restricted his pen to those things.

The following is the usual course of nature. A man whose constitution is good, his health sound, and his habits regular, attains his full strength by, from thirty to thirty-five. Until forty-five, real strength decays but very little, if any at all, in men who pursue *active*, but not severely *laborious* occupations. During this period, however, there is some loss of agility, one reason of which is, that the person becomes fuller and heavier. Even from forty-five to sixty, provided health continue, the diminution of strength is not very rapid or great, though the loss of bodily *activity* is considerable. After this period, the change is more rapid.

Respecting the mental powers, the same may be affirmed. They do not attain their *entire native* strength, until from thirty to *thirty-five*, because, before that period, the brain, which is the immediate mental organ, is not *fully matured*. Until forty-five or fifty, the mental powers retain all their *native strength*, though not their entire *elasticity* and *sprightliness*. Thus far they accompany the bodily powers. Nor do they separate from them now. From forty-five or fifty to sixty, though still strong, they become less flexible, alert, and playful than before. They are also, like the body, less easily excited to action. From sixty, onward to old age and decrepitude, the changes are less regular, the faculties being more easily affected and modified by casualties, because the body is deranged with less difficulty. But here also body and mind maintain their companionship. A rapid and striking decay of the former, especially when the *brain* is involved in it, is accompanied by a corresponding decay of the latter. Nor, under the present dispensation of things, is it *possible* for the case to be otherwise. As soon shall we have perfect vision, with a diseased eye, as a sound intellect with a diseased brain. As to the closing sentence of our last quotation, where his Lordship asserts, that some very old persons, (perhaps centenarians,) whose bodies 'can hardly be said to live, possess, notwithstanding, every faculty of the mind unimpair-

ed'—as to this statement, we say, *it is not to be credited*—it wants even *plausibility*—much more the character of a physiological truth. His Lordship cannot mean to vouch it, as a *fact within his own knowledge*. He must have received it *unexamined*, from one of the 'hundred tongues' of rumor.

That the mental powers, especially the *moral* and reflecting, improve after the age of thirty or thirty-five, while the bodily powers do not, may be admitted. Nor is the reason concealed from us. The former powers are exercised more than the latter. And exercise always increases strength, while inaction diminishes it. Until thirty or thirty-five, man lives a life of *animal action*, of which *muscular* exercise makes a leading element. In other words, he exercises his muscles more, and certain portions of his brain less. Hence his comparatively superior muscular activity and vigor. After that period, he exercises his muscles less, and the moral and reflecting organs of his brain more. He becomes to a much greater extent a reflecting, moral, and reasoning being. In consequence of this, though his muscles do not, for a time lose power (their exercise being sufficient to prevent that) they do not gain any; while a higher degree of exercise of his moral and reflecting faculties adds to their strength. But the man who, after thirty-five, grows indolent, exercising neither mind nor body, in a due degree, becomes debilitated alike in both. He, on the contrary, who keeps both in action, much better preserves the vigor of both, until an advanced age, when, as already stated, they fade together. These truths being the result of every-day observation, as well as the dictates of common sense, need no chain of argument to prove them. They force themselves spontaneously on the attention of every one, who looks around him, with a discriminating eye, *on things as they are*. We repeat our surprise that Lord Brougham has so strikingly erred, in a matter so palpable.

Hundreds of additional facts might be easily adduced, to prove incontestably the dependence of the mind on the brain, in all its operations. The oppression of the brain in apoplexy, or by a depression of the scull, extinguishes completely the mental faculties. So does pressure on the brain with the hand, when the scull is re-

moved. So does fainting, induced by an abstraction of blood from the brain. When the orator, engaged in debate or declamation, is confounding his antagonist by the force of argument, and fascinating his audience by the splendor of eloquence, the rushing of blood to the brain, in consequence of the high excitement of that organ, destroys at times his powers both mental and corporeal, and occasionally his life. In such a case, there is an interchange of influence. The mind, first acting on the brain, awakens its energies and invigorates its functions, while it, with the aid of the circulatory system, reacts on the mind, and suspends or entirely extinguishes its operations. Even when the mind of Newton was grasping in its ken the organized universe, and the minds of Milton and Dante were soaring through the heavens, or exploring the horrors of the nether world, a blow on the head concussing the brain would have instantly arrested them in their glorious career. But we can dwell on this subject no longer. Facts and arguments, similar to those just adduced, have been employed in defence of Phrenology times almost innumerable. But, from prejudice, passion, or some other cause apart from reason, metaphysicians and antiphrenologists are deaf to them. Antagonists, therefore, who will neither listen attentively, nor deliberate coolly, but maintain their contest by dogmatism and invective, misrepresentation and abuse, must be left to the teaching and correction of time. And that will either enlighten and convince them, or silence them by the influence of mortification and shame.

But we have not yet examined the argument, on which our author most confidently relies, for the establishment of his hypothesis of the separate condition of the mind, and its independence of the body, during our present state of existence. We shall now, therefore, make trial of its soundness and strength. It is stated in the Discourse as follows :—

'The strongest of all the arguments, both for the separate existence of the mind, and its surviving the body, remains, and is drawn from the strictest induction of facts. The body is constantly undergoing change in all its parts. Probably no person at the age of twenty has one single particle in any part of his body which he had at ten; and still less does

any portion of the body he was born with continue to exist in him or with him. All that he before had has now entered into new combinations, forming parts of other men, or of animals, or of vegetables, or mineral substances, exactly as the body he now has will be afterwards resolved into new combinations after his death. Yet the mind continues one and the same, 'without change or shadow of turning.' It remains unchanged by the changes of the body.'

In this argument there is nothing to us either new or forcible. We have often heard it urged, but never felt its power. Did Lord Brougham intend only to prove by it, that the mind is capable of surviving the body, no one would dispute his *position*, however lightly he might think of his *argument*, which, when fairly analyzed, proves nothing, except that his Lordship is very much of a stranger to the topic he is discussing. But his design is also to show, that, *in this life*, the mind is capable of acting *independently of the body*. With other metaphysicians, he evidently considers *personal identity* as consisting exclusively in *the identity and unchangeability of the mind*. *Corporeal* identity, in his opinion, is perpetually changing, and has therefore no influence in the constitution of *identity of person*.

From this it is plain, that Lord Brougham is no physiologist, and has therefore no competent knowledge of the science of living organized matter. And without such knowledge, he is disqualified for a discussion of the present question. It is a settled maxim in physiology, that the identity of no living body consists in the identity of the particles of matter that form it. *They* are changing every moment, old ones disappearing, and new ones taking their place, in ceaseless rotation. And this is as true of the inferior animals, and of vegetables, as it is of men. By means of nutrition, secretion, absorption, and excretion, the matter of all living bodies is perpetually changing; yet the identity of the bodies continues. A horse is the same animal now that he was ten years ago; and an oak is the same tree that it was at the commencement of the eighteenth century. But our author will not, we presume, contend, that, in either case, identity consists alone in identity of *mind*. As relates to the latter case, we are sure he will not, be-

cause there is no mind connected with it. Yet there is as much and as genuine identity in it, as in the former.

In what, then, does personal or individual identity consist? The answer is plain. It consists in *identity of organization*, and nothing else. Change organization, and identity is correspondingly changed—or entirely destroyed. Convert the organization of a pigeon into that of a pheasant, and it is a pigeon no longer, but a real pheasant. And a goat would be transformed into a deer, by giving to it the organization of a deer. Nor would any change of mind or spirit be requisite to complete the metamorphosis. In like manner, were the organization of a Caucassian changed into that of an African, an African would be the product, the mind or spirit continuing the same. To individual identity, then, identity of bodily organization is much more essential, than identity of mind. Infuse into the body of a Caucassian the spirit of an African, and it will not make him an African, nor will the spirit of a Caucassian communicated to an African produce a Caucassian. Yet, as just stated, an interchange of organization will produce an interchange of person.

The adduction of a few facts will sufficiently, we think, illustrate this truth.

There are orange trees in Rome, six hundred years old; and they are the same now in stock, foliage, flowers, and fruit, that they were in the thirteenth century: of the giant chesnut tree of Mount Ætna the same may be said. Its history is traceable for nearly fifteen hundred years, during the whole of which period its identity has continued. Yet in neither of these cases has mind been concerned. Organization alone has done the work. And were the organization of the tree of one species changed into that of the other, the identity of the tree would be also changed. This position, as relates to vegetables, nobody will question. And of the animal kingdom it is equally true.

The swan, the goose, and the toad have been known to live for nearly a century—perhaps an entire century—during the whole of which time their identity has remained unchanged. But identity of mind could not have been the cause. No one will harbor a fancy so preposterous. The cause consisted in identity of organization. In confirmation of this, let the organization of a toad be

changed into that of a swan, and a swan will be the issue. It is thus that an egg becomes the bird, to whose species it belongs. A new and appropriate organization makes the new creation. All living beings are what organization makes them. Change that, and identity accompanies it. This truth is more thoroughly confirmed in certain conditions of man, than in those of any other kind of beings.

In verification of what we say, *sleep-walkers*, but more especially *sleep-talkers*, may be confidently adduced. They have two modes of existence, and two distinct states of consciousness and identity. Yet, according to Lord Brougham's own declaration, in which we fully concur, their *minds* remain unchanged. Indeed, the mind, if perfectly 'one and simple,' cannot change, without undergoing *annihilation*, or conversion into another mind entirely different. The following case (and several other similar ones could be cited) is conclusive on this subject. It was that of a 'young lady, of a good constitution, an excellent capacity, and well educated.'

'Her memory was capacious, and well stored with a copious stock of ideas. Unexpectedly, and without any forewarning, she fell into a profound sleep, which continued several hours beyond the ordinary term. On waking, she was discovered to have lost every trait of acquired knowledge. Her memory was a *tabula rasa*—all vestiges, both of words and things, were obliterated and gone. It was found necessary for her to learn every thing again. She even acquired, by new efforts, the art of spelling, reading, writing, and calculating, and gradually became acquainted with the persons and objects around, like a being for the first time brought into the world. In these exercises she made considerable proficiency. But after a few months, another fit of somnolency invaded her. On rousing from it, she found herself restored to the state she was in before the first paroxysm; but was wholly ignorant of every event and occurrence that had befallen her afterwards. The former condition of her existence she now calls the Old State, and the latter the New State; and she is as unconscious of her double character as two distinct persons are of their respective natures. For example, in her old state, she possesses all the original knowledge; in her new state, only what she acquired since. If a lady or gentleman be introduced to her in the old state, and *vice versa*, (and so of all other matters) to know them satisfactorily she must learn them in both states. In the old state, she possesses fine powers of penmanship, while in the new, she writes a poor, awkward hand, having not had time or means

to become expert. During four years and upwards, she has had periodical transitions from one of these states to the other. The alterations are always consequent upon a long and sound sleep. Both the lady and her family are now capable of conducting the affair without embarrassment. By simply knowing whether she is in the old or new state, they regulate the intercourse, and govern themselves accordingly.'

Here, we say, was a case of complete double consciousness, memory, and identity, without any supposable *change of spirit.* No one will dream of referring the phenomenon to that cause. The change was in the condition of the brain, as is amply attested by the morbid sleep (for it evidently *was* morbid) into which the individual fell, in her passage from one identity or state of being to the other. Sleep is but a condition of the brain, and diseased sleep is a diseased condition. This is a truth, which no sound physiologist will deny. And, in the present case, the diseased condition amounted virtually to a change in organization. The cerebral organization, in the 'Old State' of the patient, was sufficiently different from that of the 'New,' to change her identity. In the two states, the mind acted on and with the same brain, as its *immediate* organ. But that organ was so changed in its condition, that it could be no longer made to co-operate with the mind in the same way. The mere fact, then, that our mental faculties and their functions continue the same, while our material portion is constantly changing, furnishes no evidence that our minds are independent of our bodies. Every fact that bears on the subject speaks a contrary language.

It was our intention to have noticed some other points in Lord Brougham's Discourse, on which we consider his Lordship mistaken. But the length which this article has already reached forbids us. We shall conclude, therefore, with a few recapitulatory remarks.

Notwithstanding what we have said on the subject of materialism, we wish it definitively understood, that, as heretofore mentioned, we are not ourselves, materialists. We belong to no school on that subject, nor have we any opinion of our own respecting it. We always make facts the bases of our opinions, and, as relates to

materialism, we have none. Nor has any body else—Lord Brougham not excepted, as his Discourse abundantly shows. When we looked for fact and reasoning from him, he has given us assertion, and has presented us with speculation, when we asked for evidence. Instead of a web of sound and imperishable arguments, he has woven but a fragile tissue of sophistry. In a word, though not yet advanced, we believe, to the age of *sixty*, the period at which he fancies the mental powers nearly in their highest perfection, we regret to say, that his *judgment*, at least, appears to be in the wane. And that is the most substantial and lasting attribute of the mind, which usually lingers with us, after we are forsaken by the more light and volatile ones, which constitute the charm of earlier life. Ten years ago, his Lordship would not have written the Discourse we are examining. He would have framed one of greater soundness.

For three reasons, at least, the noisy *disputation* about materialism (*argument* it cannot be called, for that involves *facts*) ought to be abandoned, by the well-meaning and the enlightened. The question can never be decided, by us, unless we be furnished with higher powers than we now possess; whether true or false, the doctrine is innocent, when correctly understood, and the contest, as now conducted, feeds the angry and uncharitable passions. Add a fourth, the hypothesis, as already shown, is of *pagan* origin, and receives from *pure* Christianity neither sanction nor countenance. It is an interpolation in church doctrines, by some speculative Platonist in theology, unauthorized by the Messiah, the prophets, or the apostles. Nor, as further shown, does it involve either the *mortality* of the mind, or its *exemption from moral responsibility.* The Omnipotent can impose those conditions on matter, as easily as on any other substance. Nor does any one know that he has not done so.

The Deity has promised immortality to man, and, as if doubtful of his veracity, and to hold him to his word, the Platonic spiritualists would compel him to make the soul out of something *imperishable*—something *immortal from its own nature.* But such is not the condition, on which the boon of endless existence is granted

to us. It is given as a favor, not as a privilege to be asserted or claimed by us, in consequence of any thing we possess in ourselves. Immortality is promised expressly through the Resurrection, not because the soul is, in its own nature, *immaterial* and *immortal*. The resurrection, moreover, is of *the body*, which fairly implies that, without the body, the soul is, in some way, defective, —is not the *perfect* '*self*,' which Lord Brougham pronounces it. His Lordship will hardly declare the body raised from the tomb to be *pure spirit having no parts*, and still to be a *body*, a term which includes both *substance* and *figure*, and therefore *parts*. Yet that body is asserted, by St Paul, to be 'uncorruptible,' although possessed of parts. And we can conceive of nothing to which parts and figure belong, that is not *material*. An *immaterial figured body*, would be a self-contradictory expression. Indeed, were not the body as well as the mind, matter as well as spirit, in some way concerned in it, the Resurrection from the dead would be a *mighty* event, without any *corresponding* end to be attained by it. Certainly no such end is apparent. For further information on this subject, much more authentic than any we can give them, we refer our author, and all who think as he does, to Chap. XV. of St Paul's second epistle to the Corinthians, ver. 42, and onward. Let them then choose, each one for himself, between the scheme of immortality of the Apostle, and that of Plato—two of the most distinguished writers of antiquity. And we recommend to all carping and clamorous immaterialists, to drink at the same fountain, mingling in their draught a due portion of charity and liberality, good temper and common sense. And we entreat them to bear in mind, that, in the present instance, as in all others where knowledge is concerned,

> '———*Shallow* draughts intoxicate the brain;
> 'But *drinking deeply* sobers it again.'

The foregoing observations are intended, in part, to expose the abstract inanity and silliness of the endless din maintained by the anti-phrenological fraternity against the doctrine of materialism. We shall only add, that genuine phrenology, as has been hundreds of times shown, is as free from materialism, as any other system of

mental philosophy now taught, or which any teaching can render intelligible. For, as already represented, things immaterial are, in their nature and operations, altogether incomprehensible to us. As connected with *man*, in his *present condition*, *pure spiritualism* is *pure nonsense*. It is, moreover, untrue. And in no other condition does our science regard him, because there are *no facts*, on which a rational study of the kind can be founded. It is only against phrenology, as misrepresented by anti-phrenologists and ignoramuses, that the charge of gross materialism can lie. Such a charge, therefore, can issue only from a *want of knowledge*, or a *want of honesty*—those who prefer it, may take their choice.

Article II.

New Phrenological Theories.—Read before the Boston Phrenological Society.—By E. L. Frothingham.

In studying the character of the Indians of North America, a subject which was committed to me by the society, upon which to report, in connection with a collection of Indian sculls, many difficulties of an insuperable nature presented themselves, in endeavoring to reconcile these cranial developments with the known character of this race of men; and from these difficulties, I first became aware of the *great imperfectness* of phrenology, as a science. For, having but recently directed my attention to it, and, of course, not feeling sufficient confidence in my own practical skill, to compare *all* its theories with *nature*, I naturally followed in the path of most other believers in the science; and, from that little that I *did know* to correspond, presumed that the rest was equally satisfactory.

The first difficulty which presented itself, in examining the spe-

cimens, was, that, while the organs of the perceptive and reflective intellect were decidedly *small*, and nearly *equal* in development, this race of men have exhibited an activity of the *perceptive* intellect, a vivid perception and a tenacious memory of objects, which is rarely found in civilized man, in whom these organs are much more extensively developed; while they are as *remarkable* for an almost total *absence of reflection*. This, you will perceive, is a contradiction to the phrenological theory, that *size* in the *intellectual* organs is a measure of power.

The next difficulty seemed to be, that while *Adhesiveness* is well developed in all the sculls, and in one, enormously so, the character of this race has been satisfactorily proved to be *eminently unsocial*, which is a direct contradiction to another theory of our science,—that the *social* principle in man is the *result* of this propensity. Many other phenomena, for which there appeared to be no satisfactory explanation, were noticed. Such as strong attachment to particular places, while *Inhabitiveness* is almost entirely deficient; an incapacity for pursuing any regular occupation, or of framing *any* systematic plan. The great want of connection in their thoughts; inability to pursue a regular train of ideas, and their entire ignorance of the arts and sciences.

The desire to overcome the difficulties presented by these and other contradictions, as they seemed to me, induced me to investigate the theories which are at present considered as orthodox, and endeavor to become acquainted with the *wants* of the science. This has suggested to me a theory, which seems to furnish a complete explanation of all these phenomena, and by which, also, many other objections and difficulties, which are continually occurring to shake the faith of the believers in our science, and to confirm the unbelief of the skeptic, are answered and explained. It has resulted in the discovery, as I believe, of at least *four* of the most important faculties of the mind, with their respective organs—has thrown new light upon many of those which have been considered as established—and, if true, must materially change the structure of the whole phrenological edifice.

It would, perhaps, in this early stage of my progress, have been

prudent to have waited until these theories had been more matured, and compared more faithfully with nature, before I presumed to offer them for your consideration. And, by being precipitate in declaring opinions which conflict so much with our former views, and are so directly opposed to the opinions of the eminent men who have originated and illustrated the science, may expose myself to the charge of vanity and ignorance. I would, however, be content to incur this undesirable imputation, in suggesting what should prove to be only an *ideal* creation, if I should, by so doing, manifest a desire for *improvement*, and excite in others a spirit of inquiry; much rather would I prefer this, than subject myself to that of stupidly yielding, on the credit of some popular name, an assent to theories which I had never *proved*, and which, of course, I could not be competent to defend;—while I rejected *other* theories, coming from respectable sources, without taking the trouble to examine them. I have been decided in this course, by a desire to have the real or visionary character of these theories determined with as little delay as possible, and that I might be able to avail myself of them in explaining the character of such heads as are committed to me by the society.

I am aware that there are many phrenologists, who look with great suspicion upon all innovations; although, in most cases, I believe it is because they are not acquainted with the *real* imperfections of the science in which they repose so much confidence. *These*, its *enemies* have never assailed, and those phrenologists who have perceived, appear to have been unwilling to *speak* of the *defects* of a system which they know to be *founded* in truth. This has been, perhaps, from the fear of retarding its progress; but if so, they have taken the most effectual means to *produce* the evil which they desired to avoid. They have, in this way, not only prevented improvements from being made, by keeping its believers in ignorance of the wants of the science, but have encouraged many to reject the whole system, because they have observed some of its received theories to be contradicted by nature.

It would seem to us, that since the time of Gall, phrenologists have been so anxious to present to the world a *complete system* of mental philosophy,—to cover at once the *whole ground* with their

building, that they have not waited a sufficient time to *prove* the materials which they have used in its construction,—some of which, are now found to be crumbling in pieces, and altogether unfit to afford *support* to the fabric which they have reared. Having, with reason, the greatest confidence in the firmness of their *foundation*, they have been too much disposed to claim for this unfinished and imperfect structure, the character of a complete temple of science. While so much that is unphilosophical, and uncertain in practical application, is still retained and defended; while the profoundest researches of the most gifted minds, are represented to be entirely visionary; and while the characters of men once celebrated for brilliancy of intellect, for untiring zeal in the cause of humanity, or for deep philosophical research, are *reversed* by the confident phrenologist upon an examination of their sculls, and pronounced to have been superficial talkers, shallow reasoners, or as having acted from selfish and unworthy motives;—is it to be *wondered* at, that so many philosophical minds are unwilling to trouble themselves with the investigation of proofs, offered in support of a system, which, to them, must appear to be discordantly made up, and arrogantly supported?

