

But what is the curability of dipsomania, and the probability of its permanence? Does the cure remain only so long as there is nothing to drink; or will seclusion, for a period not exceeding a year, as recommended by the commissioners, be found sufficient to establish a healthy habit of temperance, which the smell of whisky will not overcome? The cautious suggestions in the report as to the permanence of the good results of idiot training may well be repeated in regard to this subject.

In conclusion, we have to thank the commissioners for a report, which not only indicates the strenuous and constant efforts which they are making to improve the condition of the insane, but which is full of interest and instruction.

J. C. B.

The Love of Life.

By HENRY MAUDSLEY, M.D.

WHAT a painfully distressing feeling must that be which one who has faith in the doctrines of phrenology, and experience in the art of it, is compelled continually to undergo! In his converse with men, the most disagreeable suspicions with regard to their feelings, their motives, their abilities, and their whole characters must ever be obtruding their dark shadows over the serenity of his mind. As a judge on the bench, a counsel at the bar, or the foreman of a jury, it will be to him an irresistible conviction that no reliance can be placed on the evidence of that witness in the box, forasmuch as, on the top of his head, in the place where should gently rise a veneration-swelling, there appears a most palpable pit, in which clearly all faith in the sanctity of oath may be hopelessly buried. What a cold sweat of agony, too, must ooze out over the phrenologist's body, when, prostrate on the bed of heavy sickness, he sees written on the forehead of the being into whose hands the event of his recovery seems placed, that there is no power there of tracing out the causes of his ill, no faculty there for comparing and judging the value of symptoms and remedies! And then to be so often obliged to feign an intimate intercourse or to transact confidential business with one whose cranial conformation proclaims that no intimacy, no confidence, no security can abide. Verily, if phrenological knowledge be true, it is a blessed want to be without it. Conceive, if possible, the angry consternation of a future mother-in-law, if, before definitely proposing for her daughter's hand, a polite but resolute claim was put forward to a careful phrenological examination of her daughter's head. And

yet that would be the bounden duty of a faithful phrenologist. Nor would accurate craniological knowledge be any great blessing to the individual, as regarded his personal welfare. For, inasmuch as the majority of men are foolish, and a great proportion of them very foolish, it is evident that a great many heads must be of indifferent conformation. What, then, would be the result of a general knowledge of this? Why, the vacillator would be surely confirmed in his vacillation, for he would fancy he saw his want of firmness to be in the purpose of the universe; the sensualist would wallow deeper in the mire of sensuality, for he would challenge the fate of a necessity in his acts; the thief would steal with greater abandonment and more industrious infamy, for he would consciously bow before the inexorable tyranny of organization; and the atheist might, with a scoff, silence for a moment his antagonist, by summoning in the effect the testimony of a cause in which he dreamed that he disbelieved. It appears to be the right fulfilment of an individual's destiny upon earth not to trouble himself greatly about deciding what he can do, but to do what he can. No advantage ever comes to any one from an excessive attention to the elements of his own character, or the phenomena of his own mind. Great self-consciousness is more or less of a disease; and that which is appointed to each one is to do with all his might that which lies before him to do—to work with earnest, sincere, moral, and intelligent labour in harmony with nature's laws. It is of such labour that it has been said, *laborare est orare*; and to one so working there need be no fear of failure, for the laws of the universe are his support; beneath him are "the everlasting arms."

Wer immer strebend sich bemüht
Den können wir erlösen.

Who ever striving labours well,
He never can be doomed to hell.

Notwithstanding the inevitable distress which the sincere phrenologist must so often experience, a moment's reflection may still enable him to draw some amount of consolation from his principles. It is painful to meet with individuals whom no consideration seems effectual to restrain from dishonorable actions—people who cannot crawl out of their own slime, for they carry the ever-active source of it with them; but it is often more painful and difficult to be able to accept them as they are without useless anger and disgust. And yet that is what must be done; for there is no ignoring an accomplished fact, however perplexing, disagreeable, or afflicting it may be, and no amending it by reviling or regret. Necessity is a hard and rugged teacher, sternly and inexorably insisting on acceptance. Perhaps, then, the conviction of their inevitable nature may be of service in enabling the phrenologist to accept with equanimity certain of those lying, vicious, malignant human abortions,

who are daily plying damnably on the "sounding loom of time."* Why give way to vain disgust or grief? All mankind, conspiring together in deepest, desperate determination, cannot for a moment refuse recognition of the inevitable; whatever is, is by nature's laws, and, being there, is most surely there rightly. So might reason to himself the philosophical phrenologist, were such a being in existence; and in such reflections, whatever their justice, there would at any rate be more wisdom than is exhibited by those philosophers who, blown up by the wind of their own conceit, have the vanity to suppose that they could improve upon the constitution of the universe.

Some time ago there was under care a patient, whose head was remarkable for its general angularity, but especially for a very marked projection in the region in front of the ear. On the brain this elevation would correspond to the anterior lower and outer part of the middle lobe, and perhaps, also, to the outer, lower, and posterior part of the anterior lobe. Evidently here was a case for testing the assertions of phrenology in one of its details, and a case so far favorable, inasmuch as it was impossible for any one to look at this patient's skull without observing the peculiarity. But first it will be well to establish definitely what was the particular, marked, absorbing feature in the mental disease, in order that, on reference to a phrenological chart, there may be a pure and simple test, without any even unconscious bias from foreknowledge. The case was one of deep melancholy—melancholy of the whining, moaning, selfish type; the melancholy which makes a man miserable without spoiling his appetite, and which renders him acutely sensible to his own lightest trouble, while utterly insensible to the profoundest calamities of others. The particular and persistent delusion was a gloomy fear of death, a fear which had no foundation in any recognisable bodily disease; and with it, when at its worst, was conjoined the dread of having committed the unpardonable sin. But the latter fear, unlike the haymakers' puppets which come out with their rakes only when the weather is to be fair, retiring when the storm threatens, seemed to disappear on sunshiny days, and to make its appearance again when there was extra gloom. The dread of death was, however, an ever-present horror; and for the most part it was only necessary to suggest the name of a disease, for the unhappy patient to fancy, before twenty-four hours were over,

* In place of exclaiming as they ought to do—

So schaff' ich am sausenden Webstuhl der Zeit
Und wirke der Gottheit lebendiges Kleid.

