

James Spurzheim

CORRESPONDENCE

RELATIVE TO

PHRENOLOGY,

BETWEEN

SIR WILLIAM HAMILTON, BART.,

DR SPURZHEIM,

AND

MR GEORGE COMBE,

IN JANUARY, FEBRUARY, AND MARCH, 1828.

JOHN ANDERSON, JUN., EDINBURGH,
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SIR WILLIAM HAMILTON, BART.,

AND

PHRENOLOGY.

I.—CORRESPONDENCE PUBLISHED IN THE CALEDONIAN MERCURY BETWEEN SIR WILLIAM HAMILTON AND DR SPURZHEIM, AND BETWEEN SIR WILLIAM HAMILTON AND MR GEORGE COMBE.

LETTER FROM SIR WILLIAM HAMILTON, BART.

To the Editor of the Caledonian Mercury.

SIR,—The report of Dr Spurzheim's lectures on Phrenology, published in your paper of last Thursday, contains allusions to me of such a nature, that I cannot with propriety suffer them to pass without an immediate correction of their inaccuracy. What Dr Spurzheim may state within the walls of his lecture-room I have taken no opportunity of learning; and I certainly should not have deemed it incumbent on me to notice any observations relative to my proceedings, had these not been thus obtruded on my attention, and published to the world.

Dr Spurzheim complains that I have acted unfairly, in refusing to print the papers against Phrenology which I read before the Royal Society, and in not openly discussing the opinions which I had ventured to attack. Before thus animadverting on my conduct, he was certainly bound to have ascertained the accuracy of his allegations; and he ought therefore to have known, from my correspondence with Mr Combe, (to be read in the Fifteenth Number of the Phrenological Journal,) that, far from refusing to publish these papers, I explicitly declared that I only awaited the decision of the umpires appointed to report in regard to the truth or falsehood of certain essential phenomena,

in order that both parties might have in common an indisputable foundation of reality, on which to establish or to refute the hypothesis in question. (See p. 404.) If any hardship be felt by Dr Spurzheim at the delay thus necessarily occasioned, this cannot with justice be attributed to me; but though it would be preposterous, under these circumstances, to publish my argument before the state of the decisive facts on which it proceeds is recognized as correct, it will certainly be admitted that I act with equal fairness and intrepidity, and afford to Dr Spurzheim the most advantageous opportunity of subverting my objections to his doctrine, by allowing, nay urging him to disprove, by a comparison with nature, the positions of fact on which the objections are established. I am willing to join issue with Dr Spurzheim, as with Mr Combe, in periling the whole question on the truth or falsehood of the propositions I am soon to propose. *Res non verba quæso.*

Dr Spurzheim seems to suppose that the objections I alleged against Phrenology were founded, not on sensible appearances, but on speculative opinions; not on my own observations, but on the authority of others.

It is true, that in the first paper which I read before the Royal Society, in attempting to prove that the consequences of the theory were diametrically opposite to those so fondly deduced from it by its supporters, I only indirectly assailed the doctrine itself, through the logical incompetency of those on whose authority it rested; and I there endeavoured merely to establish a general presumption, that the same causes of error—the same prepossession, partiality, and enthusiasm—would be found in the constitution of Phrenology to have vitiated the observation of the fundamental facts, which, in their reasonings on its consequences, were displayed by the Phrenologists in the chimerical superstructure reared on so incongruous a basis. I did not attempt to show that Phrenology was false, because it immediately involved the conclusions of fatalism, materialism, and atheism, but that, as the Phrenologists were so egregiously deceived in maintaining that their doctrine supplied the most secure foundation of moral liberty, of the immateriality of mind, and of religion, natural and revealed, we were entitled to infer the probability, that they were equally deluded in the slippery task of authenticating and applying the phenomena which condition or constitute the theory itself. It was only subsequently to the reading of this paper, that I satisfied myself that this analogical inference was correct; and in the second paper I applied myself exclusively to show, that the determining and integral facts of Phrenology, when not merely selected specialties, were either *petitory* or *false*.

Petitory—Because Phrenology assumes the very facts, of whose existence, otherwise established, it could only, as a legitimate hypothesis, attempt to explain the law. Professing to demonstrate

as its law the co-relation between the two phenomena of *mental manifestation* and *cerebral development*, phenomena which were necessarily supposed cognizable in themselves; Phrenology is compelled, however, to resort to sundry subsidiary hypotheses in order to evince the *reality* of the latter fact, and is only able to equalize them with each other by postulating, in its definition of *development*, the occult quality of *internal structure*, an exploded theory of the *temperaments*, and a baseless distinction between *activity* and *power*. And even in so far as the more discoverable phenomenon of *Size* was allowed to constitute development, though their doctrine was solely a *doctrine of proportion*, the Phrenologists, vacillating at their convenience between the different *standards* of *absolute*, of *relative*, and even of *topical* size, have, to this hour, never yet established on any of these standards a fixed *scale*, in reference to which alone could their statements of comparison be held significant of aught but the fancy of the individual manipulator.

False—Because the anatomical positions which Phrenology assumes, either as the conditions of its proof, or as the most certain of its constitutive elements, were, as far as I could bring these to examination, not only untrue, but even at the greatest possible distance from the truth. Resolved to take nothing upon trust, I had (during the interval between my two papers) looked with some attention both at nature and at books; and, notwithstanding my anticipation, was astonished to find that many facts, lying at the root of the hypothesis, and which the Phrenologists coolly postulated as indisputable, were diametrically opposed to all that nature manifested, and other physiologists had observed. As a merely casual investigator, I was certainly glad to find that my own observations were, in general, confirmed by the concurrent testimony of all impartial anatomists; but I never allowed any weight of authority to supersede a personal examination of the fact. On several points I could appeal to natural appearances alone, and overlooked many statements of the most accurate inquirers, because unable to verify them by any adequate induction of my own.

“We go not to books,” says Dr Spurzheim, “for support, but with our five senses to nature; and no king nor emperor, no Hamilton, no Gall, no Spurzheim, can determine what nature will do.” No one can assuredly reproach the founders of the new doctrine with any dependence upon authority; but as all anatomists must be wrong if they are right, and as the fate of their hypothesis must hinge on the correctness of its authors, the question is of some interest:—Did Drs Gall and Spurzheim believe always what they perceived in nature, or did they not often perceive only what they were predisposed to believe? To bring this problem to a final issue appeared, however, a matter of no inconsiderable difficulty. These two theorists, as I have elsewhere observed, had for thirty years

been advancing certain statements in regard to the anatomy of the cranium and brain. These statements, in their truth or falsehood, involved the possibility or impossibility of the new opinion; and these statements were, in many instances, precisely the reverse of all that every other anatomist maintained. When the attention of those most competent to judge was occasionally attracted to the theory, the truth of these novelties was of course pre-emptorily denied. But the confidence with which its authors always asserted the superior accuracy of their observations,—the apparent impossibility of being deceived in what were at once facts of vital importance to the system, and, in most instances, of easy discovery, if not of obtrusive notoriety,—and, in fine, the unacquaintance too generally prevalent upon subjects of this nature,—all contributed to obtain for the fashionable doctrine a crowd of converts, zealous, if not always intelligent, in their faith. *Argumentum pessimi turba*. But if the contradictions of the most illustrious anatomists were either wholly overlooked, or thought sufficiently refuted by the re-assertion of the litigious point by some partial adherent of the system, how was I, a mere anatomical interloper, to hope that any statements of mine, however articulate and correct, should meet with that attention which had not been obtained by the weighty authorities of Blumenbach, Hufeland, Wenzel, Monro, Magendie, Dumoulines, Rudolphi, Flourens, &c.? Confident, however, in the strength of my position, I was persuaded that I had only to constrain the Phrenologists to interrogate nature and to proclaim her answers, to prove, even to themselves, the fallacy of their best-established observations; while a concession of facts extorted from them, in opposition to all their previous asseverations, would at once excite the curiosity of the public, and subvert for ever all confidence in the credit of phrenological experience. This I hoped to accomplish by a mutual reference to umpires; as I was sure that my opponents had, like myself, no other end than the discovery and propagation of the truth. I accordingly proposed to Mr George Combe, (the most distinguished of our Scottish Phrenologists, and who had done me the honour of proposing to reply to my objections against the doctrine he so ably supported,) to bring the whole question to a decision of anatomical fact. “So long,” I observed, “as Phrenology is the comparison of two hypothetical quantities,—a science of *proportion*—without a determinate *standard* and an acknowledged *scale*,—so long as it can be maintained, that its facts, even if not assumptive, constitute only a partial induction, which can never represent the universality of nature, I deem it idle to dispute about the applications of a law which defines no phenomena, and the truth of an hypothesis which has no legal constitution. But let us take, not the hypothesis in itself, but the foundations on which it rests,—let us take facts, not of occult proportion, but of palpable existence,—facts which prove, not

“ the *probability*, but the *possibility* of the doctrine,—and, on
 “ the truth or falsehood of the phrenological statements in re-
 “ gard to these, I am content to join issue in regard to the cre-
 “ dibility of the opinion, and to the confidence that ought to be
 “ accorded to its founders. In making this proposal, I concede
 “ every thing, and ask nothing in return. I agree to stake the
 “ decision of the controversy on your proving, not the *truth*, but
 “ the mere *possibility* of the doctrine. In refuting this possibi-
 “ lity, I bind myself to prove, not *simply*, that the assertions of
 “ Drs Gall and Spurzheim, in regard to the fundamental condi-
 “ tions of their hypothesis, are *false*, but that they are *diametri-
 “ cally opposite to the truth*. My proof shall rest, not only on the
 “ concurrent testimony of anatomists, but on the notorious evi-
 “ dence of an extensive induction of crania, previously purged
 “ on any general principle you may propose; and I am con-
 “ tented to leave to yourself the nomination of the umpires by
 “ whom the result shall be determined.”

Mr Combe, as was to be expected, frankly accepted the conditions, but declined nominating the umpires, who were accordingly appointed in the usual way. Dr Scott was named by Mr Combe, Professor Christison by me, and Mr Syme by the two other arbiters. I proposed for their determination the following conflicting propositions:—

I. *Phrenological Proposition*.—In old age the walls of the skull increase in thickness, and the cases in which the cranial bones wax thinner, as the subject declines in life, constitute exceptions from the general rule.

Counter Proposition.—The rule is here the exception, and the exception the rule.

II. *Phrenological Proposition*.—(Maintained by Spurzheim)—Young and adult persons have no cavities between the tables of the frontal bone; and the real frontal sinuses occur only in old persons, or after chronic insanity.

Counter Proposition.—The absence of the sinus in young and adult subjects, so far from constituting the universal law, is a rare, if not a doubtful, anomaly.

III. *Phrenological Proposition*.—Before the age of twelve or fourteen, the frontal sinus never, or almost never, exists.

Counter Proposition.—Before this age the sinus is frequently, if not generally, present.

IV. *Phrenological Proposition*.—The frontal sinuses are rarely to be found in women.

Counter Propositions.—1. These cavities are rarely absent in the female cranium. 2. Even more rarely than in the male.

V. *Phrenological Proposition*.—The sinus, when present, betrays its existence and extent by an irregular elevation of a peculiar character, constituting a bony crest or ridge, or blister, and is distinguished from the forms under which the phrenological organs are developed.

Counter Proposition.—There is no correlation between the existence and extent of a sinus, and the existence and extent of any such elevation, whether superciliary or glabellar:—either may be present without the other; and when both are co-existent, they hold no reciprocal proportion in their dimensions, or in their figure. Neither is there any form of cranial development which excludes the subjacent presence of a sinus.

VI. *Phrenological Proposition.*—In ordinary cases the sinus only extends an obstacle over two organs (Size and Lower Individuality), or, at most, partially affects a third (Locality).

Counter Proposition.—In very ordinary cases the sinus covers a greatly larger proportion of the supposed organs, and frequently affects more than a third part of the whole thirty-six.

VII. *Phrenological Proposition.*—The opposite sides of the cranium are in general commensurate; and, when not symmetrical, this inequality is the effect, and consequently the index of disease in the brain.

Counter Proposition.—The opposite sides of the cranium are very rarely symmetrical, very frequently widely different in development; and this disproportion is seldom the consequence of any morbid affection.

VIII. *Phrenological Proposition.*—The convolutions of the opposite hemispheres of the human brain are almost perfectly symmetrical.

Counter Proposition.—Neither on the upper nor on the under surface of the brain, and in no age or sex of the human subject, have the convolutions of the two hemispheres any reciprocal symmetry, but differ remarkably from each other in figure, connexion, situation, length, and breadth.

Note.—In the brain of the horse, which is adduced by Gall as an example of an *absolutely perfect* symmetry, the cerebral convolutions are also widely dissimilar.

IX. *Phrenological Proposition.*—The whole brain (encephalon) does not in general attain its full complement of size till thirty, and in many individuals not till forty years of age.

Counter Proposition.—From the age of seven the cerebral mass gains little or nothing in volume; and the increase of the head about the time of puberty, and afterwards, is determined by the greater development of the cranial bones, muscles, integuments, and hair.

X. *Phrenological Proposition.*—The cerebellum only attains its full relative proportion to the *brain proper*, from the age of eighteen to twenty-six.

Counter Proposition.—The cerebellum reaches this proportion many years before puberty, and even probably as early as three years old.

XI. *Phrenological Proposition.*—In male animals the cerebellum, proportionally even to their larger brain, is generally greater than the cerebellum of females of the same kind; and

this difference is still more decided in man than in the other species of animals.

Counter Proposition.—The cerebellum of women (and the analogy probably holds true throughout nature) is, on an average, and *in proportion* to their smaller heads, much larger than the cerebellum of men.

XII. *Phrenological Proposition.*—As the female cerebellum, even in proportion to a lesser brain, is relatively smaller than the male, the ratio of its inferiority in size will be greatly increased, if the two parts are compared directly with each other, according to their absolute proportions.

Counter Proposition.—Though on a smaller head, the cerebellum of women (and probably the same is true of other females, as compared with other males) is, on the average, *absolutely* larger than that of men.

XIII. *Phrenological Proposition.*—In women, as more frequently actuated by a strong natural propensity to devotion, the organ of Theosophy or Veneration is in general more largely developed than in men.

Counter Proposition.—The manifestation cannot be denied; but those dimensions of the head which determine the size of the supposed organ of religious sentiment are proportionally, even to the smaller size of the female head, much less, on the average, in women than in men.

XIV. *Phrenological Proposition.*—As the “knowing faculties” are in full energy at a much earlier period than the “reflective,” the lower region of the brow, along which the organs of the former are distributed, is found more largely developed in children than the superior parts of the forehead, in which are situated the organs of the latter.

Counter Proposition.—The manifestation is notorious; but the heads of children are peculiarly and remarkably distinguished from those of adults, by the greater development of the higher region of the brow, as compared with the smaller development of the lower.

In all of these, the Phrenological position (with, perhaps, a single exception) is to be found, virtually or in terms, in the writings of the two fathers of Phrenology. The seventh was at least maintained by Mr Combe.

The decision of several of these points requires the dissection, in the recent subject, of a considerable number of male and female, of young and adult heads; an induction of this kind may consequently require some delay. The consideration of those propositions which require only an examination of a sufficient complement of crania, and which can therefore be at all times rapidly and easily accomplished, the umpires have agreed to postpone. These, however, involve at once the most numerous, and the most important of the facts at issue; and nothing can be easier or more opportune, than for Dr Spurzheim to mani-

fest, if that be possible, the futility of my counter propositions, the confirmation of which would completely eviscerate his system. It fortunately also happens, that no difficulty can occur in determining the crania, on which the experiment should be made. There is extant, in the Royal Museum of Natural History, a series of fifty skulls from the catacombs of Paris, selected in illustration of Phrenology, numbered, the sex discriminated, and the developments noted, *by Dr Spurzheim himself*. These cannot, therefore, by any, far less by Dr Spurzheim, be regarded as unfairly adduced in opposition to the doctrine in support of which they were procured. On these, though far from exhibiting an average favourable to my positions, I am content to rest the decision of any single brain. By them alone the *second, fourth, fifth, sixth, eleven, twelfth, and thirteenth* propositions can be satisfactorily determined. The *eighth* can be decided by the dissection of any single brain. If that were thought expedient, the *first, ninth, and tenth* might be brought to proof, by examining the crania in the different anatomical collections; and the *fourteenth*, by measuring the heads of any twenty adults, and the heads of the same number of children, in one of the junior classes of a parish-school. I remain, Sir, your most obedient servant,

W. HAMILTON.

16, King Street, 19th January, 1828.

LETTER FROM DR SPURZHEIM.

To the Editor of the Caledonian Mercury.

SIR,—Your paper of Monday last contains a long communication from Sir William Hamilton, in answer to the remarks on his proceedings concerning Phrenology, as published in your paper on a former occasion. I beg that you will oblige me by inserting in your next number, if convenient, the following reply:—

Sir William is mistaken in thinking that I complained of his acting unfairly. He may learn from his friends amongst my numerous auditors, that I never used a single expression offensive to his personal character; that, on the contrary, in my first lecture I gave him credit for his acting openly, and compared his doing so with the concealed conduct of anonymous reviewers. As his motto, *Res non verba quæso*, has been mine long ago, I ask him at *once*, where in my works he read that, *1st*, “The sinus, when present, betrays its existence and extent by “an irregular elevation of a peculiar character constituting a “bony crest, or ridge, or blister?” (See his Vth Phrenological Proposition.)—*2d*, “That the opposite sides of the cranium are “in general commensurate; and, when not symmetrical, this ir-

“regularity is the effect, and consequently the index of disease in the brain?” (See his VIIth Phrenological Proposition.)—And, 3d, that “The lower region of the brow is found more largely developed in children than the superior parts of the forehead?” (See his XIVth Phrenological Proposition.) I declare these three statements to be inexact, and deny them to be my opinions.