We are confident that the time is not far distant, when most of these impediments to the progress of phrenology will be removed; by adopting theories which are more consistent with nature, and more easily reconciled with *other* theories of mental philosophy; and by *proving* every theory before attempting to apply or defend it. But this cannot be done, unless phrenologists are made acquainted with the *existence* of these obstacles, and become anxious to remove them; and clearly perceive how much of their work remains to be accomplished, before they can offer it to the world as a perfectly practical and complete system of mental philosophy. So little has been known of the imperfections of the science, and so little have phrenologists observed for themselves, that I presume few are acquainted with the *fact*, that the power of intellectual manifestation is by *no means* in proportion to the size or predominance of the intellectual organs;—although it is a fact, which any person of common observation might soon *learn*, if he would com-

pare the heads he daily meets, with the intellectual *character* of the individuals.

It is true, that as far as the sentiments and propensities are concerned, except, that the particular functions of some of them have been misunderstood, phrenologists have been able to judge with considerable certainty of the strength of their manifestations, from the size of the organs, and the *general* activity or quality of the brain, because *these are* the conditions upon which the manifestation of the *feelings* depend, and an accurate estimate of character has been obtained, so far as these feelings have influenced it. It is, *therefore*, that their attention has been so much confined to heads where the organs of the propensities or sentiments have been largely developed, because by these *only*, could they be *certain* of giving any satisfactory evidence of the truth of their science. For I do not consider the attempts to reconcile the *known* intellectual character of individuals with phrenological theories, as giving any *satisfactory* evidence of their truth, although phrenologists have shown much ingenuity in this way.

Phrenological writers on the subject of *Memory*, which is the principal function of the intellectual organs, among whom is the celebrated Mr Combe, have acknowledged it to be but imperfectly understood, and have conjectured, that memory depends for its permanency upon some *unknown quality* of the brain, and *not* upon the size of the organs. The celebrated Cuvier is mentioned as a striking example of this. It is said that he possessed the quality of retentiveness and a vivid minuteness in the perception and memory of objects, which was wonderful, and which was *unexplained* by phrenology. It will be perceived that, according to my theory, a large development of '*Watchfulness*' would perfectly explain this phenomena.

This shows how much light is *needed* on this subject. If it were *true*, that so important a condition in the manifestation of mind, depended upon a certain quality in the texture of the brain which cannot be ascertained, phrenology must always *remain* a very imperfect science. Are we not, therefore, completely in the dark, so far as an understanding of the *conditions* necessary for the man-

ifestation of the *intellect* is concerned; and is not a theory which will explain this difficulty, and give us *practical* rules for estimating intellectual power, still wanting?

Such a theory, I propose to offer for your consideration and investigation, so far as I have at present matured it. It relates partly to that region of the brain, which has always been so perplexing to phrenologists, and which has been a subject of continual debate, situated between the organs of *Self-Esteem* and *Philoprogenitiveness.* This has remained an undiscovered country, in this new world of phrenology, of which nothing has been certainly known, and upon the borders of which an impenetrable cloud has always rested. We have endeavored to penetrate this cloudy barrier, and have been delighted with what we suppose to have discovered in the rich domain beyond. For rich it indeed is, as it contains springs from which proceed both moral and intellectual supplies. The *whole space* between the two organs just named, has been said to belong to the organ of a propensity, which has been called by some *Inhabitiveness*, and by others *Concentrativeness.* The consequence of spreading out the organs of *Self-Esteem*, *Inhabitiveness*, and *Philoprogenitiveness* over so wide a space, has of course produced great uncertainty in defining their boundaries and studying their manifestations. And accordingly phrenologists having differed very much in the manner of locating these organs, confusion and error has been the result. But when it is ascertained that *two* of the most important faculties of the mind have organs situated between Self-Esteem and Inhabitiveness, and *their* boundaries are defined, then the other organs can be correctly located, and their manifestations studied with success. It will then I believe be acknowledged, that neither Inhabitiveness or Concentrativeness have been correctly written out, but that the true nature of the faculty is different from either. I shall, in the course of these remarks, describe what has appeared to me to be its nature, both from studying its *probable* character, and as it is manifested in nature.

Although the opinion of Aristotle, that the seat of *memory* was in the *back* part of the head, has been made a subject of much merriment by some phrenologists, who have per-

petrated much wit upon the occasion; yet that great philosopher, who had no theory to support, was a much more correct observer of nature than they, and was *right*—so far as this, that the organs of those mental powers, upon which memory *depends*, *are* situated there. This shows how prone we are to *laugh at* what we do not understand, without once thinking, that the opinions of every intelligent man are based upon something with which we should first be acquainted before we condemn them. It is in this way that the happiest inspirations of great minds have been rejected as visionary, because above the *common* mind. Happy would it be, if we could always act upon that golden rule—'Until you *understand* another's *ignorance*, presume *yourself* ignorant of his understanding.' Neither have philosophers been so far from the truth, as we have supposed, when they have represented *Attention* and *Memory* to be distinct faculties of the mind. For if, as we believe, the intellectual organs do not manifest *desire*, it follows, that an impulse must be communicated to them from some *feelings*, which *desiring to perceive*, excites in them *attention*. In proportion to the strength of these *feelings*, must be the power of attention, and of course the *permanency* of the impression on the memory.

I suppose, then, that there exist in the mind, certain *propendencies*, which excite and control all intellectual operations, without which, the intellectual organs are but *useless machinery*, and therefore, that upon the size and activity of the organs of these feelings, principally depends the character of all intellectual manifestations. To ascertain the number and nature of these, and the situation of their organs in the brain, has been my object.

One of these, which I have called Watchfulness, I suppose to determine the activity of those organs of the *perceptive* intellect, which take cognizance of the outward appearance of objects. It manifests the *desire to observe*; excites *attention* in these perceptive organs, and determines the strength and durability of the impressions received by them. Its activity is also supposed to produce *Wakefulness*. Persons in whom the organ is large and active, will be able, from the great stimulus communicated by it to the ex-

ternal senses, to remain a long time without regular sleep;—to be refreshed with short intervals of rest, and to wake at slight noises. This organ should be large in attendants on the sick, as they would be easily and entirely waked by slight notice, and untiring in attention to the wants of the invalid.

This propensity is stronger in woman than in man—is the reason why she is generally so much more *observing*, and why she is enabled to be such a 'ministering angel,' when 'pain and sickness wring the brow.' Its organ is situated in the forward part of the space usually allotted to *Caution*, immediately over the ear, and above *Secretiveness*. The situation of it may be seen upon any Indian scull, on all of which it is remarkably prominent. The nature of its manifestations may also be understood by studying the character of this race. The existence of this propensity, and the situation of its organ, has been confirmed by a great number of observations.

Another of these controlling powers of the mind, and of a much higher character, is the faculty from which the *desire for society* originates, and upon which, also, principally depends *association* in the mind. To this, I have given the name of *Associativeness*. Its organ is situated immediately under Self-Esteem, or, rather, in the lower part of the space which has heretofore been allotted to Self-Esteem, in a distinct convolution of the brain, communicating with the organ of *Approbativeness*. I suppose it to manifest a *desire* to understand the specific *character* of Individualities, with their natural *relations*, and to possess within itself an *intelligent perception* of these relations. It would seem, that it thus, in a great measure, determines the order or succession of our ideas—a law of the mind, the discovery of which has been a great desideratum among metaphysicians, and without which, it is supposed the mind would be a perfect chaos. It enables us, with a rapidity and to an extent proportioned to the size and activity of its organ, to associate in a regular order, with any subject or idea presented to the mind, *other* ideas already in possession of the intellect, which bear to it a natural relation. In Pope's 'Essay on Man,'

the manifestation of this feeling is conspicuous, and the organ must have been decidedly prominent in his head. He speaks the language of Associativeness, thus :—

> 'Nothing is foreign—parts relate to whole—
> One all-extending, all-preserving soul
> Connects each being, greatest with the least;
> Made beast in aid of man, and man of beast;
> All served, all serving: *nothing stands alone;*
> The chain holds on, and where it ends, unknown.'

It is not satisfied with considering or viewing *any thing* as solitary and disconnected, but delights to contemplate the perfect order and harmony of creation—its 'strong connections, nice dependencies.' With objects, it desires to associate other objects—with ideas, other ideas, which have a natural connection, and in the most systematic order. With persons, other persons, in the order which is natural to them:—

> 'Heav'n forming each on other to depend,
> A master, or a servant, or a friend,
> Bids each on other for assistance call,
> 'Till one man's weakness grows the strength of all.'

It disposes to philanthropy—to extensive views of social relation—to value the ties of kindred, and to seek enjoyment in all domestic, social, and patriotic communion. It thus irresistibly leads man to connect himself with others, in all the various relations for which the Creator has designed him—as a member of a family, of a social circle, of a community. To consider himself as a citizen of the world, and even as connected with *other* worlds, and superior intelligences :—

> 'All are but parts of one stupendous whole,
> Whose body nature is, and God the soul.
> * * * * * *
> Vast chain of being! which from God began—
> Nature's ethereal, human, angel, man,
> Beast, bird, fish, insect—what no eye can see,
> No glass can reach: from infinite to thee,
> From thee to nothing.'

A great variety of its manifestations might be enumerated, but, understanding the *principle*, it will be easy for you to imagine its results. The manifestations will, of course, vary as it is differently combined with other faculties. It will lead some to the study of various sciences—others, to extend and multiply their business relations—others, to form an extensive circle of acquaintance—others, to devote their lives to active labor for the good of mankind, in such a direction as other faculties incline them, &c. It will be large in all who are remarkable for a regular and rapid succession of ideas—such as are called ready and *clear-headed*, and are said to have brilliant minds. In those who are able to attend to variety of business, in a connected, systematic manner, and in public speakers and others, who have an uncommon talent for extemporaneous speaking and copious illustration.

These and other manifestations are only *predicted* from the nature of the faculty. They have not been *observed*, there having been no opportunity for a very extensive observation of facts, owing to its recent discovery. Such heads, however, as have been examined with reference to it, have decidedly confirmed the theory, without an exception. It is larger in woman than in man, and is the cause of that peculiar brilliancy and activity of mind for which they are remarkable, as well as of many other peculiarities.

Connected with the organ of Associativeness, are two intellectual organs, by which we *remember* the perceptions of the character of objects, and their relations. These organs are situated in the centre of the forehead, and known to you by the names of *Individuality*, and *Eventuality*. *Individuality*, remembering perceptions of the character of individualities, or creations—and *Eventuality*, the perceptions of *relation* in these characters.

Form, *Size*, and *Color*, then, being excited by *Watchfulness*, or the desire to observe, take cognizance of the outward appearance of all individual objects ; and *Locality* of their *relative position*, or the relations existing among them as *appearances* merely. Other faculties, which we presume are *Number*, *Order* and *Weight*, being excited by *Constructiveness*, perceive their properties and relations as *matter*, without regard to form or design :—under-

stand their mechanical adaptations, and apply to them the principles of mechanics, in various constructions. The peculiar *character* of these and all other individualities, and their relations, *Associativeness* desires to perceive, *does* perceive, and excites *Individuality* and *Eventuality* to remember. Without *Associativeness*, however, there can be no desire to perceive, or perception of these relations, and, therefore, no memory.

Opposed to this desire to embrace a wide circle of objects, is the antagonist principle in the mind, commonly called *Inhabitiveness*. One is a principle of *motion*, and the other of *rest*. *Singleness* of desire, of thought, and of action is produced by it; while *Associativeness* would lead us to unite the whole creation by an uninterrupted chain of relation, and desires to be acquainted with every thing that exists. *Inhabitiveness* desires to select single objects upon which to dwell. It leads man to select one particular spot for his residence, to apply himself to one particular occupation, and to be offended with *change* in any thing. In proportion as Associativeness predominates, the individual will be fond of *variety* in his business, his studies, and his amusements. Will be impatient of confinement to any one thing. While, in proportion as *Inhabitiveness* predominates, the reverse will be the case. The social circle will be contracted, and change will be dreaded in every shape—one seat will be retained—one favorite subject dwelt upon —one occupation pursued—one place inhabited, &c. This principle will extend to every thought and action of the individual.

This, I believe to be the real character of that propensity, which has excited so much debate, and which is now as unsettled as it has been at any time since its discovery. If now studied in connection with *Associativeness*, I am confident that its nature will be understood without difficulty, and settled beyond dispute. It will be necessary, however, to look for the organ lower in the head than it has generally been marked.

I have now described the intellectual powers of man, by which he understands the appearance of all objects—the properties and relations of matter and the *character* of all objects, and *their* relations. This constitutes that part of his understanding, which he possesses in

common with the animal creation, by which he accumulates *practical* knowledge, and is able to apply it to the greatest advantage. Now, it appears to me, that this lower nature of man, if it has not been represented as the source of *all* his knowledge, has been *confounded* with those higher attributes which particularly distinguish him from the brute, and ally him to the Author of his existence, not only by many modern metaphysicians, but by the founders of phrenology and their followers, and thus giving an appearance of justice to the charge, that it belongs to the *sensual* school of philosophy. Mr Combe, in describing reason, says,—'that it is only by observing the invariableness of the sequence, that we discover the connection of cause and effect.' And, Dr Spurzheim says,—'we cannot attain to final causes—all that we can know, is, *the succession of phenomena*, and if one uniformly succeed another, the preceding is considered as the cause, and the succeeding as the effect.' Mr Locke, also, describes reason to be nothing more than the recollection of associated phenomena, as thus,—'tell a country gentlewoman that the wind is south-west, and the weather lowering, and likely to rain—and she will easily understand, it is not safe for her to go abroad thin clad, in such a day, after a fever: she clearly sees the probable connection of all these, viz. south-west wind, and clouds, rain, wetting, taking cold, relapse, and danger of death.' Now, this quick recollection of associated phenomena, is the result of this lower understanding which I have described, and would be much more likely to be manifested in the most *unreasoning* woman, than in the profoundest philosopher—because, in them, the perception and recollection of phenomena, and the power of associating and commanding them is greater than in man; and if *this* constitutes reasoning, women must certainly be better reasoners than men, and the dog will reason as well as his master—for it cannot be contradicted, that animals possess the same recollection of associated phenomena, and act upon this knowledge, which has led to the belief, that animals *do reason*.

Among the metaphysicians of the sensual school, only Hume has been consistent; for he has not only confined all knowledge to mere experience, but has denied the *necessity for causation;*

which conclusion seems to be the natural result of such premises. I consider these opinions to be as untrue, as they are derogatory to human nature ; and this I hope to prove, by showing the existence in man, not only of *desires*, which elevate him above the brute, but of INTELLIGENT PERCEPTIONS, which do not come by *observation*, but are *within him*. Should I be able to do so, phrenology will be saved from the reproach which now rests upon it, and will furnish to the world, the most *encouraging*, as it is the most practical system of mental philosophy.

I expect to do this, and thus complete my principal theory, by describing two other desires of man, which are also accompanied by an intuitive perception or knowledge. One of these, which may be called *Sagacity*, I suppose to be the desire to understand the *intelligent* cause of all phenomena ; or rather, the desire to understand, and the intelligent perception of, the relations existing between all manifestations of mind, and the mental cause, condition, or motive.

The other, which is the highest attribute of man—the image of the Creator within him, and proof of his divine relation, I suppose to be the desire to understand *moral truth*—or, in scripture language, to be acquainted with God.

The particular description of these, with the situation of their organs, I shall defer until I have made more extensive observations of their development and manifestations in individuals ; but hope at some future time to offer them for your investigation.

Article III.

Observations on the Mutual Influence of the Mental Faculties, and, in particular, on the Modes and Laws of the Activity of Destructiveness. By Mr Robert Cox.

[From No. XLV. of the Edinburgh Phrenological Journal.]

The proneness of any cerebral organ to act, and the intensity of its action, are influenced by a variety of different circumstances. These are, *first*, the extent of its development; *second*, its quality, temperament, or internal organic constitution; *third*, the external causes of excitement to which it is exposed, and the exercise or training which it has undergone; *fourth*, the quantity, quality, and force and quickness of circulation, of the blood by which it is stimulated; and, *fifth*, the influence exerted upon it by other portions of the brain and nervous system. Of all these particulars, the development of the organ is that in regard to which there is generally least difficulty in the way of the practical phrenologist;—the means of judging of the quality of the brain have been investigated with considerable, though not yet perfect, success;—the effects of training, external circumstances, and the condition of the blood, have been largely elucidated;—but with regard to the mutual influence of the organs, an ample field appears to remain unexplored. There are different modes in which one cerebral organ may be said to influence another. First, it may restrain us from *acting* under the other's impulse, without in any degree lessening the force of that impulse itself; as when a person who ardently desires to strike his neighbor, is prevented by Cautiousness from gratifying this inclination. Or, in the second place, it may direct the other to seek gratification *in a particular line of conduct;* as when an avaricious man is led by Conscientiousness to amass wealth by honest industry rather than by theft. In such cases, however, it is only the *result* of the activity that is modified, not the activity itself; so

that, strictly speaking, the mutual influence of the organs is *the production, increase, diminution, or extinction, of the activity of one organ, consequent upon certain states of other organs.* As already hinted, this department of Phrenology, though a most interesting field of inquiry, has hitherto been greatly overlooked. Dr Spurzheim adverts to it in a brief and somewhat unsatisfactory manner in his work on Education, a chapter of which is devoted to 'the mutual influence of the faculties as a means of excitement;' and the subject is touched upon in a cursory way also by Mr Combe, in his analysis of Association in the 'System of Phrenology.' It is intricate and bewildering in no ordinary degree, but, being also of very great importance, obviously deserves to be minutely and carefully investigated. I have of late bestowed considerable attention upon this department of the physiology of the brain, and am convinced that phrenologists may labor in it with every encouragement to hope for useful and valuable discoveries. Such data as I have been able to collect, appear to shew that the mutual influence of the organs is regulated by general laws—which, however, are, for special purposes, subject to modification by *particular laws*, regulating only *certain organs*. My speculations concerning the former class of laws here alluded to, although they have made some progress, are not yet sufficiently mature for publication; but in regard to at least one department of the *particular laws*, precise and definite conclusions are believed to have been arrived at. These I shall endeavor to expound in the following essay; which, it may be stated, is meant to serve, at the same time, as a dissertation on the part performed by Destructiveness in the animal economy. Almost every form of activity of the mental faculties is comprehended within one of two great classes of manifestations—that in which the activity or excitement is attended with pleasure, and that in which it gives rise to *disagreeable* sensations or *pain*. When the sense of *Taste*, for example, is stimulated by honey applied to the tongue, the action of the faculty, so induced, is agreeable; while, on the other hand, the sensation which arises in consequence of a drug being taken into the mouth, is nauseous and unpleasant. The sense of *Feeling*, in like manner, is pleased by

any gentle tickling, and by the rubbing of smooth bodies on the skin; but painfully affected when a horsewhip or a branding-iron is applied. Many sounds are soothing and delightful to the sense of *Hearing;* while others, as the creaking of a file, cause every nerve in sensitive persons to thrill with pain. The fragrance of the rose or the violet gratifies *Smell;* but assafœtida and sulphuretted hydrogen are in general felt to be intolerably offensive. *Acquisitiveness* rejoices in the contemplation of rapidly increasing possessions, but suffers pain when the pocket is disburdened of a well-filled purse. *Self-Esteem* is fond of obedience and deference on the part of others; but galled when its possessor is domineered over, contemned, insulted, or reduced to slavery. To *Love of Approbation,* nothing can be more delightful than applause, admiration, and fame; but he in whom it predominates is driven to desperation by infamy and reproach. Parents with strong *Philoprogenitiveness* are gratified by the existence and society of their offspring; but the death of a beloved child renders them for a time inconsolable. *Adhesiveness* rejoices in the affection of a trusty and sympathizing friend; separation from whom, however, is productive of the acutest pain. *Benevolence* is gratified by witnessing the comfort and happiness of sentient beings, and afflicted by the spectacle of misery and pain. *Cautiousness* experiences satisfaction in the absence of danger,—as when a shipwrecked sailor finds himself secure upon the beach, or when a battle is witnessed from the fortifications of an impregnable strong-hold; but the activity of the faculty is disagreeable when its possessor himself is in circumstances of peril and gloom. *Ideality* delights in the elegant and beautiful, but loathes what is mean, squalid, and unrefined. *Tune* is pleased by the harmony and melody of music, but finds in discord a source of grievous annoyance. *Order* delights in the proper arrangement, the neatness, and the cleanliness, of surrounding objects; but is ill at ease in the midst of disorder and dirt.

It is farther to be remarked, that when a faculty is *disappointed of a wished-for gratification,* its activity becomes painful or disagreeable: thus Acquisitiveness regrets the issue of an unprofitable speculation, even although no positive loss be sustained. Another

important circumstance is, that the *unsatisfied cravings* of every faculty are accompanied with misery or uneasiness; as when one who pants for reputation finds himself passing through 'the cool sequestered vale of life' unnoticed and unknown. The *forced activity*, moreover, of every faculty is disagreeable; and, lastly, when a faculty is made to *work too much, or in too monotonous a way*, uneasy sensations are the never-failing result. Muscular or mental fatigue, for instance, and muscular exercise against one's inclination, are by no means pleasant. Tune is disgusted by superabundance or too frequent repetition of music; and the sense of taste is palled by protracted eating of even the daintiest food.