Thus I work the roaring loom of Time,
And weave the living robe of God.

Such creatures ought continually to cry—

So schaff' ich am sausenden Webstuhl der Zeit
Und wirke des Teufels lebendiges Kleid.

that he was afflicted with it. Nay, he would beg of you piteously to come and look at his eyes—they were certainly becoming glazed; to feel his heart—it was fluttering, feeble, actually stopping; to examine his legs—there was no circulation in them, and he was sure they were already dead. He walked along with cautious tread and bated breath, as though he were a Prince Rupert's drop, which the slightest scratch might precipitate in dust. Of course no reasoning was of any avail to shake his unfounded conviction; there would have been as good a hope of an attempt to talk down a gale of wind.

" You may as well
 Forbid the sea for to obey the moon
 As, or by oath remove, or counsel shake,
 The fabric of his folly."

And will not the end prove that the quotation might be continued?—

" Whose foundation
 Is piled upon his faith, and will continue
 The standing of his body. (*Winter's Tale.*)

It is quite evident, then, that in the history of the patient there is a very notable matter, as well as in the appearance of his skull; and were it a legitimate conclusion to regard these two circumstances as cause and effect, phrenology might well cry out in exultation, for it so happens that the phrenologists locate the love of life precisely in that spot where the prominence in this death-fearing individual occurred. And an excessive fear of death, coming as it does from a consciousness of the object of the blind instinct of life, may be regarded justly as the evidence of an excessive love of life. A somewhat similar case, recorded by Dr. A. Combe, may be mentioned to show what was the cerebral seat of the mischief therein; it was that of a lady in whom the love of life was a ruling passion. On a post-mortem examination, there was found "an enormous development of one of the convolutions at the base of the middle lobe, so striking as to arrest immediate attention. The corresponding part of the skull showed a deep and extensively moulded cavity or lid, running longitudinally, with high and prominent sides, and presenting altogether an appearance much more striking than any I ever saw." Two swallows, however, do not make a spring, that is certain; but it is certain also that two swallows darting and wheeling through the air, or rippling with rapid wings the quiet surface of the waters, would make most people suspect the approach of spring. But then the swallow does not make the spring—*una hirundo non facit ver*,—but comes as a coincident effect of a cause of which the spring also is an effect; and so it is quite possible that a particularly bossed head may be associated with an extreme love of life without having any direct causative relation thereto. It will be most satisfactory to appeal to facts for the elucidation of whatever connection, accidental or essential, there may be, or

appear to be. The head of the patient was measured in its antero-posterior diameter, from about middle of forehead to occipital protuberance, and transversely from a spot a little in front of upper part of ear to the corresponding point of the opposite side; and the dimensions were—

Antero-posterior diameter	7 $\frac{7}{8}$ inches.
Transverse diameter	6 $\frac{1}{4}$ "
Circumference	22 $\frac{1}{4}$ "

Now, the corresponding measurements of a phrenological model were—

Antero-posterior	8 $\frac{1}{4}$ inches.
Transverse	5 $\frac{1}{4}$ "
Circumference	22 $\frac{1}{4}$ "

So that, although the length of head in the model was one-fourth of an inch greater than in the death-fearing patient, the breadth was actually three-eighths of an inch less. The model head is, however, rather a large one; and the average dimensions of an ordinary male head may be more properly stated thus :

Antero-posterior	7 $\frac{7}{8}$ inches.
Transverse	5 $\frac{1}{4}$ "
Circumference	22 "

The transverse diameter of the death-fearing head is still three-eighths of an inch more than it should be, and in reality even more than three-eighths of an inch; for the transverse average has been established by measuring from a point above the ear, where, of course, the skull is broader considerably than it is in front of the ear. One conclusion may be considered certain, that, in an individual cursed with an inordinate love of life, there is a marked development of that part of the skull which the phrenologists look upon as covering the portion of brain in which such love is placed. Such a striking coincidence naturally raises the expectation of a like result in a like case, and of a quite different result in an unlike case. Here, then, is the head-measurement of a patient who evinces no love of life whatever, but a most decided desire for death. He is deplorably anxious to have a bath, and to be boiled to death; and has attempted suicide once by breaking a chamber-pot, and haggling at his throat with the fragments :

Antero-posterior measurement	7 $\frac{7}{8}$ inches.
Transverse measurement (in front of ear)	5 $\frac{1}{4}$ "
Circular measurement	22 "