With respect to the greater number of his counter propositions, Sir William refers the public and myself to fifty skulls in the Museum of Natural History at Edinburgh. As he styles Dr Gall and myself theorists, and accuses us as being “the most worthless of observers,” your readers may be glad to become acquainted with Sir William’s accuracy in observing, and his close reasoning in drawing inferences from his observations. He comes forward with fifty skulls of persons of whom he knows neither age nor condition of life, neither character nor talent. These skulls were picked out *by myself* in the catacombs of Paris, among thousands of skulls, on account of their singular shapes, in order to send them to the Phrenologists of Edinburgh, as proofs against the Edinburgh Review, which had affirmed that such different forms of heads as we speak of are not to be found in nature, and never existed. They were forwarded by Mr Royer of the Jardin du Roi of Paris, to this city, with this intention, and are evidently *anomalies*. It is farther known to a certainty, that an immense quantity of bones was carried to the catacombs of Paris from the church-yard *Des Innocens*, when it was changed into a market-place. It is also certain that in the church-yard *Des Innocens*, the very *canaille* of Paris, and the lower classes of the *quartiers de St Denis* and *de St Martin*, were buried. Now, I leave it to the public to decide on the merit of Sir William’s accuracy in observing, and of the fairness of his inferences, when he takes singular, and several of them monstrous configurations, as types of female heads, whilst some of them were perhaps *poissardes*, or even prostitutes. If Sir William has no facility of collecting skulls of boys and girls, men and women, why does he not compare living persons, in order to convince himself, that among the native females in all good families in Edinburgh, there is probably not one single specimen of head similar to those skulls which he holds out as standard forms of females, and on which “he is content to rest the decision of the contested points?” If this be accuracy of observation, I confess it is beyond my power of comprehension.

I also wish to Sir William success in proving to the medical world, that “the cerebellum reaches its full relative proportion to the brain, probably at the age of three years (see his Xth Counter Proposition); that the cerebellum of women is, on an average, and in proportion to their smaller heads, much larger than the cerebellum of men; and that this ana-

“logy probably holds true throughout nature (his XIth Counter Proposition); that though in a smaller head the cerebellum of women is, on an average, absolutely larger than that of men, and that probably the same is true of other females as compared with other males (his XIIth Counter Proposition); that from the age of seven the cerebral mass gains little or nothing in volume, and that the increase of the head, about the time of puberty and afterwards, is determined by the greater development of the cranial bones, muscles, integuments, and hair (his IXth Counter Proposition); and that in very ordinary cases the sinus covers the greatly larger proportion of the supposed organs, and *frequently* affects more than a third of the thirty-six,” (his VIth Counter Proposition.) If Sir William can demonstrate these his assertions, his name will undoubtedly rank very high among those of illustrious anatomists. I assure the learned gentleman, that I am no less anxious than he is to derive my knowledge from nature, and that I shall always be ready to learn from him, when he can show me in nature what I did not know. But, after all, is he not premature in his conclusions, when, by his own showing, the data which he assumes are still unsupported by any existing evidence? Should he not have had his supposed facts established incontrovertibly before he appeared as a champion? Finally, coming to the conclusion, I beg your readers to remark, that the fifty skulls in the Museum of Natural History do not furnish satisfactory proof to determine Sir William’s *second, fourth, fifth, sixth, eleventh, twelfth, and thirteenth* Counter Propositions; that his 8th Phrenological Proposition is not to be found in any of my works; that his 9th and 10th Counter Propositions cannot be proved in comparing the different individuals with each other; but that the same individual must be observed at three years, at seven years, and in adult age; and that, as stated above, his 14th Phrenological Proposition is merely assumed.

I heartily invite Sir William Hamilton to attend my lectures and witness my demonstrations, and then he will prosecute the inquiry with more satisfaction to himself, and benefit to Phrenology. Meanwhile, I repeat the offer made in Mr Combe’s letter of 22d November, to meet him before as many judges as he chooses to bring forward—to consider all the evidence he may be pleased to adduce in support of his assertions—and to answer his objections. I am, Sir, your very humble servant,

J. SPURZHEIM, M. D.

Edinburgh, 23d January, 1828.

LETTER FROM MR GEORGE COMBE.

To the Editor of the Caledonian Mercury.

SIR,—In your paper of the 21st January, Sir William Hamilton has published a statement regarding the phrenological reference lately entered into between him and me, on which I beg leave to offer a few remarks.

On two several occasions Sir William read essays in opposition to Phrenology before the Royal Society of Edinburgh, in the knowledge that the laws of that Society prohibited not only visitors, but even members, from entering into controversial debate; so that he was in safety to make whatever assertions, and draw whatever inferences, were most agreeable to himself, without fear of contradiction on the part of the Phrenologists. He availed himself of this advantage; and, so far as boldness of assertion and latitude of inference could refute facts, and overcome legitimate reasoning, he appeared to triumph over Phrenology. He was called upon during a period of many months, both by the conductors of the Phrenological Journal and by myself, to publish his Essays, but in vain. In April, 1827, his benevolence, co-operating with his love of truth, prompted him to convert his essays into a popular lecture against Phrenology, which he delivered for the benefit of the distressed operatives, within the College, to a numerous audience of ladies and gentlemen. It again happened that, when I offered to reply to him on the spot, at the termination of his lecture, he discovered that the rules of the University excluded all who were not invested with an academical gown from opening their lips within its walls. I then challenged him to transfer his lecture to the Assembly Rooms; but this also he discovered was not consistent with an academical etiquette. I therefore repeated the call for publication, and in the interim gave a lecture on Phrenology in the Assembly Rooms, in answer to such of his objections as I had been able to comprehend. Previous to this time, Sir William Hamilton had assigned want of leisure as the chief reason for deferring his publication; but, aware of the impression made by the lecture in the Assembly Rooms, which was attended by nearly six hundred individuals, he *thereafter* produced a long series of antiphrenological Propositions, and offered to refer them to umpires. Unwilling to allow any opportunity of meeting him to escape, I acceded to this proposal; but, in a letter addressed to him, dated 9th May, I repeated what had previously been stated, that “there are at least a hundred thousand educated men in Britain, every way qualified to judge of the points in dispute, merely by reading your statements and my answers to them; and with such a body of umpires to appeal to, a public discussion appears greatly

“preferable” to a private reference. He, however, insisted on the private arbitration.

Accordingly, in July, 1827, the umpires met, and after two long discussions about the terms of the propositions and answers* to be submitted to judgment, they proceeded to consideration of the evidence. Sir William Hamilton was the attacking party, and, being called upon for proof of his assertions, produced twelve or thirteen skulls, part of a larger number selected by Dr Spurzheim from the catacombs at Paris, and transmitted to the College Museum of Edinburgh. I stated to the umpires that these skulls had been selected, not as specimens of average human crania, but expressly as instances of extreme development of particular organs, intended for the purpose of showing the wide variety of form in which the human skull existed in nature, the assertions of Drs Gall and Spurzheim on this point having been confidently denied by the Edinburgh Review. Further, I remarked that the age, and, in some instances, the sex of the individuals were doubtful,—and therefore objected to their being received as proper evidence of Sir William Hamilton’s propositions. After hearing Sir William at great length on the subject, the umpires unanimously set aside the whole skulls produced by him, as incompetent to support his propositions.

The next meeting of the umpires was held in November last; but Sir William was still unfurnished with any new or better specimens, and in consequence the judges condescended to take upon themselves the duty of doing what he ought to have done before he made a single assertion on the subject, namely, performing a course of dissections, in which the age, sex, and disease of the individuals could be perfectly ascertained. Since this resolution was adopted, they have examined one or two cases, and it may require years before they find a sufficient number to enable them to arrive at any general result. And even after they shall have come to a conclusion, their decision will still be that of only three individuals; and, however distinguished they may be for talents and attainments, the philosophical world will be as little disposed to bow implicitly to their award as to the assertions of Sir William Hamilton himself. With great deference, therefore, the proposal to constitute the medical men of Britain the umpires was rational and philosophical, and ought at once to have been adopted.

In the letter to Dr A. Combe, dated 1st May, 1827, published in the Phrenological Journal, Sir William Hamilton writes thus:

* The answers to Sir William Hamilton’s propositions, submitted by me to the umpires, were the same as those stated in Dr Spurzheim’s letter to you of this date; and, in particular, I denied that it had been any doctrine of mine that irregularity in the opposite sides of the cranium “is the effect, and consequently the index, of the disease in the brain.”

—“ I have only to say, that Gall and Spurzheim are the only “ authentic representatives of their own doctrine,” and that “ Gall and Spurzheim are the only authors I propose to refute,” —and he frequently repeated this statement on subsequent occasions. On 22d November, therefore, when I had ascertained that Dr Spurzheim intended to lecture in Edinburgh, I wrote to Sir William, and proposed that he should meet Dr S. on his arrival in January, 1828, and proceed with him to a final termination of the points in dispute; *but Sir William declined this proposal.*

Here I beg leave to observe, 1st, That the very offer by Sir William of a private reference to umpires, in place of a public discussion, indicated a consciousness, on his part, that he was not in possession of evidence sufficient to make good his assertions; 2dly, That the rejection by the umpires of the whole evidence produced by him, as inadequate to support his propositions, positively establishes, that in the Royal Society, and in his popular lecture, he indulged in assertions of which he possessed no legitimate proof; 3dly, That his refusal to meet Dr Spurzheim, and conclude the arbitration with him, betrayed a decided want of confidence in the positions which he had undertaken to defend; and, finally, that if he shall now reject the invitation made to him by Dr Spurzheim to attend his lectures, just about to commence, on the anatomy, physiology, and pathology of the brain, so as to learn what Phrenology really is, of which, up to this hour, he appears to be imperfectly informed; and if he shall fail to accept Dr Spurzheim's challenge to bring forward evidence of his objections during this gentleman's stay in Edinburgh, which will be prolonged for a month, the public will draw their own conclusions regarding the foundation of his opinion, and the reasonableness of his asking the umpires and myself to proceed farther in the reference, at a great sacrifice both of time and labour.

It is amusing, as well as edifying, to compare the promise made by Sir William Hamilton, in his letters of April and May, published in the Phrenological Journal, No 15, with his subsequent achievements. He says, “ I bind myself to PROVE *not simply*, that the assertions of Drs Gall and Spurzheim, in regard to the fundamental conditions of their hypotheses, are *false*, but that they are *diametrically opposite to the truth.* “ My proof shall rest not only on the concurrent testimony of “ anatomists, but on the notorious evidence of an extensive induction of crania, previously purged on any general principle “ you may propose.” Again he says, “ I am PREPARED, admitting even the preliminary possibility of the hypothesis, to “ demonstrate the falsehood of every integral position it involves, which I have been able to bring to proof;” and farther, “ I cannot entertain a doubt, but that the assertions of Gall

“ and Spurzheim are, in regard even to the plainest facts of
 “ *cranial* anatomy, assuredly the reverse of truth, as is their
 “ opinion in *cerebral* anatomy, that the cortical matter precedes
 “ and generates the medullary substance. In these circum-
 “ stances, it is idle to disguise the inevitable alternative; *either*
 “ Drs Gall and Spurzheim are the most worthless observers, or
 “ my counter statements are a product of the most exquisite
 “ delusion that presumption ever engendered upon ignorance.”
 As Sir William has hitherto adduced no proof of his assertions,
 I leave your readers to decide whether Drs Gall and Spurzheim
 or he are most in danger of suffering from the application of the
 foregoing alternatives.—I am, Sir, your very obedient servant,
 GEO. COMBE.

25, Northumberland Street, 23d January, 1828.

To the Editor of the Caledonian Mercury.

SIR,—My letter of the 19th has drawn forth replies both from
 Dr Spurzheim and Mr Combe.

In reference to the first, I am happy to find that the allusions
 I felt myself compelled to notice are to be attributed not to Dr
 Spurzheim, but to an erroneous report of his lectures; and what-
 ever I may say of that gentleman's opinions, I hope I shall al-
 ways be found to speak of himself with perfect courtesy and re-
 spect. Dr Spurzheim is not correct when he says that I accuse
 him and Gall of being “ the most worthless of observers.”

One proposition (viii.) Dr Spurzheim says is not to be found
 in his works. Does he mean to hold against Gall, and with all
 other anatomists, that the convolutions of the opposite hemi-
 spheres are not symmetrical? This would be an important ad-
 mission.

Three phrenological propositions (v. vi. and xiv.) Dr Spurz-
 heim declares to be incorrect in themselves, denies them as his
 opinions, and asks in what part of *his* works they are contained.
 To my accuracy it is indifferent whether they be held by Dr
 Spurzheim, if they be maintained by Dr Gall; but, in point of
 fact, all three, with the exception of the *seventh*, which I only
 asserted to be held by Mr Combe, are “ virtually, or in terms,”
 maintained by Dr Spurzheim. Even the *seventh* is apparently
 involved in the *eighth*, as it seems difficult to conceive how the
 convolutions of the hemispheres of the brain should be symme-
 trical, and yet the opposite sides of the cranium be unequally
 developed.

The *fifth* (“ *that the sinus when present betrays its existence
 “ and extent by an irregular elevation of a peculiar character,
 “ constituting a bony crest, or ridge, or blister, and is distin-*

“*guished from the forms under which the phrenological organs are developed;*”) this proposition is, in substance, to be found repeatedly in Dr Spurzheim’s writings. Speaking of the objection of the frontal sinus as affecting Locality, he says, “the development of this organ and that of the frontal sinuses present quite different forms; the frontal sinuses only form a bony crest, while the isolated protuberance, indicating the particular development of the organ of Space, is round and large.”—(*Phys. System*, p. 236.) In his “*Phrenology*,” the development of Locality is also, after Gall, said to be situated higher in the forehead (p. 116). In all these places (and in his “*Examination of Objections*,” &c. p. 79,) the sinus and the bony crest are used by Dr Spurzheim with Gall as correlative and convertible terms; and the latter explains the formation of the cavity, by saying, that in subjects “not very old” the external plate separates and bulges out, forming two very sensible elevations, which he afterwards describes as *irregular*, in contradistinction to the development of Locality.—(*Physiol. III.* p. 43.) The term “blister” was added to include Mr Combe’s description. How the proposition could have been generalized more correctly I am yet to be informed.

In the *fourteenth* proposition, the clause, that “the lower region of the brow is more largely developed in children than the superior part of the forehead,” &c. is, *I re-affirm*, virtually or expressly asserted by Dr Spurzheim and all the Phrenologists. “The manifestations of the mental faculties,” to use Dr Spurzheim’s language, “always follow the growth of the cerebral organs.” The “knowing faculties” are, and must be admitted by the Phrenologists to be manifested, in full vigour, long before the “reflective;” consequently the development of the former precedes the development of the latter. “Eventuality” is even stated by Dr Spurzheim himself to be “largely developed in children.” That the proposition in question is involved as an elementary fact of Phrenology, is proved, indeed, by all the writings of the school. Hear Dr Combe. “It is an undisputed truth, that the various mental powers of man appear in succession, and, as a general rule, that the reflecting or reasoning faculties are those which arrive latest at perfection. In the child the powers of observing the existence and qualities of external objects arrive much sooner at their maturity than the reasoning faculties. Daily observation shows that the brain undergoes a corresponding change.” “*In childhood, the middle and lower part of the forehead generally predominates; in later life the upper and lateral parts become more prominent.*”—(*Phren. Transact.* p. 414.)

It is sufficiently irksome to be compelled to reply to all this.

I now proceed to consider the more curious parts of the Doctor’s letter, in which he struggles hard to escape from the suicidal confutation afforded by his own collection of crania. In

this collection the skulls are said to be "singular in their shapes," and to be "evidently anomalies." With the exception of one or two unimportant examples, this I positively deny, and I would willingly refer the point to any anatomist. In the present case, however, that the skulls were chosen to show the development of the different organs in excess and in defect, is of no importance, as the average is sufficiently large, and as the developments counterbalance each other.

Dr Spurzheim argues, that a comparison of the male and female skulls in this collection would not be decisive of the relative size of that viscus in the sexes, because some of the women "were perhaps *poissardes*, or even prostitutes." Now the Doctor has evidently no right to presume of the women what I may not with equal justice do of the men. All general argument on this point, is, however, in this instance fortunately superseded, as the developments, whether of excess or deficiency, have been all carefully marked by Dr Spurzheim himself; so that we are able to determine, on his own authority, what is the preponderance of extraordinary development in either scale. And to put an end to all cavil, as we are generally able at a game of facts with the Phrenologists to make them a present of a few points, and still to win easily at last, *I will allow all the male crania in which their organ No 1 is marked as large to be arrayed against me, and I will further reject all the female skulls in which this organ is similarly noted.* I have, however, no particular attachment to these skulls, and only adduced them as evidently demonstrating the perfect impartiality of my induction. But of this afterwards.

I am amused with the Doctor's offer to try the question of the size of the cerebellum in the sexes by experiment on "*the native females of the good families in Edinburgh.*" I shall certainly have no objection to the proof, if Dr Spurzheim can persuade his female auditors to submit.

But if, under any circumstances, this collection could be held not to afford a fair induction of the phrenological organs, it would be the grossest absurdity to suppose it incompetent to decide the questions in relation to the frontal sinus. This I defy the Phrenologists to find any anatomist to assert. If the series exhibits only two or three crania of old persons—if not a skull is to be found without a sinus—and if the smallest sinuses are discovered in the oldest subjects—it surely subverts the doctrine of Dr Spurzheim, that "*these cavities occur only in old persons, or after chronic insanity,*" to say nothing of the assertion of Gall and others, that they "*are rarely to be found in women.*" If Dr Spurzheim has marked *three only* of these crania as exhibiting the frontal sinuses, in which, however, the internal vacuity holds no relation to the external ridge, the phrenological criterion of their presence is shown to be absurd. And if the sinus is found frequently to affect from *six to sixteen* organs, the

assertion of Phrenologists, that it covers, in ordinary cases, only *two*, is shown to be equally unfounded.

Surely Dr Spurzheim and Mr Combe do not seriously suppose that my induction is limited to these French crania. They form a few only of those I have examined; and I should have equal confidence in my conclusions were they annihilated. I only prize them as a convenient, accessible, and manifestly impartial, evidence in my favour. But all unselected skulls, as all impartial anatomists, are on my side.