Happiness, therefore, as is abundantly obvious from the preceding remarks, consists in nothing else but *the satisfaction or agreeable activity* of our several faculties; while misery is simply their *disagreeable excitement:* and hence, with a view to the prevention and diminution of misery, it is highly important to ward off or remove every cause productive of an unpleasant affection of any of our organs. We are surrounded by fellow-mortals, each endeavoring to secure for himself the greatest attainable amount of gratification, and very frequently indifferent whether or not, in the eager pursuit of his object, he painfully excite the faculties of other members of the community. Persons in whom Acquisitiveness and Self-Esteem predominate over the moral faculties of the mind, have a strong desire to appropriate to themselves the wealth pertaining to their neighbors; inordinate Self-Esteem lead s the unprincipled to tyrannize over their weaker brethren; while Destructiveness prompts another class to excite painful feelings, corporeal or mental, in those against whom they have, or even have not, conceived a dislike. The world, moreover, is in many places infested by animals which devour, disfigure, or destroy the property of man, inflict pain upon his body, and are sometimes both able and willing to tear him to pieces. Rats, mice, foxes, and wolves, in civilized countries, and bears and tigers in the desert,—with many analogous tribes which it is needless to enumerate—would, if left undisturbed, speedily render the world a scene of incessant mo-

lestation and alarm, and totally unfit to be the residence of the human race.

The disagreeable excitement of our faculties being thus, in many instances, brought about by the conduct of our fellow-creatures, it is important that man, as well as the lower animals, (whose condition in this respect resembles his,) should be provided with the means of warding off the causes of pain,—of extinguishing them when their influence actually reaches him,—and of thus either avoiding altogether the unhappiness which it is their nature to produce, or at least materially abridging the period of its endurance.

There are two modes in which the disagreeable effects of such causes may be escaped from:—either, *first*, we may allow them to exist unchecked, but in some manner shield ourselves from their influences; or, *secondly*, we may put counteracting causes into operation—motives may be presented to the minds of surrounding beings, which shall induce them to refrain or desist from gratifying their desires at our expense. The strongest motive of this sort is obtained by disagreeably exciting their own faculties—by paining, for instance, their sense of feeling, or Acquisitiveness, or Love of Approbation; for nothing tends so much to prevent men from gratifying their desires, as the endurance of, or knowledge that they must subsequently endure, an amount of suffering equal to that which they occasion in others. Finally, should no available motive have power to stay or avert the aggressor, he may be rendered incapable of doing mischief by disabling his person or depriving him of life.

To the first of these modes of warding off or abridging the duration of pain, we are instinctively urged by the sentiment of *Cautiousness*, and to the second by the propensity of *Destructiveness*. Some of the lower animals, such as the sheep and the hare,* are

* I say *almost* destitute; for although it is commonly affirmed that herbivorous animals are not endowed with Destructiveness at all, there seems good reason for doubting the truth of this opinion. A tame ram, which I once possessed, became very mischievous. He repeatedly broke to pieces the door of his hut, and the trough in which his food was placed. During the day, he used to lie very frequently outside of the door of the house where I lived, and, when

almost destitute both of Destructiveness and of the instruments by means of which carnivorous animals carry its dictates into effect; while Cautiousness, on the contrary, is in them exceedingly powerful,—keeps them for the most part out of harm's way,—and leads them, when actually invaded, to provide for safety by flight. Man, in common with many other animals, is endowed with a considerable share of both faculties :—

> 'This double lot
> Of evil in the inheritance of man,
> Required for his protection no slight force,
> No careless watch; and therefore was his breast
> Fenced round with passions, quick to be alarmed,
> Or stubborn to oppose—with fear more swift
> Than beacons catching flame from hill to hill,
> Where armies land—with anger uncontrolled
> As the young lion bounding on his prey....
> These the part
> Perform of eager monitors, and goad
> The soul, more sharply than with points of steel,
> His enemies to shun, or to resist.' *

By Cautiousness, we are impelled to put locks upon our doors, ships of war around our coasts, and watchmen upon our streets; to take, in short, a thousand precautions against danger and misfortune. It is Destructiveness, however, which plays the more important part in preventing the mischievous acts of our fellow-creatures. The sphere of activity of this propensity is, I conceive, much more extensive than that indicated by the name *Destructiveness*, applied by Dr Spurzheim. From it originate not merely an

disturbed by any one coming out, revenged himself by following close behind, and butting the person violently, so as, in some instances, to knock him down. He was, moreover, a terror to all the children in the neighborhood, who if they encroached upon his domain, were sure of being attacked and maltreated. At length his pranks became intolerable, and he was put to death.—With regard to hares, Dr Gall himself (tome iv. p. 7) mentions that they fight so furiously with each other, that occasionally their skins are torn, and their persons mutilated.

* Akenside's Pleasures of Imagination, B. ii. v. 570—584.

inclination to destroy animate and inanimate objects, but also the desire to inflict suffering or uneasiness in general upon sentient beings; in other words, to produce in them the disagreeable excitement of one or several of the faculties. Dr Spurzheim, therefore, I humbly suggest, has erred in comprehending the whole functions of the organ within the definition, 'Propensity to destroy in general, without distinction of object, or manner of destroying,'—and in enumerating, as the persons in whom 'its manifestations are perceived,' only 'those who like to pinch, scratch, bite, break, tear, cut, stab, strangle, demolish, devastate, burn, drown, kill, poison, murder, or assassinate.'* It is impossible, perhaps, to find a *single word* more suitable than *Destructiveness* to express the function of this organ; but the phrase *Propensity to Injure* appears to comprehend every mode of its activity, legitimate manifestations as well as abuses. Literally, the word *injury* (derived from the negative *in*, and *jus*, *juris*, right) signifies the invasion of another's right; but I here employ it in its popular sense, without reference to the justice or injustice of any particular infliction.† Now, it seems to me to be a law of the human constitution, that, WHEN ANY OF OUR FACULTIES IS PAINED OR DISAGREEABLY ACTIVE, THIS PROPENSITY INSTANTLY COMES INTO PLAY; that is to say, there is immediately excited in the mind of the sufferer *an inclination to injure*—having for its object the inflicter of the pain, if one exist but not unfrequently vented, where the feeling is

* Phrenology, 3d edit. p. 163.

† Let me not be misapprehended. Injury does not necessarily imply malice or mischief. There are occasions when it is benefical to injure; though doubtless the propensity is manifested less frequently in its uses than in its abuses. We may destroy, kill, or chastise for good purposes as well as bad; nay, we are compelled to do so; and the faculty which prompts to such conduct needs only to be regulated by morality and reason. Destruction is *extreme injury*; to kill is to *injure mortally*; slander and reproach are *verbal injuries*; chastisement is *injurious* to bodily comfort; we *injure* a statue by breaking off its nose. As, however, the word *injury* is popularly understood in a bad sense I do not wish that it should supplant *Destructiveness*. The name is not of vital importance, provided the nature of the faculty be understood.

uncontrolled by the moral sentiments and intellectual powers, upon neutral individuals, or even inanimate objects.

'In every heart
Are sown the sparks that kindle fiery war;
Occasion needs but fan them, and they blaze.'*

Such a propensity is altogether indispensable to man before the institution of regular and powerful governments; but at whatever point in the social scale we regard him, its utility is abundantly obvious. 'Nature,' says Dr Thomas Brown, 'has not formed man for *one* stage of society only; she has formed him for all its stages,—from the rude and gloomy fellowships of the cave and the forest to the tranquillity and refinement of the most splendid city. It was necessary, therefore, that he should be provided with faculties and passions suitable to the necessities of *every* stage,—that in periods when there was no protection from without, that could save him from aggressions, there might be at least some protection *within*,—some principle which might give him additional vigor when assailed, and which, from the certainty of this additional vigor of resistance, might render attack formidable to the assailant, and thus save, at once from guilt and from the consequences of guilt, the individual who otherwise might have dared to be unjust, and the individual who would have suffered from the unjust invasion.

'What human wants required, that all-foreseeing Power, who is the guardian of our infirmities, has supplied to human weakness. There is a principle in our mind which is to us like a constant protector,—which may slumber, indeed, but which slumbers only at seasons when its vigilance would be useless,—which awakes, therefore, at the first appearance of unjust intention, and which becomes *more* watchful and *more* vigorous, in proportion to the violence of the attack which it has to dread. What should we think of the providence of nature, if, when aggression was threatened against the weak and unarmed, at a distance from the aid of others, there

* Cowper's Task, B. v.

were instantly and uniformly, by the intervention of some wonder-working power, to rush into the hand of the defenceless, a sword or other weapon of defence? And yet this would be but a feeble assistance, if compared with that which we receive from those simple emotions which Heaven has caused to *rush*, as it were, into our mind, for repelling every attack.'

'But this transient effect of anger,' continues Dr Brown, 'is trifling compared with its permanent effects....It is the long-remaining resentment that outlasts, not the momentary *violence* of emotion only, but all the evil consequences of the injustice itself, which renders the anger even of the weakest formidable, because it enables them to avail themselves, even at the most distant period, of aid, before which all the strength of the strongest individual must shrink to nothing. There is a community, to the whole force of which the injured may appeal; and there is an emotion in his breast which will never leave him till that appeal be made.' *

According to the predominance of any organ in the brain is its liability to be active, and, as a necessary consequence, its susceptibility of pleasurable and painful excitement. Where acquisitiveness is very strong, greater delight is experienced in gaining money, and more acute pain in losing it, than where the propensity is weak. A person in whom Love of Approbation is a ruling passion, is elated by applause, and plunged into the depths of misery by disgrace; while he in whom this sentiment has hardly an existence, is neither delighted by praise, nor pained by disapprobation.

Now, the height to which the Destructiveness of any individual is inflamed, so far as the excitement is not the result of its own inherent and independent condition, *bears a direct proportion to the intensity of the uneasiness felt by the wounded faculties.* A very apt illustration of this occurs in Shakspeare's tragedy of *King Richard III.*:—

'*Queen.* O thou well-skilled in curses, stay a while,
And teach me how to curse mine enemies.

* Brown's Lectures on the Philosophy of the Human Mind, vol. iii. p 223—5.

Q. Mary. Forbear to sleep the night, and fast the day;
Compare dead happiness with living wo;
Think that thy babes were sweeter than they were,
And he that slew them fouler than he is;
Bett'ring thy loss, make the bad causer worse:
Revolving this will teach thee how to curse.

Queen. My words are dull; O! quicken them with thine.

Q. Mary. Thy woes will make them sharp, and pierce like mine.'

Act IV. *Sc.* 4.

The object of cursing, I need hardly observe, is to express malevolent wishes in regard to the person against whom it is directed. The witch's son, Caliban, for instance, (whom Shakspeare represents as a perfect incarnation of Destructiveness,) thus salutes Prospero and his daughter in *The Tempest*:—

'As wicked dew as e'er my mother brushed
With raven's feather from unwholesome fen,
Drop on you both! a south-west blow on you,
And blister you all o'er!' *Act* 1. *Sc.* 4.

From the principle just stated it follows, that the circumstances which tend most strongly to excite anger, vary in different persons, according to the faculties which predominate and are most susceptible of uneasiness in each particular case. 'The covetous man,' says Plutarch, 'is most prone to be angry with his steward, the glutton with his cook, the jealous man with his wife, the vain-glorious person with him that speaks ill of him; but of all men, there are none so exceedingly disposed to be angry, as those who are ambitious of honor, and affect to carry on a faction in a city—which, according to Pindar, is but a splendid vexation.' * When the temperament is very excitable, this effect is still more decided; for, in the words of Lord Bacon, 'no man is angry that feels not himself hurt; and, therefore, tender and delicate persons must needs be oft angry, they have so many things to trouble them, which, more robust natures have little sense of.' † Hence it is, that men

* Plutarch's Morals, English Transl. London, 1718, vol. i. p. 44.

† Essay on Anger.

of genius,—especially poets, musicians, and artists,—among whom it is rare to find a temperament that is not highly vivacious and excitable, are universally recognised as an *irritable genus*. 'I am very sorry to be obliged to own,' says Chesterfield in *The World*, 'that there is not a more irritable part of the species than my brother authors. Criticism, censure, or even the slightest disapprobation of their immortal works, excites their most furious indignation.'

It is an additional result of the same principle, that resentment ought to be most frequently and furiously kindled by wounds inflicted on those faculties which have the largest organs in the brain, and thence most powerfully actuate mankind. Now, this appears from observation to be in reality the case; for pain of the propensities and lower sentiments, which have larger organs than the intellectual powers, and are naturally more energetic and susceptible of uneasiness than they, not only excite Destructiveness with greater frequency, but also produce greater violence or intensity of its action. The faculties which, in the present state of society, are the most energetic and influential, and at the same time most liable to be wounded and baulked of their enjoyment, are Acquisitiveness, Self-Esteem, and Love of Approbation; to which may be added the sense of feeling, a faculty very subject to be disagreeably affected in consequence of the activity of Destructiveness in our neighbors, and one whose pains are the most intolerable of all human sufferings. The occasions, therefore, on which the propensity to injure is most commonly roused, are when one or more of the faculties just named are in a state of disagreeable excitement; and, in like manner, the revenge, when inflicted, is generally some disagreeable application to these same faculties—as whipping, scolding, speaking roughly or sarcastically, * suing for damages,

*It is well observed by Lord Kaimes, that 'roughness, and harshness of manners are generally connected with cruelty;' a remark which he illustrates by referring to the bitter upbraidings and revilings which Homer represents the Grecian chiefs as bestowing so liberally upon each other. And he asks, 'Whence the rough and harsh manners of our West India planters, but from the unrestrained license of venting ill-humor upon their negro slaves?'

extorting an humble apology, or putting the offender to shame. But, as already hinted, should any faculty, whatever, be powerful and active, and should its possessor be in circumstances which expose it to painful activity, it will prove a frequent and violent exciter of Destructivess. Of course, the greater the number of faculties disagreeably affected at a particular time, and the greater the inherent energy and irritability of Destructiveness itself, the more intense, *cæteris paribus*, will be the action of this propensity.

Let us now survey the activity of Destructiveness when roused by uneasy sensations of the other faculties respectively; and the various passions which arise from the combination of these different uneasy sensations with the emotion of Destructiveness itself.

Violent bodily pain has the effect of instantly kindling Destructiveness into fury. Should a person with a weapon in his hand, and a considerable development of this organ, be suddenly and severely struck, the life of the aggressor would be in very imminent danger. In this case, Destructiveness would be called into play by the disagreeable activity of the sense of FEELING.

Suppose, in the next place, a North American Indian to have a friend or relation who is waylaid and murdered by some one belonging to a hostile tribe. ADHESIVENESS, disagreeably affected, rouses his Destructiveness, itself very energetic; and no pains are spared to make the enemy feel the effects of his wrath. 'I have known the Indians,' says Adair, 'to go a thousand miles for the purpose of revenge, in pathless woods, over hills and mountains, through huge cane swamps, exposed to the extremities of heat and

(*Sketches*, B. i. Sk. 5.)—Mr Combe states, in his System of Phrenology, 3d edit., p. 172, that 'Destructiveness *gives edge* to sarcasm, satire and invective.' He might have added, with truth, that it *directly prompts* to the employment of these weapons of molestation. Cobbett used to indulge his Destructiveness in this way; his controversial productions—to use the forcible language of a writer in one of the public journals—being characterized by 'a mingled stream of torturing sarcasm, contemptuous jocularity, and fierce and slaughtering invective.'

cold, the vicissitudes, of the seasons, to hunger and thirst. Such is their overboiling, revengeful temper, that they utterly contemn all those things as imaginary trifles, if they are so happy as to get the scalp of the murderer or enemy, to satisfy the craving ghosts of their deceased relations.'* In small communities, as Dr Robertson observes, every man is touched with the injury or affront offered to the body of which he is a member, as if it were a personal attack upon his own honor or safety;† and in this way Self-Esteem also receives offence. The whole tribe, therefore, takes a part in the quarrel, and its warriors issue forth against the community to which the offender belongs. The war-song is very characteristic: —'I go to revenge the death of my brothers: I shall kill; I shall exterminate; I shall burn my enemies; I shall bring away slaves; I shall devour their heart, dry their flesh, drink their blood; I shall tear off their scalps, and make cups of their sculls.'‡ In more civilized life, Destructiveness burns with less fury, but still its excitement by wounded Adhesiveness is sufficiently obvious. The exclamation of Isabella in *Measure for Measure*, when informed that Angelo has put her brother to death, is perfectly in accordance with nature:—

'Oh I will to him, and pluck out his eyes!'
Act iv. *Sc.* 10.

Let another case be taken. Suppose an Arab, travelling with his camels and merchandise in the desert. He is met by another Arab, who attempts to seize his property. ACQUISITIVENESS and CAUTIOUSNESS are painfully affected, and, by rousing Destructiveness, cause him to wound the aggressor. He is, however, eventually overcome, and deprived of his goods. The pain of Acquisitiveness, and activity of the propensity to injure, continue to subsist: he harbors resentment; and, when an opportunity occurs, he inflicts chastisement on the perpetrator of the wrong.

* History of the American Indians, p. 150.

† History of America, B. iv.

‡ Bossu's Travels through Louisiana, i. 102.

But of all the causes which excite Destructiveness, the disagreeable activity of SELF-ESTEEM is the most frequent and powerful; and indeed there are few occasions, on which it does not partake in the suffering produced by offence of the other faculties. 'For 'contempt is that which putteth an edge upon anger, as much or more than the hurt itself; and therefore, when men are ingenious in picking out circumstances of contempt, they do kindle their anger much.'* Self-Esteem, when ill regulated, makes individuals prefer themselves to every other person, and gives them a tendency to engross as much as possible the sources of happiness for their own peculiar advantage. Such men are therefore offended when they see other people either enjoying gratifications in which they have not the good fortune to partake—the mode of activity of Self-Esteem being in this case denominated *envy*,—or grasping at what they themselves are desirous to obtain, whereby the emotion of *jealousy* is produced. † The occasions which give birth to envy and jealousy, vary according to the faculties which happen to be, along with Self-Esteem, energetic. Thus, an unmarried lady, possessing large organs of the domestic affections, combined with a great development of Self-Esteem, will be exceedingly apt to *envy* such of her acquaintances as are happily married, and surrounded by a promising and healthy family; while she will harbor *jealousy* towards any one who endeavors to secure the affections of the man whose love she desires for herself. A self-esteeming and acquisitive individual competing for a lucrative office, is *jealous* of his rival; and, after failing in the pursuit, regards him with *envy*. This pain of Self-Esteem renders him maliciously disposed towards the fortunate candidate; he bears a grudge against him, rejoices in his misfortunes, and lets slip no opportunity of blasting his reputation. In the case here supposed, there is added to envy the emotion of *hatred*, which is a compound of the painful emotion of Self-Es-

* Bacon's Essay on Anger.

† Cautiousness, also, appears to be an element in jealousy; and if suspicion be one of its ingredients, Secretiveness likewise comes into play.

teem, or of some other faculty, with the propensity to injure or destroy :—

'Hates any man the thing he would not kill?' *

In cases where Self-Esteem is so vigorous as to give rise to ambition or lust of power, but where the attempts of the aspirant to gratify his desire are frustrated by a more popular antagonist, to whose authority he is compelled to submit, there is no great probability of the victor being allowed to remain unmolested. Cassius is represented to have been a man of this sort :—

'I cannot tell what you and other men
Think of this life; but, for my single self,
I had as lief not be, as live to be
In awe of such a thing as I myself.' †

And Cæsar's remark upon him is sufficiently pointed :—

'Such men as he be never at heart's ease
Whilst they behold a greater than themselves;
And therefore are they very dangerous.' ‡

Satan expresses the same feeling in *Paradise Lost*—

'Better to reign in hell than serve in heaven;'

and nothing can be more bitter and malicious than the tone in which Milton represents him as habitually speaking of the Deity. There are men so base and selfish, that the enjoyment of happiness by others is with them a sufficient ground for hatred; and even the sense of inferiority engendered by the contemplation of excellence,

* Shylock, in The Merchant of Venice, Act iv. Sc. 1.—It is proper to state, that, in this and some other illustrations given in the text, Benevolence and Conscientiousness are assumed to be moderate, and the organ of Destructiveness to be large. Where great morality exists, there is a powerful check upon the *execution* of the suggestions of Destructiveness—whose activity, moreover, it tends to allay.

† Julius Cæsar, Act I. Sc. 3.

‡ Id., Act I. Sc. 4.

disposes grovelling minds to detract from the reputation of those whom they dare not hope to equal.

> 'No might nor greatness in mortality
> Can censure 'scape; back-wounding calumny
> The whitest virtue strikes.'*

Few circumstances are so much calculated as disobedience to wound a preponderating Self-Esteem; and the proud man's Destructiveness, when so inflamed, is very apt to inflict suffering on the culprit. Persons in whom Destructiveness is powerful, generally find more ready obedience than that which is accorded to those who have it weak; for the receiver of the command, disliking to be the object of this propensity, takes care to avoid giving occasion for its exercise. It may be further observed, that persecution and ill-will on account of difference of opinion, religious or political, derives its origin principally from Self-Esteem; which, offended by the presumption of others in holding tenets at variance with those of its possessor, excites Destructiveness to chastise them by vituperation, slander, penalties, imprisonment, or death. In the case of religious persecution, offended Veneration is also in the field; but, in general, Self-Esteem appears to be the chief instigator of this disgraceful proceeding.