Though in length the head of him is half an inch less than that of the fearful individual, the breadth is as much as one inch less, which is a striking difference; but yet, if we compare the dimensions with those of a model, the proportions are not unjust. A more striking

instance of an utter disdain of life is perhaps afforded by the following case of a patient who is subject to periodical attacks of mania. He may be considered to pass through four phases of existence in the course of five or six weeks. At the beginning of a maniacal attack, he is lively, brilliant, rapid, full of projects and fancies; in a few days he becomes noisy, violent, utterly incoherent, and dreadfully destructive; after a period of such life he is gloomy, silent, moody, desperate; and out of this stage he emerges into a calm and rational condition, in which he is notable for the vigour and originality of his thoughts, and the energy and precision of his language. Now, his disgust of life persists through all these stages; death is whimsically projected in one, violently attempted in another, desperately brooded over in the third, and calmly recognised as a desirable event in the fourth. He believes that life can bring no more joys to him; he has found such pleasures as he has had to be the bitterest vanity; nay, he would rather live through his sorrows and sufferings again, as of them there have been instruction and profit, than through a fancied happiness which has been as ashes in the mouth; his soul is weary of its tenement, and would most gladly leave it. But the death-desire is manifested in the strangest fashion at the commencement of a maniacal attack. "I am perfectly willing that you should make any experiment you like upon me; you may take a piece out of my forehead, and weigh some of my brain, or you may cut out my heart and weigh that; but I should prefer that you roasted me slowly, and if you will allow me I'll tell you how I should like it to be done. In the bottom room there is a grid; you might put me on that, and make a big fire under me, so that my skin might gradually peel off; that would be skin for skin, and I should be, as you may say, regularly *done*. I have an idea that would be the best experiment. Or you might tie me up before the fire, but I should like to be tied with my head downwards. I should wish to be bound with withs—I fancy they would be stronger than cords; and, if I roar out, you must not mind that. I should prefer being done slowly rather than being thrown right into the fire; for I should roast better like a fowl slowly; and I have an idea that when the fat began to ooze out of me, I should not suffer so much. I speak this quite calmly and deliberately." And so on, with other horribly ingenious devices. During the paroxysm of mania the death-desire sometimes takes a very obstinate form; on one occasion it was necessary to feed him night and morning for a fortnight with the stomach-pump, in order to prevent voluntary starvation. Well! the measurement of his head stands thus:

Antero-posterior	7 $\frac{7}{8}$ inches.
Transverse	5 $\frac{1}{8}$ "
Circumference	22 $\frac{1}{4}$ "

Here then, if the phrenologists were correct in their details, we have an undoubted right to expect a narrowness of head in that part

which they regard as the seat of the love of life; we are as fairly entitled to such expectation as they are to any conclusion favorable to their view from the broad head. And yet no such narrowness exists, and the measurement, compared with that of the model, exhibits fair proportions. To accept one case and to ignore the other two, would be contrary to the plainest rule of philosophical investigation; though, without a doubt, phrenology would find some excuse for doing so. Spurzheim fancied that the celebrated calculating-boy, who afterwards became an eminent engineer, had no organ of number whatever; and in spite of so great a mistake, not a whit shaken thereby, went on to the end of his life believing in his system. But what possible excuse can there be for a so-called science which makes an assertion directly opposite to the fact? Why there is a compensation in bumps, and the minus good or plus evil of one bump is happily often modified by the plus good or minus evil of another bump. If a man be a murderer and have nevertheless the smallest possible organ of destructiveness, phrenology points out to you with unabashed front, nay with an actual brow of triumph, what a little benevolence or veneration he had; and so two negatives have made a desperate positive.* Should all compensatory excuses fail, and some perverse individual be quite the reverse of what phrenologically he should be, the faithful believer in an elastic system must confidently take refuge in the different qualities or nervous activity of different brains. And so with the eagerest possible desire to be somewhere, we are still nowhere. Most unlucky of all, the above-mentioned case of the death-fearing patient, with such an enormous bump of life-love, positively lands us in deeper difficulties; for he, at one period of his illness, evinced a marked suicidal propensity, and was put under care solely to prevent any painful catastrophe. It may be deemed a very moderate censure to apply to a system which presents us with such anomalies as a man with love of life immensely developed seeking death, a man with "causality" very large disbelieving in a first cause, or a man in deep thought scratching the back of his head, the remark that has been made of the individual given to excuses, that "a man who is good at excuses, is good at nothing else." Although phrenology has ranked among its supporters men as eminent as Prince Metternich, who asserted that, "since he became acquainted

* Lauvergne ('De l'Agonie et de la Mort') finds the organs of courage and destruction very small in professed duellists, and he is a phrenologist; but then he says that is exactly what it should be, as they are always the greatest cowards.

There is one philosophical doctrine which seems to have escaped the phrenologists, and which, as it may be very useful to them, is here presented gratis. Geoffery St. Hilaire, in his 'Philosophie Anatomique,' lays great stress on what he calls the *balancement des organes*, by which he desires to express that an excessive development of any one organ is always attended with a corresponding atrophy of some other. So that if nature has made a murderer *quoad* one bump, she must put the compensation in another. The miracle is that there should ever be a murderer.

with Gall's discoveries, he never employed any one confidentially or about his person without reference to the shape of his head," yet few who have been trained to scientific investigation will be found willing at the present day to enter into a serious discussion on its doctrines. Since the demolition of the system by Leuret,* real science has been content to leave it for the amusement of the pseudo-scientific and the profit of the designing. The latter will find some valuable advice in a recently published work. Having set up a shop, and spent a few pounds in brains, skulls, charts, &c., so as to make a great and learned show, he should advertise himself extensively as the celebrated Professor Brainey. "My first customer is a middle-aged man. I look at him, ask him a question or two, so as to hear him talk. When I have got the hang of him, I ask him to sit down, and proceed to fumble his skull, dictating as follows :

"SCALE FROM 1 TO 10.