I cannot accept Dr Spurzheim's hypothetical felicitations on the novelty of my anatomical discoveries; for, unfortunately for my originality, with the exception of the eleventh and twelfth counter propositions, the facts to which he alludes have been fully established, through a large and most elaborate induction, by the brothers Wenzel. These anatomists, whom the late Dr John Gordon (a truly competent judge) has justly praised in his *System of Anatomy*, as the most original and accurate observers on the brain who have appeared for more than a century, have proved that this viscus attains its full complement about seven years old, and that the relative proportions of the brain and cerebellum are the same from the age of three. The articulate and minute weighings and measurements of those physiologists, confirmed by the independent observations of Soemmering, Ackermann, Rudolphi, &c., (to say nothing of the experience of hatters, adduced by Dr Milligan, which proves that the *head* does not increase in size from seven years old till twelve, at which period it is well known that the skull, cranial integuments, and hair, begin to wax much thicker)—have only been refuted on the part of the Phrenologists by vague and unauthenticated assertion. My own measurements of young crania confirm the statements of the anatomists.

I cannot comprehend how an attendance upon Dr Spurzheim's lectures can have any influence on the present discussion. As a matter of some interest, I meant to have witnessed Dr Spurzheim's dissection of the brain, which I have always heard was performed with the greatest dexterity; and, as that gentleman has politely sent me a ticket, I propose attending these lectures when not otherwise necessarily engaged. But as the only point at issue between us, which can be determined by a limited demonstration, is the symmetry of the opposite convolutions; and as that, however vital a point, is now either given up or not supported by Dr Spurzheim, it cannot be supposed that any admiration I may feel of Dr Spurzheim, in his illustration of matters irrelevant to Phrenology, can have any influence in persuading me of the truth of facts which *I know*, from the most accurate observation, to be false. It is idle also in my opponents to talk of my ignorance of their science, while unable to adduce a single specimen of misrepresentation; and it is still more absurd to recommend me to attend their lectures, "*to learn what*

"Phrenology really is," seeing that on this point the teachers themselves are by the ears. Are not the faithful scandalized to see Dr Gall anathematizing the heretical novelties of Spurzheim, and Dr Spurzheim ridiculing Gall's antiquated attachment to the bumps? Does not Mr Combe acknowledge Dr Spurzheim to be wrong, and Dr Spurzheim combat the theories of Mr Combe? Have the professors also an esoteric doctrine only orally communicated?

I now proceed to Mr Combe. I cannot afford time to refute this gentleman's history of my relations with Phrenology. I can only say I am sorry that any irritation should have so blinded his better judgment, as to stoop to such statements and insinuations as he has ventured to indulge in. The whole scope of this perverse narrative is to impress on the public that I have no confidence in my facts. This attempt is not a little amusing, at the very moment when I am offering to prove the most important positions of Phrenology to be ludicrously false, and when the Phrenologists are writhing to escape from the cruel refutation of their system furnished by their own collections. It is only a short time since I was accused of reckless temerity and overweening confidence by the Phrenological Journal; and Mr Combe has always found me any thing but diffident of my induction. He has not stated in his narrative, nay, he has insinuated the contrary, that I promptly acquiesced, though in violation even of academical decorum, in his desire to be permitted to make observations on my argument at the conclusion of my lecture, and that *he himself subsequently contrived to frustrate my intention*. He does not state that every facility was offered him to examine the crania on which I was to found my public demonstration, and that he was pressed and goaded, nay, even taunted into an acceptance of the same specimens for the use of his own lecture in the Assembly Rooms. What in fact had I to fear from an appeal to nature? All anatomical testimony is on my side, and the phrenological propositions are so untenable, that I *defy and challenge* my opponents to produce a single *practical anatomist* who will consent to stake his reputation on their truth. The question is, in fact, already decided with men of science; and even the great world is beginning to suspect the baseless nature of the fabric with which it has been so long amused.

I shall only notice one or two of the principal misrepresentations.

Some time ago, Mr Combe proposed to me *to devolve the part of defender in the arbitration* on Dr Spurzheim. This I declined, because the end of the reference was not likely to be accomplished if I lost Mr Combe as an opponent, since the facts could not all be decided during the temporary residence of Dr Spurzheim in this city. I felt also, I acknowledge, some dislike at being placed in such strong and permanent collision with a man

so completely identified with the system I opposed; I never, however, as Mr Combe ventures to state, refused to meet Dr Spurzheim, or even dreamt that he might not attend the meetings of the umpires, at one of which he was actually present.

In regard to Mr Combe's most erroneous assertion, that the arbiters decided against the general competency of Dr Spurzheim's crania, I state the following facts:—At the second meeting of the umpires, after a tedious preliminary discussion on the adjustment of the issues, it was proposed, before separating, to proceed to the consideration of one of the propositions; and the fourth was chosen in regard to their rare occurrence in the female cranium. I produced the skulls marked as women in Dr Spurzheim's collection. Mr Combe made no previous objection to this production; and he could not have learnt any thing of their nature from Dr Spurzheim; for he stated, that he did not know on any better authority than in my report, that they were marked by that gentleman. He agreed to ascertain the fact from the doctor himself. When produced, Mr Combe made sundry objections, that the age could not certainly be known; and even professed to doubt the accuracy of the sexual discrimination. Some loose conversation passed; and it was agreed by all, that the *umpires* should endeavour to procure crania of whose age and sex no doubt could be entertained. The arbiters came to no general decision in regard either to the thirteen skulls before them, or to the others which they never saw. I am certain that no minute of any decision took place; and there was only an agreement that, on the special point under consideration, it was better, in the first place, to procure the evidence most satisfactory to all. I was perfectly contented with this. From an induction of several hundred crania, I did not believe that there would be found in Edinburgh a single example of a European female skull without the sinus; and I was far better pleased to have Dr Spurzheim's competency as a craniological discriminator redargued by his own disciple, than the unimportant evidence of these crania, on this point, unconditionally accepted.

Mr Combe's extraordinary statement, that at the last meeting of the umpires in November (called by himself in the Phrenological Hall), I was still unfurnished with skulls, is totally without foundation, as is his insinuation, that the protraction of the arbitration was occasioned by any delay on my part in producing evidence to the umpires.

In a few days, though I have no hopes of ever satisfying the Phrenologists, I am confident of being able to bring the truth of their doctrine to a decision that will satisfy all impartial judges.—I remain, Sir, your most obedient servant,

W. HAMILTON.

LETTER FROM DR SPURZHEIM.

To the Editor of the Caledonian Mercury.

SIR,—Be pleased to communicate to your readers my final answer to Sir William Hamilton. I am confident that a newspaper correspondence will not decide about the truth or falsehood of Phrenology. Further, *Res non verba quæso*. What is, is; and it is as it is, whatever Dr Gall, myself, Mr Combe, Sir William Hamilton, or any other friend or enemy of Phrenology, may affirm or deny. I declared three of Sir William Hamilton's propositions to be inexact, and asked him where in my works he had read them? Why, *instead of simply copying the passages*, does he confine himself to informing your readers that my assertions "are *in substance*" what he assumes them to be? Let us abandon all inferential phrasology, and stick to reality; I shall be judged by the public. As, however, Sir William relies on the late Dr John Gordon, whom he calls "a truly competent judge," he does not stand in need of attending my evening course on the anatomy, physiology, and pathology of the brain. The same Dr Gordon, supported by the Edinburgh Review, declared our anatomical and physiological views of the brain to be "sheer nonsense and direct imposture," and it was therefore unnecessary for Sir William to mention to the public, that, being invited, he proposes "attending my lectures in the evening when not otherwise necessarily engaged." Besides, who does not feel, that, in this season, evening engagements are of much greater importance than witnessing the dissection of the brain and examining physiological facts, more especially when these are shown by a person whom Dr Gordon, the oracle of Sir William, and, in addition, the Edinburgh literary gospel, have presented to their readers as a quack and a mountebank! Notwithstanding all this, I shall thankfully witness the proofs to which Sir William alludes, at the end of his last letter in your paper, and he may be assured that no engagement, neither in the day nor in the evening, will prevent me from examining the facts which he promises to show. His merit will be undoubtedly very great, if he be able to bring the truth of Phrenology "to a decision that will satisfy all impartial judges."—I remain, Sir, your most obedient servant,

G. SPURZHEIM.

LETTER FROM MR G. COMBE.

To the Editor of the Caledonian Mercury.

SIR,—I beg leave to make a few observations in answer to Sir William Hamilton's letter to you, dated 26th January.

I have written a letter to the umpires, requesting them to favour me with a statement of the proceedings in the reference for publication; but the severe indisposition of Dr Christison prevents them from returning an answer for some days. In the mean time, I positively affirm, that my former assertion, that hitherto Sir William has proved nothing, and that all the evidence yet adduced by him has been rejected, was perfectly correct.

Sir William says that he promptly acquiesced in my desire to be permitted to make observations on his argument at the conclusion of his lectures; but that I "*subsequently contrived to frustrate his intention.*" This is a most incorrect statement: On the 14th April, 1827, after obtaining Sir William's acquiescence, I wrote to Principal Baird as follows:—"My dear Sir,—I use the freedom to annex a copy of a correspondence betwixt Sir William Hamilton and me, on the subject of my delivering a lecture for the benefit of the distressed operatives, in answer to his objections against Phrenology, and most respectfully solicit the permission of the Senatus Academicus to give a reply at the conclusion of the demonstration." The answer returned was as follows:—"Extract from the Minutes of a Meeting of the Senatus Academicus of the University of Edinburgh, held 16th April, 1827.

"It was resolved that the request of Mr Combe (he not being a member of the Senatus) could not be granted.

"ANDREW DUNCAN, jun., Sec."

This is what Sir William calls my "*contriving to frustrate his intention.*"

As Sir William Hamilton is pleased to controvert the statements in my letter to you of the 23d January, about his declining to meet Dr Spurzheim, and proceed to the termination of the reference with him, I solicit the favour of your attention to the following circumstances:—

Sir William is pleased to quote a passage from Dr A. Combe's answer to the late Dr Barclay, as embodying what he holds to be a phrenological proposition. Had not Sir William himself positively precluded Dr Combe, it would have been easy for him to show that Sir William has altogether misapprehended his meaning, and that his words and Sir William's statement are by no means equivalent. In his answer to Dr C.'s letter of 30th April last, in which Dr C. had used the pronoun *we*, as including himself among the Phrenologists whose principles he was stating, Sir William reiterates the assurance *no less than four times in a single printed page*, that the works of the founders afford the *only* genuine exposition of their opinions. He begins, for example, by assuring Dr C. "that Gall and Spurzheim are the *ONLY* authentic representatives of their own doctrines," and immediately adds, "Gall and Spurzheim are the *ONLY* authors I proposed to refute;" and again, "I stated them," (his

first and third propositions), "because I wished to demonstrate "the true value of the authority of Gall and Spurzheim;" and, as if all this had not been enough to satisfy Dr C., he repeats once more, "I only observe, that wishing, as I said, ONLY to "refute the assertions of the two founders."—(Vide Phrenological Journal, vol. iv. p. 394.)—Keeping these assurances in view, I would ask what Sir William really means? Does he still hold the writings of Drs Gall and Spurzheim as the only authentic record of phrenological doctrine, to the exclusion of all other phrenological authors, or does he not? If he does, why, after his own explicit remonstrances, does he pronounce to be phrenological, a proposition which is not to be found in the works of its founders? If he does not, then why did he interdict Dr Combe from adducing the statements of other Phrenologists as expressive of phrenological doctrines? And how can he expect Dr C. to defend his opinions in the face of his, Sir William's, own prohibition and denial of their authenticity? And why, while they are still under his ban as unauthentic, does he now resort to them as if they *did* represent the true doctrine?

Keeping this statement in view, I beg leave to present you with copies of my letter to Sir W. H., and of his answer about admitting Dr Spurzheim as a party to the arbitration.

" LETTER—GEORGE COMBE TO SIR WILLIAM HAMILTON, BART.

" Edinburgh, Nov. 22, 1827.

" MY DEAR SIR,—Our arbitration-question has been long postponed, owing to the absence from town of the parties, the illness of Dr Scott, the marriage of Dr Christison, &c.; but now the umpires are ready to resume, and so am I. I beg leave to mention, however, that Dr Spurzheim has written to me that he will positively lecture in Edinburgh in January next; and, as you stated at the first meeting of the umpires, that you did not attack Phrenology, nor my exposition of it, but solely the statements of Drs Gall and Spurzheim, it has occurred to me that the most proper course of proceeding is to delay farther discussion till Dr Spurzheim's arrival, and then that you and he should proceed to a final determination of the points in dispute. The declaration, that you controverted only the statements of Drs Gall and Spurzheim, placed me, from the first, in an improper position; for I did not represent them, and had no authority to refer any views or opinions of theirs to arbitration. In fact, I could proceed only in so far as my own views were the same as theirs; which certainly, with very few exceptions, they were; but still these founders of Phrenology might well object to their writings being condemned by arbitrators before whom they had not been heard. Dr Spurzheim's presence in Edinburgh

“ will remove this objection. If, however, you decline this
 “ proposal, I am ready to proceed. Mean time, remain, &c.
 (Signed) “ GEO. COMBE.”

“ LETTER—SIR WILLIAM HAMILTON TO GEORGE COMBE, ESQ.

“ MY DEAR SIR,—I have to apologize for allowing your note
 “ of 22d November to lie so long unanswered. I wished, pre-
 “ viously to writing you, to see Dr Christison, and to ascertain
 “ whether he was prepared to proceed with the arbitration,
 “ which he is. I am also quite ready to meet you and the um-
 “ pires whenever it suits their convenience and yours.

“ Your proposal of surrendering the defence of the arbitra-
 “ tion to Dr Spurzheim, I must beg leave to decline, for various
 “ reasons which it is here needless to enumerate. I certain-
 “ ly never said ‘ *that I did not attack Phrenology, but solely*
 “ *the statements of Drs Gall and Spurzheim ;*’ for I know not
 “ where Phrenology is to be found except in the statements of
 “ its authors ; nor can I imagine any other expositor entitled to
 “ represent their doctrine with an authority equal to that of its
 “ founders. It is, however, only in so far as you coincide with
 “ Drs Gall and Spurzheim in regard to the most fundamental
 “ positions and the plainest facts that we have any controversy ;
 “ and you agreed to enter into the arbitration because you were
 “ willing to peril their credibility, and the possibility of the
 “ system, on the truth of the assertions which I offered to dis-
 “ prove. Hoping that we may soon bring the points at issue to
 “ proof, I remain, &c.

(Signed) “ W. HAMILTON.”

The meeting of the umpires suggested in my letter of the 22d November did not take place till 22d December. It was then held in the Clyde Street Hall ; but I positively affirm that Sir William Hamilton only referred again to the crania that had been previously rejected, and did not produce one jot of additional evidence to substantiate any of his propositions.

Sir William says, that Dr Spurzheim was actually present “ at one of the meetings of the umpires.” This is correct : but he forbears to state what occurred. Owing to a previous engagement, it was impossible for me to be present ; but Dr A. Combe, accompanied by Dr Spurzheim, attended, not as parties, but as spectators. These gentlemen waited with much patience to hear and see Sir William’s evidence ; but they assure me, that, though personally present, he neither said any thing, nor did any thing, in furtherance of the objects of the reference.

Sir William proceeds—“ Mr Combe does not state that every
 “ facility was offered him to examine the crania on which I was
 “ to found my public demonstration, and that he was pressed
 “ and goaded, and even taunted into an acceptance of the same
 “ specimens for the use of his own lecture in the Assembly
 “ Rooms.”

This matter is very easily set at rest. On 25th April, 1827, I wrote to Sir William as follows:—"I beg to mention, that, at the request of the committee for the relief of the distressed operatives, I shall deliver a lecture on the evidence of Phrenology, in the Assembly Rooms, at one o'clock on Friday, and will be happy to exhibit as many skulls of the collection used by you as will be allowed to be cut open. Farther, if you will honour me with your attendance at the Clyde Street Hall, on Friday morning at ten, I shall saw open as many skulls as you may select, carry them to the Assembly Rooms, and abide by the evidence they afford, both as to parallelism and the frontal sinus."

Sir William wrote in answer, that he was allowed to offer me "the whole 50 skulls sent by M. Royer to the Museum;" but that as Professor Jameson was averse from disfiguring the heads, all that he could obtain was permission for me "to open, before the audience, one of the two cavities (the frontal sinuses) in any three crania that may be selected." Farther, he declined my offer of opening as many skulls as he might select belonging to the Phrenological collection. On 27th April I wrote him, "Unless I am permitted to saw open at least a dozen of them (the skulls,) not selected on account of evident peculiarities, but taken at random, so as to afford a fair average, I shall be obliged to decline admitting them as evidence."

My reason for rejecting the skulls which I was not allowed to saw open was, that, without being opened, the audience in the Assembly Rooms could not see the sinuses, and, in that case, had I not reason to apprehend that the whole would have terminated in a controversy about facts which the auditory had no sufficient means of verifying? My wish was, that the question should rest, not on assertions on the part of Sir William Hamilton, and contradictions on mine, but on the evidence of the senses of those present.

In conclusion, Sir William says, "*I am confident* of being able to bring the truth of the doctrine to a decision that will satisfy all impartial judges." Sir William has all along been confident of doing so much, while hitherto he has accomplished so little, that I am not very sanguine in expectation from this announcement; but it would afford me the greatest pleasure if he shall keep his word. I have spent much time and taken much trouble with Sir William Hamilton; but although from other opponents I have learned something in the way either of correction or elucidation, from him I have derived not one iota of knowledge. Words, and words alone, have been poured out upon me, and the stream has been so copious, that sense and fact have seemed to me to be too often swept away in the flood. I am, Sir, your very obedient servant,

GEO. COMBE.

Edinburgh, 30th Jan. 1828.

LETTER FROM SIR WILLIAM HAMILTON.

To the Editor of the *Caledonian Mercury*.*

SIR,—Might I request you to allow the insertion of the following observations, in supplement of the letter which appeared in your last paper.