The weapons by which Love of Approbation is vulnerable, are slander, ridicule, and the expression of displeasure; and it is hardly necessary to say that these have a strong tendency to excite a desire to injure the person from whom they proceed. Disappointment of this feeling has a similar effect. A man who is quashed where he intends to make a splendid figure, seldom fails to bear a grudge against the person by whom he is annihilated. When both Self-Esteem and Love of Approbation are powerful—as they were in Bonaparte, for example—there is a desire not merely to be applauded and admired, but to be the *grand and prominent object* of applause and admiration—to walk, in short, 'the sole hero

* *Measure for Measure*, Act III. Sc. 6.

upon the stage.'* Such a man is therefore jealous of all whom he suspects of aiming at a share of the eclat, and envies and hates them when they get more than he. Robert Burns used to be grievously offended and irritated, when not made the *lion* of the company in which he was present.† The noted case of David and Saul furnishes another good illustration. When the virgins, in celebrating their exploits, proclaimed that 'Saul had slain his thousands, and David his ten thousands,' the king, we are told, 'was very wroth, and the saying displeased him;....and Saul eyed David from that day and forward.'‡ An army which has been mortified and disgraced by defeat at the hands of an enemy before regarded with contempt, is apt to be extremely ferocious when at length a victory is gained. The conduct of the Duke of Cumberland's troops in the Highlands of Scotland, after the battle of Culloden, illustrates this remark. General Hawley, in particular, whose arrogance seems to have exceeded even his folly, was 'one of the most remorseless of all the commanding officers; apparently thinking no extent of cruelty a sufficient compensation for his loss of honor at Falkirk.'§

Cautiousness is painfully excited by the presence or apprehension of danger—in which case some other faculty, such as Acquisitiveness, or the Love of Life, uniformly experiences disagreeable sensations along with it. This unpleasant excitement, by rousing Destructiveness, causes the emotion spoken of by Dr Thomas Brown in the passage before quoted, 'to rush, as it were, into our mind, for repelling every attack.'

* See Channing's splendid Analysis of the Character of Napoleon Bonaparte, 3d London edition, p. 31. This trait in Bonaparte's disposition may be summed up very briefly and forcibly in the words of Young:—

> 'Fain would he make the world his pedestal;
> Mankind the gazers, the sole figure, he.'
> *Night Thoughts*, B. viii. v. 492—3.

† See p. 65 of this volume.

‡ 1 Sam. xviii. 7, 8, 9.

§ Chambers' History of the Rebellion in Scotland in 1745, vol. ii. p. 138.

'I pr'ythee take thy fingers from my throat——
For though I am not splenetive and rash,
Yet have I in me *something dangerous*,
Which let thy wisdom fear.'*

And as this emotion might be too late if it came only after a blow had been received, the Creator has so arranged that the natural language of the intending aggressor generally gives his victim unequivocal warning of his intention—thus exciting Cautiousness, and through it Destructiveness, in time to repel the assault. Even where there is no aggression, Destructiveness is excited by fear, though in a less vivid degree; for people in a state of trepidation are apt to curse, and otherwise behave in a manner symptomatic of the action of this propensity. Apprehension of danger is notoriously productive of a cruel disposition, even among persons who, when free from it, are altogether incapable of barbarous conduct.

'He that is feared is hated,' says the old Roman poet Ennius; 'and they that hate a man wish him dead.' 'Quem metuunt, oderunt; quem quisque odit, periisse expetit.'† And it is well observed by a sagacious writer already cited, that 'we are never so apt to commit an act of inhumanity as during the surprise and agitation which follow personal danger.'‡ Sir Walter Scott mentions of Charles II., that he 'was good-natured in general; but any apprehension of his own safety easily induced him to be severe, and even cruel.'§ There is little room for doubt, that the horrible atrocities committed in the seventeenth century against supposed witches, are in a great measure traceable to the painful excitement of Cautiousness. The persecutions in New England particularly illustrate this observation.‖ Hence also the ferocity which pervades the public mind in times of proscriptive violence.

The warmth which most individuals are prone to exhibit when

* Hamlet, Act V. Sc. 2.

† Ennius, quoted by Cicero, *De Officiis*, lib. ii.

‡ Chambers' History of the Rebellion, &c. ii. 229.

§ Tales of a Grandfather, 2d series, ii. 170.

‖ See Sir W. Scott's Letters on Demonology and Witchcraft, p. 274.

arguing against a formidable opponent, and without confidence in the goodness of their own cause, may be accounted for in the same way. Mr Edgeworth has very well stated the fact in the following sentence :—'People are often violent in argument, and angry from a secret fear of the strength of their opponents: where a person has a full sense of being in the right, and of having the best of an argument, it is easy to preserve calmness and temper.'* On a similar principle it seems possible to explain, in some cases at least, the peculiar acrimony of feeling with which intimate friends usually regard each other after having quarrelled. Each has been intrusted with a knowledge of foibles and other private concerns, the trumpeting of which to the world might lead to disagreeable and prejudicial results. Each of them, knowing how much the other has thus in his power, is haunted by a lurking apprehension that the knowledge will be spitefully made use of; and, in the production of mutual hatred, this disagreeable excitement of Cautiousness must considerably reinforce the other offences which a quarrel implies. It may be added, that friends are apt to regard the conduct which leads to a rupture as more unpardonable than the same conduct proceeding from a stranger.

Perhaps it will be objected, that *extreme* terror absorbs the whole mind, so that Destructiveness, instead of being roused, is for a time, as it were, utterly annihilated. This phenomenon, however, takes place under the operation of one of the general laws alluded to in the commencement of the present essay, and it will be noticed at greater length on some future occasion. When self-possession is recovered, the activity of Destructiveness speedily appears.

It is curious, and to some may appear paradoxical, that even BENEVOLENCE can act as a direct stimulus to Destructiveness. Its disagreeable excitement occurs when we witness the infliction of pain, and is called *pity* or *compassion*. The benevolent man, whose Destructiveness is powerful, has in such cases a vivid inclination to bestow summary chastisement on the inflicter. This is

* Essays on Professional Education, by R. L. Edgeworth, Esq. 4to. p. 89.

well exemplified by the incident which gave occasion to the maledictory poem of Burns, written on seeing a wounded hare pass by—and in which are embodied, in nearly equal proportions, compassion for the hare and curses on the man who had wounded it. So enraged was the poet, that he threatened to throw the sportsman into a neighboring river. * In like manner, when a crime of great atrocity is perpetrated against any individual, the anger is not confined to the sufferer alone. 'There rises,' says Dr Brown, 'in the mind of others, an emotion, not so vivid, perhaps, but of the same kind, involving the same instant dislike of the injurer, and followed by the same eager desire of punishment for the atrocious offence....In periods of revolutionary tumult, when the passions of a mob, and even, in many instances, their most virtuous passions, are the dreadful instruments of which the crafty avail themselves, how powerfully is this influence of indignation exemplified in the impetuosity of their vengeance! Indignation is then truly anger.

The demagogue has only to circulate some tale of oppression; and each rushes almost instantly to the punishment of a crime, in which, though the injury had actually been committed, he had no personal interest, but which is felt by each as a crime against himself.' †

A curious example of this effect of Benevolence in rousing Destructiveness, is furnished by the history of Montbar, a Frenchman, who was so furiously exasperated by reading, in early life, accounts of the cruelties of the Spaniards in America, that he joined the buccaneers, a body of pirates long the scourge of navigators in the West Indies. So much and so frequently did this man gall the Spaniards, during the whole of his life, that he acquired from them the name

* See p. 68 of this volume.

† Lectures, vol. iii. p. 326—7.—A beautiful passage, following that above transcribed, is very reluctantly omitted for want of room. I may, however, quote a few words from an article in the first volume of the Edinburgh Review, evidently the production of Dr Brown :—'There is a virtuous *wrath*—we could almost say a virtuous *malice* and *revenge*—which, we trust, will ever be excited by the tale of successful oppression.'—P. 481.

of *the Exterminator.* * Of course, the *independent* energy of his Destructiveness itself must have been very great.

The offence which impiety, real or imagined, gives to VENERATION, is not slow in calling Destructiveness into exercise. This has already been hinted at in reference to theological persecution; and I may now, it is hoped, without impropriety, allude to a well-known act of One, who, being 'made like unto his brethren,' drove out of the Temple at Jerusalem, with 'a scourge of small cords,' those who profaned it by selling oxen, sheep, and doves; and 'poured out the changers' money, and overthrew the tables.' † The Crusades will readily occur to the reader, as exhibiting a fearful ebullition of Destructiveness, excited through the medium of Veneration.

CONSCIENTIOUSNESS, when offended by an act of gross injustice and ingratitude, by the punishment of a guiltless individual, or, what is still more intolerable, by a groundless suspicion or accusation brought against one's self, often kindles Destructiveness into fierce indignation. An honest man who witnesses oppression, is strongly inclined to 'break the jaws of the wicked, and pluck the spoil out of his teeth.' ‡ Such is the feeling, also, with which liberal men regard the enemies of truth and free inquiry, and all who trample on the rights and liberties of mankind. The world has seldom witnessed a philosopher whose temper was more sweet than that of the Honorable Robert Boyle; but even this mild and amiable man, by reason of his having 'a most particular aversion to all severities and persecutions for conscience sake,' was capable of manifesting no slight activity of Destructiveness. 'I have seldom observed him,' says Dr Burnet, 'to speak with more heat and indignation than when that came in his way.' §

When an object offensive to IDEALITY presents itself, Destructiveness appears to be excited in the usual manner. On what other principle can we account for the instinctive propensity which arises to kill a loathsome reptile the moment it catches our eye,

* Encyc. Brit. Art. Buccanneer, vol. v. p. 623, 7th edit.

† John ii. 14—16. ‡ Job xxix. 17.

§ Quoted in Life of Boyle, Constable's Miscellany, vol. vii. p. 90.

even when we know it to be perfectly harmless? 'Kill the ugly brute,' is an instantaneous exclamation among the vulgar; the ugliness being obviously the leading reason for putting the animal to death. Or, in what other way is it possible to explain why, in the generality of mixed parties, a beautiful woman receives far more kindness and attention than she whose looks are of a homely description; and why, for the most part, a pretty child is treated with greater indulgence by its parents than an ugly one? It may be suggested, as an inquiry perhaps not unworthy of the attention of naturalists, whether those animals which are most dangerous or annoying to man, and which at the same time it is difficult both to avoid and to escape from—or which, if not instantly attacked, would make their escape in the twinkling of an eye,—are more loathsome and ugly in their appearance than harmless creatures, so that, whenever they are seen, there arises in the spectator an immediate inclination to destroy them, much stronger than that which would be excited by Cautiousness alone.

It is not often that the INTELLECTUAL FACULTIES experience disagreeable excitement. They are naturally weaker than the feelings, and, standing less in relation to living beings, are less liable to be galled by the conduct of the latter. It is chiefly in being baulked of desired enjoyment that the intellect suffers. When LOCALITY, for instance, is powerful, and its possessor in consequence desires to travel, he is unhappy if continually detained at home. He who has a taste for sculpture and painting, is annoyed by inability to find admittance into a gallery where pictures and statues are exhibited. When TUNE is large, a desire to attend musical concerts is felt; and if it be impossible to do so, the person feels regret. EVENTUALITY, in like manner, is disagreeably affected by the denial or removal of its gratification. 'The pain which attends ungratified curiosity is most strikingly proved by those tales which are often intentionally suspended at some most interesting moment, and printed as fragments. We feel, in such a case, a vexation that almost amounts to anger, as if the writer of the fragment were wilfully and wantonly inflicting on us pain; and there are many little injuries which we could perhaps much more

readily forgive. To be forced to read a succession of such fragments would be, truly, to any mind which can take an interest in the adventures of others, a species of torture,—and of torture that to such a mind would be far from being the slightest which could be devised.'* Perhaps the faculty of TUNE is more exposed to annoyance from our fellow-men than any other intellectual power. Those in whom it predominates are acutely pained by discordant and unmelodious notes; and Hogarth's picture of the Enraged Musician is an enduring testimony that anger may be kindled by these.

One grand legitimate object of Destructiveness, then, appears to be *warding off or removal of uneasiness* from its possessor; an end which is accomplished by its inspiring with fear those who long to gratify their selfish faculties at his expense, and repelling or disabling such of them as are not to be so deterred. It is very important to remark, however, that *even where the pain is attributable to ourselves alone, or to unavoidable accident, the general rule continues to hold; and the activity of Destructiveness, though generally less vivid, is equally certain.* In a word, the existence of an aggressor is not indispensable to the excitement of Destructiveness. Bodily pain, occasioned by the merest chance, immediately sours the temper, and, where the intellect is weak, leads to absurd violence of conduct. The North American Indians, 'if hurt accidentally by a stone, often seize it in a transport of anger, and endeavor to wreak their vengeance upon it.'† Children, in like manner, if they unluckily stumble over a stool, are prone to kick it to pieces in their wrath. 'I saw him,' says Valeria, speaking of the child of Coriolanus, 'run after a gilded butterfly; and when he caught it, he let it go again; and after it again; and over and over he comes, and up again; and caught it again; *or whether his fall enraged him, or how 'twas, he did so set his teeth, and did tear it. Oh, I warrant how he mammocked it!*'‡ Every one must have remark-

* Brown's Lectures, iii. 437.

† Robertson's History of America, B. iv.

‡ Tragedy of Coriolanus, Act i. Sc. 6.

ed that, during the continuance of uneasy sensations, occasioned by indigestion, superfluity of bile, costiveness, and other disorders, the temper is unusually irritable, and the character, indeed, so materially changed, that by this and similar facts some have been induced to question whether the tempers of men are really determined by nature. Pope, for instance, is greatly perplexed by finding 'the same man utterly different in different places and seasons'*:—

> 'See the same man, in vigor, in the gout;
> Alone, in company; in place or out.'†

It is a remark of Voltaire, that 'costiveness has too often been the original cause of the most sanguinary and dreadful scenes;' a position which he illustrates by affirming, that Oliver Cromwell suffered under this disorder for upwards of a week before he signed the death-warrant of Charles I., and that the 'costive and unhappy temperament' of Charles IX. of France 'was one of the principal causes of the Massacre of St Bartholomew.' Into the accuracy of these statements it is needless to inquire: they are here given merely as illustrations of a fact which very few will dispute. It may be further observed, that during the prevalence of the east wind in Britain, and of gloomy and tempestuous weather in general, a feeling of uneasiness rarely fails to pervade the system; and the temper is certainly at such periods unusually snappish. That this is the case also among people enduring the discomfort of hunger, every one must be aware. A party kept waiting for a long time in a drawing-room before dinner, is seldom in the sweetest of moods. The same is true of persons grievously fatigued by muscular exertion; and, lastly, the reader will have no difficulty in explaining, by means of the principle under consideration, why his female friends (who are constitutionally subject to periodical uneasy sensations over the whole frame) display at certain times a degree

* Pope's Moral Essays, Ep. i., argument.

† Id., v. 71, 72.

of ill-nature, perhaps even fury, very different from their habitual temper of mind.'*

Grief, in consequence of the death of relations or friends, has a like tendency to stimulate Destructiveness. That this fact has not escaped the penetration of Shakspeare, is evident from the dialogue of Brutus and Cassius after their quarrel :—

> '*Cas.* I did not think you could have been so angry.
> *Bru.* O Cassius, I am sick of many griefs.
> *Cas.* Of your philosophy you make no use,
> If you give place to accidental evils.
> *Bru.* No man bears sorrow better. *Portia's dead,*
> *Cas.* Ha! Portia!——
> *Bru.* She is dead.
> *Cas. How 'scaped I killing when I crossed you so?*
> O insupportable and touching loss!'†

This seems to be the origin of the custom so prevalent among savage tribes, of tearing the hair and disfiguring the countenance in the agony of grief at the death of a friend. It is mentioned by Bruce, that the women of Abyssinia, upon the death of a near relation, cut the skin of their temples with the nail of the little finger, which is left long on purpose; and that thus every female countenance in the country is disfigured with scars. The Charrua Indians of Uraguay are accustomed to testify their grief on such occasions by cutting off one of the bones of a finger, and making incis-

* Males also seem to have, at the same time, monthly visitations of uneasiness, melancholy, and irritability, for which no cause has as yet been discovered. See, on this curious and important subject, Gall *Sur les Fonctions du Cerveau*, iii. 252—364; and Spurzheim on Insanity, sect. v., on Fits of Madness. Speaking of the domestic jars which often occur at those periods, Dr Gall observes, that 'it is necessary to be a philosopher, or to know thoroughly the organic cause of the extraordinary conduct, and to anticipate its speedy termination, in order to endure it with charitable patience.' P. 362. It is 'surtout à l'époque des évacuations périodiques' that paroxysms of destructive insanity, and disposition to suicide appear—See Gall, i. 398—400; iv. 110, 353, 363; also Forster's Observations on the Casual and Periodical Influence of particular states of the Atmosphere on Human Health and Diseases, particularly Insanity. London, 1817. Sect. ix.

† Julius Cæsar, Act iv. Sc. 4.

ions in their flesh. * The New Zealanders in like manner lacerate the face, arms, and other parts of the body; † and it is not uncommon for them even to commit suicide on the death of a brother, a husband, or a wife. ‡ The Jews appear to have been at one time addicted to similar practices; for we find in Scripture the express commandment, 'Ye shall not make any cuttings in your flesh for the dead, nor print any marks upon you.' § To the same principle must be ascribed the old Jewish custom of rending the garments whenever the feelings were disagreeably excited.

Achilles is represented by Homer as in danger of committing suicide in the excess of his grief for the death of Patroclus:—

> 'Then clouds of sorrow fell on Peleus' son,
> And, grasping with both hands the ashes, down
> He poured them on his head, his graceful brows
> Dishonoring, and thick the sooty shower
> Descending settled on his fragrant vest.
> Then, stretched in ashes, at the vast extent
> Of his whole length he lay, disordering wild
> With his own hands, *and rending off his hair....*
> On the other side, Antilochus, dissolved
> In tears, held fast Achilles' hands, and groaned
> Continually from his heart, through fear
> *Lest Peleus' son should perish self-destroyed.*' ‖

Many other instances might be adduced, to shew that Destructiveness is excited by painful sensations in general, even where no aggressor exists; but it is unnecessary to multiply examples. None will dispute that the merchant whose warehouse is consumed by

* Notice sur les Indiens Charruas, p. 8.

† Library of Entertaining Knowledge; *The New Zealanders*, pp. 198, 209.

‡ Id., pp. 292, 297, 388.

§ Levit. xix. 28.

‖ Iliad, B. xviii. I have preferred Cowper's translation as more faithful, though somewhat less elegant, than that of Pope. The concluding verse in the original passage is—

Δείδια γὰρ μὴ λαιμὸν ἀποτμήξειε σιδήρῳ,—v. 34.

Literally, 'For he was afraid that Achilles would cut his throat.'

lightning,—the traveller who loses his purse,—and the wight who, on arriving breathless and exhausted at a coach-office, beholds the vehicle, in which he is anxious to seat himself, wheeling round a distant corner,—are all rendered prone to destructive conduct, and hardly refrain from speaking harshly to those around them. Children, when wounded by a fall, are apt to stamp their feet on the ground with rage, to kick about the smaller articles of furniture, and to commit havoc among the brittle ware; while passionate adults, when any annoyance occurs, give vent to a copious volley of imprecations.

As formerly observed, the legitimate object against which Destructiveness ought to be exclusively indulged when roused by uneasiness or pain, is the individual by whom that uneasiness is caused. In such cases, we may sometimes *injure*, without infringing in the slightest degree, the dictates of morality and reason. 'If the *benevolent* affections,' says the penetrating metaphysician already more than once cited, 'be so important as sources of happiness, the malevolent affections are not less important parts of our mental constitution, as the *defence* of happiness against the injustice which otherwise would every moment be invading it;—the emotions of the individual injured being to the injurer a certainty that his crime will not be without *one* interested in avenging it; and the united emotions of *mankind*, as concurring with this individual interest of retribution, being almost the certainty of vengeance itself. If vice can perform those ravages in the moral world, which we see at present, what would have been the desolation if there had been no motives of terror to restrain the guilty arm,—if frauds and oppressions, which now work in secret, could have come boldly forth into the great community of mankind, secure of approbation in every eye, or at least of no look of abhorrence, or shuddering at their very approach? It is because man is rendered capable of hatred, that crimes which escape the law and the judge, have their punishment in the terror of the guilty.'* In a word, so long as the saying shall continue true—'Mali inter malos vivimus,' the propensity to

* Brown's Lectures, vol. iii. p. 274. See also pp. 249, 546.

injure will be indispensable to our welfare; and it is interesting to remark, that, as most of the pains occasioned to us by our neighbors are the produce of exuberant Destructiveness in the inflicters,—if the organ shall, in the progress of civilization, become so quiescent in the human race, that we shall cease to torment and destroy each other, this very quiescence must at the same time weaken the principle of resentment, which will thus become more and more feeble in proportion as its services are less required.

It unfortunately happens, however, that, in the existing state of human affairs, Destructiveness seldom confines its operations to the offending object exclusively. When pain is occasioned by circumstances referrible either to the sufferer alone, or to some particular aggressor, parties entirely innocent are often made to feel the consequences of that displeasure, which, if directed by reason and morality, would either be wholly curbed, or fall exclusively on the party offending. The excitement of Destructiveness, however, being less furious in these instances than when it is directed against the author of pain, the disposition manifested is frequently of no higher intensity than what is familiarly known as *peevishness* or *fretfulness*—a tendency to growl, and snarl, and act with unmerited harshness towards all who are unfortunate enough to be in the way. Such a misdirection of displeasure is extremely unamiable, and obviously at variance with reason and common sense.

Before concluding this branch of the subject, it is proper to remark, that Combativeness, or Opposiveness, is roused by the same circumstances which excite the propensity to injure. These two faculties, indeed, as I observed on a former occasion, * seldom fail to act in concert; and it is impossible to doubt the *general* truth of Dr Brown's assertion, that 'when anger arises, fear is gone—there is no coward, for all are brave.'† There is certainly in every case an *increase* of courage, though not always so great as to elevate it to the rank of positive bravery.

I have still some additional remarks to offer on the uses and modes of activity of Destructiveness; but, as the present article is already too long, it is necessary to postpone these till next number.

* Essay on Combativeness, p. 160 of this volume.

† Lectures, iii. p. 324.

Article IV.

Edinburgh Phrenological Journal, No. XLII.

Art. I. (Review.) *The Physiological Characters of Races of Mankind, considered in their Relations to History, &c.*— By W. F. Edwards, M. D., F. R. S. L., &c. &c. Paris, 1829.