<i>List of Faculties for Customer.</i>	<i>Private notes for my Pupil, each to be accompanied with a wink.</i>
Amativeness, 7.	Most men love the conficting sex, and all men love to be told they do.
Alimentativeness, 8.	Don't you see that he has burst off his lowest waistcoat button with feeding—hey?
Acquisitiveness, 8.	Of course—a middle-aged Yankee.
Approbateness, 7.	Hat well brushed. Hair ditto. Mark the effect of that <i>plus</i> sign.
Self-esteem, 6.	His face shows that.
Benevolence, 9.	That 'll please him.
Conscientiousness, 8½.	That fraction looks first-rate.
Mirthfulness, 7.	Has laughed twice since he came in.
Ideality, 9.	That sounds well.
Form, Size, Weight, Colour, Locality, Eventuality, &c.,	Average everything that can't be guessed.
4 to 6	

And so of the other faculties."†

With regard to the particular love of life, the question naturally suggests itself whether there is any ground in philosophy for allowing it such a special location as that which the phrenologists assign it. When observation in one well-observed instance decidedly fails in supporting a theory, it is better at once to throw overboard the theory and to begin again; for, however we may flatter ourselves in the conduct of life that there is no rule without an exception, yet to a law of nature there never is, and never can be, an exception. "And what thinkest thou" said Socrates to Aristodemus, "of this continued love of life, this dread of dissolution, which takes possession of us from the moment we are conscious of existence?" "I think of it," answered he, "as the means employed by the same great and wise Artist, deliberately determined to preserve what He has made."

* 'Anatomie comparée du Système Nerveux,' 1839.

† 'The Professor at the Breakfast Table.' By O. W. Holmes.

It is, indeed, the fundamental instinct on which all others rest for their gratification; for without its continuance there could obviously be no efforts on the part of any animal to obtain what was agreeable, or to shun what was injurious. The instinct for life, *sensational self-love* (*Eigenliebe*), the struggle for existence, is the natural endowment of an organic being of any kind; prompts the plant to strive upwards with much patient endurance after light and air; gives force to the polype when it tugs and tugs at the disputed morsel till it has swallowed its opponent polype tugging at the other end, and is responsible for the obstinacy with which the latter persists in being swallowed rather than let go its hold; it is manifested in quiet action in the processes of repair, nutrition, and growth in man's body, and consciously in the operations of his mind; it is present in the anencephalic fœtus, which lives its few days, as well as in the most illustrious philosopher, for it is the *lex nostræ conservationis*—the law of organic being in consciousness and out of consciousness. The evidence then must be considered as quite opposed to any specialization of location for our instinctive love of life.* In making such an assertion, there is no forgetfulness of the fact that, as we ascend in the scale of animal existence, a differentiation of parts and consequent specialization of function replace the general tissue and general function which answer all demands in the lowest animals; indeed, as we know that in the mind of man many different so-called faculties supersede the general instinctive faculty which serves every purpose in some animals, we are fully prepared to expect a specialization of parts in the organ through which these are manifested. But even though a specialization of brain as ministering to certain manifestations of a one and indivisible mind be conceded, it may be fairly denied that the phrenologists have, it may be confidently asserted that they have not, philosophically analysed the mental phenomena, or even at all satisfactorily observed the coincidences between the different cranial developments and such faculties as they have most arbitrarily assumed. By such a process as that which they have actually followed it would be quite easy either to reduce the faculties to half the number, or to multiply them almost infinitely. The general instinct of life, which is coextensive with organic existence, has been cribbed and cabined into a spot which the finger end might almost cover, while an extensive tract is often marked out for a fancied faculty or propensity, which cannot be shown to have any independent existence in the mind, which can, in very truth, be proved, as far as proof is possible in such matter, to have no such existence.

Inasmuch, then, as candid observation fails to support the phrenological generalizations, it remains only to search for some wider generalization which shall, if possible, include the facts on which they claim to be founded, and the contradictory instances by which they

* Unzer und Prochaska, on the 'Nervous System,' Syd. Society's Trans.

have been discredited. Well, then, all broad-headed people are very selfish, that is to say, all who have the head broad in proportion to its length. Now, if an individual love himself very much, it is clear that, as a part of his self-love, he will love his own life; and, therefore, there is no necessity from the existence of that particular feeling, in the absence of other evidence, to appropriate a particular part of the brain as its special seat. But are we to look upon an exaggerated self-love as the sure accompaniment of a disproportionately broad head? If attention be given to the matter, it will be surprising what a number of observations support such a provisional generalization, for it is nothing more; but it is certain that, as a practical rule, it will be safer to repose faith in the long-headed man than in the broad-headed man. Such a conclusion may claim in part the support of the phrenologists, as about the love of life centre they group the various so-called animal propensities, which have all self as the object of their gratification. Near is placed that organ which is supposed to have for its gratification in a moderate degree the possession of such things as may be necessary or desirable, and which in immoderate measure evidences selfishness, avarice, or suchlike vice. Next neighbour to it is constructiveness, the design whereof is the construction of useful works of art, but the abuse or extravagant development of which is clearly manifested in the fabrication of injurious and destructive devices, for deceiving or injuring in the pursuit of selfish gratification. Secretiveness and destructiveness carry the breadth backwards above the ear; the former rightly an ingredient in prudence, unrighteously becomes the foundation of cunning, deceit, lying, and suchlike abominations; the latter displays itself in severity, cruelty, and a total disregard to the feelings and interests of others. Behind, again, combativeness and adhesiveness may represent in the selfish character the ferocity of selfish effort, and the tenacity with which the selfish being holds to that which he has unjustly obtained, or clings to the faithful implements of his vices. We may then accept the observations of the phrenologists so far as this, that an undue preponderance of breadth of head throughout the region in which they place the propensities, indicates with certainty an animal self-love, which can scarcely be trusted at all times to adopt only fair means for its gratification. Undue preponderance, be it observed, for it is justifiable to expect a favorable result, even with a rather broad head which has a proportionately good length, and which has, so to say, the power of its length placed in the anterior half thereof. And, why? Simply because there is in the front the greatest natural power, the force of intellect, which by exercise and development is able to control the objectionable propensities indicated in the animal broadness of skull. A man of intellect, even with a powerful selfish propensity, sees morality to be in the purpose of the universe, in that he sees that immorality is surely and inexorably punished,