I there forgot to notice Mr Combe's denial, "*that it had been any doctrine of his that irregularity in the opposite sides of the cranium is the effect, and consequently the index of disease in the brain.*" I beg to ask that gentleman, whether I am wrong in supposing a philosopher to hold a doctrine which he not only merely asserts, but even applies in parrying an objection to his system; and whether he himself did not, on *this ground*, endeavour to extenuate the ludicrous illustration of phrenological truth which the cranium of the atrocious robber-murderer of Bali afforded? Among other similar contradictions, I had shown by phrenological measurement, that the skull of this monster greatly surpassed that of George Buchanan, in *all* the intellectual and moral organs, and was equally deficient to it in *all* the brute propensities, and in particular in that of murder or Destructiveness. Mr Combe, in his lecture in the Assembly Rooms, finding that the two sides of this cranium were not perfectly correspondent, (not a skull in a hundred, as observed by anatomists, is found symmetrical, and the want of symmetry in this specimen did not certainly exceed the average,) boldly asserted, that because thus, what he called "twisted," it was a diseased, and consequently an incompetent, subject of comparison. Will he likewise deny, that he attempted to show of the same skull, that there was a deficiency in the organ of Conscientiousness, by holding up in contrast with it, a thing he called the cast of a head, and which exhibited the superior and lateral parts towering into two mountains divided by an interjacent valley? On this anomaly, which he then took for his *mean standard of proportion*, there could not probably be found, on phrenological principles, an honest individual in Europe; but had it been convenient to have proved the owner of this skull a virtuous character; it would not probably have been difficult to discover on the nonce, among the phrenological apparatus, a counter monstrosity, exhibiting the sides of the cranium sloping from the vertex like a penthouse. Such is the opinion that arrogates to itself the name of science! Mr Combe, it ought to be added, was on this occasion enthusiastically applauded,—by the believers for his triumphant vindication of their faith, by the scoffers for his unconscious exposition of its absurdity.

In my first letter I also neglected to append a note to the

* This letter appeared in the *same* paper with the two preceding letters of Dr Spurzheim and Mr Combe.

passage where the name of Hufeland is introduced. Among other controverters of Phrenology, that author had been alluded to by me in my correspondence with Mr Combe, printed in the *Phrenological Journal*; and the editor, in a note, says, that he "had seen an extract from a *late* publication, stating that Hufeland, on more careful and extensive observation, had confessed himself obliged to renounce his opposition, and to adopt the very doctrine to which he had formerly objected." He then refers to an article in the same number, on the progress of Phrenology in Germany. On turning to this article, which purports to be from a foreign correspondent, it no doubt appeared, from a translation out of what was said to be a "*recent*" work of Hufeland's, that he had ended in becoming a decided convert to Phrenology. It was not, however, long before I perceived that the whole was a mere mystification. For, in the *first* place, the "*recent* tribute" paid to the science is extracted from a work of which the *second* edition, now before me, is printed twenty-three years ago: in the *second* place, this "*tribute*" is paid in the introduction of the very work in which he treats Phrenology to its refutation: in the *third* place, the translation, in essential points, is little better than a fabrication. I am far indeed from supposing that the editor of the *Journal*, whoever he be, was a party to the deceit; but the reference to *Bischoff's Darstellung* should have pointed out the hoax, had he not been ignorant of the history of his own opinion. It is, however, evident from the example, that scepticism is not amiss in regard even to phrenological quotations; and in regard to facts, I have never yet met with a statement of any consequence to the system, which, in its accuracy or its application, could bear a critical examination.—I remain, Sir, your most obedient servant,

W. HAMILTON.

16, King Street, 29th January, 1828.

P. S.—I observe an erratum in the third paragraph of my last letter, which reverses the meaning:—for "are symmetrical," read "are *not* symmetrical."

LETTER FROM MR GEORGE COMBE.

To the Editor of the Caledonian Mercury.

SIR,—In consequence of the assertions contained in Sir William Hamilton's letter to you, published in the *Mercury* of 31st January, it becomes necessary for me again to trouble you with a reply.

Your readers will have discovered long before this time, that philosophy or facts in nature attract, in a very subordinate degree, the notice of Sir William Hamilton. He has commenced

the present controversy by giving forth several absurd propositions, which he gratuitously ascribes to the Phrenologists, but which the latter at once denied to be either taught or believed by them. Any reasonable disputant would have perceived that here the discussion as to them ought to have terminated; because, both parties being agreed that the propositions have no foundation in nature, farther argument could serve no legitimate end. Sir William Hamilton, however, views matters differently. He gravely states, that his object is to destroy the credibility of Drs Gall and Spurzheim. His own words in his letter of 3d May, 1827, are, "If all their assertions within our observation be false, *all beyond it are entitled to no credit;*" and how does he proceed to show that all their assertions within our observation are false? He does this by thrusting certain disavowed absurdities on these authors, and he hopes, by proving what nobody denies, that *these* are sheer nonsense, to arrive, by "a very simple inference of analogy," at the conclusion, that *real* assertions, founded in nature, and consistent with sense, are not to be believed! The folly of this proceeding is very apparent. *First*, The *credibility* of Drs Gall and Spurzheim constitutes *no element* in the evidence of Phrenological science. These gentlemen and the other authors on phrenology have all along explicitly stated, that they require no person to believe *any thing on their testimony*, but solely on the evidence addressed to their own senses and intellects. Dr Spurzheim repeated this most particularly at the commencement of his present course of lectures, and I have uniformly been equally explicit. *Secondly*, It is intrinsically absurd to enter into a grave discussion about the credibility of a person who rests his assertions upon facts in nature which may easily be verified. No man of common sense inquires whether a chemist or natural philosopher is credible in relating his experiments; he repeats the experiments himself, and believes or disbelieves according to the result. *Thirdly*, Even were it philosophical gravely to discuss the credibility of phrenological authors, ought not their own statements in their avowed works to be assumed as the authentic record of their opinions? Nevertheless, Sir William Hamilton, when called on by Dr Spurzheim to point out where in his works three of the propositions ascribed to him were to be found, could not do so, but alleged that they were "in substance" what he assumed them to be. This is trifling with the public. Again, after repeating four times in one page, and in the most positive terms, that "*Gall and Spurzheim are the ONLY authentic representatives of their own doctrines;*" and that he wished "*ONLY to refute the assertions of the two founders;*" he attributes an absurd proposition to *Phrenologists in general*, and adduces an alleged statement of *mine* as the authority on which he rests. Not only this; but he assumes his own recollection of an oral discourse, delivered by me nine months ago, as a sufficient ground for im-

puting to me a statement which I disavow, and which a printed record of my words, published in the Scotsman newspaper at the time, proves that I did not utter. This can easily be established.

1st, As to Dr Gall's doctrine regarding the symmetry of the two sides of the cranium, that author says, "We must not forget, *that often the healthiest heads*, I mean those in which the form has not been influenced by disease, *have two sides unequal.*"

2dly, As to my statement—On 31st January last, I wrote Sir William Hamilton as follows:—"Will you oblige me by pointing out the authority for which you ascribe to me the doctrine, 'That irregularity in the opposite sides of the cranium is the effect, and consequently the index of disease in the brain?'" The answer is in these terms:—"31st January, 1828.—The authority on which I ascribe to you the opinion in question, is *your lecture in the Assembly Rooms*. My memory is very distinct on the subject. You argued, that as the skull of the Bali murderer was twisted, the brain had probably been diseased. I was the more particularly struck with the argument, because I had happened to have recently read in Dr Monro's Anatomy, that not one skull in a hundred was to be found symmetrical, and to have examined an instrument invented by him for measuring this inequality." The following is an extract from a report of my lecture in the Assembly Rooms, published in the Scotsman of 2d May, 1827, prepared not by me, but with the assistance of the notes from which I spoke:—

"The supposed skull of George Buchanan had been produced as an objection; but, in the *first* place, Buchanan died at the age of 78, which was at least 30 years beyond the period of middle life, to which Phrenologists confine their demonstrative observations, and no one could tell how much the brain and skull had diminished in the course of the ordinary decay of nature. In the *second* place, the evidence of the skull having belonged to Buchanan was found by the Phrenologists to be so defective, that they had, for this very reason, avoided publishing any account of it. In the *third* place, even granting it to be the skull of Buchanan, no attempt had been made to show that its development was inconsistent with the manifestations.—It had, indeed, been contrasted, and held to be equally good, with the skull of a Bali murderer, which *Mr Combe now saw for the first time*, and which had been sent in by Sir William Hamilton after the lecture had begun. A friend sitting behind him (Mr C.) had looked at it since it was handed in, and written the comments, which he would now read:—"The Bali murderer is old, as is seen by the absence of the teeth, and alveolar processes. *It is therefore not within the conditions required by Phrenology.* The skull is un-

“ equal and twisted. The propensities, generally, are very
 “ large.—Combativeness, Secretiveness, Self-esteem, Cautious-
 “ ness, are all very large, and Destructiveness and Firmness
 “ are large. Conscientiousness is moderate, as it rises little
 “ above the level of Cautiousness. Benevolence and intellect
 “ are large. Here, then, cunning, passion, suspicion, and jea-
 “ lousy, are the strongest among the propensities; and with
 “ such a combination, in a savage nation, murder from age or
 “ from suspicion is quite probable. To prove this skull to be
 “ subversive of Phrenology, Sir William Hamilton must first
 “ prove that it is *not* above middle life, and *not* diseased (which,
 “ *from its appearance, and from the murder apparently not being*
 “ *committed till old age, is at least doubtful*). He must produce
 “ evidence that the manifestations in mature age were *at vari-*
 “ *ance* with even his *present* development; that he was *not*
 “ violent in his rage, *not* crafty, and *not* suspicious; and that he
 “ was *not* deep and calculating in his schemes against others;
 “ that he was *not* kind and firm to his friends; and that he
 “ was *not* a man whose *mental energy* made him feared. Hav-
 “ ing established these points, Sir William may then, but not
 “ till then, produce it as evidence against Phrenology. We
 “ do not receive it as evidence, because we *expressly* specify
 “ middle life as the period for evidence *in demonstration*, and
 “ we *expressly* require health as a condition.”

By the words, “to appearance,” the whole indications of the skull are obviously meant, its density as well as its twist.

Nothing can savour more of the spirit of perverse wrangling than to found on this statement in the lecture the assertion, that I maintain it as a *general* phrenological proposition, that “irregularity in the cranium is the effect, and consequently the index of disease in the brain.”

Up to the present hour, Sir William Hamilton has not produced a shadow of evidence, that the skull which he calls that of George Buchanan really belonged to that individual, or that he did not die at the age of 78, which is beyond the period of phrenological observation. Farther, in a letter, dated 27th April, 1827, I begged of him to send me the letter of Mr Crawford, in which the history of the Bali robber is alleged by him to be detailed, *but he has never done so*; nor has he proved any of the foregoing points, which he was called on to substantiate before being entitled to assert, that this skull afforded evidence against Phrenology.

Sir William says, that I held up in the Assembly Rooms, “in contrast with it, a thing called the cast of a head.” Sir William never before questioned that it was a cast of an actual head; but as he now does so, I am ready, whenever he pleases, to refer him to one of the oldest and most esteemed surgeons in Edinburgh, as the authority on which the authenticity of that cast rests.

Sir William next refers to an article in the Phrenological

Journal about Hufeland's opinions in regard to Phrenology ; but he conceals the fact, that I told him more than a month ago, when he mentioned the error, that I had written to the author of that article, who resides on the continent, and who had translated Hufeland's expressions into indifferent English, for a more explicit statement ; that an answer had then been received, from which it appeared that the original report was not accurate as to its date ; and that *this mistake would be corrected in the next number of the Journal.*

Sir William denies that he called Dr Spurzheim " the most worthless of observers." His own words are, EITHER Drs Gall and Spurzheim are the most worthless of observers, OR my counter-statements are a product of the most exquisite delusion that presumption ever engendered upon ignorance."

I am, Sir, your very obedient servant,

GEO. COMBE.

Edinburgh, Feb. 1, 1823.

LETTER FROM SIR WILLIAM HAMILTON.

*To the Editor of the Caledonian Mercury.**

SIR,—I am disappointed to find that, in what Dr Spurzheim is pleased to call " an answer" to my letter, *every point* at issue is either passed over altogether, or studiously evaded. Quoting the *Res non verba quæso*, the Doctor himself treats us to *nothing but words*. After an oracular enunciation of the recondite truth, "*what is is, and it is as it is,*" he starts off in a tirade about evening parties and evening lectures, the Edinburgh Review, and vituperations which that " literary gospel" had vented upon himself and Gall. The occasion of this effusion is the luckless employment I had made of the authority of Dr John Gordon, to prove the high reputation of the Wenzels to the public, who, as unlearned on the subject, were consequently ignorant of the European celebrity of these accurate observers. The Wenzels are not praised by Dr Gordon in disparagement of Spurzheim and Gall, and his testimony is even contained in a systematic work, written, I believe, before its author was acquainted with the works of my opponents. Dr Spurzheim must not, however, be allowed to escape conviction because he refuses to plead.

The Doctor does not answer my pointed interrogatory, whether he now at length admits against Gall, *that the cerebral convolutions are not symmetrical?* I am willing, however, to accept silence for a confession ; and am not less rejoiced to see Dr Spurzheim thus compelled to evacuate the strongholds of the system, and the surest positions of Gall in relation to the brain, as I was to behold Mr Combe back out of the most important

* This letter appeared in the *same* paper with the preceding letter of Mr Combe, and has therefore no reference to it.

and confident assertions of Dr Spurzheim touching the cranium and the frontal sinus. So far so good.

In my last letter I proved to demonstration, that the two Phrenological Propositions which Dr Spurzheim denied to be held by him (fifth and fourteenth) were, however, actually his. In his present letter he still affirms that they are "inexact;" but he cautiously abstains from attempting any proof of my inaccuracy. "*The better part of valour is discretion.*" As yet I stand unconvicted of a single misrepresentation of my opponents, while they are seen endeavouring to avoid inevitable refutation, by sneaking out of their opinions,—denying of their language its unambiguous meaning, of their doctrine its most immediate corollaries.

Touching the *fifth* Phrenological Proposition. If Dr Spurzheim can adduce a *single* passage from his own works or those of Gall, where (in opposition to all those I have quoted, proving that the sinus and the bony crest are uniformly maintained by them severally to suppose each other) it is stated, that the internal vacuity, except in cases of old age and disease, is ever found without its external index of the ridge;—in that event, I shall at once abandon this proposition; but, if he cannot do this, he necessarily stands convicted of the grossest quibbling.

In reference to the *fourteenth* Phrenological Proposition, affirming the greater development in children of the inferior parts of the forehead, &c., Dr Spurzheim must either deny, 1. That the knowing *organs* are not situated in the lower region of the brow, and the reflective in the superior; or, 2. That the knowing *faculties* are not manifested before the reflective; or, 3. That the development of the several organs is not correspondent with the manifestation of their respective faculties. Unless he maintains one or other of these alternatives, he cannot impugn the accuracy of my proposition; and, if he does, he virtually denies the truth of Phrenology. He can only escape execution by suicide. Be it observed, that I only quoted Dr Combe *in illustration* of Dr Spurzheim, not as an authority representing the opinion. This, however, it is chosen to misrepresent.

Dr Spurzheim also maintains silence on my challenge to try the question of the relative size of the cerebellum in the sexes, on his own skulls, allowing him *to retain all the male crania marked by himself as large in that organ, and to throw out all the female skulls in which it is similarly distinguished*. I ought to have added, that I would also permit him *to reject all the male crania in which No 1 may be marked as small*, retaining those female crania in which it may be similarly noted. The collection shall also be purged, by any teacher of anatomy, of all skulls which may be "monstrous," "singular," or "anomalous."

If Dr Spurzheim, therefore, is not anxious to evade the appeal

to facts, and would not be reproached with having accused his opponent of misrepresentation, without the shadow of a reason, he will favour me with an answer to the four following questions :—

1. Does he not abandon Gall's assertion in regard to the symmetry of the convolutions of the opposite lobes of the brain ?

2. In what respect have I mis-stated his and Gall's opinion, as published in their works, in regard to the co-relation of the frontal sinus and the superciliary crest ?

3. In what respect have I misrepresented them in regard to their doctrine of the greater development in children of the lower region of the brow ?

4. Does he accept my challenge to try the truth of Phrenology on his own series of skulls, and conceding to him every possible advantage ?

I again defy the Phrenologists to produce a single practical anatomist who will declare that the phrenological propositions are not ludicrously false.

I say nothing in reply to Mr Combe, as I beg leave to decline his interference in the present controversy between Dr Spurzheim and me. I should be sorry, especially at the present busy juncture, to occupy your columns with any answer to his long-winded statements, however easily refuted ; and am unwilling to co-operate in distracting attention from facts of some importance to personalities of none. This also I wish to be my last letter on the present subject.

I remain, Sir,

Your most obedient servant,

W. HAMILTON.

King Street, 31st January, 1828.

Postscript.—As my letter has not been published to-day, I hope I may be permitted to add a few observations, suggested by reading the report of Dr Spurzheim's lecture on the frontal sinus, which appeared in the Scotsman of this morning.

Mr Combe asserts, that he has never learnt any thing from me. This cannot be maintained of Dr Spurzheim. I am rejoiced to find, from this report, that the Doctor *abandons his old opinions, and now actually inculcates the very doctrines which I have offered to prove, and which are diametrically opposed to those hitherto maintained by the Phrenologists.*

In the *first* place, instead of holding that the sinus exists *ONLY* in old age, and as the effect of chronic insanity, by only supporting the feeble negative that they are not found "in every instance," he *now* evidently acknowledges that they are *generally* present. So far, therefore, he admits my second counter-proposition.

In the *second* place, instead of maintaining that the presence

of the sinus is always indicated by a bony crest, he *now* admits that the crest "sometimes accompanies a sinus, and sometimes not." He thus adopts my *fifth* counter-proposition.*

In the *third* place, Dr Spurzheim seems to admit that the sinus exists in children *after seven years old*; and so far, therefore, acquiesces in my *third* counter-proposition. In denying the existence of the sinus before the age of 'seven, he is, however, opposed to all the most illustrious anatomists, (Morgagni, Albinus, Bichat, Scarpa, &c. &c.) who trace the sinus back even to the *fœtus*.