A work on this subject, from a writer whose reputation for experimental research is behind that of no other man of the age, must, without doubt, be exceedingly valuable, and we regret never having met with it. Such kind of inquiries are so generally undertaken by those who are not properly prepared with the requisite knowledge of anatomy, physiology, languages and history, and the result so often abounds with false facts and empty speculations, that none but those whose studies have been particularly directed to this subject can duly appreciate the labors of a writer whose mind is so well trained by practice in scientific pursuits that it can see the relative importance and bearing of his facts, eschew all mere theorizing, and obtain his results in the spirit of the inductive philosophy.*

The *effects of climate* in altering the physical character of man, Dr Edwards very justly considers to be almost nothing; and yet, notwithstanding the evidence of this and of many other eminent philosophers against this theory—and one with less foundation was never seriously entertained—it is often referred to in writings of the day, as established and settled, and sometimes by writers who ought to know better.

Mixture of the races cannot lead to an entire extirpation of the characters of a race, except in the very rare cases where one of the races is very small in number, and the other very large; and in the very improbable one, when each individual of one race unites with

* See Annals, page 364, Vol. ii. No. iii.

an individual of the other, till all are paired. It is a fact, well established, Dr Edwards thinks, that when varieties of a species intermix, the offspring most generally bear the characters of one or the other variety, and not a mixture of both; consequently, notwithstanding the great diversity of features in a tribe or people, we can always find specimens of the pure types which have entered into their composition.

The influence of civilization, Dr Edwards thinks, cannot be great, and we have no evidence of its power in changing the physical character of man.

In the application of his ideas to practice, if we may judge from the notices of the Reviewer, the author has been eminently successful. *

ART. II.—*An Essay on Temperaments. By Mr Daniel Noble, &c.* We observe nothing very new or striking in this Essay, except one or two notices, which may or may not be true—for they are offered merely as suggestions.

ART. III.—*Case of derangement of the faculty of language, in consequence of a blow near the eye.* This is an account of one of two cases, where blows or other injuries near the eye have been followed by a temporary derangement of the power of language.

ART. IV.—*Phrenology and the British Association.* When this association met in Edinburgh last year, Mr Combe addressed a note to one of the Secretaries, signifying his readiness to give a demonstration of the Phrenological Society's collection of national sculls, if it would be acceptable. To this very polite and proper offer, no answer was returned, except an acknowledgment of its receipt. The reason of this silence is explained by the language of the President of the previous year.

'He urged most strenuously upon the Association the necessity of keeping in mind the objects of its institution, and to confine their researches to dead matter, without entering into any speculations on the relations of intellectual beings; and he would brand as a traitor that person who would dare to overstep the prescribed boundaries of the insti-

* See Annals, pages 103—4—5. Vol. ii. No. iii.

tution. If the Society should ever be broken up, which God forbid, he would predict that it would happen by some members imprudently and daringly passing its boundaries.'*

A very sorry reason this, why, when a most valuable collection of natural history was before them, they should not listen to an account of it from one who was better acquainted with it than any other man, and must have proceeded, not from a philosophical indifference to Phrenology, but a petty hostility towards it. What renders it still more absurd, was the fact that one of the members of the Association spoke at length of a race that recently dwelt, he thought, between 14 and 19 degrees of south latitude, in South America, characterized by having two thirds of the entire weight of the brain behind the occipital foramen, and supported his views by quoting the opinion of Gall, among others. Now it happened, that in that very collection, which the British Association would hear nothing about, is the scull of one of these people, and so considered by this gentleman. No science, or any other subject of inquiry was ever frowned out of existence, and the British Association may rest assured that phrenology will not prove an exception to the universal rule. Free and manly discussion is the only weapon worthy their use,—all others had better be left to hacks and scribblers.

ART. V.—*Case of Idiocy.* Here, as in every other case of congenital idiocy, unconnected with disease, a diminutive size of the intellectual organs accompanied the feeble endowment of understanding. Why this invariable connection, if the mind acts independently of the brain? It is too common to be accidental, and if we are warranted in drawing certain inferences from the constant association of phenomena, we are certainly here, in laying down the general principle, that the manifestations of the mind are in a certain relation to the development of the intellectual organs. This is a truth firmly established, now and forevermore, by the history of idiocy, and none but the grossly ignorant would ever

* Report of Proceedings of the British Association, in Edin. New Phil. Journ. for Oct. 1834, p. 372.

think of calling it in question. If a person, in common conversation should deny that idiots were at all deficient in understanding, he would instantly be looked upon as beside himself, or profoundly stupid; and yet, what is just as false, we hear it asserted, and that oftentimes by professed teachers of anatomy, that the brain of idiots is as well formed as other persons!'

ART. VI.—(Review) *Journal de la Société Phrenologique de Paris. Tome* 11. *No. V.* Phrenology is gaining ground in Paris, and numbers among its believers, or what is better, its students, some distinguished men. The French Phrenologists are destined, we think, to lead in the science, but at present they are a little more fond of making discoveries, than collecting observations. The following case is a strong one.

'The case of a woman called Denise, detailed in the *Annales de la Medicine Physiologique*, (Oct. 1832,) is taken notice of, as furnishing a curious example of insatiable appetite for food. In infancy she exhausted the milk of all her nurses, and ate four times more than other children of the same age. At school she devoured the bread of all the scholars; and in the Salpétrière it was found impossible to satisfy her habitual appetite with less than eight or ten pounds of bread daily. Nevertheless, she there experienced, two or three times a month, great attacks of hunger (*grandes faims*,) during which she devoured twenty-four pounds of bread. If, during these fits, any obstacle was opposed to the gratification of her imperious desire, she became so furious, that she used to bite her clothes, and even hands, and did not recover her reason till hunger was completely satisfied. Being one day in the kitchen of a rich family, when a dinner party was expected, *she devoured in a very few minutes, the soup intended for twenty guests, along with twelve pounds of bread!* On another occasion, she drank all the coffee prepared for SEVENTY-FIVE of her companions in the Salpétrière! Her scull is small; the region of the propensities predominates; and the organ of Alimentiveness is largely developed.'

ART. VII.—*Observations on the Functions of the Organ of Weight. By Mr Richard Manchester.* This gentleman suspected some time since that the organ of weight gave the perception of objects, with respect to the perpendicularity of their position, and subsequent observations which have been numerous, have

confirmed this idea. He has found that whenever the organ is small, there is a proportionate incapability of detecting deviations from verticality in any object; and that when large, that power is strong in proportion. His cases are so interesting that we quote them entire.

'I have met with it so small in two ladies, sisters, that in running my finger over the perceptive organs, I found an indentation over Weight so remarkable, that it appeared as if a piece had been taken out of the scull with a small gouge; and neither of them could detect a deviation from the perpendicular of an inch in a line of eighteen inches or two feet. I tried many experiments with them, and always with the same result. One of them, when I first saw her, had just left a boarding-school, and at my request she shewed me her drawing books. She displayed considerable taste in representing flowers, birds, and butterflies, but her attempts at any kind of architectural pieces were very inferior. One of her drawings was a view of a small town built on a river, and when I turned to it, she said, "I had more trouble with that piece than with all the rest in the book; my master made me do it four times over; he said all the buildings were tumbling, and I had *such* work to get it done *right*." And, although she had done it four times over, not a single line in it approached to perpendicularity: the buildings were in the most awkward confusion—some were tumbling to the right and some to the left; yet neither herself nor her sister could perceive any thing wrong with them. Both of them had large Form, Size, Coloring, and Order, and made considerable progress in drawing objects where the lines were curved; but they entirely gave up attempting pieces containing straight lines, as they never could please their friends with them. My brother and I invariably find, in our own business, that persons with large Form can cut good curved lines, but unless they have Weight also large, they cannot cut good straight ones;—in squares, for example, they can never make them "*true*," as we say.

'Another remarkable instance of deficiency in this organ, I observed in a joiner in our employment. He had an excellent development for his business, except of this organ, which was the smallest I have observed in any male head. In planning he was excellent, and in execution rapid; and when he used the square, &c. his work was unexceptionable. In fitting up our benches, a number of uprights were of course required, which he fixed by the eye, and out of upwards of thirty there was not one decently accurate; many of them were above an inch out of truth, and all of them so much so, as to offend our own eyes.

We pointed this out to him, and, strange to say, he could not perceive the slightest inaccuracy in any of them; but on our applying the plumb-line, he was of course convinced, very much to his astonishment, as he had always supposed he had "a good eye," as he called it. I shall mention only one other circumstance:—Some time ago, I had to superintend the erection of some buildings connected with our establishment, at which a great number of hands were employed, and where time was of great importance to us. In watching the bricklayers I was much struck with the difference amongst them in the use of the plumb-line; some of them had continual recourse to it, all of whom had the organ small; while others, who had the organ large, scarcely used it at all. The master-builder had a very large development of the organ, and he frequently found fault with some of the men for losing so much time in plumbing. The bricklayers' turn-out commenced before our work was completed, and the master himself took the trowel in hand. I was quite astonished at the rapidity with which he worked, and the very little use he made of the plumb-line. I have seen him build up two feet of a stack of brick chimnies before he applied it at all; and when he came to plumb it, the inaccuracies were very trifling indeed. I remarked to him how very seldom he found occasion for the instrument, compared with many of the workmen; upon which he replied, "Aye, d—n them, some of them waste half their time in plumbing the corners—a parcel of idle vagabonds; if they would only use their eyes, they might almost do without it altogether." Of course he was no phrenologist, and imagined that every one who pleased could do as well as himself. These few facts, out of many more that I have observed, will suffice for the present. Some other phrenologists in Manchester have made observations on the same subject, and have met with the same result without a single exception. In the third edition of Mr Combe's System, a work beyond praise, it is said on page 397, "The intoxicated soon lose a steady gait, fall down, *see perpendiculars at other angles, believe the floor itself perpendicular*, and grasp the ground to save themselves from falling off its surface"—which perfectly agrees with the above; and it appears to me that this organ not only gives us the *feeling* of equilibrium, but also the perception, through vision, of the position of all objects as to their centre of gravity.'

ART. VIII.—*Dundee Lunatic Asylum.* This institution is one among many others in Europe, where the modern principle is adopted of treating the patients with humanity, consulting their feelings and wishes, and furnishing them with occupation and a-

musement. This is a matter, thank God, in which our country is not behind the rest of the world. Generally speaking, perhaps, insane establishments are no where so well conducted as with us.

ART. IX.—*Observations on Combativeness, &c.* (*Inserted in the last number of the Annals.*)

ART. X.—*Remarks on two Cases of Cerebral Disease, published by Dr Moir, in the Ed. Med. & Surg. Journal, and imagined to be subversive of the Conclusions of Phrenologists as to the Seat of the Organ of Language. By W. A. F. Browne, Esq.*

The writer clearly shows that the cases do not bear, in the remotest degree, on the point at issue. In the first case, the patient 'lost the power of expressing her ideas in *proper* language, using sometimes words conveying a meaning quite different from what she intended.' The morbid appearances found after death were tumors in the middle and posterior parts of the brain. There might have been a lesion of the organ of Language not appreciable to the senses, because such a thing, we know, is not uncommon. And if there were not, this organ might have been functionally diseased, as organs in other parts of the body frequently are, from sympathy with other diseased parts. No pathologist expects to find organic disease in every organ whose functions are deranged. In the other case, the power of language was unaffected, but the disease, though in the anterior lobes, was not in those convolutions resting on the centre of the orbitar plate, which are considered as the organ of Language.

ART. XI.—*Proximate Cause of Sleep.* This is a discussion between Mr Carmichael and Mr Macnish, of which we could give but a very imperfect notion by an abstract, and it would not be generally interesting if we could.

ART. XII.—*Letter from Mr Levison.* An altercation between Mr Levison and the Editor, which we shall not meddle with, having controversies enough of our own.

From the 'notices,' we learn that Mr Combe's System of Phre-

nology has been translated into German, and favorably received in the *Medicinische Zeitung*, by Professor Ideler, physician to the great Insane Hospital at Berlin, and that phrenology is rapidly advancing in great Britain and Ireland.

Article V.

Account of the Scull of Dean Swift, recently disinterred at Dublin.

[From No. XLV. of the Edinburgh Phrenological Journal.]

In making some alterations on the building of St Patrick's Cathedral at Dublin, it was found necessary to shift several coffins, amongst which were those containing the remains of Dean Swift and Mrs Johnson (better known as Stella.) The Rev. Henry Dawson, Dean of St Patrick's, with his usual liberality and anxiety for the advancement of science, allowed Dr Houston to remove the sculls of these two celebrated persons, in order that drawings and casts of them might be made, and that they might be submitted to phrenological examination—under an engagement that they should be duly restored to the coffins. Mr Combe luckily happened to be in Dublin at this time, attending the annual meeting of the British Association for the Advancement of Science; so that he had an opportunity of examining the actual sculls. The examination took place on 16th August, at the house of Dr Marsh, in presence of that gentleman and Dr Harrison, Mr Snow Harris, Mr Richard Carmichael, Mr Wheatstone of London, Mr Andrew Carmichael, Mr J. Isaac Hawkins, Vice-president of the London Phrenological Society, Mr John Wilson, Dublin, Dr Houston, Dr Evanson, and Dr Croker, Dublin.

The scull was found to present the following appearances. At the base—roughened in the sphenoidal region; the processes prominent and sharp-pointed; the foramen magnum of the occipital bone irregular, and the condyloid processes projecting into it. Some parts, in the occipital fossæ, the super-orbitar plates, and other portions of the scull, were so thin as to be transparent. The marks of the arteries of the dura mater on the vault were large and deep, but the general surface of the interior of the vault was smooth: along the line of attachment of the falx the bone was porous, from the multitude of small foramina which had transmitted blood-vessels from the dura mater to the bone in that situation. Above the frontal protuberances (in the region of Benevolence) the bone was thickened, apparently by a deposition of bony matter on its inner surface—making the inner surface at that part on both sides flat in place of concave, and smoother than the other parts; which was the more remarkable as the other portions of the scull were rather thin. Below or anterior to that flattened space, about a dozen of small deep figured foramina, existed in a cluster of six or seven on each side, apparently indicating a fungous state of the dura mater at that place. Some foramina in the middle basilar fossæ of the scull were observed, similar to those just noticed, and evidently arising from the same cause. The exterior surface of the scull was smooth and natural. The scull shewed clearly increased vascularity of the dura mater in the basilar and anterior regions. The anterior fossæ were small, both in the longitudinal and in the transverse directions. The middle fossæ were of ordinary size; the posterior fossæ very large, wide, and deep. The internal parts corresponding to the frontal protuberances were unequal in concavity; at neither was there any depression corresponding to the great prominences on the outer surface. The two hemispheres were regular and symmetrical. Dr Houston (who dictated to Mr Combe the foregoing description of the scull, which was approved of by all the other gentlemen present) suggested that the extraordinary powers of mind which Swift exhibited on many occasions may have arisen from diseased activity;* and Dr Harrison remarked that the ap-

* We dissent from this opinion, but have no room to state our reasons.—Ed.

pearances were such as he had observed in patients who had been affected with epileptic fits. The dimensions of the scull, and cerebral development indicated by it, are reported by Mr Combe to be the following :—

From Individuality to Philoprogenitiveness,	7 5-8
Ear to Individuality,	4 3-8
Ear to Philoprogenitiveness	4 5-8
Ear to Firmness	5 1-8
Destructiveness to Destructiveness,	5 3-4
Secretiveness to Secretiveness,	5 7-8
Cautiousness to Cautiousness,	5 1-4
Ideality to Ideality,	4 1-4
Constructiveness to Constructiveness,	4 3-4

1. Amativeness, large.
2. Philoprogenitiveness, large.
3. Concentrativeness, full.
4. Adhesiveness, large.
5. Combativeness, very large.
6. Destructiveness, very large.
7. Secretiveness, very large.
8. Acquisitiveness, large.
9. Constructiveness, large.
10. Self-Esteem, large.
11. Love of Approbation very large.
13. Benevolence, small.
14. Veneration, large.
15. Firmness, large.
16. Conscientiousness, full.
17. Hope, rather small.
18. Wonder, small.
19. Ideality, small.
20. Wit, small, (scull thickened here.)
21. Imitation, rather full.
22. Individuality, very large.
23. Form, very large.
24. Size, large.
25. Weight, full.
27. Locality, large.
28. Number, moderate.
29. Order, full.
30. Eventuality, full.
31. Time, moderate.
32. Tune, small.
33. Language, large, (scull very thin.)
34. Comparison, moderate.
35. Causality, moderate, (scull thickened.)

Mr Combe has forgotten to mention the organs of Cautiousness and Coloring. In taking the development he was assisted by Mr Hawkins.

There was produced at the examination of the scull an engraving after a portrait painted by Jervis, principal painter to his Majesty, shewing a considerable forehead in the upper region; from which, and the aspect of the scull, it appeared that the head had diminished at the position of the anterior lobe.

We received the foregoing information when the last sheet of our present number was on the eve of being put to press, and have been forced to sacrifice other matter on its account. We can fancy the 'glorious triumph' the first blush of the facts will give our

friends the anti-phrenologists, and the delight with which they will hail a scull with *small intellectual and large animal* indications, as that of the caustic and powerful Swift. But as a triumph founded on error must of necessity be very short-lived, we advise them to make the most of it in the mean time; because the more minutely the case is examined, the more completely will it be found to harmonize in all its features with the phrenological philosophy. At present we have room and time for only a few hasty remarks.

In the first place. After being subject to fits of giddiness and deafness, and to occasional epileptic attacks, from the early age of twenty-one, Dean Swift at last died in October, 1745, at the advanced age of seventy-eight, from disease of the brain, of several years' duration, and which, in 1740, gave rise to a '*state of violent and furious lunacy*,' followed by a total failure of understanding, which sunk him '*into the situation of a helpless changeling*,'* and ended only with his life. In reference to this, our readers will recollect, that as the brain decreases in volume in old age, and the scull no longer indicates its form with certainty at that period of life, it is held by Gall and Spurzheim, and all other phrenologists to be impossible to predicate from the inspection of the sculls of very aged persons what their talents or dispositions were at the time of vigorous maturity; and consequently, although useful as *illustrations*, such cases are never considered admissible as *proofs* either for or against Phrenology. For the same reason—that the shape of the scull no longer represents accurately that of the brain,—cases of disease also are excluded; an additional reason being that the relation between organic size and functional power can no longer be depended on, as the morbid action sometimes increases and at other times diminishes mental energy, just as, in the case of the liver, it sometimes excites and at other times diminishes the secretion of bile. Applying this principle to the case of Dean Swift, who is known to have died *in very advanced age, from water in the brain, the effect of long-standing disease*, the phrenologist would not hold himself warranted to infer, from the mere inspection of the scull, what had been the talents and dispo-

* Sir Walter Scott's Life of Swift, p. 457, 459.

sition of its possessor in the prime of life. All he could do would be to point out the relative proportions of the organs *as they then existed*, and compare them, for the purposes of illustration rather than of proof, with their then accompanying manifestations.

Assuming, *in the second place*, that, for the sake of mere illustration, we *may* make such a comparison, it is astonishing how closely the development corresponds with the state of mind. In the scull, the intellectual region is small, the animal region large, and the moral moderate, except at Conscientiousness and Veneration, which are larger; and, with respect to the manifestations, we know that Swift was for years idiotic in intellect, and that even so early as 1734 (eleven years before his death) '*his memory became imperfect*, and his temper, *always irritable*, was now subject to VIOLENT AND FRANTIC FITS OF PASSION upon slight provocation;'* evidently shewing both the work of disease and the close coincidence with the indications now presented by the scull. If it could be shewn indeed, that in the vigor of Swift's life and faculties his forehead was as small as after years of idiocy, there would be more plausible grounds for maintaining the existence of a discrepancy between his talents and the phrenological indications: but, in the various portraits which have come down to us, including that prefixed to Sir Walter Scott's Biography of Swift, the forehead is uniformly represented of much larger and fuller dimensions; and, in the face of such evidence, it would be arguing on a mere assumption to say that the scull is a fair index of what the brain was in the prime of life.

In the third place. The brain is well known to decrease in volume, and the scull to follow its shrinking surface, both in old age and in disease. The constant recurrence of giddiness and deafness, and the liability to epilepsy, with many other symptoms, from which Swift was seldom entirely free,—and lastly, the termination of his ailments in furious mania and idiocy,—shew to how great an extent he was a victim to disease, and prove that the morbid indications presented by the scull are in accordance with the phenomena observed during life, as well as with the other appear-

* Sir Walter Scott's Life of Swift, p. 442.

ances on dissection. There is, in fact, the strongest presumptive evidence that the anterior lobe, or intellectual region of the brain, had actually shrunk very considerably even before the supervention of the 'furious lunacy' in 1740. It is, we repeat, no new doctrine, that in old age the brain participates in the general decay of the system, and that the scull, which is moulded on the brain, shrinks in proportion. Even the hard and solid bones are familiarly known to decrease in size between maturity and extreme old age, and the large and erect man of the prime of life dwindles into the lean and slippered dimensions of advanced age. In disease this change is often greatly accelerated, and in medical works cases are recorded in which the brain and head diminished with unusual rapidity. In the second volume of this Journal, p. 210, there is an account of a remarkable case, which fell within our own observation in 1819, when studying under Esquirol at the Salpetrière Asylum. The patient, a woman, died after having been four years insane, and at last idiotic. At her entry, her forehead was so large that Esquirol had a drawing of it made on account of its remarkable size; whereas, at the time of her death, the great diminution which it had undergone was so striking as to form a perfect contrast to the portrait. The brain had shrunk even faster than the outer table, as the scull was unusually thick—much more so at the frontal bone than elsewhere. In our fourth volume, p. 495, we have reported another case of chronic insanity, in which the mind was much weakened, and where the diminution of the head became so great as to attract the attention of the patient himself, who, on finding a smaller and smaller hat required in succession, boasted of the circumstance as a proof of his becoming *etherealized* by the evaporation of the grosser particles of his head. On dissection, we found the forehead not only smaller than it had originally been, but the bones of very unequal thickness, and extremely dense. But, to come even closer to the point, we have in our possession a portion of the scull corresponding to the forehead of another patient, who had suffered for many years under an affection of the mind characterized by instability of purpose and deficient power of understanding, and the internal surface of whose

frontal bone presents a singular thickening, evidently produced by the shrinking of the contained brain, and similar to what is described above as visible on the inner surface of the scull of Swift. In this instance it was impossible to doubt that the brain had shrunk, and that the inner table of the scull had followed it. If time and space permitted, we could adduce other examples of a similar nature.