and he resists, stifles, and overcomes his evil propensities as a matter of intellectual conviction. There is much more hope, therefore, of a broad skull heavy in the anterior portion of its length, than there is of a skull deficient in front and largely developed behind. Our death-fearing patient was not only unfortunate in an unusually broad head, but was unfortunate also, with a moderately good length, in the proportions thereof. While the back part of his head was large, his forehead receded and was remarkably flat, seemed for all the world as though it had been planed up and down slantingly backwards, and from side to side directly. There was no power of intellect, therefore, to compensate the propensities; the fates had been unpropitious.

There is one circumstance in the history of this man of fear, that might at first appear rather awkward for our generalization. He was at one time suicidal, and it may be objected that such a fact, which is so damaging to the phrenological special assertion, is none the less so, to the fancied safer and really more general one. But what does suicide come of but of self-love? It may be looked upon as the final development of selfishness, the culminating act of self-love gone mad; a pitiable proclamation to all the world on the part of a certain individual, that by too great consideration of himself and undue indulgence in the feeling of self, he has rendered himself unable to labour with and for his kind, therein to further nature's progress and fulfil the purposes of a human being's existence in time and space. Accordingly nature has compassion upon him, and takes the management of him out of his own hands. Surely Cato is one of the most unworthy of heroes, hero of Lucan though he be; was he pure and unselfish? If Cato had thought more of Rome and less of Cato, he had surely not killed himself.

Any poor creature from the gutter can put an end to itself; there is no nobility in the act, and no great amount of courage required for it. It is a deed rather of cowardice shirking duty, generated in a monstrous feeling of self, and accomplished in the most sinful, because wilful, ignorance. Even if the act of Cato did not speak for itself, there is other evidence to show that he was far too self-conscious. Montaigne tells us that he was given to drinking, and it is certain that the Catos as a race were noted for rigid severity of character, which mostly signifies narrowness of vision, self-love, and conceit. That he at any rate could not see very far out of himself is undeniable, else he surely had not failed to recognise one of the very greatest heroes that the world has seen. It has been said, "*Non video quid habeat in terris Jupiter pulchrius, quam ut spectat Catonem, jam partibus semel fractis, stantem nihilominus inter ruinas publicas rectum!*" Certainly there would have been a nobility in the spectacle had Cato stood firm; unfortunately he did not, but fell very helpless and prostrate indeed, and the spectacle is a

miserable one.* How painful and pitiable it is to hear of the wretched documents which a poor mortal who has put an end to himself so often leaves behind him! One man thinks that virtue and nobility are perishing off the face of the earth with him; and another feeble being, whom a housemaid or a needlewoman has jilted, leaves behind an explanatory document, as though it were of some consequence to the universe to be enlightened as to why he went the way of folly. Patient endurance of trials and afflictions never fails in life even to secure respect and honour, for it is in the purpose and of the nobility of human nature to suffer; suffering teaches and exalts—is in itself so great a good that the wisest have ever heartily blessed it. But it is only an extension of view which enables a man to regard himself as a small atom in a mighty scheme, and to feel that the works which he does, and not the feelings which he has, are of consequence in the universe; which makes him learn that egotism is only rightly such, as the expression of individual force labouring for the general good, labouring, and if need be, suffering and dying for that—it is only such wide and disinterested views that will render any one capable of enduring with resignation and in silence.

If it be true that an angular head is not to be desired, and that a broad head, or a head large behind are to be regarded with suspicion, it may be demanded with some impatience what description of head is the best. We shall not find that there has been any general agreement among mankind upon this point. Adair says that the northern savages “flatten their heads in divers forms; but it is chiefly the crown of the head they depress, in order to beautify themselves, as their wild fancy terms it; for they call us long-heads, by way of contempt.”† It might even be supposed that nature had no particular preference in the matter, and had contentedly left the form which a head might take very much at the mercy of accident or human design, were reliance placed on the credulous observations of Vesalius, who says “that the Germans had generally a flattened occiput and broad head, because the children are always laid on their backs in the cradles; and that the Belgians have a more oblong form, because the children are allowed to sleep on their sides.” To the confiding disciple of Gall and Spurzheim, who reflects on the small circumstances which so frequently determine great events, it may appear within the compass of possibility that we are indebted for the dark ages of the world to a prevailing epidemic for putting children on their backs in the cradle. Vesalius further observes that the crania of the Greeks and Turks are globular, that being a shape well

* The epigram of Varro, therefore, loses its force for us—

Marmoreo Licinus tumulo jacet, at Cato parvo;
Pompeius nullo. Credimus esse Deos?