But though Dr Spurzheim, less indocile than Mr Combe, conceives it *fus ab hoste doceri*, he does not, however, appear more inclined to acknowledge the tuition. He quietly advances the new opinions, as if these were his spontaneous statements, and not involuntary concessions, extorted from him in the teeth of all that he had ever previously taught. Of this, however, I do not complain; and am better pleased to be saved, by these admissions, (which I shall hold good, if not denied by Dr Spurzheim,) the trouble of bringing my *second, third, and fifth* counter-propositions to a proof. With the suicidal effects of these admissions to Phrenology, I have at present nothing to do; nor do I advert to the other statements of Dr Spurzheim concerning the sinus, which I know to be not less untrue than the more notorious absurdities, from which he would now fain be allowed quietly to back out. Of the *five* phrenological propositions, on the truth of which Mr Combe originally agreed to peril the truth of Phrenology, and the credit due to its founders, *three* are now given up by Dr Spurzheim himself; and the *two* not yet surrendered are even more untenable than the others. (*See Phrenological Journal, No XV. p. 390.*) I suspect the Phrenologists now begin to nauseate *facts*, even more than they formerly abominated *reasonings*.

Notwithstanding your notice, I trust that Dr Spurzheim may be allowed to insert an answer in your journal to this communication.

2d February, 1823.

* * * While we readily accede to the proposal which Sir William Hamilton so very handsomely makes in favour of his opponent, we must still repeat, that, in doing so, we do not hold ourselves as departing from the resolution expressed in our last.

LETTER FROM MR GEORGE COMBE.

To the Editor of the Caledonian Mercury.

SIR,—Acquiescing, as I fully do, in the propriety of terminat-

* The report of Dr Spurzheim's lecture on the frontal sinus, referred to by Sir W. Hamilton, will be found in section IV. of this article.

ing the controversy, in your columns, on the subject of Phrenology, between Sir William Hamilton and me, I solicit the favour of your inserting the Report of the Umpires, which I have only this day received; and also an Extract from the Phrenological Journal, No I., published in October, 1823, relative to the fifty skulls, which establishes that the Phrenologists have never varied in their account of the purposes for which they were selected and sent to Edinburgh; and remain, Sir,

Your very obedient servant,
GEORGE COMBE.

Edinburgh, 8th February.

“ *Proceedings of the Arbiters in the Reference by Sir William Hamilton and Mr Combe, on the Anatomical Facts of Phrenology.* ”

“ The first meeting was spent in arranging the Issues to be tried regarding the frontal sinuses.

“ At the second meeting the Issues were farther arranged, and Sir William Hamilton proceeded to prove his statements by examining a set of skulls in the University Natural History Museum, said to have been sent from Paris by Dr Spurzheim. Mr Combe stated various objections to these skulls being referred to; and the arbiters agreed that satisfactory facts could not be deduced from them,—in the *first* place, Because the age and sex could be determined only presumptively, and even that but in a few; and, *secondly*, Because liberty could not be obtained to lay the sinuses open to such an extent as appeared necessary for an accurate examination.

“ At the third meeting, after a desultory conversation on the best method of procuring accurate facts for deciding the points at issue between Sir William Hamilton and Mr Combe, the arbiters proposed, that, instead of examining skulls whose history was unknown, and which could not always be cut open to the requisite extent, the parties and umpires should attend the pathological dissections at the Infirmary and Fever Hospital; by which means they hoped, that, in the course of a few months, a sufficient set of correct observations might be procured, with all the necessary collateral circumstances.— This proposition was agreed to; and, a few days afterwards the first examination was made in presence of all the arbiters at the Fever Hospital.

“ (Signed)—JOHN SCOTT, M.D.—JAMES SYME.—R. CHRISTISON.

“ Edinburgh, February 8, 1823.”

Extract from Phrenological Journal, No I. p. 57.

“ We are able to state farther, that the skulls are really very interesting to the student of Phrenology. The question is of-

“ ten asked, On what principle did Drs Gall and Spurzheim
 “ *map out the skull*, and assign different shapes to the different
 “ organs as appearing on the cranium? This collection presents
 “ a most satisfactory answer to the inquiry. In cases of extreme
 “ development of any particular organ, the bone situate above
 “ it protrudes in the very form and dimensions delineated by
 “ the founders of the science; and these skulls were selected
 “ with the view of illustrating this point, and do illustrate it in
 “ the most decided manner. In one skull, for example, *Cau-*
 “ *tiousness* is the predominating organ, and the projection is seen
 “ to be exactly of the shape and size marked in the phrenologi-
 “ cal busts. In another, *Benevolence* is the leading feature; in
 “ a third, *Veneration* predominates, and so on; and in each the
 “ skull is seen presenting a distinct elevation of a form corre-
 “ sponding to that assigned to the external indication of the or-
 “ gan by Drs Gall and Spurzheim. The history of the indivi-
 “ duals to whom the skulls belonged is not known, and the
 “ collection was sent as evidence merely of the fact, that eleva-
 “ tions of the cranium, corresponding in figure and dimensions
 “ to those delineated on the phrenological busts, actually exist
 “ in nature, and that the lines of demarcation are not fanciful,
 “ as is generally reported and believed.”

LETTER FROM DR SPURZHEIM.

To the Editor of the Caledonian Mercury.

SIR,—You were so good as to insert, in your paper of Thurs-
 day, 31st January, an answer to Sir William Hamilton, which
 I intended to be final; but his letter published in your number
 of Monday, the 4th of February, makes it necessary for me to
 add some explanation to your readers, and I now trouble you
 and them for the last time. I depend on their good sense that
 they do not think me bound in duty to prove, that three propo-
 sitions, which Sir William assumes to be mine, are inexact. He
 is the accusing party; hence let him prove his accusation, and,
 instead of drawing interpretations, let him copy from my printed
 works the passages in which I maintain the views attributed to
 me, and combated by him.

Sir William asserts, that he has taught me the views which I
 now maintain regarding the frontal sinus; but I am constrained
 to declare, that hitherto I have learned nothing from Sir Wil-
 liam, who, by not bringing forth from my works the exact pas-
 sages on which he founds his three *supposed* propositions, betrays
 that he did not understand Phrenology as I taught it in 1815
 and 1816, and who, by not attending any of my demonstrations,
 shows that he is unwilling to become acquainted with the pro-

gress this science has made since that time. Your readers will easily conceive, that I could not learn my doctrine on the frontal sinus from him, seeing that all the specimens of the various modifications of it, through all ages, from new-born children to very old age, in the state of health and disease, shown by me in Edinburgh, were collected in Paris, whence I brought them to England, and seeing also that I taught the same doctrine in London, Bath, Bristol, Cambridge, and Hull, which I repeated in Edinburgh.

But Sir William, forgetting the old saying, *nec sutor ultra crepidam*, proposes to teach anatomical points unknown, I am sure, to all lecturers on anatomy in this city. *The cerebellum*, says he, *has its full growth at three years, and the brain at seven years of age. The cerebellum, moreover, is absolutely larger in women than in men, and probably so in females than in males.* To my knowledge Dr Gall never saw such things. I also confess, that, during the twenty-seven years that I have studied the structure, functions, and diseases of the brain, I have never been able to perceive facts to support the above-mentioned assertions of Sir William; and M. Chaussier, formerly professor of anatomy and physiology in the university of Paris, who paid particular attention to this subject, and who *professedly* wrote on it, notwithstanding of his great opportunities of examining brains both of children and adults, states, in his *Exposition de l'Encephale*, published in 1808, the contrary of what Sir William undertakes to demonstrate. I shall be glad to see him prove *publicly* his assertions as soon as he finds it convenient, even by the fifty skulls on which he *fully* relies. At the same time, I regret not being able to say, *His gloriamur inimicitis.*

I am, Sir,

Your very obedient servant,

G. SPURZHEIM.

Edinburgh, 6th February, 1828.

II. CORRESPONDENCE BETWEEN SIR WILLIAM HAMILTON AND DR SPURZHEIM, NOT PREVIOUSLY PUBLISHED.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and requests permission to inquire, whether Dr Spurzheim consents to try the truth of Phrenology in the points at issue, by an induction of skulls, taken indifferently from the various collec-

tions in Edinburgh; the age, sex, health, &c. to be rigorously determined, without interference of the parties, or relation to the questions in dispute, by the skill, and on the honour of the anatomists through whom they are obtained.

Sir W. Hamilton, on his part, is willing that Dr Spurzheim's series of crania should be purified from any "monstrous," "sin-gular," and "anomalous" specimens, if such it really contains, by any of the public teachers of anatomy in this city whom Dr Spurzheim may prefer. He likewise offers to include the skulls belonging to the Phrenological Society in the induction, provided, that their *whole* collection be submitted, *without reserve*, to the same impartial determination. Crania, not European, to be taken, *cum nota*, in reference to the frontal sinus; and in regard to other points, those of children and of males and females, only of the same race, and in equal proportions, to be compared together.

16, Great King Street, 15th February, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir William Hamilton, and, in answer to Sir Wm.'s note of yesterday, begs leave to say, that he examined the skulls sent from Paris, and those preserved in the public and private collections at Edinburgh,—that he explained, and continues to explain, to the public at large, his doctrines on Phrenology,—and that it is not his fault if Sir Wm. Hamilton, though invited by Dr S., did not think it proper to attend any of Dr Spurzheim's demonstrations, or to look at any of the evidences which he brings forth. On the other hand, Sir Wm. Hamilton does not stand in need of Dr Spurzheim's "*permission*" to refute Phrenology whenever and wherever he pleases; Dr Spurzheim, however, repeats the statement already made in the Caledonian Mercury, that he is willing to meet Sir Wm. H. as soon as Sir Wm. may be ready to prove PUBLICLY his assertions. It is evident that Sir Wm. has the right to proceed as he likes, and to appear alone or in company of all teachers of anatomy in Edinburgh, to whom he alludes in his note. The only thing upon which Dr S. insists is, that Sir Wm. shall not confine his decision to a written document signed by his friends, but shall bring all his evidence before the public, and allow Dr S. to put any question concerning the contested points to Sir Wm. Hamilton or to his supporters. Dr S. also desires Sir Wm. H. not to wait till Dr S. has left Edinburgh, to exhibit publicly the evidence of his assertions. From not attending to this circumstance, Sir Wm. could not be free from the charge of having alleged assertions which he could not substantiate in Dr Spurzheim's presence.

Edinburgh, 16th February, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR WILLIAM HAMILTON presents compliments to Dr Spurzheim, and regrets, though he is not astonished, that Dr Spurzheim refuses to join in any induction, by which the *assertions of Phrenology* would be held up in collation with the *facts of Nature*. Sir William has done every thing in his power to manifest the rigorous impartiality of his proof; and he flatters himself, that he has succeeded in placing in a strong contrast, his own anxiety and the reluctance of his opponents, to bring the truth of their several positions to the proper test.

Sir William has applied for ALL the *female crania* extant in the different anatomical collections of Edinburgh, and he has employed ALL indifferently. The sex of many of these is known independently of anatomical criteria. The others have been discriminated by the most skilful judges; and no specimen has been admitted, in regard to the sex of which any doubt has been entertained. The same has been done in respect to *ante-puberual crania*. From all the anatomical collections all the skulls have been obtained the teeth of which evidence the proper age.

In regard to *male crania*, which are preserved in far greater numbers than those of women, Sir W. Hamilton offers to allow Dr Spurzheim himself to fix, without selection, on the adequate complement, in any of the anatomical musæ.

Having done thus much, and expressed his willingness to include Dr Spurzheim's own collection, under the most favourable conditions—indeed under any terms Dr Spurzheim himself may choose—and to admit the skulls belonging to the Phrenological Society, Sir William is confident that nothing more on his part could possibly be performed, to decide the question on fair and liberal principles, nay, even on principles more partially favourable to the Phrenologists. He begs Dr Spurzheim himself to state, whether he can conceive it possible to act more generously by an opponent, without absolutely compromising the interest of truth.

In regard to Dr Spurzheim's insinuation, that the Edinburgh lecturers on anatomy are his "*friends*" and "*supporters*," Sir W. Hamilton must observe, that, if it is meant that a disbelief in the phrenological anatomy constitutes them his friends, they are probably so, not less than all other anatomists alive and dead; but if it is hereby whispered, that their impartiality is not to be trusted in their scientific determination of the subjects of his induction, so unworthy an insinuation can only recoil on the head of him who could imagine the possibility of such a supposition. Sir William may be somewhat strict in his notions on this subject; but he can assure Dr Spurzheim, that he would as soon forge a bill as colour a philosophical fact; and

even the most infatuated of the phrenological multitude, will, he thinks, begin to suspect the delusion of a doctrine, which can only be supported by innuendos against the integrity of whole classes of honourable men.

If Sir W. Hamilton's attendance on Dr Spurzheim's physiological lectures were of the smallest relevancy to the present question, as it is of none, how could he, with any delicacy, have availed himself of Dr Spurzheim's invitation, after his attendance was subsequently so unceremoniously prohibited by Dr Spurzheim, in his second letter in the Caledonian Mercury?

Sir William has only to add, that Dr Spurzheim will have ample opportunity, privately to scrutinize, and publicly to canvass, the accuracy of his measurements. Dr Spurzheim is at present only commencing a new course of lectures; but, that no time may be lost, that part of the induction which is already finished, shall, if Dr Spurzheim pleases, be submitted to him without delay. The earlier completion of the whole induction has only been prevented by its extent, minutness, and elaborate accuracy.

16, Great King Street, 17th February, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir Wm. Hamilton, and begs to remark, that in Dr S.'s letter to him, Dr S. says, that he has seen the skulls in the different collections at Edinburgh. If it be necessary, Dr S. adds, that all these skulls do not refute any phrenological opinion which he entertains. It is incomprehensible to Dr S. how Sir Wm. could find in Dr S.'s letter insinuations against the anatomists of Edinburgh. Dr S. disclaims all such, and his letter does not justify Sir Wm. in imputing them. Sir Wm. Hamilton *publicly* attacked Phrenology before Dr S. visited Edinburgh; it is now Sir Wm. Hamilton's duty to prove *publicly* his assertions. Dr S. therefore repeats, for the fourth and last time, that he is willing to meet Sir Wm. H. before the public. Dr S. also repeats his desire, that Sir Wm. may not wait till Dr S. has left Edinburgh, to exhibit the evidence of his assertions. This cannot be difficult, since it is but common sense to think, that Sir Wm. had collected his proofs before he appeared as an opponent of Phrenology.

Edinburgh, 16th February, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and, in answer to his yesterday's letter, observes, that the fact, repeatedly stated by Dr S., of his having "examined the skulls preserved in the public and private collections at Edinburgh"—a fact, however, of which the custodians of the most extensive are not aware—is of no importance; as the question is not, whether Dr S. has looked at nature, but whether he has truly reported her realities. Sir W. cannot, of course, deny that these crania "do not refute the phrenological opinions which Dr S. *entertains*;" he only knows that they utterly explode the phrenological doctrines which Dr S. *has published*.

Sir W. H. having gained all he wanted, in manifesting that he is simply desirous of the truth, while his opponent seems merely anxious to elude the effect of an inquiry, has only, in reply to the caution, that Sir W. would "not wait till Dr S. had left Edinburgh, to exhibit the evidence of his assertions," to state, that on his part he is only apprehensive—from the very caution itself—lest Dr S. should suddenly escape; as he would regret if any thing were wanting to consummate the impending exposition of phrenological credibility. Sir W. therefore requests, that, if Dr S. does not mean to conclude his present course of lectures, he may send Sir W. warning a fortnight previous to his departure.

16, Great King Street, 19th February, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir William Hamilton, and does himself the honour to state, *in compliance with Sir William Hamilton's wishes*, that he will be ready to meet Sir William *publicly* any day that may be convenient for him, between this day and Thursday, the 6th of March next.

Edinburgh, 20th February, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and as he has now nearly collected all the subjects of his induction, he begs again to repeat his offer, of sending Dr Spurzheim a note of his measurements, and of submitting the various specimens to his examination. Sir W. is likewise ready to meet Dr Spurzheim, and to afford him every explanation that may tend to facilitate his scrutiny.

16, Great King Street, 27th February, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir William Hamilton, and again states, that his published doctrines are the result of many years' examination, repeated in various countries, and under the most different circumstances; consequently, that he cannot be satisfied with a mere private explanation, which Sir William offers to give. Moreover, Phrenology and its believers, as well as Dr Spurzheim, having been *publicly* attacked by Sir William, and *publicly* accused of "credulity and of infatuation," and of being, "*without exception, the most erroneous of observers recorded in the whole history of science,*" the phrenological public, or, as Sir William calls them, "the phrenological multitude," or "mob," insist upon their right to ask for a public refutation.

Dr Spurzheim repeats, *for the fifth time*, his readiness to meet Sir William Hamilton *before the public*, any day betwixt this and the 6th of March next.

Edinburgh, 28th February, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and begs leave to observe, that in repeatedly offering Dr S. every information, aid, and facility, in sifting the accuracy of his anti-phrenological induction, far from supposing that a private meeting for this purpose was to foreclose Dr S. from publicly criticising this evidence, he was only anxious, lest, through any omission on his part, Dr S. might not be fully armed for the attempt. Though personally averse from any thing like a public exhibition, and though convinced that a crowd is neither the audience to understand, nor a crowded assembly the place to detail, the evidence of an anatomical induction, Sir W. is too thoroughly convinced of the certainty of his proof, not on other accounts to court an opportunity of manifesting, in the most open manner, the unsoundness of the opinion he controverts. He therefore acquiesces in Dr Spurzheim's proposal of a public discussion. The points at issue are purely anatomical, and it only remains for Dr S. to mention the persons most competent to the task, whom he would propose as umpires on the occasion.