In the fourth and last place. It is curious to notice the coincidence between the development of many of the organs of the propensities and sentiments, and the Dean's habitual manifestations during life. His large Firmness, Self-Esteem, and Combativeness, are in accordance with his 'stern and unbending pride of temper;' his large Acquisitiveness, with his reputed parsimony and real economy; and his large Destructiveness, Combativeness, and Self-Esteem, with his caustic severity, passionate temper, and misanthropic spleen. His Ideality is moderate, and he seems to have been altogether indifferent to the beauties of nature. (Life, p. 472.) Sir W. Scott says of his poetry, that 'its elevation of tone arises *from the strong mood of passion rather than from poetical fancy*,' (p. 491;) and Dryden told Swift himself, that he 'would never be a poet, *where power of imagination was necessary for success*,' (p. 491.) Sir Walter adds, that '*we look in vain for depth of feeling or tenderness of sentiment; although, had such existed in the poet's mind, the circumstances must have called them forth.*' This is singularly consistent with the moderate development of Benevolence, and we think it would be easy to trace most of Swift's kindnesses to other feelings than pure benevolence. This organ, however, has evidently decreased in size, as the thickening of the scull occurs immediately over it; but most probably it was never greatly developed. Individuality is very large; and in discussing Swift's intellectual superiority in the great art of verisimilitude, Sir W. Scott justly infers that the secret rests mainly upon '*minuteness of narrative*,' and goes on to prove his position. We have much more to say, but our space is exhausted.

Article VI.

ON IDIOCY.

Report to the Members of the Council General of Administration of Hospitals and Asylums, upon the idiotic and epileptic patients, in the Hospital of Incurables, by Dr Felix Voisin, read to the Academy of Medicine, Paris, June, 1834. Translated for the Annals.

Gentlemen,—The Council General of Hospitals, in its solicitude for the unfortunate, directed me to organize a medical corps, for the care of the epileptic and idiotic patients, in the Hospital of Incurables. I now render you an account of what I have done to forward the philanthropic design of the Council; and I submit to you also, the result of observations made upon these unfortunates, during the last year.

My first care was to establish certain necessary divisions among this noisy, convulsed, and degraded population.

In the first division, which I placed on the lower story, at the right hand on entering, I put the idiots of the lowest degree. These beings, hideous in form, disgustingly filthy, devoid of instinct, uttering shrill and inarticulate sounds, exhaling an infectious odor, reduced in one word, to a condition below the brutes, could not be allowed to remain confounded with the other subjects which were put under my direction.

There is nought but vegetative existence, apparently, in the first class; respiration and digestion are the only functions; the senses are there and well formed, but there is nothing within to which they can transmit their report of the things without; the impression is arrested at the organ, at the ear, on the eye, and affects no emotion of the soul; there is no apparent destination for their organization, all is confused, chaotic, without harmony, and without design. The eye rolls vaguely, the ear heeds not, the hand stretches not forth, hunger and thirst call, and are not heeded, food

placed under their eye and within their reach, but they know not how to carry it to their mouth; they have no perception, no attention; the propensities, the sentiment, the affections, the instinct and intelligence, all—all are wanting, and nothing appears which should characterize the animal or the man.

They have now a common dormitory and keeping room; and being on the lower story, it is convenient to administer those measures for cleanliness, which their natural wants render necessary at every moment of the day.

Although I cannot now give an account of them, I may remark that in general, I have observed among these idiots, a balancing o the body backward and forward, or from right to left; the arms hung loosely, and the head turns slightly from side to side; they thus swing themselves, sometimes by the hour together. I have never seen this kind of excitation, except among the monkies in our menageries; I have remarked it particularly among those idiots who have heads of the smallest kind.

If the science of medicine can do nought but deplore its inability to effect any thing upon subjects so horribly deformed by nature, it can at least draw from these gross and imperfect specimens of the human race, observations both interesting and important. Who knows if in the end we may not discover the laws according to which these diseased organizations manifest themselves? When we can determine, by deficiency of cerebral developments, that there are alterations in its texture, or in its membranes, who knows whether we shall not at last discover the causes of the inflammation of the organ, of the derangement of the process of nutrition, and which have placed an invincible obstacle to the free, perfect, and regular manifestation of the intellectual and moral faculties? I have reason to hope, as well for the benefit of the public, as for the sentiments dearest to the human heart, that females can one day receive from their positions, instructions equally salutary to themselves, and to the progeny they are to bear.

For the sake of the other subjects, care was taken also to separate the epileptic patients. I have assigned them the lower story on the left side. When I first undertook the charge of the establishment, they were distributed over the upper stories; now they

have no reason to fear those dangerous falls to which they were subject in going up and down stairs.

Now that we know better than formerly the system of the brain and nerves, it will be possible, perhaps, to apply to these great apparatuses of nervous influence, specific and energetic applications, to arrest or moderate the tumultuous, involuntary, and irregular actions, which constitute epilepsy.

Before undertaking the treatment of hereditary epilepsy, I would first study the effect of remedies upon accidental epilepsy. This is the most simple, natural, and philosophical way of procedure. I hope, gentlemen, the next year, to lay before you the result of my observation on this important part of the medical art; at any rate, I can promise to exercise towards these unhappy beings, devotion, prudence, and humanity.

I have placed on the first story, those idiots who are less monstrous in their organization, than those of whom I have just given you an account. I think I ought, gentlemen, to make an observation which has not been made respecting these unfortunate beings, by any author with whom I am acquainted. It ought to serve, if I am not mistaken, conjointly with the imperfection of our systems, to explain the most general and habitual manifestations of human nature, and by the reflections to which it gives rise, to interest alike the philosopher and the legislator. It is, that among the majority of these degraded beings, the manifestations which first appear, are instinctive and animal. There appears not in them the slightest spark of reason; you see not the least appearance of human sentiment, while there manifest themselves with great energy a considerable number of propensities and inferior sentiments. In the development of the posterior and lateral parts of the head, nature rarely is baulked in her purpose. The deformity is general in the anterior and superior parts of the brain. It would appear, that nature has a decid d preference for those propensities which she has made the portion of all animals, and that, careful before every thing else, for the preservation and multiplication of the species, she has sacrificed every thing to the formation of the principal organs, and to the establishment of the fundamental powers.

If we compare this observation with the fact, that when the brain is not embarrassed in its development, the front part is hardly formed in outline, while the circumvolutions of all the other regions are comparatively large and well formed, we shall again perceive the preference which nature has for the vegetative functions which constitute the existence of most animals; and if, carrying still farther these analyses and comparisons, we consider that among those subjects which offer the greatest anterior-superior cerebral development, (on which, as is known, depend the distinctive characters of man,) the size of the cranium is two-thirds made up by the organs of the faculties common to the inferior beings; and that perhaps our shameful education tends to develop the inferior propensities, we can arrive at a knowledge of the first and principal cause of these phenomena, and these facts. One may then see why the life of man has so much resemblance to the life of animals, and why it is so often confined to instinctive movements, blind and vain impulses, and is wanting in reason, grandeur, and morality. The only difference there is between them and us in this respect, is that man, having united in his head all the powers which are given separately to various animals, is in continual activity; and that hardly satisfied on one point, he torments himself to obtain satisfaction upon another; and that by the union of all the faculties and their consequent association, every thing in him acts with more energy than among them. All parts of the brain give to each other a mutual support; the divisions which it makes, the actions which it performs, are the result of the action of several cerebral forces. Thus, when the organs are powerful, and their action strong, we see that man rarely escapes their dominion; he obtains his end by force or by perseverance, whatever may be the difficulties or the obstacles which are placed in his way by the laws, the manners, the education, the institutions of his country, or by the interest of his fellow-men, and even by the action of those noble and benevolent faculties of which he possibly may have a portion.

Nothing is then more important than to know intimately the natural dispositions and tendencies of human nature. It is not upon

speculations, but upon facts, that men who wish to be useful, should found their principles. The more we examine the subject, and the more we perceive the necessity of returning to the notions of the ancient moralists, the more we shall strive to give weight and prevalence to those superior faculties which are the distinguishing birthright of the human race. Let us be morally certain of this, that the future welfare of society depends on the supremacy of the moral faculties. We cannot disguise the fact, gentlemen, that there is a dreadful defect in our institutions. No class of society receives an education founded on the supremacy of the faculties peculiar to the human race. In the instruction and in the directions which we give to our children, every thing betrays the activity of the inferior propensities; the great object of education being to make it the means of acquiring fortune, reputation and power. This is to be accomplished only by the constant and powerful action of acquisitiveness, self-esteem, love of power, all of them selfish sentiments, and can never put humanity in the road to perfection, or cultivate the social virtues. Whoever will accomplish an object, must use the means: the exercise of the brain is in the exercise of the faculties, and you have thus the power, by means of education, of making, in some respect, your children just such as you would have them. Would you have men to be just, benevolent, generous, noble, pious; cultivate in them these brilliant faculties, show them yourself, and you will infallibly reap the fruit of your care and your good example.

Next, with respect to the size of the inferior encephalic mass, there is nothing, I think, which should lead us to infer the eternal prevalence of the animal faculties in man, and nothing, consequently, can justify the employment of brute force in his treatment. If we remark, that it is by the great development of the front of the head, that the well formed man, distinguishes himself from other animals, and makes a being apart; if we reflect upon the relative arrangement of the different organs of the brain among themselves, and consequently upon the order in which our different faculties are arranged; (arrangement so wonderful as to confound human wisdom, and which no philosopher of antiquity could discover, and

which Gall and Spurzheim, with all their genius could not invent ;) if we consider the superior position occupied by the organs of the faculties of benevolence, justice, hope, ideality, veneration, a position which we cannot suppose fortuitous, which must have had an object, and which I consider as indicating the true seat of government in the human head ; and if we appreciate the advantages derived from them as from their allies, by men like Socrates and St Augustine, (men to whom we cannot deny the animal feelings,) if, confining ourselves to facts, and with history in our hands, we consider the prodigious results obtained by some leaders of human hordes, through the development and almost frenzied exaltation of these noble instincts ; if, beside all this, we consider the intentions of nature in the exquisite pleasure which she makes to accompany the exercise of these different faculties, pleasure, full, analyzed, ineffable, and which, so far from leaving any regret behind, gives to the whole future the most grateful recollections ; if we make these various considerations, we shall perhaps draw from them the conclusion that man is not given up, bound *hand and foot*, to the dominion of the inferior propensities.

I repeat, then, when I contemplate the forehead of man, when I measure its dimensions, when I perceive the noble impress stamped upon it, when I see it pressing by all its weight upon the inferior organs, and ruling by its position the whole brain, I cannot but believe that there is in him intellect and morality enough for the basis of a glorious future. It is for us not to imitate our fathers, and not to neglect these precious gifts of God ; it is for us to cultivate them, and awaken them to new life. We shall see then, that the external and ordinary conditions of human existence, being thus changed, there is great temerity in laying to the charge of organization the prevalence of vice, and crime, which may be explained by the imperfection of our methods, by the bad passions or the ignorance of our rulers, and the little knowledge we have until now had of how much that is good, just, honest, noble, venerable and true, may be effected by the beautiful and powerful constitution of the anterior-superior part of the brain.

The idiots of whom I have spoken are interesting in many other

points of view. Accustomed as we are, not to appreciate the motives which influence our fellows, and not to consider in the actions of men any thing but the materiality of them, how many unfortunate beings have been and are the victims of our ignorance. When will this study of human nature be so much cultivated as to enable us to appreciate correctly, the morality or criminality of an action? It cannot be said and repeated too often, that idiocy is seldom entire. But because an individual, intellectually, is stronger than another, it does not follow that he ought to incur the responsibility of his actions. It is not sufficient, in order to be accountable, to have all the cerebral powers. Before arriving at man of the common standard, of the common and general constitution, nature presents various degrees of development in the organization of the brain; from the narrowest dimension she goes not at once to the great and splendid proportions, nor even to middling ones, and by the faculties which are dependent upon them, she does not go suddenly at once from absolute nullity to universal activity. This is what constitutes partial idiocy, upon which nothing satisfactory has yet been written.

The individual affected by it, has generally, like other men, the brute propensities; he unites often with them those faculties which put him in relation with the external world. He has memory and order: sometimes he unites the faculty of number, and appears to count the time, and as, among other things which liken him to the brutes, cunning is foremost, every thing which he does, seems characterized by discernment and premeditation. We allow him often and justly a participation in our feelings, our passions, and other lower incentives to action; but when we would subject him, as we subject ourselves, to the consequences, we forget that by reason of the narrowness and lowness of the anterior-superior parts of the brain, he has no nobleness of soul; that he has no safeguard within himself; that he is more or less deprived of the moral and intellectual resources which we find in the more perfect organization, which is remarkable also, compared to his, by the beauty of its form, and the value of its attributes.

Among the subjects of partial idiocy, under my care, fifteen have

particularly attracted my attention. I should like to have given to each one of them a cell by himself; but the building would not admit of this perfect separation.

Eight of them are dangerous by their habits: not only do they shatter and ruin their constitutions by giving themselves up to all the excesses of onanism, but they seek to reduce their unfortunate companions into brutal indulgences, and to gratify upon them their unnatural lust. Nature was their first seducer. I have three who, by their violent and sudden passion, are exceedingly dangerous to all about them. It is often difficult to save the other subjects from their murderous propensities. These three unfortunate beings, live generally alone; they are almost always sad, sullen, and silent; insensible to every thing around them, they are not moved from their inaction, except by the sudden stimulus of their destructive propensity, and as soon as this is satisfied, they return again to their solitude, and relapse into their dreadful stupor. All the causes of their fury are internal; there is nothing without to excite it. In their actions they make no exception of persons, and when they cannot cast their blind ferocity upon the individuals among whom they live, they give it vent upon themselves, or upon the inanimate objects around them.

Four others cannot be prevented from stealing. They steal without necessity, without want, without imitation, without bad example: they steal by instinct; they steal for stealing's sake. They take indiscriminately all sorts of things; spoons, wooden shoes, knives, bits of wood, of bone, old stockings, handkerchiefs, &c. They run to hide them quickly in their beds, in the garret, in the corner, wherever in the blindness of their instinct and the feebleness of their intellect they imagine they will not be found.

I shall never forget as long as I live, to have seen in 1828, at the prison of Bisetre, a young man of 22 years old, affected by the incomplete idiocy of which I have spoken, and who had been condemned for theft. I entered into the great yard of the prison, when they were about chaining up these unfortunate men to lead them away. Being accustomed to the appearance of these infirm and degraded beings, no sooner did I see this young man, than it

occurred to me, from his cerebral conformation, from his gait, from his uncertain step and his vacant and stupid smile, from the manner in which his comrades pushed him about, that he must be an idiot. I wished to be certain : I approached him, examined and questioned him; I asked his companions in misfortune many questions about the order and nature of his ordinary manifestations. They looked upon me with astonishment ; they knew nothing of what was passing in my mind, and as they had no conception of the importance which I attached to knowing exactly the mental condition of this young man, they could not conceive how a person who seemed in other respects to be intelligent, could spend so much time in deciding upon a stupidity so apparent to them, and which, said they, must be manifest to every body. I was not mistaken. I had before me an unfortunate creature, to whom nature had not given the common endowments, and who was uselessly sacrificed for the interest of society. The unfortunate being was not indeed sensible of his situation, but his family had to undergo the humiliation of his infamous condemnation. There is no crime among individuals of this kind ; nevertheless they are dangerous, and it is necessary to keep them from social intercourse. It should be the duty of a vigilant police merely to watch over them with regard to theft, murder and arson. The same considerations are forced upon us every day. If I should recount incidents of this kind, I might easily fill a volume ; the works of physicians who have treated on mental alienation, abound with a multitude of facts of this kind. Happy are those, who, like the idiots mentioned by Mr Fiderè, have only those isolated intellectual faculties, which may be excited to extraordinary action with impunity to themselves and to society. They have not to dread the misconceptions of officers charged with the execution of the laws. 'It is remarkable,' says this venerable man, of whom death has just deprived science and humanity, 'that, by a strange peculiarity, some of these individuals have a peculiar talent for copying designs, for making rhyme, or even music.'

'I have known some who have learned to play tolerably well upon the organ and harpsichord ; others who understand without instruction how to mend watches, and to make some machines.

This arises, probably, from the more perfect organization of the part depended upon, which is the exercise of such or such an art, and not upon the whole mind; because these individuals not only did not know how to read books which treat upon the principles of their art, but they were incapable of conversing about them and never improved themselves.' *

With regard to the applications which may be made of these observations to morality and legislation, I have already shown the necessity of it in 1830, and observed, that, in order to be just, it was necessary to abandon the usual standard in judging of such persons. I said that statistics, however exactly they might record facts, could not, nevertheless, by its figures, afford a solution to these questions. Before using this part of my argument, I will make known to my readers, the incontestable and direct relations which there is between the mass of the brain and idiocy. I have made use of the experience of Dr Gall, in aid of my own observations upon idiots; I have measured their heads, and this is what I can affirm in confirmation of his doctrine on this subject.

In measuring these heads, immediately above the superior orbital ridge, and over the most prominent part of the occipital, we shall find a periphery of from eleven to thirteen inches.

In measuring from the root of the nose to the back of the occipital, we find from eight to nine inches.

The entire and full exercise of the intellectual faculties is absolutely impossible with a brain so small. There never was an exception to the rule, and there never will be.

This law of nature, relative to heads from eleven to fourteen inches, is confirmed by every day's experience. When we examine heads, from perfect stupidity to the ordinary intellectual standard, inclusively, this kind is included between the two following limits. Fourteen to seventeen inches for the first periphery, and eleven to twelve inches for the arch included between the root of the nose and the great occipital foramen.

With these dimensions, we find greater or less stupidity; incapacity, more or less total, of fixing the attention upon a determined object; vague and indistinct sentiments; obscure and undetermined

* Treatise on goitre and cretanism. Paris, 1800, p. 133.

affections, and feelings; an irregular flow of ideas; an incoherence of language; blind instincts; ill regulated, and sometimes null.

Heads from 18 to 18 1-2 inches are still very small, although they allow a regular exercise of the faculties.

What use now may be made of these statistics, by heads, capable for induction, by our philosophers and civilians? They may seize upon all the well attested cases which occur within their own observation, and which are furnished to them by other observers, in other departments, and in other countries. They may compare the results; they may mark the differences, and search for the causes. Soon they will find constant and invariable relation between a certain order of events, and a certain external and physical influence. They will then draw their strong conclusions, and present them with confidence to legislators.

In proportion to the uniformity of organization of man in general, and to his original sameness, (external circumstances, modifying all his power, exercising an immense influence upon the proportion, the direction and employment of his faculties, and stamping, in the long run, according to their peculiarity, a peculiar character upon each people,) we can, without fear of error, take into rigorous account, the explanations furnished by the statistical details, and calculate from them the consequences. Nevertheless, however similar men may be originally, and of whatever modifications they are susceptible by circumstances, I demand if we can draw from this principle any inference of universal application? I ask why a science, which may facilitate the study of human nature, and furnish materials to legal medicine, which takes into calculation, in its judgment of men, the influence of instruction and of ignorance, of wants and of ease, of commerce and of industry, of profession and of all other external influences—how, I ask, has this science been thus far deprived of the aid of documents so important as those of organization? Why, since one step has already been taken by allowing for the difference of age, has it not followed up its march in the same direction, and taken notice of the general and particular forms of the head? Is it forgotten that facts are not abstract beings; that they imply nothing by themselves alone; that they are the pro-

ducts of individuals; that they derive their consequence and receive their character, not only from the situation, but from the nature of the individuals, and that by just men they ought not to be regarded in any other light? Let the statistics then of our criminal courts, at least in extraordinary circumstances, take one view more; and make known the cerebral development of the individual of whom it notes the external appearance with so much fidelity; let it regard the subjects of its observation in all the aspects under which they may present themselves, in order that the picture may be complete. By thus taking into consideration the physical part of man, the mystery which hangs over certain actions will be cleared up. We shall have the key to many enigmas, and free ourselves often from ridiculous and cruel interpretations.

The state of the brain will then be considered of some import; it will be to others what it is to us, the physiological proof of the activity of certain feelings and propensities, for the energetic action of which there is no adequate cause in the excitement by the external world, and which involuntary activity seems a kind of futurity, and which a special education only can repress or regulate.

Will it be said that a court of justice is not a medical jury; that it is incompetent to judge of imperfections of organization, and the relations which exist between such and such form of the head, and such and such manifestations; and that we should only multiply the difficulties of criminal jurisdiction? This consideration would have some weight if the court had not always a physician at hand, or if he should gravely deliver to them a metaphysical discussion in the style of the sixteenth century; but when in the presence of intelligent and prudent men, he gives, not a speculative discourse, but makes observations which fall within the cognizance of common sense; when the only object is to determine by observation the volume and form of the head, which inevitably causes idiocy, or destroys moral responsibility—a great object will be attained, and nothing asserted but what can be proved. We challenge the world to produce a head of the prescribed form and size, which shall make an exception to the rule, which shall put physiology at fault; and as in all this there is neither philosophical jargon nor scholastic

subtilty, it does not seem to me that one need be initiated in the mysteries of science, to perceive what is essential, and to decide upon the value of the most important evidence or document which can be brought into a court of justice.