† ‘History of North American Indians.’

adapted for wearing the turban, and one, therefore, often produced by the midwives at the request of the mothers. But there would really appear to be no limit to the number of deformities of the head artificially produced by different nations. M. Gosse enumerates no less than sixteen principal varieties.* These are: 1. the wedge-shaped head, produced by pressure in front, as among the Caribbees and others, and in another way by pressure principally applied to the occiput, as among the Natchez Indians. 2. This form is similar to the first except that the deformity is more symmetrically produced, so that the head becomes cylindrical rather than wedge-shaped. Such a form was beauty with the ancient Aymares of Bolivia. 3. This may be called oblique; it is produced by pressure applied in a diagonal from the frontal of one side to the parietal of the opposite side. 4. The square head. 5. A very singular form; the head is made *threelobed* by means of a complicated system of bands. This was the case in certain skulls found "dans l'île de los Sacrificios." 6. Pressure exclusively frontal; the deformity thus made is said to be common in many parts of France. 7. This variety is produced by elongation or flattening of the nose. 8. In addition to the flattening of the nose, the head is pressed obliquely in front and on the sides, so as to give it a pyramidal form; this is the Mongol head. Besides these deformities, M. Gosse further admits: 9. The *prognathos* head, found among the Caribbees, and produced as before stated. 10. The head flattened on the sides; this has been found even among some modern Arabs. 11. The head deformed both in front and on the sides. 12. The spherical head of the Turks. 13. The head which has been strangled into an hour-glass shape by means of a tight hand—the annular deformity described by Foville. 14. A band tied under the chin has divided the upper part of the head into two lobes. 15. A particular pressure applied occipitally produces the deformed head of the Incas. 16. Sometimes the head is made to assume the appearance of a truncated cone; this form has been observed at Siam. A remarkable circumstance is that M. Gosse believes that the forms artificially impressed on the skull through successive generations tend to become hereditary, and that we must consequently assign less value than has been hitherto done to those characteristics of different nations derived from the forms of their skull. Herein he only agrees with Hippocrates, who observes that the seminal fluid comes from all parts of the body, sound as well as unsound. If, then, from bald parents there often spring bald children, from blue-eyed parents blue-eyed children, from squint-eyed parents squint-eyed children, and so with other varieties, what should hinder a long-headed person from begetting a long-headed child? There is, however, a fallacy to be guarded against in the observation

* 'Essai sur les Déformations Artificielles du Crâne;' also 'Annales d'Hygiène publique,' Paris, 1855.

of Gosse. It is almost certain that the deformity artificially produced by a nation will be an exaggeration of some natural peculiarity, which is itself considered beautiful; and it is evident that if a particular form of head be natural to a race, it will be transmitted without artificial influence. It is pride which, as Gratiolet observes, lies at the root of such follies, and the savage or civilized man loves his defects as well as his good qualities. If humps or big ears were deemed beautiful among a people, there would certainly be an attempt to exaggerate such peculiarities. Since Gall's time, some have tried for a noble forehead by shaving off their hair in front, and fools every day think to get a great man's genius by imitating his mannerism. On the whole, it seems probable that nature is much too wise to leave the destiny of man to the mercy of his own ignorance and superstition, and that she ever works faithfully to a type of her own. It is certainly of some importance that it should be so, for Gosse, whose opinion Gratiolet deems to be of great weight, thinks that the deformities artificially produced are not without influence on the moral qualities of the individual; and goes so far as to suppose that a slight deformity of the occiput may in some cases be advantageous.

Now if there be one nation which we should expect to have come up more closely than any other to nature's best type of the human head, that would surely be the Grecian—a nation which still maintains its pre-eminence above all others for the success with which it has discerned and represented the true in the beautiful and the beautiful in the true. The Grecian sculptors have made the heads of their gods on the best human model, but have purposely exaggerated the perfections, and have thus fashioned more than mortal foreheads. They are sometimes not content with a facial angle of less than 100° ; and all succeeding artists who have desired to represent a noble ideal being, have imitated their immortal productions. And yet a good head, as was not forgotten in Greece, should constitute a harmonious whole, without any sudden projection or striking disproportion between its different parts. The forehead should be high, broad and full, so that there may be no mistake about the skull falling forwards of its own weight when unsupported. Let it even drag the body forwards with it into a somewhat ungainly stoop, as it often does in thinking men; it is the head of natural intellectual superiority, the opposite of that which, fading in front, so often crowns the pipe-clay column. For a bad feature in a forehead, in addition to its lowness, is a narrowness thereof; in the negro and more markedly in the Bosjesman the anterior part of the hemispheres is narrower than is usually the case in Europeans, as Tiedemann observes; and the narrowing of the frontal lobes to an acute point is one character in which the brain of the monkey is distinguished from that of man. Observation shows also that a development of the

frontal vertebra contributes more to the actual size of the brain than a corresponding development of the occipital vertebra; for whilst a considerable relative increase of the latter adds but little to the capacity of the cranium, and particularly of its cerebral portion, the least increase of the former is entirely to the advantage of the cerebrum, and adds notably to the capacity of the cranium.*

From the forehead the passage backwards above should be through a lofty vault, a genuine dome, with no disturbing depressions or vile irregularities to mar its beauty; for the greater depth of the hemispheres is another point in which the human brain differs from that of the monkeys, and in which the brain of the European differs from that of the Bosjesman. After the size of the forehead there is no character of more importance, says Gratiolet, than the elevation of the cranium above its inter-auricular diameter, an elevation which signifies a simultaneous increase of the median *occipito-frontal* convolution, and of the *transverse inter-auricular* convolution. "The portion of this latter convolution measured by the interval between the centres of ossification of the two parietals is especially interesting, as it gives a very exact idea of the development of the cerebral regions comprised between the top of the fissure of Sylvius and the great median fissure which separates the two hemispheres." This is a region which is narrow in the *Pithecus*, more developed in the Orang and the Chimpanzee, but which acquires its largest proportions in man. "Its great size is therefore a human character, and every flattening of this convolution on each side of the median plane is a grievous sign. We instance particularly on this subject the Tasmanian."