16, Great King Street, 28th February, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir Wm Hamilton, and begs leave to observe, that, if Sir W. had *privately* intimated

to Dr S., that he is in possession of facts which may convince Dr S. of the "unsoundness" of his opinions, Dr S. would have thankfully availed himself of a private meeting with Sir W., and received from him private instruction in Anatomy and Physiology; but since Sir W. *publicly* attacked Phrenology and its believers, Dr S. can meet him only before the public. Moreover, as the truth or falsehood of Phrenology depends neither on what Drs Gall and Spurzheim nor Sir William Hamilton say, nor on the opinions of umpires, but solely on the invariable laws of nature, Sir William has nothing to do but to bring before the public the proofs from which he draws his conclusions. Dr S. requests, for the sixth time, that Sir W. H. will name a day and place when Dr S. may meet him in public, and this before the 6th of March next. Sir W. is requested to lose no time in doing this, as several days' notice of the meeting must be given to the public, that they may attend. All other proceeding is unphilosophical, and all correspondence to any other purpose in vain.

Edinburgh, 29th February, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and takes the liberty of saying, that Dr S. has acted precisely as he has all along anticipated he would do. Sir W. was well assured that Dr S., though *professing* to desire a public discussion, would never be brought to submit the truth of his doctrine to an audience, any part of which was competent, at once to form a correct opinion, and to embody that opinion in an authoritative verdict. If driven to the worst, Dr S., he was satisfied, would only venture to give an irrelevant lecture to an idle mob, without knowledge, as without a voice; and thus afford the opportunity to his friends of issuing a fallacious narrative under the imposing form of a report. The points at issue can only be decided by a patient investigation of anatomical measurements; and a Phrenologist alone could propose to determine their accuracy, by submitting these, for an hour, to a tumultuary flock of men and women, who had probably never handled a cranium in their lives. Sir W. has too much self-respect, and too great a deference for truth, to co-operate in a proceeding which would only serve to turn himself into derision, and to amuse or to delude the public. Sir W. is, however, now, and at all times, ready to meet Dr S. or his adherents, before any competent tribunal, to prove in their teeth, the ludicrous falsity of phrenological facts. He is willing to allow Dr S. to nominate the umpires, and desires him to point out any collection of skulls, on which the craniological positions can be established. Dr S. avers, that "his doctrine is the result of an

"examination repeated in various countries." Phrenology, if true at Vienna, cannot be false at Edinburgh; and it is absurd in Dr S. to think of supporting his own accuracy by his own assertion, when it lies before him to silence scepticism by the easiest of appeals to nature. *Hic Rhodos, hic saltus.* It is also profitable to hear Dr S. confess, that "the truth or falsehood of Phrenology does not depend on what Drs Gall and Spurzheim say," seeing that Drs G. and S. have to this hour only *asserted*, and never, by articulate induction, *proved* a single fact; while, in the same breath, it is also coolly proposed to refer the determination of "the invariable laws of nature" to a populace, who know nothing of these laws, except on the dicta of those by whom they may chance to be addressed. It also baffles an uninitiated comprehension, how Phrenology can rest true, and yet the opinions of its founders, with which it is identical, be found false.

Dr S. having thus declined the only public meeting which would not be conducive to the propagation of error, Sir W. has only now to publish his state of facts. In the meanwhile, the subjects of induction will be open, on application to Sir W., for the examination of Dr S. and his friends until the 14th of March.

16, Great King Street, 29th February, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir Wm Hamilton, and, in answer to his letter received to-day, takes the liberty of saying, that as Sir William refuses to show the evidences of his opinions to the public in the presence of Dr S., though he thought it very convenient to attack Phrenology *publicly*, without being supported by proper evidence, Dr S. will be glad that Sir W., according to his promise, shall "*publish his state of facts*," as soon as his state of mind is become calmer than it seems to be at this moment.

Edinburgh, 1st March, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and having been informed that Dr S., on Wednesday, examined the crania which constitute the subjects of Sir W.'s induction, and that he is again to visit the Anatomical Museum to-morrow, begs leave to say, that if Dr S. should find any objection to any of these skulls, he is ready to reject the specimen at once, or to

submit the validity of the objection to whatever anatomist of eminence Dr S. may be pleased to name. If Dr S. declines this, Sir W. still offers, if Dr S. will mark and lay aside any cranium, stating the specific ground on which he would object to its evidence, to take the opinion of all or any of the practical anatomists in Edinburgh on the point. Sir W. only adds, that he will treat with the most profound contempt, every general and unauthenticated assertion which Dr S. or his adherents may, hereafter, find it convenient to make in regard to the present induction; for even the credulity of the "phrenological public" can hardly be carried to such transcendent absurdity, as to attribute any the smallest weight to objections which Dr S. durst not prefer *at the time*, and *in the form*, necessary, equally for their establishment and articulate refutation.

Sir W. also encloses three short notes which he proposes to append, when he has occasion to quote Dr S.'s last (and unanswered) letter in the Caledonian Mereury; and he is willing to annex any observations which Dr S. may be disposed to make in reply.

16, Great King Street,
(Friday Morning,) 7th March, 1828.

1. On "cerebellum—*agc.*"—The Phrenologists are rarely correct in their quotation of opinions, as in their report of facts. My doctrine is, that the *cerebellum* reaches its full PROPORTION to the brain at *three*, and that the *encephalon* (brain and cerebellum) obtains its ultimate size about, or soon after, *seven* years old.—(See Counter Propositions IX and X.) It is worthy of remark, that Gall makes a similar misrepresentation of the doctrine of the Wenzels on this very point.—(Anat. et Phys. du Cerv. III. p. 93.) It is always casier to attribute an absurdity than to refute a truth.

2. On "Cerebellum—*males.*"—I beg that this nonsense may not be attributed to me.

3. "Chaussier—*demonstrates.*"—One not aware of the total incapacity for accurate observation and correct statement, manifested by the Phrenologists, would be surpris'd to hear, that Chaussier, directly or indirectly, neither contradicts my real opinion, nor even that so erroneously attributed to me by Dr S. I have adduced Chaussier's authority against Phrenology, but the Phrenologists can find nothing in that eminent anatomist against me.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir W. Hamilton, and, in answer to his letter of yesterday, begs leave to say, that Dr S., in Phrenology, relies only on the authority of nature, and that he wishes every one might do the same. Sir William is

mistaken in supposing that Dr S. intended to visit again the anatomical collection in the College ; but Dr S. takes the liberty of reminding Sir W. H., that he attacked Phrenology publicly, and that Dr S. and the Phrenologists of Edinburgh demand, as matter of right, a public refutation. The 6th of March is past, and Sir W. has not met Dr S. before the public. Sir W., however, has promised to publish the state of his facts. Dr S. has already requested Sir W. to do this as speedily as possible ; and he now begs leave to add, that, if Sir W. really intends to bring his assertions to trial, he will leave the evidence on which he founds his conclusions open to the inspection of the phrenological public for a reasonable time *after* publication of his statement, so that a fair opportunity may be afforded to all taking an interest in the discussion, of comparing the assertions with the proofs. If Sir W. shall withdraw the evidence *before* publishing his statement, every intelligent person will form his own opinion of the propriety of such a proceeding. The Phrenologists of Edinburgh have left their evidence open to public inspection one day in the week, for six years past, and they continue to do so ; hence they have the right to demand of their opponents a corresponding degree of publicity.

Res non verba quæso.

The 8th March, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and, in reply to his letter of the 8th, begs leave to remind him, that the establishment of Phrenology is proclaimed by its propagators to be, on their part, a war of extermination against all other systems of psychology ; to *attack* the new opinion was, therefore, only to *defend* the old. If Sir W. read *two* papers in refutation of their hypothesis, within the walls of the Royal Society, where all opinions are freely canvassed by philosophers of every sect, the Edinburgh Phrenologists have read, at least, *two hundred* against doctrines which he maintains, or may maintain, within the sanctuary of their own Society, which excludes all disbelievers in Phrenology, by law. If Sir W. gave a *single lecture in refutation*, Dr Spurzheim and Mr Combe have delivered above *twenty courses in support*, of the revolutionary theory ; and even to that one lecture by Sir W., Mr Combe rejoined by another professedly *in answer*. The balance is thus all in favour of Phrenology, and “ *Dr Spurzheim and the Edinburgh Phrenologists*” cannot now “ *demand, as a matter of right, a public refutation.*”

Sir W. H. was, however, always ready to *indulge* his oppo-

nents in what they had no title to *exact*; and he had too intimate an experience of their tactic, to afford them, on any ground, the slightest pretence to hold out, that he declined to demonstrate, in the face of the world, the futility of their doctrine. Dr Spurzheim's challenge, he also shrewdly suspected to be mere bravado; and made little doubt, that, calculating on Sir William's very natural repugnance to a personal and public debate upon a subject he so thoroughly despised, Dr S. would, in fact, sweat blood and water to escape a meeting the moment his challenge was accepted. To render, however, the retreat of his opponent still more ignominious, and to blazon more conspicuously to the world, that, even by the confession of its founders, Phrenology could not stand the light; Sir W. not only eluded in, at once, with the proposal of a public discussion, but, at the same time, afforded to Dr S., what, if confident in his opinions, he would have most eagerly embraced:—viz. by the appointment of arbiters, to render a popular meeting competent, in some degree to the furtherance of scientific truth; in providing it with an authority, to regulate the proceedings, to check all evasive quibbling, and to pronounce sentence between the parties on the various points to be determined. Nay, to exhibit, in its very highest climax, the conscious weakness of his opponent, in contrast with his own confidence of strength, Sir W. actually offered to leave to Dr S. the sole nomination of the umpires. The event verified the anticipation. The mention of enlightened judges, a regulated discussion, and an articulate proof, was enough. Dr S. was off; and off upon the very ground that raised a public meeting above a mountebank exhibition. So much for Dr S.'s observation,—“*The sixth of March is past, and Sir W. has not met Dr S. before the public.*”

In regard to the concluding demand of Dr S., Sir W. has only to say, that he would build a golden bridge between his opponents and his facts. Every facility has been tendered to Dr S. for near a month, to scrutinize Sir W.'s induction; in which Dr S. was first urged to co-operate—then to point out himself its subjects—then to compare Sir W.'s measurements;—and, finally, to specify any objection to any of the specimens. All these proposals Dr S. has declined; though he has twice carefully examined the crania under consideration. Now, to demand more, is perhaps unreasonable in Dr S.; but all that Sir W. *can do* in compliance, *shall be done*. He cannot promise that every one of the proprietors should conveniently want his crania so long; but all the skulls that can, shall be retained in one collection, open for examination; at any rate, every specimen is to be numbered, and the names of the various custodians shall be published.

16, Great King Street, 10th March, 1828.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

DR SPURZHEIM returns compliments to Sir W. Hamilton, and begs leave to observe, that in sciences, particularly so far as positive facts are concerned, every intelligent person may claim the right of private judgment, and that the reference of any physiological question to umpires alone is *unphilosophical*. If it had been proposed to Harvey to refer to arbitration, the circulation of the blood, would he, with propriety, have admitted as umpires, those who denied his discovery, or would his opponents have admitted converts to his doctrine as fit persons to render a final decision? And suppose their decision had been unfavourable to his discovery, would it have had any effect except proving human fallibility? The case of Phrenology is exactly parallel; it is the physiology of the brain, as Harvey's doctrine was that of the heart.

Farther, Sir W. H. proposed to name umpires with the view of "regulating the proceedings, and checking all evasive quibbling;" and Dr S. begs leave to say, that it is in order to exclude all shifting, evading, and erroneous representation, that he considers a public discussion as the only one suitable to the present case.

Sir W. Hamilton says, that every facility has been rendered to Dr S. for "near a month," to scrutinize Sir W.'s inductions; and Dr S. begs leave to reply, that no opportunity has been afforded him of scrutinizing the evidences of Sir W. *before the public*, and that it is neither the inclination nor the duty of Dr S. to convince Sir W. of the truth of Phrenology. Dr S. never refused to Sir W. the right of choosing his assistants, or of bringing to the meeting all the anatomists of Edinburgh: he only insisted upon its being Sir W. Hamilton's duty to prove his assertions *before the public*, since he had *publicly* attacked Phrenology and its believers.

In order to leave to Sir W. no excuse, Dr S. adds, that if Sir W. shall, within a fortnight from this date, name a day and hour to meet Dr S. *before the public*, and give to him seven days' warning of such a meeting, he will, although very inconvenient for himself, discontinue his lectures in Glasgow, and return to Edinburgh, in order to hear Sir W. substantiate his assertions *publicly*.

With these observations, Dr S. leaves Sir W. to proceed as he shall think proper, and declares all correspondence to any other purpose in vain. Dr S. takes no notice of the puerile boasting, and so little *professor-like* expressions, in which Sir W. indulges in his letters. Dr S. entered into, and has continued the correspondence on public grounds *exclusively*, and he leaves it to the intelligent public to decide on which side the desire or fear of publicity has been most conspicuously manifested.

13th March, 1823.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and thought, from Dr S.'s long silence, that this correspondence was at an end. In reply to Dr S.'s letter of yesterday, Sir W. has only to say, that had Harvey challenged an opponent to a public disputation; had that opponent not only at once closed with the proposal, but offered, (what he was easily able to do,) to prove by experiment, in the face of an assembly, and to the satisfaction of arbiters, *appointed exclusively by the challenger himself*, that the veins had no valves, and that the arteries, when punctured, emitted only air, agreeing at the same time to peril the whole controversy on the ocular demonstration of these essential facts; and had Harvey upon this, deserting his challenge, refused to bring his opinion to an issue before any judges, by whom the facts could be examined, but would consent only to harangue an ignorant multitude, by whom the phenomena could not even be seen, who could believe only what they happened to be told, and who had even no organ to declare the impression they passively and fortuitously received; then would the cases be "exactly parallel;" but Harvey would then have been no greater a discoverer than Gall, and the doctrine of the circulation of the blood would have been as futile as the doctrine of Phrenology.

In conclusion, Sir W. has simply to repeat, what he formerly stated, that as arbiters are only a mean to an end, if Dr S. will suggest *any other mode* by which an oral discussion can be so regulated, that the parties shall be constrained to prove articulate issues, not by *assertion*, but by *fact*—that all irrelevancy shall be checked—that objections on either side shall be peremptorily determined—and that a final decision on the several points shall be pronounced;—Sir W. is ready to meet Dr S. before the public on any Saturday, and to prove his propositions upon whatever collection of crania Dr S. may select. Sir W. may observe that, independently of other considerations, Dr S. is not the opponent he could safely encounter, without an authority capable of estimating all assertions at their proper value. The man who could, in print, coolly state at his convenience, that a series of very ordinary crania, selected by himself, were "*monstrous*," "*singular*," and "*anomalous*," on which it was incompetent to establish any conclusion whatever, (a statement Sir W. defies Dr S. to find any medical man, *even of the Phrenological Society*, to stake his reputation in confirming;) who could misrepresent his adversary's opinions; and quote authorities against these opinions which do not exist:—is not the opponent who could be trusted to take no unfair advantage of his position, before a dumb and ignorant assembly.

DR SPURZHEIM TO SIR WILLIAM HAMILTON.

Dr SPURZHEIM returns compliments to Sir W. Hamilton, and, in answer to his letter of the 14th ult., reminds him once more of what he seems willing to overlook, that he is the attacking party, and Dr S. the defending party, and that, in consequence, from the beginning, Dr S. declared that he leaves it to Sir William to procure the evidences of his assertion, and to take for assistant whomsoever he likes, in order to refute Phrenology. The only condition on which Dr S. insisted to meet Sir William was, that the public should be admitted, not with the view of taking their decision on the spot as an assembled tribunal, but by having the public as *witnesses*, that both Sir William and Dr S. might be spared the painful task of disputing afterwards as to what the arguments and evidences adduced really were. Dr S. also insisted on this condition, since he was aware of the manner in which Sir William Hamilton conducted the arbitration with Mr Combe. Sir William Hamilton boasted of his ability not simply to disprove Phrenology, but to demonstrate its diametrical opposition to truth; why then does he hesitate to show his evidences before the public? Dr S. has published his doctrines, and he exposes them to miscellaneous audiences, and to numerous classes of the medical profession; he thinks that any scientific controversy should be conducted in the face of all persons of education who may choose to attend, and that the proper and ultimate tribunal by which all questions of science must be decided is the great philosophical public, and not a few individuals of Edinburgh, or any other city.

Dr S. concludes by repeating, that he has seen, with regret for their author, an habitual indulgence in expressions towards Dr S., which, had Sir William alone been concerned, would long ago have precluded Dr S. from any reply. Self-respect requires Dr S. to state expressly, that he considers himself not addressing Sir William Hamilton, whose opinions he has seen no reason to value, but the public, before whom this correspondence will soon be laid, and to whom Dr S. willingly leaves to decide on the propriety of Sir William's expressions, and on all other points of the controversy.

Glasgow, Hutton's Hotel, 17th March, 1828.

SIR WILLIAM HAMILTON TO DR SPURZHEIM.

SIR W. HAMILTON presents compliments to Dr Spurzheim, and is perfectly satisfied with having compelled both Dr Spurzheim and Mr Combe so unequivocally to confess, that they *dare not*

submit their doctrine to a close investigation ; and with *words to delude the many*, that they have no *facts to convince the few*. Dr Spurzheim's *Res non verba quæso* is significant—by antiphrasis.

Sir W. has only to add, that in the present correspondenc, he has employed no expressions that were not fully warranted, both on the ground of truth and on the ground of retaliation. He must also be permitted to say, that while he need not express, as he cannot feel, a very high respect for one who can always so easily accommodate his statements to his convenience ; he is certainly not bound to treat with distinguished ceremony, a man who had so little "*self-respect*" as, in the security of his lecture-room, daily to attribute to his opponent, absurdities, which he had no opportunity of knowing, and which, in fact, if not silly inventions of his own, were weakly credited on the cajolery of others.

Edinburgh, 20th March, 1828.

III. CORRESPONDENCE BETWEEN SIR WILLIAM HAMILTON AND MR COMBE.

SIR WILLIAM HAMILTON TO MR GEORGE COMBE.