Article VII.

Remarks on the Influence of Mental Cultivation and Mental Excitement upon Health. By Amariah Brigham, M. D. Boston, U. S.: Marsh, Capen and Lyon, 1833. Second edition, 12mo, pp. 130.

[From No. XLV. of the Edinburgh Phrenological Journal.]

Dr Brigham is an unpretending writer, but his little volume proves that he possesses a rare combination of accurate and extensive knowledge, with calm and practical sense. He has chosen a subject, the importance of which it would be difficult to over-estimate, and has handled it with remarkable perspicuity, precision, and judgment. His mind is a logical one: he deals in *principles*; and with these the numerous details which he introduces are at all times intimately linked. His views are obviously the result of mature and anxious reflection, and are never propounded without an ample display of evidence in their support. Although he does not avow himself a phrenologist, modestly alleging that he is not yet entitled by qualification to do so, he nevertheless speaks of the subject and its advocates in such terms of friendliness and even eulogy, so entirely prefers its mental philosophy to all others bearing the name, as explanatory of the phenomena of human nature, and avails himself of that explanatory power so largely, indeed so ex-

clusively, throughout his volume, that we hesitate not to claim him as a *real*, though not an avowed phrenologist; a much better ally in its cause than an avowed phrenologist who is not a real one.

The inductive motive of the publication of the volume, as the author says in his preface, 'is to awaken public attention to the importance of making some modification in the method of educating children, which now prevails in the United States of America. It is intended to shew the necessity of giving more attention to the health and growth of the body, and less to the cultivation of the mind, especially in early life, than is now given; to teach that man, at every period of his existence, should be considered both as a spiritual and material being—as influenced both by physical and moral causes—and that therefore all plans for his improvement should be formed, not from a partial view of his nature, but from a knowledge of his moral, intellectual, and physical powers, and of their development.' Physical education, he truly says, is too little attended to, and the connection between health of body and health of mind too much overlooked. 'Philosophy,' exclaimed Dupaty, on seeing the magnificent anatomical museum at Florence, 'Philosophy has been in the wrong not to descend more deeply into physical man; *there* it is that the moral man lies concealed.' The study of anatomy and physiology is, of course, strenuously recommended by the author, as that on which all plans of education ought to be founded. Dr Brigham proceeds, first, to consider 'that part or organ of the human system which is called into action by mental labor; and then to trace the effect which this labor has upon that part of the system, and upon other organs of the body, at different periods of life.'

In section first, he demonstrates that 'the brain is the material organ by which the mental faculties are manifested.' The reader will be at no loss to refer the following words of the author to the right state of his opinions: 'That the brain is the "material organ of all the mental faculties, scarcely, at this period of science, requires to be proved."* To "discipline the mind," means, therefore,

* Elements of Pathology, by Caleb Hillier Parry.

to call into regular and repeated action *certain portions* of the brain, and to enable them to manifest easily and powerfully certain mental operations: this process is like that of exercising other organs of the body, thus giving them increased facility in the performance of their respective functions. There is much proof that the brain consists of a *congeries of organs*, each of which, in a healthy state, manifests a particular faculty of the mind, and that the power of each faculty chiefly depends on the size of its appropriate organ. I allude to these facts, however, only for the purpose of directing the inquiries of others to them. My present aim is simply to shew that the brain, considered as a whole, is the instrument by which the mind operates; and I hope to impress this fact deeply upon the minds of all those who are engaged in the education of youth.' (P. 18, 19.)

The author details the usual evidence, drawn from injury to the brain and from insanity; referring to various writers who adduce an immense preponderance of cases, in which, in the insane, the brain has been found more or less organically deranged. 'It is curious,' he says, 'to notice that often an injury of the brain impairs only that part of the mental faculties (memory.) Such instances give great support to the phrenological views of Gall and Spurzheim, who contend for a plurality of organs of the brain, and a separate and peculiar function to each organ.'—(P. 25.)

The general proposition which the author wishes to establish is, that whatever excites the mind, excites and stimulates the brain. 'This we know from experience in a severe headache. We perceive the pain to be increased by intense study or thinking, and that mental application determines more blood to the head. So true is it that mental excitement produces an increased flow of blood to the head, that surgeons are very careful to preserve a quiet state of mind in those whose heads are wounded.'—(P. 29.)

The author concludes the first section with these words:—'While people are exceedingly fearful of enfeebling and destroying digestion, by exciting and overtasking the stomach, they do not appear to think they may enfeeble or derange the operation of the

mind, by exciting the brain by tasking it when it is tender and imperfectly developed, as it is in childhood.'—(P. 33.)

The subject of the second section is, 'The condition of the brain in infancy; the effect on the mind of excitement and enlargement of the brain by disease;' and the proposition that 'mental precocity is usually a symptom of disease.' We are inclined to extract here a little more at length from Dr Brigham's work:—

'Since at first no organ is fully developed and prepared for the powerful execution of its appropriate function, let us inquire at what time of life nature has prepared the brain for the performance of the important office of manifesting the mind.

'Let us begin with the infant, and ascertain what is the condition of its brain in early life.

'The brain of a new-born infant weighs about ten ounces;* that of an adult, generally, three pounds and a half, apothecaries' weight, frequently a little less—but if the mind of an adult has been long devoted to thought, if he has been engaged in constant study, his brain is usually increased beyond this weight. The brain of Byron, for instance, is said to have weighed four pounds and a half; and that of the illustrious Cuvier, four pounds thirteen ounces and a half. The size of this organ increases from the time of birth till manhood, remains stationary from this period until old age, and then diminishes in bulk and weight.† The relative size of its different portions constantly varies during several of the first years of life, and it is not until about the seventh year that all its parts are formed.‡ During childhood it is "very soft, and even almost liquid under the finger, and its different parts cannot be clearly distinguished."§ Still at this time it is supplied with more blood, in proportion to its size, than at any subsequent period. It then grows most rapidly, and more rapidly than any other organ: its weight is nearly doubled at the end of the first six months; and hence the nervous system, being connected with the brain, is early developed, and becomes the predominating system in youth. At

* Meckel's Anatomy, vol. ii.

† Andral's Pathological Anatomy, vol. ii. ‡ Meckel.

§ Bichat's General Anatomy, vol. i.

this period of life, however, which is devoted to the increase of the body, it is necessary that the nervous system should predominate; for this system is the source of all vital movement, and presides over and gives energy to those actions which tend to the growth of the organization. Besides, "Infancy," says Bichat, "is the age of sensation. As every thing is new to the infant, every thing attracts its eyes, ears, nostrils, &c. That which to us is an object of indifference, is to it a source of pleasure. It was then necessary that the nervous cerebral system should be adapted by its early development to the degree of action which it is then to have." *

'But this great and early development, though necessary for the above purposes, very much increases the liability to disease: it gives a tendency to convulsions, and to inflammation and dropsy of the brain, and to other diseases of the nervous system, which are most common and fatal in childhood.

'It is, therefore, deeply important that the natural action of the nervous system should not be much increased, either by too much exercise of the mind, or by too strong excitement of the feelings, lest at the same time the liability of children to nervous diseases be increased, and such a predominance given to this system as to make it always easily excited, and disposed to sympathize with disorder in any part of the body; thus generating a predisposition to hypochondriasis and numerous afflicting nervous affections.

'Mental excitement, as has been shewn, increases the flow of blood to the head, and augments the size and power of the brain, just as exercise of the limbs enlarges and strengthens the muscles of the limbs exercised. The wonderful powers of mind which an infant or child sometimes manifests, and by which he surpasses ordinary children, do not arise from better capacity in the mind itself of the child, but, in fact, from a greater enlargement than usual of some portion or the whole of the brain, by which the mind is sooner enabled to manifest its powers. This enlargement takes place, whether the mental precocity arises from too early and frequent exercise of the mind, or from disease, and it must arise in one of

* Bichat's General Anatomy, vol. i.

these two ways. But, in my opinion, mental precocity is generally a symptom of disease; and hence those who exhibit it very frequently die young. This fact ought to be specially remembered by parents, some of whom regard precocity, unless accompanied by *visible* disease, as a most gratifying indication, and, on account of it, task the memory and intellect of the child. Sometimes, however, it is accompanied by visible deformity of the head, and then the fears of parents are greatly awakened. Take, for instance, the disease known by the name of rickets. Every person understands that this is a disease of childhood, and, according to the best medical authorities, it arises from the irritation or inflammation of some organ, and frequently of the brain. Its most characteristic symptoms when it affects the brain, are an enlargement of the head, and premature development of the intellectual faculties. On examining the heads of those who have died of this disease, the brain is found very voluminous, but ordinarily healthy. Meckel observes, that its mass is increased in rickets; an effect gradually produced, without disorganization of the brain, by increased action in its blood-vessels, and the consequent transmission to it of more blood than usual. Being thus augmented in size, increased mental power is the consequence of this augmentation. "One of the most remarkable phenomena in the second stage of rickets," says M. Monfalcon, "is the precocious development, and the energy of the intellectual faculties. Rickety children have minds active and penetrating; their wit is astonishing; they are susceptible of lively passions, and have perspicacity which does not belong to their age. Their brains enlarge in the same manner as the cranium does." He adds, "This wonderful imagination, this judgment, this premature mental power which rickets occasion, has but a short duration. The intellectual faculties are soon exhausted by the precocity and energy of this development."*

'I do not say or believe that cautious tasking of the minds of young children will frequently cause this disease; but I believe there is great danger that it will produce the same unnatural growth of the brain, and this will give rise to an exhibition of superior

* Dictionnaire des Sciences Medicales, vol. xlvi.

mental power, and be followed, as in the case of rickets, by permanent weakness, or loss of mental energy.'—(P. 34—38.)

Several interesting cases follow, for which we must refer to the volume. Of one case of infantine precocity the author says, 'The following, in my opinion, is the true explanation of the surprising mental powers exhibited by this boy. Disease or some other cause irritated his brain; this irritation attracted more than an ordinary quantity of blood to the head, and thus excited and unnaturally or prematurely developed certain portions of the brain; and just in proportion as these were developed, his mental powers were increased.'—(P. 44.)

The second section is wound up by the following words, part printed in italics: 'From what has been said hitherto, we gather the following facts, which should be made the basis of all instruction; facts which I wish often to repeat. *The brain is the material organ by which all the mental faculties are manifested; it is exceedingly delicate, and but partially developed in childhood; over-excitement of it when in this state is extremely hazardous.*'—(P. 50.)

Dr Brigham's third section is devoted to the 'Consequences which have resulted from inattention to the connection between the mind and the body,' and to the proposition, that 'the best minds are not produced by early mental culture.' He strongly recommends to teachers of youth to acquaint themselves with human anatomy and physiology, especially of the brain, before they proceed to cultivate and discipline the mind. He objects to the excessive abundance of 'books for children,' some of them for children of from two to three years of age; and holds that time is idly spent and mind injured in poring over such books. This, he says, is the result of making prodigies of children. The following is an example of the kind of infant education which the author deprecates. 'That children *do* have their mental powers prematurely tasked, is a fact which I know from personal observation. I have seen a course like the following pursued in many families in various parts of the country, and I know that this course is approved of by many excellent persons. Children of both sexes are required,

or induced, to commit to memory many verses, texts of Scripture, stories, &c., before they are three years of age. They commence attending school, for six hours each day, before the age of four, and often before the age of three; where they are instructed, during three years, in reading, geography, astronomy, history, arithmetic, geometry, chemistry, botany, natural history, &c. &c. They also commit to memory, while at school, many hymns, portions of the Scriptures, catechisms, &c. During the same period they attend every Sunday a Sabbath-school, and there recite long lessons: some are required to attend upon divine service at the church twice each Sunday, and to give some account of the sermon. In addition to these labors, many children have numerous books, journals, or magazines to read, which are designed for youth. I have known some required to give strict attention to the chapter read in the family in the morning, and to give an account of it; and have been astonished and *alarmed* at the wonderful power of memory exhibited on such occasions by children when but five or six years of age. I have known other children, in addition to most of the above performances, induced to learn additional hymns, chapters of Scripture, or to read certain books, by the promise of presents from their parents or friends.

'The foregoing account fails to describe the amount of mental labor required of many children, in intelligent and respectable families.'—(P. 58, 59.)

The fourth section adduces the 'opinions of celebrated physicians respecting early mental cultivation;' such as Tissot, Hufeland, Spurzheim,* Sinabaldi, Friedlander, Ratier, Julien, and others, who join in reprobating early mental labor.

* We have much pleasure in quoting the following note by Dr Brigham, devoted to that great man:—'The above quotation is taken from the French edition of Dr Spurzheim's valuable *Essay upon the Elementary Principles of Education*. A later edition in English, with additions, has been published, which I have not seen. The learned and estimable author of the above is now in this country, and proposes to lecture upon the interesting science of Phrenology, a science to which he has given a philosophical character, and which, by his labors, he has advanced to its present high standing. I cannot but believe that his visit to this country will be productive of great good, by directing the atten-

We must content ourselves with referring to the fifth section, on the 'Influence of mental cultivation and excitement in producing insanity, nervous affections, and diseases of the heart.'

The sixth section is entitled 'Remarks upon Moral Education—Influence of example;' and here, for a reason that will afterwards be apparent, we think it important to quote the author's words. 'The remarks which I have made respecting the danger of too early cultivating the intellectual faculties, do not fully apply to the development of the *moral* qualities; though in regard to them some caution is necessary; for danger is to be apprehended from strongly exciting the feelings of children and awakening their passions. In endeavoring to call forth and cultivate those moral qualities which are good, and to suppress the bad, we should constantly keep in mind that the brain is not only the seat of the intellectual faculties, but is also the agent by which the passions, the affections, and all the moral qualities, are manifested. That this is true, is shown in the same way as I have proved that the brain is the material organ of the mind. Insanity alone furnishes abundant proof. This disease of the brain as often deranges the moral as the intellectual faculties.'—(P. 87.) Again: 'The great object, therefore, in moral education should be, to call into repeated action those organs that manifest the good qualities, and increase their activity

tion of the public to the immense importance of physical education, a branch of education, the almost entire neglect of which, in this country, threatens dangerous and lasting consequences. As to the correctness of the phrenological system, I am not qualified to determine; but so far as I have had an opportunity of observing, I think it explains the phenomena of the morbid action of the brain far better than any other.

'I leave this note as it was in the first edition, though the work referred to has been reprinted in this country. I still hope, that, although its illustrious author lived but a few months after his arrival in this country, his visit will be of great service to it, and that he will ere long be accounted a great benefactor.

'In a letter which I received from him but a few days before the illness which terminated his life, he remarks upon the uncommon mental activity of the people of this country, and expresses his belief that the science which he taught would do great good here, and would "contribute to a reform in education." I trust that he has awakened a spirit of inquiry on this subject, that will not subside until the benefits he predicted are realized.'—(Pp. 66, 67.)

and power. For this purpose, it is necessary to study the characters of children when quite young; and when certain moral qualities appear to predominate, that are likely to produce bad traits of character, great efforts should be made to develop and call into activity opposite qualities: when a child appears exceedingly selfish, he should be taught and accustomed to practise benevolence. In this manner it is as certain that the moral qualities which are most desirable may be cultivated and made predominant, as that the memory may be increased by exercise.'—(P. 88.)

We regret we have not space to analyze the seventh and eighth sections, entitled 'The cultivation of the mind at a proper time of life not injurious but beneficial to health;' and 'Influence of mental cultivation in producing dyspepsia in literary men; irritation of the brain the most frequent cause of this disease.' In both sections the reader will find some most valuable practical truths. Among the reasons which, independently of his own experience, have led Dr Brigham to the opinion, that, in many cases, dyspepsia or indigestion is primarily a disease of the brain and nervous system, are the following:—

'*First*, A blow or other injury of the head, or a tumor in the brain, frequently produces sickness, irritation of the stomach, and all the symptoms of dyspepsia.

'*Second*, Dyspepsia "may be produced by mental affections," says Dr Parry; and in this opinion he is supported by numerous observers. Who is there that has not felt the influence of bad news, or mental agitation, in destroying the appetite and deranging digestion, and thus producing dyspepsia for a short time?

'*Third*, Insanity, or disease of the brain, is usually preceded by the symptoms of dyspepsia, and recovery from mental derangement is often marked by a return of these symptoms.

'*Fourth*, Examination of the bodies of those who have died after long continued dyspeptic symptoms, confirm the opinion I have advanced, that dyspepsia is often a disease of the head, and not of the stomach.

'*Fifth*, The fact that dyspepsia is frequently cured by permitting the overtasked and tired brain to rest, or by changing the

mental labor or excitement, is evidence that it is a primary disease of the head, and not of the stomach.

'*Sixth*, The fact that dyspepsia is a disease chiefly confined to the studious, to those whose minds are much exercised and excited, and to those, who, by too early mental education, have had a predominance given to the nervous system, is evidence that the brain is the primary organ affected.

'*Finally*, If dyspepsia is a disease of the stomach, why is it not more frequently cured by attention to diet than it is?'—(Pp. 103, 106, 112, 114, 119.)

These propositions are defended and illustrated at considerable length, and the whole section is worthy of being attentively studied both by physicians and patients. A table is appended, exhibiting the age attained by some of the most distinguished literary men in ancient and modern times, from 50 years to 109.

We have been thus particular, even to detail, on Dr Brigham's views of early mental culture, that we may apply them to the question now so deeply interesting the country and the legislature, that of infant school education. Mr Cobbett, in one of his *Registers*, published shortly before his death, applied Dr Brigham's facts and reasonings indiscriminately to the condemnation of these institutions; against which, had he lived, he meant to raise his voice in Parliament. He announced, moreover, his intention of printing a cheap edition of Dr Brigham's work, obviously with the view of making it the popular basis for his warfare against the system. We do not regret that he did not wage the war, but we should have thanked him for a cheap edition of the volume; for we feel that more temperate reasoners,—among whom, we are confident, we may rank Dr Brigham himself,—can make use of that work, not for the destruction, but for the defence and benefit, of infant schools. Mr Cobbett's intention regarding it is about to be fulfilled by his son.

In all that *we* have written on the subject of Infant Schools, * we have broadly and anxiously stated, that moral training, and that guarded precisely as it is by Dr Brigham in his fifth section,—so as

* Vol. vi. p. 418, and vol. vii. p. 108. See also Simson's 'Necessity of Popular Education,' p. 133.

to exercise the superior moral sentiments, which in general, when left to themselves, act too feebly to be in the smallest danger of over-excitement, and to regulate and moderate the selfish passions and animal propensities,—is the *primary* end of an infant school; and that intellectual training should be a *secondary* and accessary object, only. As a secondary object, we have strongly urged that it should never approach to *labor*, that it should never overtask the infants, and that the utmost they attain should be acquired incidentally, almost unconsciously, and in the very manner in which the infant would instruct himself, by the exercise of his senses and observing powers, if left alone; only that his attention should be better directed, and the faculties which Nature, as Dr Brigham rightly affirms, has, in the stage of infancy, appetized for that knowledge of external objects which infancy is the period to attain, should receive their legitimate food better prepared and more usefully administered. We have ever been enemies to long lessons, tasks, and laborious repetitions. When teachers of infant schools have forgotten, as they are perhaps apt to do, that the intellectual training is only secondary, have allotted to it the principal place and the larger share of time, and, yielding to the ignorant prejudices of parents, who wish 'learning' for their money, have crammed their infant pupils for the supposed credit of their own teaching, we have held that they were departing from the essential principle of legitimate infant training. Nothing would tend more effectually to bring them back within the proper bounds of that intellectual training which should be harmless and even beneficial, than just such a work as Dr Brigham's; and we, therefore, earnestly recommend it to the perusal and reperusal of every infant school teacher. One obvious improvement it would be well if the directors of infant schools would most especially enforce—*a great deal more time ought to be spent in the play-ground, or at least at play, than is now almost any where allowed.* The usual alternation is an hour at lessons, and a quarter of an hour in the play-ground. We would have this proportion well nigh reversed; *we should wish to see the infants, at the very least, one-half their school day in the play-ground.* There can else be no time, no opportunity, for moral exercise in

reasonably continued intercourse. The teacher's handbell is rung for a return to lessons before they have had time to commix, and even before they have reaped the benefit of air and muscular exercise; while he himself, engrossed, as he is, with the intellectual department, is led to pay scarcely any attention to the play-ground intercourse—the true infant school—and the moral discipline which may there be realized.