Inasmuch as the posterior lobe of the brain is almost peculiar to man and the monkeys, we cannot but conclude that it has most important functions, and that a rightly proportioned human head will be fairly developed above and behind. The convexity of the head behind the points of ossification of the parietal bones is an indication of the appearance on the surface of the brain of certain convolutions peculiar to man. Gratiolet, who has given the greatest attention to the particular characters of the human brain, finds that this is a point in which the white race excels other races as much as it does in those characters before mentioned.†

That there should be no marked projections or irregularities on the human skull formed after the noblest type, but rather a general evenness of contour, would appear to be involved in its superiority over

* 'Anatomie comparée du Système Nerveux considérée dans ses rapports avec l'Intelligence,' par Leuret et Gratiolet, tome ii.

† There can be no doubt that the functions of the posterior lobes of the brain are of as much importance in the mental phenomena of man as those of the anterior; but the discussion of these would be out of place here, where the object is merely to give the general characters of a well-formed head. With reference to the brain of monkeys, see No. 1, 'Natural History Review,' Art. by Professor Huxley; also Gratiolet, *op. cit.*

the animal type, in which prominent ridges and rough irregularities are required for the attachment of very powerful muscles, and might perhaps be furthermore predicated as a result of the great complications of the secondary convolutions in the human brain. When the Greeks wished to express physical force as contrasted with moral force they made the head large, with the orbital cavities wide apart, the jaws massive, and the facial projections well marked, the forehead low and broad, with enormous frontal prominences, "Comme pour marquer la place des défenses d'un taureau." "Certainly the Farnese Hercules, with the head of a ruminant and the upper part of the cranium depressed into a smooth table, will never be confounded with one of the gods of the metaphysical order, one of those who govern the universe. We may conceive easily enough how he might struggle with a lion, but regarding the smallness of the noble protuberances of his head, who can be astonished to see him take an infant for his guide, and to surprise him spinning at the feet of Omphale." *

It is by the predominance or deficiency of those characters by which the human brain is distinguished from the brains of other animals, and especially from that of the monkey, as far as any opinion can be formed of such characters from the conformation of the cranium, that we may establish the beauty or defects of a human head. Mere size is by no means to be trusted to alone, as it forms but one element in a difficult problem; for while Napoleon, Talleyrand, Schiller, and Cuvier have had large heads, Descartes had but a very moderate one. Genius is indeed at times but humbly lodged, while even idiocy has now and then a noble-looking habitation.† Conclusions in this matter must be general and not too positive; and perhaps all that can be justly said is, that an enumeration of the bad features of a badly-formed head would include a narrowness and lowness of the forehead, a flatness of the upper part of the head, a bulging of the sides towards the base, and a great development of the lower and posterior part; with those grievous characters might be associated a wideness of the zygomatic arch, as in the carnivorous animal, and massive jaws.‡ A man

* 'De l'Agonie et de la Mort.' Lauvergne.

† In the 'Annal. Françaises et étrangères d'anatomie et de Zoologie,' t. ii, is an account of an infant which lived four days, and which was so far anencephalic as that the whole of the anterior and upper parts of the cerebral hemispheres were wanting, together with the corpus callosum and the corpora striata; notwithstanding which the cranium had quite its normal shape.

‡ Disagreeable as it is to mention facts which seem to oppose a favorite theory, it is only right to add that Gratiolet looks upon a roundness of the sides of the head as an advantage—a distinction of the Caucasian skull from that of the negro, which, though small, is disproportionately long, being flattened on its sides. The Caucasian infant is also, as compared with the adult, dolicho-cephalic; whence we must conclude that the brain in development increases a little more in breadth than in length. G. Combe quoted the narrow-headed Ceylonese as remarkable for gentleness; but, says Gratiolet, the inhabitants of New Guinea are more narrow-headed still, and they are notorious for their ferocity. But as a matter of observation, if a European head be very broad it is scarcely ever rightly proportioned; it is, in fact, imperfectly de-

so formed might be expected with some confidence to be given over hopelessly to his brutal instincts.

Yes; whatever may be said of the power which an individual may exercise over circumstances, and whatever power some undoubtedly do exercise over them, it remains undeniable that every one is inexorably subjected to the tyranny of his organization. The circumstances of one generation make much of the fate of the next. How, then, can we hope that an individual with the weight of the universe upon him should rise? This, however, is not a sorrowful truth, but, rightly regarded, one really of glorious hope; for on it rest our just expectations of human advancement through the ages. Man has been constituted with an understanding by which he may learn the laws of nature, by which he may bring himself into harmony with them, and perceive his advantage therein. The brute can instinctively adapt itself to the outer world with a marked success, but it is the noble privilege of man to make his own highest instincts. By systematic exercise of reason, he so consciously forms himself that he unconsciously, after a time, acts rightly. And, intelligently obeying nature's laws, he is inevitably carried upwards, for he has the force of the universe behind him; but, ignorantly disobeying them, he is as surely carried downwards, and his posterity marks the degradation,—the sins and ignorance of one generation become the disease and degeneration of the next. The greatest blessing, almost, that any individual can have to be thankful for is that he has been well-born—that he has come of sound parentage, not physically sound only, but morally and intellectually so, also. "By purity of birth," says Ruskin, "the entire system of the human body and soul may be gradually elevated, or by recklessness of birth degraded, until there shall be as much difference between the well-bred and ill-bred human creature as between a wolf-hound and the vilest mongrel cur."* Such considerations should tend to produce a solemn conviction of the eternal duration of any act, good or ill, and should inspire a fervent desire in every mortal to form, as far as depends upon him, a good future. Schiller has somewhere said, "This is the peculiar curse of evil, that it must continually reproduce evil;" and one may confidently add, "This is the peculiar blessing of good, that it must continually reproduce good."