MY DEAR SIR,—Though the induction with which I am at present occupied was more immediately intended to determine my controversy with Dr Spurzheim, yet, as the points at issue between us are the same as those in dispute between the Dr and me, I am anxious not to lose the opportunity of submitting my evidence to our arbiters. That they be enabled to appoint a meeting agreeable to all parties, may I request you to name the days and hours, when, during the week, you could most conveniently attend. I remain, my dear Sir, very truly yours,

W. HAMILTON.

16, Great King Street, 3d March, 1828.

MR GEORGE COMBE TO SIR WILLIAM HAMILTON.*

Edinburgh, 4th March, 1828.

MY DEAR SIR,—I have received your note of yesterday's date, and, in answer, beg leave to observe, That you commenced your attacks on Phrenology in the Royal Society, where the Phrenologists were not permitted to answer you, and although

* The figures numbering the sentences refer to Sir William Hamilton's notes in his next letter in answer to this.

frequently urged to print and publish your objections, you delayed doing so. (1) Next, you inserted advertisements in the newspapers, and set up men with placards at the corners of the streets, (2) inviting the public in general to come and hear you deliver an antiphrenological lecture for payment of half-a-crown. (3) Having given a lecture on my part, in answer to yours, (4) you then discovered that a private reference to umpires, to fix some points of fact, was a proper preliminary to an appeal to the public on the merits of Phrenology, and I acceded to your wishes in this particular. (5) Umpires were named, and proceeded to investigate the evidence you laid before them. They rejected it as incompetent, (6) but agreed to seek evidence themselves, by pathological dissections at the Infirmary and Fever Hospital, on the points which you had undertaken, but failed, to support (6) by proof, and to this proposition you acceded. Having heard of Dr Spurzheim's intention of passing some weeks in Edinburgh this winter, and having read in your letters, and heard you repeat in debate before the umpires, that Drs Gall and Spurzheim are the "ONLY authentic representatives of their own doctrines," and that you wished "ONLY to refute the assertions of these two founders," I proposed to you to devolve the reference on Dr Spurzheim; but this you declined. I acquiesced in your declination, and expressed my readiness to proceed with you to a close. After this, and without the least communication with me, you thought proper again to attack Phrenology before the public, in the Caledonian Mercury of 21st January, 1827; (8) to bring forward all your antiphrenological propositions then under reference to the umpires, to omit all mention of the fact, that the umpires had rejected all the evidence of them you had then adduced, and had agreed to go in quest of evidence themselves; and, nevertheless, in this state of matters, and after having declined to admit Dr Spurzheim as a party, you called on *Dr Spurzheim* "to manifest, if that be possible, the futility of your counter-propositions," and asked him to do so by means of the very 50 skulls which the arbiters had already rejected. (9) I replied in the Mercury to this most irregular and unfounded manifesto, and the controversy was supported in its columns, between yourself on the one hand, and Dr Spurzheim and me on the other, until 31st January, when you wrote, "I say nothing in reply to Mr Combe, as I beg leave to decline his interference in the present controversy between Dr Spurzheim and me." By your own act I was thus excluded; and, after having declined to take Dr Spurzheim as your party, you fixed on him alone. A correspondence next ensued between you and Dr Spurzheim, which I have perused, in which he called on you repeatedly to name a day for bringing forward your evidence before the public, and offered to attend; but in which you declined to proceed before a mixed audience, stigmatizing them as a *multitude* and

"*an idle mob*, (10) without knowledge, as without a voice;" and you requested him to name umpires to proceed to a *private discussion*. (11) This he declined, and reminded you, that you had commenced by addressing your objections to an audience of the very description to which you here alluded, (12) and that the Phrenologists, as well as the very intelligent citizens of Edinburgh, had a right to demand a public refutation, as the attack had been publicly made. You persisted in refusing to bring forward your proof in this way, but said you "had only now to publish your statement of facts." Dr Spurzheim replied, that he will be glad how soon you shall do so. Accordingly, in yesterday's Mercury, you advertised as speedily to be published, "*Fictions of Phrenology and Facts of Nature*;" but before this publication takes place, nay, on the very day of your advertisement, and, forgetting that the umpires had fixed a mode of proof, you, in your note of yesterday, have asked me to attend before the arbiters to see you submit some new evidence in the arbitration to be adduced by yourself. (13)

I am quite ready to meet you before the arbiters at any time you please; but respect to them as well as to consistency, requires that you, in the first place, should terminate your discussion with Dr Spurzheim, by publishing your "*Fictions and Facts*;" and, in the next place, satisfy the arbiters regarding the principle on which you have hitherto proceeded, and intend in future to proceed. You appear to conceive yourself to enjoy an unlimited latitude of inconsistency; and appeal to the public one day, then the next denounce them as "*an idle mob*;" next revert to the public, and again decline their jurisdiction; you hold out Drs Gall and Spurzheim as the sole objects of your attack, then refuse to assume Dr Spurzheim as a party; nevertheless, you in a few days fix upon him, and exclude me; next you leave him off in the middle, at least before the close, and desire me to proceed. Satisfy the arbiters of the propriety of all this, and publish whatever you have to urge against Dr Spurzheim, and I repeat, that I shall then be ready to meet you before the umpires whenever you please. (14) I am, my dear Sir, yours very sincerely,

G. COMBE.

SIR WILLIAM HAMILTON TO MR COMBE.

MY DEAR SIR,—Your letter of the 4th was so melancholy a manifestation of the torture, which the fear of being publicly crucified, under the arbitration, on the facts of nature had inflicted, that I was almost resolved to pass it over as a writhing, unseemly indeed, but pitiable; and, in these circumstances, I meant, in case you and Dr Spurzheim had lain quiet, to have

simply refuted your doctrine, without exposing you personally to the world, in all the ludicrous contortions of your polemical agony. What I last night learned, has, however, altered my resolve. I am informed that my opponents thought it better to anticipate the expected publication of the documents on my part, and that your letter, along with my recent correspondence with Dr Spurzheim, was read, and (for the lookers-on, very amusingly) discussed, at the last meeting of the Phrenological Society. The portentous mis-statements it embodies, formed, however, as was to be expected, no part of the debate. (The Phrenologists, indeed, by the way, seem to think themselves emancipated, in all relations, from every regard to the correctness of their allegations: and, in reference to myself, I have good reason to *protest against any credit being accorded to aught asserted by them of me, either in public or in private, either in lectures or in print.*) This publication and discussion by the Phrenologists among themselves, induces me to signalize, once for all, the very dignified and candid manner in which you are pleased to conduct a controversy; while it also authorises me to take what steps I may deem expedient, in bringing the whole correspondence before the tribunal of the public. As I would avoid the irksome labour of recapitulating your statements, I beg leave to send you my observations under the form of notes.

1. None but the Phrenologists could have dreamt that I had not as good a right as themselves, and as all other speculators, to canvass a scientific doctrine, where and when I chose, and to publish or not to publish my opinions, in conformity to my own humour and caprice. Doctors Gall and Spurzheim lectured against all mortal systems for fifteen years; and they, I am well assured, were never pestered by the feverish anxiety of any other theorists, "to print and publish their objections." You yourself, have, I understand, privately circulated a pamphlet, in which, *following me*, you maintain that Phrenology involves the melancholy doctrine of a material necessity,—a doctrine on which man has no more moral responsibility than a jack. Have you been "urged" by the clerical associates of your sect to *publish* this argument against their own professional utility? For though you do not perceive its issue, those better versed in metaphysics and theology, are well aware that it must subvert, if true, every ground, in natural religion, for the existence of a God, and otherwise, explode Christianity in disproving the possibility of sin. It was, perhaps however, cruel to keep my victims so long in suspense before indulging them with the *coup de grace*.

2. I beg leave, in answer to this very dignified and pertinent allegation, to say, that I should blush indeed, could I be thought capable of so vulgar a piece of quackery. This mode of decoying the multitude to the lecture-room, is purely phrenological; and in the annals of scientific teaching, *belongs, I should imagine, EXCLUSIVELY TO YOURSELF.*

3. This is either the veriest twaddle, or there is an insinuation (which I shall not stoop to characterize) intended for those who know nothing of the circumstances, that my lecture was for any profit of my own. Whatever Phrenology has been to you, its refutation neither has, nor ever can be of any emolument to me. It has cost me a little time, and afforded me some amusement; but truth was my sole motive in abating an opinion, which cast a ridicule on the country, and had absolutely become almost a common nuisance.

4. It is amusing to hear you talk of *answering* a demonstration which you and the leading Phrenologists durst not venture to witness—not one iota of which you were able to invalidate—and the facts and arguments of which you did not know, did not comprehend, misrepresented, or eschewed.

5. I only wished to compel my opponents themselves to confess the absurdity of their facts, and to bring my refutation to the level of the multitude whom I attempted to satisfy of their hallucination.

6. See note 9.

7. Upon very good grounds. See above, pp. 18, 19.

8. Could I not, without Mr Combe's permission, defend myself when attacked? Could I not, without abandoning my controversy with him, engage, at my own choice, in another with Dr Spurzheim? And could I not propose the same points for discussion to both my antagonists?

9. It is sad to be obliged to reply to such statements. The umpires had nothing to do in my controversy with Dr Spurzheim; and *they never saw, never considered, and never rejected the fifty skulls*. And if they had, there were other crania in Edinburgh on which to refute the craniological hypothesis. It was, however, in part to disprove before the umpires, the marvellous assertions, which, after Dr Spurzheim, you have ventured to advance in regard to these skulls, that I wished them to meet. In regard to your other allegations, you know as well as I, that it was *only* at the fag end of the second meeting of the umpires, (and owing to circumstances which, I have it under your hand, did not originate with me, we had only *three*,) that *I had any opportunity of adducing evidence*. The *third* was appointed by you yourself, in the Phrenological Hall, where I certainly had no evidence; and this meeting was only called to deliberate about future proceedings. At the end of the second meeting, I merely produced, in confutation of the phrenological proposition, that the frontal sinus is rarely to be found in women, the *thirteen female crania* from Dr Spurzheim's collection. You professed not to know that the sex was discriminated by Dr S., and the arbiters did not think themselves competent to decide that they were accurately marked. You agreed to write for information to Dr S. The sinuses also, were *at that time*, only in general, opened so as to be measured by a probe; and you disputed every

measurement. It was by all parties agreed to supersede the evidence of these *thirteen crania on this point*, and for *these special reasons*; but there was no decision minuted, even to that effect. Yet admitting this, it was worthy of the cause which you so congenially support, to assert, that because a *few* of the crania had been found, on *temporary* and *particular* grounds, incompetent to establish *one subordinant* point, that the *whole* collection is, on *permanent* and *general* grounds, incompetent to evidence *any conclusion at all*. The decision could, in fact, however, have no relevancy whatever *at present*, and *in relation to Dr Spurzheim*. Dr S. cannot impugn the accuracy of his own sexual discrimination: and a sinus is now fully displayed in every skull of the collection.

10. Who does not perceive that the expressions have here nothing to do with the *personal respectability*, or even with the *general intelligence* of the *audience*? The most fashionable assembly would be a mere populace, in the determination of anatomical problems.

11. You say you have perused my correspondence with Dr Spurzheim. But your genuine Phrenologist can only perceive a fact or report a statement, *by contraries*. My answer to the wish which Dr S. professed for a public discussion, was, as you know, in the following words:—"Though personally averse
 " from any thing like a public exhibition, and though convinced
 " that a crowd is neither the audience to understand, nor a
 " crowded assembly the place to detail the evidence of an ana-
 " tomical induction; Sir W. is too thoroughly convinced of the
 " certainty of his proof, *not, on other accounnts, to court an oppor-*
 " *tunity, of manifesting, in the most open manner, the unsoundness*
 " *of the opinion he controverts.* HE THEREFORE ACQUIESCES IN DR
 " SPURZHEIM'S PROPOSAL OF A PUBLIC DISCUSSION. The points
 " now at issue are purely anatomical, and it only remains for Dr
 " S. to mention the persons most competent to the task, whom
 " he would propose as umpires on the occasion."

12. To my demonstration you gave, what you were pleased to call, an *answer*. Phrenology and I are therefore quits on this score. It is also a logic peculiar to my opponents, to infer, that because a *public lecture* can be profitably delivered, a *public discussion* can be rationally conducted, without an authority in the meeting, to regulate and to decide.

13. It requires more acuteness than I possess, to perceive why two birds may not be killed with one stone, and two antagonists not be refuted on the same points, by the same evidence.

14. Knowing, as I do, the issue of my induction, I should certainly, after the publication of my statement, deem it an idle encroachment on my own, and on the patience of any reasonable men, to repeat before them, the evidence in refutation of a doctrine, which, from its own futility, and the mode in which it is defended, I now regard as all too contemptible for controversy.

I have undertaken to assassinate Phrenology, not to lay its spectre. *Si populus vult decipi, decipiatur.* I remain, my dear Sir, very truly yours,

W. HAMILTON.

16, Great King Street, 8th March, 1828.

MR GEORGE COMBE TO SIR WILLIAM HAMILTON, BART.

Edinburgh, 10th March, 1828.

MY DEAR SIR,—Whatever contests you and I may maintain in our characters of Phrenologist and Antiphrenologist, I presume there is no necessity for our quarrelling as individuals; and as, in your letter of the 8th March, you introduce certain topics and expressions which have a natural tendency to produce this last result, and are not relevant to the points under discussion between us, I, in the spirit of perfect amity, beg leave to point them out, not doubting but that they will be removed.

The object of my remark on the mode in which your antiphrenological lecture had been announced, was merely to show that you had commenced by collecting a miscellaneous audience, but I intended nothing disrespectful to yourself. The impression in my memory was, that I had seen your lecture placarded at the corners of the streets; but as you say not, then I request you to hold the statement to that effect as withdrawn. As to the allusion “to payment of half-a-crown” in my letter, the object of introducing it, was to call your attention to the fact, that, in your attack on Phrenology, no discrimination was used in admitting the audience. In the public newspapers you invited all who chose to pay that sum to attend and hear you demonstrate the futility of the phrenological doctrines. I am surprised, therefore, that you could conceive me to impute to you the pocketing of the money. I considered the fact, that your lecture had been delivered for relief of the distressed operatives as so perfectly well known, that no person who did not seek to make a mistake, could possibly fall into error on the subject.

You are pleased to introduce some uncourteous remarks on the placarding of my lecture in answer to yours. I consider the expressions in which you habitually indulge as indications of the soreness of your own mind, and therefore pass them over, as calculated to injure only yourself and your own cause. My lecture was advertised and placarded exclusively by the committee for the distressed operatives, and I feel no uneasiness about the manner in which they managed its publication. Their object was to draw as large an audience as possible, and whatever conduced to this, and was not inconsistent with propriety, met my entire approbation.

In your note 1, you introduce a long series of remarks on a

pamphlet which you say you "understand I have privately circulated." It is quite true that I have privately circulated a pamphlet, but diametrically opposite in character to what you represent. If you have not seen "the Essay" to which you allude, how can you be justified in characterizing it as you have done? Nay, misrepresenting it to the utmost extent possible, in a letter designed for publication? My own conviction was, that I had strengthened and systematized the proofs of design, wisdom, and goodness in the Deity; and a pretty numerous circle of friends, not destitute of metaphysical acumen, are of opinion that this conviction is well founded. If you have seen the Essay, you must have observed, what stares every reader in the face, namely, the caveat given in the preface, that "*I rely on the honour of every individual to whom the Essay may be presented, that it shall not be reprinted, reviewed, nor publicly criticized, but that it shall be treated in good faith* AS A PRIVATE COMMUNICATION." My object, as is there fully explained, was to present it to reflecting individuals acquainted with Phrenology, who take an interest in the improvement of mankind, and in whose honour I had confidence, "soliciting, in return, a free communication of their opinions regarding it;" informing them, at the same time, that it had been printed "*exclusively for private distribution; that it is not published, and not sold; so that, if it should contain important errors, injurious to the public, it is in my power at any time to suppress it; and pledging myself to do so whenever such mistakes are pointed out.*"

Let me put it to your candour, therefore, whether a communication made in confidence, upon honour, and for the purpose of obtaining private criticism previously to publication, can fairly or honourably be even adverted to, not to say stigmatized, by you, to whom no copy was presented, in a letter intended for the public eye, on topics altogether unconnected with the Essay in question? For my own part, I care nothing for your denunciation. I have received many valuable remarks on the Essay, and intend speedily to publish it, after availing myself of these; and you and the public will then enjoy a legitimate right to treat it according to its deserts. But in the mean time, for the sake of your own honour, I take the liberty to suggest, what I conceive justice also dictates, that you should withdraw the note, or paragraph, in which allusion is made to this private communication; in which event, all notice of it in this letter will also be omitted. I trust that I need say nothing farther on this point; yet I cannot avoid observing, that it would be just as fair and correct on my part, to inquire concerning the private and confidential remarks which you have made at any time on the doctrines of Spinoza, and to charge you with atheism. This would be an appeal to the religious feelings of the public, with a view to prejudice you, that would reflect

disgrace on any man pretending to the character of a philosopher, and I do no such thing. But if you shall persist in retaining *for the public eye*, a paragraph which alludes to a subject utterly unconnected with our phrenological controversy, the public will not be slow in judging whether this has been done from a conscientious regard for the interests of religion, or whether it has not been thrust in with the hope not only of exciting an unjust prejudice against me, but also of withdrawing attention from the actual merits of the controversy, after finding yourself on the losing side.

After the turn which you have now given to the correspondence, I decline entering into any farther discussion with you in this form. I repeat, that I am ready to meet you before the arbiters on any day which you may appoint, and if they shall be of opinion that the arbitration ought at present to be proceeded with, before you have published your statement against Dr Spurzheim, I shall cheerfully obey their commands. In replying to this letter, I shall take it kind that you introduce no new topics, so that the correspondence may here terminate in the mean time. I am, &c .

GEORGE COMBE.

SIR WILLIAM HAMILTON TO MR COMBE.