It does not appear that Dr Brigham has ever seen an infant school on the system of Wilderspin. His objections have all of them reference to common school or nursery tasking and examining. We have not heard that the Wilderspin system has been yet realized in America. * In it, Dr Brigham would at once see a field

* There are seven Infant Schools in Boston, which were visited and reported on last year by a Committee of the Boston Phrenological Society. The report is published in the Annals of Phrenology, No. III. These schools are superintended by female teachers, who devote particular attention to the moral culture of the children, but follow no definite system of tuition. Pictures and objects are however made use of to a considerable extent, and the children are not kept too long in a constrained posture. Some of the schools are ill-ventilated, and to none is a proper play-ground attached; but still they seem to be much more rationally conducted than those known to Dr Brigham, who resides in Hartford. The Committee, in closing their report, 'express the high degree of pleasure and interest they have received from the visits they have paid to these infant schools. The cheerfulness—the activity—the healthy, happy looks of the children—their interest in the various exercises—were such as no friend of the young could look upon without delight. We were glad to see an approach made, as we certainly did in these schools, towards a proper and rational mode of treating and educating the younger members of the family of man. We have observed in these establishments the dawn of a happy day—when human nature shall be trained with an enlightened regard to the powers, faculties, and constitution, assigned it by its great Creator. We are confident that the infant school system needs only to be improved, as it may be, and based firmly, as it ought to be, upon the ultimate principles of human nature, to prove of the highest service in ameliorating man's present condition. Let children be gathered in infant schools as early as possible—let them meet with their fellow-beings in the morning of their days, that they may imbibe early the social principle of humanity—let their various faculties and sentiments be exercised and trained as soon as they are developed—let the infant pupil breathe the atmosphere of love, and yield to the mild but firm pressure of authority—let his early discipline be grounded on the future supremacy of his moral sentiments—let all that can adorn, guard, ennoble, and perfect human

for the best possible employment, intellectual, moral, and physical, of children from two to six years of age—the best, the only, arrangement, when they are judiciously managed, for dispensing precisely that kind and degree of intellectual culture, and that moral and physical exercise, which are most desirable, and which can be realized only in a little community of sufficient numbers, as we have often said, and in no private family whatever. But to proceed blindly to cry down the infant school system, by which alone a practical course of moral education *can* be applied to the great body of the people, from a hasty conclusion that an infant school is a machine for overtasking, overworking, and overexciting, the minds, and destroying the health, of children, would be a proceeding of gross ignorance, and great and serious mischief. Yet we are glad it has been threatened; we rejoice, too, in Dr Brigham's work; for the threat and the work will both tend to put infant school conductors on their guard, lest their schools should lapse into the abuse which has thus been pointed out.

We have only to add on this head, that, in the Edinburgh Model Infant School, with which we are best acquainted, although there is more lesson work and less play-ground exercise than we quite approve, we have not seen or heard of any of the effects of overdoing which Dr Brigham justly deprecates: the children appear in school uniformly in the most rosy health and high spirits, delighting in all they learn as mere amusement,—quite as insensible of acquisition as if they were picking it up of themselves, and utter strangers to any thing bearing the semblance of mental labor. These statements are grounded on the personal experience of five years. Mr Wilderspin has enjoyed the experience of nearly twenty, and can fully confirm our conclusions.

nature, be aimed at from the beginning of the child's career—and the great purpose of the Creator of all will be accomplished.' It is added, however, by the Committee, that 'this system, good as it is, and excellent as it may be made, is very partially understood, and very poorly supported among us. Its true friends are grieved to see it lying under such neglect.' Would that we had it in our power to use different language with respect to infant education in Britain!

Article VIII.

Proceedings of the Boston Phrenological Society, for the year 1835. Being a Report (unofficial) read to the Society, Jan. 14, 1836.

It has been suggested to the Secretary, by some members of the Society, that a sketch of the labors of the members, during the last year, would be particularly acceptable, as going to show that much has been done for the improvement of the members in the science of phrenology; and that no little has been attempted by the Society, towards perfecting the beautiful system which originated with Gall, and has been improved by Spurzheim and Combe. In consequence of these suggestions, your Secretary has copied from the records a brief list of the papers, reports, &c, which have been read before the Boston Phrenological Society, during the year 1835. It is as follows :—

Jan. 15.—A report was read by Mr Fowle, upon an unknown scull, presented to the Society by Dr Lewis. A paper was afterwards read from Dr Lewis, stating that the scull was that of the pirate Delgardo, who committed suicide in Leverett-street prison.

A report was read by Mr Sleeper, on a cast of the head of Henry Joseph, a negro, who was executed in this city for the murder of Capt. Crosby.

A paper was read by H. T. Tuckerman, in relation to Bulwer's 'Last Days of Pompeii,' going to show the opinions entertained and expressed, by the author, in favor of Phrenology.

Feb. 5.—A report was read by Mr Fowle, from the Committee appointed to examine and report upon a scull of some individual unknown to the Society, transmitted from the Phrenological Society, in South Reading.

Feb. 19.—A report was read by Dr N. B. Shurtleff, on twelve

sculls of natives of the East Indies, Hindoos and Mussulmans, which were presented to the society by Mr Dixwell.

Mr Tuckerman read a phrenological analysis of Dr Channing's Sermon on war, in which he stated that the Philosophy of that celebrated Divine and the doctrines of phrenology were based on the same fundamental principles of the mind.

Mr Fowle read from the Paris Phrenological Journal, an interesting account of the *post mortem* examination of the head of Cuvier.

March 6.—Mr Sleeper read a report from a committee who were appointed to examine into a singular case, in relation to the organ of Reverence, as manifested in the cranium of an individual, residing at Lowell.

Dr M. S. Perry read a paper on the organ of Alimentiveness, and related two remarkable cases of the development and manifestation of that organ.

April 2.—A report was made by Mr Sleeper, on a cast of the head of Asa Low, a paper manfacturer, in Vermont, whose organization presented a remarkable appearance.

A report was read by Dr Shurtleff, on the anatomical structure of the cranium of Dr Spurzheim.

A translation of an interesting paper on education, which originally appeared in the Paris Phrenological Journal, was read by Mr Clark.

April 17.—Mr Fowle read a paper, being an analysis of a pamphlet, written by M. D. Richard, of Paris, entitled 'Phrenology et Napoleon.'

A paper relating to the organ of Locality, was read by Mr Sleeper, in which he stated, that a remarkable instance was to be seen in the person of Abraham Courtney, a blind man, who frequented the streets of the city.

May 1.—A report upon the *character* of Asa Low, of Vermont, was read by Mr Sleeper, from a committee appointed to ascertain whether it corresponded with the former report on the cast.

A report was read by Mr Sleeper, on the cast of a scull, unknown to him, presented to the society at a previous meeting by

Dr Shurtleff. It was subsequently stated to be that of the negro, Henry Joseph.

June 5.—Mr Fowle read a report written by Mr Coxe, of Edinburgh, on a cast of the head of Whitefield. He also read an analysis of this report, in which he took occasion to compare it with one written by himself on the same cast, and with the real character of that individual. In corroboration of some sentiments expressed in his former report, he also read a letter written by Dr Stiles, of New Haven, in 1755, and addressed to Edward Wigglesworth, of Boston.

Mr Sleeper read a paper with some extracts, from an old periodical, on the character of the Prince Potempkin, of Russia.

June 19.—A report was read by Mr Sleeper, on the cast of the scull of a North American Indian, presented to the society, at the previous meeting by L. D. Chapin, of New York.

Mr Fowle read a report from a committee appointed to examine the two reports, made on the cast of the head of Henry Joseph, and the scull of that individual.

Dr John Flint read a paper on idiocy, and stated a remarkable case, which came to his knowledge, in relation to deficiency of intellectual power, in an individual.

A paper was read by Mr Sleeper, on the character of the pirates, who were executed for robbing the brig Mexican, of Salem, on the high seas.

Mr Fowle read a report relating to the scull of Delgardo, which had been reported on at a previous meeting, detailing various circumstances, illustrative of the character of that individual.

July 17.—A report was read by Mr Sleeper, from a Committee appointed at the previous meeting, to compare the contents of a letter received from the South Reading Society, relating to a scull sent some time before to be examined, with a report made by a committee of this society, on said scull, which proved to be that of J. P. Rog, who was executed in this city, a number of years ago, for piracy.

Mr Sleeper read a report of a committee appointed to examine a

cast of the head of a person unknown to the committee, which was handed in to the society at the previous meeting.

After which, Dr Fox read a statement relating to the character of the individual, from whose head the above cast was taken, and who proved to be Mr S. Willard, well known as a clock manufacturer.

Mr Bugard read a report from cast 169, being one of the phrenological specimens, received by the society, from Europe.

September 4.—Mr Frothingham read a paper explaining the functions and locality of a new organ, which he denominated Associativeness, supposed to be situated between Self-Esteem and Concentrativeness.

Mr Fowle read a paper relating to an interesting case of practical phrenology.

Sept. 18.—A report was read by Mr Fowle, on the merits of a former report on the cast of the head of Mr Simon Willard, and confirming the character deduced from an examination of the developments of the organs, as stated in the report of Mr Sleeper, with the known character of the individual.

Oct. 2.—A report was read by Mr Fowle, on Dr Antommarchi's mask of Napoleon.

Mr Frothingham read a report, relating to a report previously made to the society, on a cast of an Indian scull, and also on several sculls which were committed to him, in which he entered largely into the subject of the character of the North American Indian.

Mr Sleeper read a report on a scull, which was referred to a committee at the previous meeting, which, it afterwards appeared by a statement of Mr Bugard, who presented the scull to the society, was found in a mound or Indian burying-ground in Georgia—where it had probably been buried for centuries.

A paper was read by Dr John Flint, relating to the cure of a diseased organ of Amativeness, and a post mortem examination of the individual.

Oct. 16.—Mr Sleeper read a report on the cast of the bust of an individual, unknown to him, which was presented to the society

at the previous meeting, by Mr Fowle, and which subsequently proved to be a cast of the head of the late Dr Benjamin Rush, of Philadelphia.

Dr Flagg read an interesting case, from the London Lancet, relating to Mary Murdoch, who with Wade, her accomplice, was executed near Bristol, Eng. for poisoning Mary Smith.

Mr Frothingham read a paper, in relation to an organ which he supposed to exist, and which he styled *Watchfulness*—located over the ear, between Caution and Acquisitiveness.

Nov. 6.—Mr Sleeper read a report on a cast of the upper part of a cranium, of extraordinary organization, which had been sent to the society, by Baron Pisani, of Palermo, in Sicily.

Mr Frothingham read a paper, being a final report on the Indian sculls, presented to the society by Dr Powell, of New Orleans.

Nov. 20.—Dr John Flint read a report from a committee appointed to visit the boys' school, connected with the House of Industry, at South Boston, and stated the developments and probable characters of several of the lads in that institution.

Mr Fowle read a report, relating to a report previously made to the society, on the cast of the head of Dr Rush, of Philadelphia.

Mr Frothingham read a report on the cast of Mark Winslow, a notorious counterfeiter, who committed suicide, in Leverett-street gaol.

Mr Sleeper read a report from a committee appointed to ascertain the correct character of Mark Winslow.

Dec. 19.—Mr Fowle read a paper relating to the opinions of the Edinburgh and London phrenologists on the cast of the scull of Whitefield, which had been sent to each of these societies.

Mr Frothingham read a paper, describing more fully and particularly the functions of the new organ of Associativeness.

A paper was read by Mr Sleeper, descriptive of a visit lately made to the State Prison, at Charlestown, and an examination of the heads of several of the convicts.

In addition to the reports and papers which have been communicated, a number of letters have been received from abroad, and read to the society; and a great number of verbal communications

have been made by various members, on interesting subjects connected with Phrenology. A number of reports have also been made on matters of business, which are not included in the above list, and several animated discussions have taken place among the members, at the meetings, on questions proposed for debate by the Executive Committee. We trust and believe that it will be seen from the above, that the members of this Society have not been idle during the past year; and now, having succeeded, although at a great expense, in procuring a catalogue of the phrenological specimens obtained more than a year since from England, it is but fair to presume that the proceedings of the society for the present year will be of a character more interesting than the last. It is hoped that every member of the society will not content himself with attempting to *gain* instruction, but will voluntarily *communicate* all the information which he may from time to time obtain, which may prove interesting or instructive to those who are pursuing the study of the science of Phrenology.

J. S. SLEEPER, *Rec. Secretary.*

Article IX.

To the Editor of the Annals of Phrenology.

In the haste of writing out a connected account of the new theories, proposed to the Phrenological Society, in several papers read before them, together with some other ideas connected with this new view of the mental apparatus, a mistake occurred, and an important omission was made, which I now wish to correct and to supply. Having described the nature of Associativeness to be the

desire to become acquainted with the specific character of all Individualities and their relations, combined with an intelligent *perception* of these relations I represented the intellectual organs which *remember* the character of these Individualities and their relations, to be those known to us by the names of Individuality and Eventuality. This was a mistake—I *should* have said, Individuality and an organ situated *between* that and Eventuality. I should next have described another propendency, which desires to observe all *motion* or *action*, and which includes all events viewed as occurrences merely, without regard to physical, natural, mental or moral relation—and represented its connection with *Eventuality*, which is the Intellectual organ which remembers the perceptions of this faculty. To supply the deficiency, occasioned by the omission of this faculty, it is necessary in order to complete the theory, of which it was my object to present a connected view. I shall endeavor to illustrate this, and describe the situation of its organ, at the same time that I describe and illustrate those, which manifest the perception of mental and moral causes and relations, which will be as soon as a sufficient number of facts are collected. By inserting this explanation in the same number of the Annals with the original communication, you will much oblige,

Your obt. E. L. Frothingham.

NOTICES.

CELEBRATION AT THE ODEON.—On the 28th of December, the anniversary of the Birth of Spurzheim, and of the formation of the Boston Phrenological Society, was celebrated at the Odeon of the Boston Academy of Music. The occasion was an interesting one, and the hall was filled to overflowing, with highly respectable auditors, who listened to the services with the deepest attention, to the close. The Prayer by Rev. MR GREEN, East Cambridge, was solemn and impressive, and admirably adapted to the occasion. The Address, by DR SAMUEL G. HOWE, was characterized by the talent and refined taste which distinguish all that gentleman's productions. After alluding to the birth, and enlarging on the excellence of the great Philosopher, he described in chaste and beautiful language the rapid and increasing extension of phrenological principles throughout the civilized world—and while with much candor he exposed some of the most glaring errors which had crept into that system of philosophy, he ably explained and triumphantly vindicated the great principles on which it was founded. The Poem, by GRENVILLE MELLEN, was a composition of an elevated character—it was conceived with judgment, and executed with much taste and skill. Some of the passages were of surpassing beauty. He spoke eloquently of THE MIND, and described its various manifestations in the shape of 'THE PASSIONS.' He concluded with the following beautiful tribute to the memory of SPURZHEIM, the philosopher, the advocate of virtue, the CHRISTIAN—who now sleeps so quietly and beautiful, beneath the shades of Mount Auburn.

'He lifted from the mind
That shadowy veil of years,
Which closes round mankind,
Upon this path of tears!
That mystery of Spirit, that like mail,
Within its bars,
Keeps life untouch'd, but yet untold its tale,
Save to the beings pure and pale,
That roam amid the glory of the stars!
He bow'd him to the service of the soul,
And with a hope like reverence beheld,
As he who sees new spheres about him roll,
Wonders on wonders form and rise,
Which men had gazed on with unquestioning surprise,
Before such dim Philosophy the world had spell'd.

He bent before that shrine,
Where only mystery has waited man,
Since its informing spirit first began
Its upward reach and march divine.
He bent there as in deep companionship,
To catch some intimation of that power
That marked our untouched Parents in their bower,
Ere with unchastened eye, or lawless lip,
They looked and tasted!—joyless hour!
When change on both fell darkling for all time—
Blinded with tears—and crushed with crime!
And what now to each wakening land,
With mien and utterance of command,
As though into the deep
Of the immortal part he had gone down,
That vasty steep!
What brings he from that realm, victorious and alone?
New visions of this Angel Mind!—
New truth!—in robe and crown!
That shall the triumph of a promise find,
And the mocked spirit bind,
When other hopes have flown!
He came up as the Conqueror
Of some devoted shore,
That Man as Man might struggle for,
To give the clime to light and law,
Where midnight frowned before!

And now from hearth and home,
Forth on the weltering sea,
With tireless step behold him roam,
The Patriot Pilgrim of a new Philosophy!
With enchanting voice he came
Here, where the forest mount and shore,
Once to the dashing surf hung o'er,
Ere Freedom had a name!
But now where sounding cities pour
The music of their ocean roar,
On their loud way to Fame!
He pour'd as from the sky,
New radiance round the immortal image here,
Until a new divinity
Did on its brow appear,
And a new lustre flash'd along its eye!
To him, in Man, was given
To see the royalty and front of Heaven—

He saw that Death was but a nobler Birth—
The better Destiny of Earth!
The change that goes
Over that front—cold—deep—and still—
The signet of the Eternal Will,
Borne on that last repose!
Here, as of spirit's power he spoke
Oft to a listening land,
Beneath the magic of his hand
New wonder woke,
And, following his footsteps, as to sound
Of music, did a world come round,
To greet with harmony of praise,
One fashioned thus to master and amaze!
* * * * * *

Clos'd was the Pilgrim's task—and full his years—
And round, in cloudy gaze,
Gathered that world in tears,
As erst men gathered round the bold and high—
Great captains of the soul's first Liberty,
When they passed to the sky!
And now, on that tomb-pillared Mount,
Amidst its flower-encompass'd dead
How beautiful he sleeps—with garlands o'er his head,
Beside the murmuring of the hidden fount!
How beautiful his sleep!—
How lone!—how deep!
Mid that unceasing harmony of great trees—
While on the ocean breeze
The far faint voices of the city steal,
And sullen requiem bell, with broken peal!—
How beautiful his sleep!
With Mem'ry thus to keep
Her quiet watch, like sentinel, around
The consecrated mount of bloom—the hallow'd ground!'

Copies of the Address and Poem, were requested by the Society, for the Press—and have since been published by Marsh, Capen and Lyon.

Boston Phrenological Society.

The rooms of this Society are now on the lower floor, of the Masonic Temple, and strangers, who are desirous of examining the collection of casts, &c. may easily gratify their wishes by applying to either of the Curators, or the Record-

ing Secretary. The collection of casts and sculls, is an exceedingly valuable one, consisting of nearly five hundred, illustrative of all the principles in practical phrenology. A small library is also attached to this institution. At the commencement of the present year, the number of members amounted to 127. At the annual meeting, the following gentlemen were elected officers of the Society, for the year 1836.

WILLIAM B. FOWLE, President.

JAMES D. GREEN, Vice President. | JOHN S. SLEEPER, Rec. Secretary.
SAMUEL G. HOWE, Cor. Secretary. | EDWARD HAYNES, Jr. Treasurer.

Josiah F. Flagg,
John Flint,
Nahum Capen,
E. P. Clark,
} *Counsellors.*

E. L. Frothingham,
Lewis H. Morris,
} *Curators.*

Oneida Phrenological Society.

Since the publication of the last number of the Annals, we have received a letter from the Corresponding Secretary of the Oneida Phrenological Society, dated Utica, January 4, from which we make the following interesting extract.

'The Oneida Phrenological Society was organized temporarily in the spring of 1835, and re-organized in August last—on the third day of which, our annual meeting falls. The officers then chosen are,

JOHN M. CALL, M. D., of this city, President.
Rev Henry Mandeville, 1st Vice-President.
Professor J. H. Lathrop, of Hamilton Col., 2d Vice-President.
C. B. Coventry, M. D., of this city, Recording Secretary.
S. D. Dakin, Esq. Treasurer.
S. P. Lyman, Esq. Librarian.
A. B. Grosh, Corresponding Secretary.

Our transactions have been confined to the collection of a small Library, a few casts and busts, and endeavors to spread information on the subject, among those with whom we are on terms of intimate intercourse. Our President has been engaged, during the last and present winters, in delivering a course of lectures, one per week, before the Young Men's Association, of this city, which are well attended by a number of both sexes. As the science advances with sure steps, in its progress to respectability and usefulness, in the minds of the people, by our labors, we have no doubt our Society will increase also, and by its increased usefulness, as its numbers increase, tend again to advance the spread of the science, to the advancement of which it is devoted.

Respectfully yours, A. B. GROSH.

HYDROPHOBIA. A celebrated physiologist in Paris, Dr David Richard, has published an article in the *Revue Encyclopedique,* in which he fixes the seat of that dreadful disorder, hydrophobia, in the brain. He says his attention has been directed to this subject, by examining the ordinary symptoms of this disorder, viz. aversion to water, loss of appetite, dislike to society, love of darkness, a desire to bite, &c.—and connecting them with the functions which the phrenologists have ascribed to certain portions of the middle lobe of the brain. He requests all physicians, who may have it in their power to make *post mortem* examinations of persons who die of this disease, to pay particular attention to this suggestion—for if the seat of the disease is discovered, the disease itself is more than half conquered.

M. Richard has had only one opportunity of examining the brain of a person who died of hydrophobia, but this case proved as far as could be done, in one solitary case, the correctness of his opinions. This person died of hydrophobia, in its most violent shape, about six weeks after he had been bitten in the leg by a dog. The middle lobe of the brain was found very much inflamed—being of a high red color, as if there had been an unusual quantity of blood distributed to that region. This was particularly observable in the organs of *Combativeness, Destructiveness, Secretiveness, Cautiousness,* and extended to *Constructiveness.* The convolutions assigned to *Alimentiveness* and *Vitativeness* were, on the other hand, much paler than other parts of the brain, and seemed to have been affected with disease. It is hence inferred, that that part of the brain, which phrenologists consider the seat of Alimentiveness is first affected; hence the aversion to water, &c.; and the diseased action afterwards extends to those parts where Destructiveness and the adjacent organs are located.

☞ Among the papers which help to compose the present number of the Annals, is one from the pen of E. L. Frothingham, which embodies some new and original views in relation to the intellectual powers. The suggestions contained in the paper may be of service, but can be of no detriment to the science of Phrenology. It is in the power of every observing practical Phrenologist to prove or disprove the truth of Mr. Frothingham's remarks, by a multiplicity of *facts,* an unerring test of truth. The introduction of this article into the Annals, requires no apology—well-written papers of a speculative nature, the production of an intelligent mind; eager in its inquiries after truth, although they may contain principles differing essentially from those taught by the great founders of the science, Gall and Spurzheim, should never be excluded from a work like the Annals of Phrenology.

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