Unhappily, our death-fearing patient was unfortunate in the stock from which he sprung; for an uncle of his was wretched for many

veloped in other parts. Now the brain develops upwards from the parietal vertebra into the frontal and occipital vertebræ, so that a marked predominance of the parietal region below may to a certain extent be regarded as the sign of an imperfect, or rather moderate, development of brain. Besides, the parallel convolutions of the tempero-sphenoidal lobe of the brain predominate in the monkey; the marginal convolution which forms the lower border of the fissure of Sylvius is the first convolution to appear in the brain of the monkeys, and in some of them is the only one, the rest of the brain being quite smooth. There can, therefore, be no great mobility about these parts.

* 'Modern Painters,' vol. v, p. 267.

years, even to his death, and wretched also on account of the very same delusion—an unfounded, ever-present fear of death. The prognosis, then, in this case was as gloomy as prognosis well could be. Was there any hope of *reforming* in a few months that which nature had been forming, not only for some thirty or forty years of individual existence, but which she had been preparing through a former generation? The evil which has been forming through generations is not readily eradicated but with generations; and the prophylaxis against future evils is, in insanity as in other matters, a far more philosophical practice than the application of temporary expedients to present ills. It is undoubtedly true, that expediency is the best maxim where principles have not been attained, and necessary even when they have been seized; but the success of such provisional palliation must never render us unmindful of the positive duty to investigate those natural laws by which events come, to place ourselves in harmony with them, and thus to make, as far as in us lies, a happy result. Is a man, then, hopelessly chained down by the weight of his inheritance? By no means entirely so; for there is something else besides inheritance which makes fate, and that is education. It is a physiological law, that the brain, throughout infancy, childhood, and youth, *grows to* the circumstances which it is placed among; and, therefore, the actual development of a brain may be much influenced by the sort of nutriment supplied to it as long as it grows. It would be rash, indeed, to venture to limit the effects which a right, reasonable, moral, physical, and intellectual education may have on the worst inheritance. Every one has in fact, as it were, two inheritances—that which he receives by transmission from his parents, and that which, after leaving his mother's womb, he receives when he enters the "womb of time;" together, these make his destiny. But given an individual at the meridian of life, with a bad inheritance and a bad education, the benevolent enthusiast may hope for his reformation, and, all honour to him, labour for it; but the careful observer will be prone to smile at his expectations, and, regarding them as a devout imagination, to compare them to those made to wash a blackamoor white. An unfavorable prognosis in any case should, nevertheless, make us feel deeply thankful that the laws which pervade nature are not suspended, rather than gloomy or fearful, because an apparent and temporary evil happens in obedience to their operations. In fact, just as he who reflects sees it to be far better that the man who falls from a scaffold should break his leg, or even his neck, in obedience to the law of gravitation, than that the law of gravitation should be suspended, and a world go to wreck; so it is quite possible to mingle a sincere compassion for the most hopelessly insane, with a joy at heart in the unfailing certainty of natural laws.

There seems to be a presumption that, had our broad-headed

patient been high-browed and full-browed in proportion, death would have lost its great horror to him. Perhaps he might not then have fallen into so deep a fear of it; for a knowledge of the impossibility of its coming without a sufficient cause would have restrained in moderation the dread of it; nay, he might even have awaited the possibility with resignation, seeing the gloomy event to be in the wise purpose of nature, and subjugating his self-love to the infinite wisdom that reigns throughout. Animals do not fear death, for they know not of its coming, they are unconscious of the object of the blind instinct of life; but the noblest earthly being, too much wrapped up in his own individuality, sometimes shivers pitifully before the dread event that he knows must come, and prostitutes his highest faculties to this ignoble slavery imposed by an animal instinct.* Of small advantage is it to point out to such a one that, as regards his earthly extinction, that which is his loss is nature's gain; that the end of earthly enjoyment to him is not the end of enjoyment upon earth, nor the end of existence to him the end of existence on earth; that enjoyment and existence are transferred to other beings who shall follow after, and live and laugh as he has done. This he cannot realise, for he has, through neglect, stunted those faculties which derive pleasure from contemplating the happiness of others, and he has, through indulgence, unduly developed those propensities which derive satisfaction from his own gratification. It is the purpose of the high intellectual and moral faculties which man has, and which exalt him so far above the rest of the animal kingdom, to make him feel that he lives for the good of mankind, for the good, in very truth, of nature generally, and therein to subjugate and hold in check those propensities by which he rates too highly and loves too much himself, and by which alone the animals are governed. To afford such exalted faculties their right exercise is to live a life moral, intelligent, and useful to his kind; and after such a life he may faithfully and fearlessly await the inevitable event, welcoming the gravedigger as the kindest of friends, who shall open to him the gates of his everlasting mansion.

"Inveni portum. Spes et Fortuna valet!
Nil mihi vobiscum: ludite nunc alios."

"Mine haven 's found; Fortune and Hope, adieu!
Mock others now; for I have done with you."—BURTON.

* Whereby one is irresistibly reminded of Mephistopheles' scornful philosophy—

"Ein wenig beaser würd' er leben,
Hätt'st du ihm nicht den Schein des Himmelslicht gegeben;
Er nennt's Vernunft und braucht's allein,
Nur thierischer als jedes Thier zu seyn."

"A little better would he live,
Could he no glimpse of Heaven's light e'er see;
He calls it Reason, and just uses it
Than every beast more animal to be."