MY DEAR SIR,—In reply to your letter of yesterday, I have only to say, in general, that if you feel sore at any parts of my last communication, you must recollect that these were merely the rejoinders, at length tardily provoked, by the irrelevant personalities with which you have of late attempted to screen the weakness of your cause, if not to disgust your opponent with his controversy. Your own manifold misrepresentations in the Caledonian Mercury, and the contemptible distortion of all truth and reason in the anonymous articles of the phrenological champion, the Scotsman, were allowed to pass, in general, without refutation, because I had myself no patience for the task, and was unwilling either to engross the columns of a newspaper, or to perplex the public with contradictions of what, even if true, had no influence on the scientific question. The continuance of the same teasing conduct in your last letter, made it expedient, however, to discontinue, for a moment, my forbearance; and, as I expressly stated, my answer to that letter was intended “*to signalize, once for all,*” your undignified and un candid mode of disputation, affording, at the same time, a sample of the *utter disregard, which, in common with other Phrenologists, you habitually manifest to the correctness of your most positive and most important assertions.* In doing this, I had no intention of exciting any irritation on your part; but in check-

ing a system of personal allusions, as inaccurate as irrelevant, and wholly unworthy of a philosopher and the cause of truth, I was certainly not bound to see that the missiles, I only retorted from myself, fell without inconvenience on the hand from which they had been originally sent. It is curious also that you object to my letter, only in its more unimportant and least galling passages; and are fain to pass over, in dumb endurance, its annihilating expositions of the phrenological tactic you employ, of *reversing, in your reports, the reality of the most notorious facts*. But though I might have conceded all you ask, had your letter been confined exclusively to ourselves, the case is completely altered by its publication, on your part, to the Phrenological Society.

As to the matter of the placards, it would certainly have been long before I stooped to reproach you with that device for congregating a crowd. But as you have published, through the Phrenological Society, that I condescended to adopt that mean, I must be allowed, on my part, to publish a contradiction of so intolerable an allegation. My statement, that this mode of assembling a multitude was "purely phrenological," is also, I am confident, perfectly correct. I know nothing of the Committee for the relief of the distressed operatives, but knowing, as I do, the manœuvring of your sect, (and you will correct me if am wrong,) I surmise and venture to state, that the whole business was a *phrenological job*, originated and carried through by phrenological members of that committee, whose compassion for the starving operatives under their protection, did not induce them either to encourage others to pay, or to pay themselves, their half-crown to any lecture but that in favour of their own opinion. If the proceeding had not been phrenological, if the only end in view had been the advantage of the charity, and if the measure itself had not been indecorous, why was it not *proposed to me* by the committee, that my lecture also should have been placarded? It was likewise a piece of amusing subtlety to make the committee pay the expense of placards, advertisements, &c. A larger sum could thus be proclaimed and published as the proceeds of your lecture paid over to the charity. Your friends truly neglect nothing to captivate opinion, or to magnify themselves.

In regard to my *third* note, as no effect could have been produced *in Edinburgh* by the publication of the context, I am willing to cancel it, provided you qualify your expression so as to prevent a stranger inferring from it, as he naturally would, that the lecture in question was for any paltry profit of mine.

The allusion in my *first* note to your pamphlet, was pertinently introduced, in illustration, once for all, of an absurdity with which I have been often pestered by you; that, having *read* a paper against Phrenology, I had incurred an obligation to the Phrenologists, *of publishing my attack, and of publishing it*

without delay. Had I conceived it possible, that the contents of this note were such as to excite *any prejudice against your religious opinions*, or to operate, *in any way, to your personal disadvantage*, it *never could* have been written by me. And if you yourself will state, and any impartial person confirm, that the smallest danger of such being its effect, is to be apprehended, I must, perforce, withdraw it. Such a statement would, however, be tantamount to saying, that no philosophy can be argued irreligious in its consequences, without reproaching the philosopher himself with irreligion. I hold, and am not bound to dissemble my opinion, that *Phrenology is implicit atheism*; but the Phrenologists would be greater conjurors than I believe them, if they were able to trace the connexion, however necessary, between their philosophy and its results. *Phrenology—Physical Necessity—Materialism—Atheism*—are, to those competent to the question, the precipitous steps of a logical transition: but though you may have advanced a degree farther than those weaker brethren, who still actually hold that Phrenology is not inconsistent with the moral personality of man, I am far from supposing that you have even a suspicion of the melancholy conclusion to which your doctrine inevitably leads. And if the nature of my allusion could not possibly affect you personally, it is idle to say, that I had no right to refer at all to a work, the opinions of which, in so far as they were stated by me, you *have publicly read in the Phreological Society*, which you have printed, widely circulated, and distributed even to women; which, right or wrong, is not confined to the sphere of its distribution; which is openly discussed in company, and has even been attacked in print; nay, which you yourself declare *to be on the eve of a general publication*. I was in fact entitled not only to state the general doctrine, but to have minutely canvassed the arguments of a work thus virtually published. Did not the Christian Advocate of Cambridge publish an elaborate refutation of the *Œdipus Judaicus*, which was only privately circulated by its author? I have never read your work; and if you mean to assert, that the doctrine it maintains is “*diametrically opposite*” to the *material necessity* or *fatalism* of human action, I am happy to afford you the opportunity of contradicting a current misconception; and at once acknowledge the report, on which I depended, to be incorrect. But on the supposition that you maintain that doctrine, I expressly stated, that (with many pious individuals) you were wholly ignorant, that the negation of the moral world virtually denied the existence of a God; and no more suspect you of irreligion for this opinion, than I would accuse a divine of conscious atheism, who could identify the philosophical doctrine of *absolute necessity* with the Calvinistic doctrine of the *absolute decrees*.

But, though not with reference to yourself, I can well imagine you anxious, on other grounds, to have the note expunged.

The phrenological clergy have some character to support as theologians. They are at last, perhaps, beginning to suspect that they have placed themselves in a mighty ludicrous position, and every exertion must be made to prevent them coming to a clear consciousness of their situation. You are well aware, that when they leave the camp, (and decamp they must,) they will, in a body, carry back with them, as they brought over, all the women converts, and half the men. Where then will be your multitudes? The bubble will collapse the moment the pious breath by which it has been inflated is withdrawn.

But while I should hold myself disgraced, if I could have whispered aught against you, to the prejudice of your religious estimation, this reproach you actually incur, by the most odious and unfounded of insinuations against me. You say, in reference to my allusion to opinions, which you have printed, circulated, and publicly read, to an allusion in which you are personally guarded from all prejudice, that "it would be just as fair and correct, on my part, to inquire concerning the private and confidential remarks which you have made at any time, on the doctrines of Spinoza, and to charge you with atheism." It is well that a phrenological controversy teaches the *nil admirari*; and I cannot treat this inuendo even with so strong a feeling as contempt. I leave it to others to distinguish the *total difference of the two cases in every point*, supposing the *grounds of your insinuation to be true*. *These are false*; and as I know not by whom, or how you may have been deceived, I can only declare in general, that *I never at any time made any confidential remarks on the doctrine of Spinoza; that I never believed, and never expressed a belief in his opinions; in short, that I never uttered a philosophical tenet in private, which I would hesitate for a moment to proclaim in public*. Pantheism, though sometimes, of late, incautiously preached as Calvinism, I hold to be subversive of all religion, natural and revealed. With his ablest opponents I regard Spinoza, his first principles being conceded, as the most cogent of philosophic reasoners. It is only in its foundation that his doctrine can be assailed, and this foundation cannot be denied by a Phrenologist. The paltry attempt at intimidation, contained in this unfounded aspersion, principally determines me not to retract my reference to your pamphlet, unless compelled to do so, by the personal plea, which, however groundless, I would not choose to resist.

As this correspondence is professedly for publication, *I again protest against credence being given to any private assertion or insinuation of the Phrenologists regarding me, of any kind*. Almost every statement they have hazarded, in print, has been disproved, or allowed to stand unrefuted, only from indifference; while, on their side, they have been unable to invalidate one iota of any assertion hitherto advanced by me. This caution against their private misrepresentations, is *not*, however, founded *only*

on an inference, *a fortiori*, from their public. In this, likewise, I disclaim any allusion to you. I remain, my dear Sir, very truly yours,

W. HAMILTON.

16, Great King Street, 11th March, 1828.

MR GEORGE COMBE TO SIR WILLIAM HAMILTON, BART.

Edinburgh, 12th March, 1828.

MY DEAR SIR,—To a lover of peace like myself, it is gratifying to have it declared, that you would do as a favour what could not be exacted as a right,—personally to oblige me,—because, were it not for your strong and repeated asseverations to this effect, I should certainly have inferred, from the whole tone and complexion of your recent communications, that your great aim was, not to discuss a philosophical question, with philosophical temper, but, through misrepresentation, violated confidence, and an appeal to prejudice, to excite personal ill-will against one whom you had failed to touch by the weapons of reason. This conclusion would have been forced upon me, even by your first attack upon a paper or essay of mine, nowise connected with our phrenological controversy; and still more by your persisting in this course, after being fully apprized of its having been a private communication, made to persons in whom I had confidence, under an express engagement, *upon honour*, that it should not be publicly criticised in any way, and that my object was to obtain their friendly advice and opinion, before any position should be taken by me absolutely, even in my private thoughts, or in any shape before the public. To me, certainly, it did appear, that, after being put in possession of those facts, your lips were as much sealed as those of the parties on whom my confidence was originally bestowed, and who, by retaining my communication, agreed to the conditions on which it was made. You justify your attack by reference to the answer to the *Œdipus Judaicus*; but you do not show that the *Œdipus*, like my essay, contained no allusions to any existing system, and that it was privately circulated among the author's friends with the sole view of obtaining their confidential criticisms on its merits prior to publication; and, although you had so shown, I would still reply, that the commission of one wrong by a Cambridge scholar does not justify another wrong, even by a senior wrangler of that university.

The error you have committed is greatly aggravated by the avowal, that *you have never seen the essay* which you have ventured to characterize so offensively; and, although my practice hitherto has been to confine myself to a plain statement of facts, supported by documents, in answer to aspersions, I shall ven-

ture to assert here, that you are the first person who, in profound ignorance, in so far as personal knowledge is concerned, adventured, on the faith of vague report, to charge upon another atheism, and every thing else that could be supposed capable of appalling the sentiments and scaring the imaginations of the good and pious; and all this, as you say, for the charitable purpose of affording me an opportunity of contradicting the rumour! I have told you also, that I am about to publish the essay of itself; and most men would have considered publication as a far better means of putting down gossip-misrepresentation than by simple denial, or by overthrowing a metaphysical superstructure, which owes its existence entirely to your own imagination.

You certainly display no less confidence in your metaphysical acumen than you did previously in your antiphrenological polemics. In the latter, anticipating a triumph, you commenced by vaunting on your own side, and contemning the other by expressions highly derogatory and insulting to the intellect and character of Drs Gall and Spurzheim; but neither in public, nor under our private reference, have you hitherto adduced an iota of evidence in support of your boasted objections. The very fact of the umpires having agreed, as is established by their report, to go in quest of evidence themselves on the subject of your allegations, proves, that you neither adduced, nor offered to adduce, any which they deemed satisfactory. You now talk with equal disrespect of the mental capacity, in regard to metaphysics, not merely of your humble correspondent, but of such of the Calvinistic clergy of Scotland as have embraced Phrenology, and of the sex whom you derogatively call "women," but who, in my opinion, have generally fully as much of intellect, and a great deal more consistency in ratiocination than their contemptuous critic. My allusion to Spinoza was not introduced with the view of intimidation. Its sole purpose was, by establishing a parallel case, argumentatively to put you out of conceit with your mode of attacking me. Even this, however, has failed to produce the desired effect. I leave it to the public to decide on the motives both of your conduct, in this respect, and mine, and only add, that I distinctly disavow every imputation on your religious opinions, whether stated privately or in public.

It does appear to me, that one not of the least of the errors into which you have fallen is fancying that the Phrenologists are writhing under the lash of your pen. For myself, I can say most truly, that I have suffered nothing, and experienced no uneasiness whatsoever, except from the time wasted in replying to a correspondence filled, as it has always seemed to me, with perplexed ideas and entangled expressions, and in which my opponent has been constantly shifting his ground. An intoxicated person thinks every one else tipsy, and that the whole external world is turning round. I account for your rhodomon-

tade, and for all your abuse, by supposing that, being angry yourself, you take it for granted that all the Phrenologists are impassioned. Being averse from quarrelling, I took no notice of your expressions as they occurred; but, before closing the correspondence, I must distinctly state, that I consider you to have indulged in assumptions and insinuations against the Phrenologists and me, of the most unhandsome, ungenerous, and unwarranted description. In my own letters, I have watchfully endeavoured to avoid being drawn into the imitation of such conduct. If, notwithstanding all my efforts to the contrary, I have in any instance misrepresented a fact or statement, or indulged in any personality whatever, which, up to this moment, I am unconscious of having done, I shall be most truly sorry for it;—nothing was farther from my intention, and nothing could so effectually injure my cause.

I must also protest against your either making me responsible for what has been done by others, or of turning your correspondence with me into a vehicle of attack upon third parties. I have told you before, and now repeat, that with the articles in the Scotsman I had no concern directly or indirectly. That journal is quite able to answer for itself; but I may remark, that what has appeared in it can hardly be called anonymous, the author being known to every one, I should think, but yourself. He has, I know, avowed the authorship to some of your own friends; and I have heard him say, that, out of kindness to you, he gave his review of the controversy a title which he is not accustomed to use, and abstained from pointing out a variety of inconsistencies into which you had fallen. His review was also, in my opinion, remarkable for its impartiality and dispassionateness; but, had it been otherwise, the answer should have been sufficient, that I have not written a syllable against you to which I have not affixed my name. As to personalities, those who ought to be impartial judges have assured me they consider you as the party who alone has unwarrantably indulged in them, and that the language you have employed, when speaking of Phrenology, its founders, and advocates, has been exceedingly discourteous and unhandsome. But of all this the public will judge.

Your remarks respecting the placarding and advertising of the lectures are unworthy of yourself. The committee of inhabitants for relief of the distressed operatives did what they saw proper, and announced the proceeds at what they saw just, without the slightest interference on my part. I had no responsibility, and feel no anxiety on the subject.

In one thing only I must in conclusion acknowledge you have succeeded; that is, in drawing me into a correspondence on various subjects utterly unconnected with *your chosen task of disproving Phrenology* in a scientific manner, by adducing physiological evidence against it. But, for the future, if we

correspond at all, our communications must be confined strictly to your proofs; for I am fully determined against travelling with you, in this form and manner, over the boundless field of ethics and metaphysics. On such subjects, there is no other way of understanding each other, or making ourselves understood by the public, than by delivering ourselves in the shape of a volume, or rather of volumes.

SIR WILLIAM HAMILTON, BART., TO MR GEORGE COMBE.

MY DEAR SIR,—As you still obstinately persevere in your untenable assertion, that I had no right to refer to your *book*, let us throw the book out of the question; and I beg you to answer me this interrogation, *Why are you better entitled to allude to opinions advanced by me, in a paper read before the Royal Society, than I am (AND IN REPLY ONLY TO YOUR OWN ALLUSION) to refer to opinions maintained by you in a paper read before the Phrenological Society, and which was even reported and published in the phrenological newspaper, the Scotsman?* Independently of all right, I have, however, already expressed my willingness to withdraw the obnoxious note, if it can be shown, that its purport could be, to you, of any personal disadvantage: and I further offer to do so, if you state, either that the opinions in your printed work, are not the same with those in your paper,—or that you have subsequently changed your views,—or that you have no intention of again publishing them to the world.

In regard to “the mental capacity of such of the Calvinistic clergy, as have embraced Phrenology,” on that point, at least, you and I are pretty nearly at one. Those of them who *do not* hold the physical necessity of human action, are by you and me, and all who know aught about the matter, despised as purblind Phrenologists: those of them who *do*, are by every one, not the veriest tyro in theology, viewed as the most ignorant, or the most heretical of divines. They can only escape the phrenological, to be impaled on the theological horn of the dilemma. I, indeed, condemn no Calvinist for phrenological opinions; *as, in fact, no true Phrenologist can be a Calvinist.* “*The contingency of second causes,*” and “*the liberty of man undetermined by any absolute necessity of nature,*” is a dogma, as much part and parcel of the Calvinistic scheme, and is as strongly enforced by the Confession of the Scottish church,* as any of the Five Points: and a clergyman who could maintain an opposite opinion, would

* See Confession, c. iii. § 1, c. iv. § 2, c. v. § 2 and 3; and, above all, c. ix. § 1 and 2.

promulgate a heresy, not only condemned by the standards of Calvinistic orthodoxy, but in contradiction to all the doctrines hitherto received as fundamental, by *every Christian sect*.

It is also well in a Phrenologist to insinuate against me any disrespect of the Calvinistic clergy, and this, when in the very act of guarding their system against unmerited reproach ! Calvinism, in its day, has been the object of no merciful abuse. But the reviling of its enemies has been light, when compared with the opprobrium cast on it by the philosophy, fondly embraced by some of its disciples, even as a new pillar of their faith. The treatment indeed of their Clerico-Calvinistic converts, by the Phrenologists, has been at once cruel, perfidious, and ungrateful. After seducing them from their walk of usefulness—after exposing them to ridicule, for the credulous profession of an idle hypothesis—and after abusing their ghostly influence to decoy the multitude into the net ; it was certainly too bad to hold up their victims to public and to bitter derision, by proclaiming *that a faith in the peculiar doctrines of Calvinism, was only to be explained by the inordinate development of the brute propensities of Self-conceit and Murder.**

That was the most unkindly cut of all !

I must also protest to the ladies, against your groundless imputation of disrespect to the sex, in having spoken of them in their generic capacity, as *women*. I regard them, on the contrary, as gracing any opinion they may choose to patronise ; and of the phrenological, I am free to acknowledge, that they constitute not merely its only ornament, but its *principal strength*. I am, indeed, truly afflicted, in being compelled to contradict a theory which they have taken under their especial protection ; but philosophy has no politeness. And if I should have offended their sense of logical independence, by insinuating that they have been brought blindly over to the new doctrine, by the influence of clerical example on their constitutional piety, I merely stated what the male Phrenologists themselves, not only publicly proclaim, but on which they even profess to found a debt of gratitude to the clergy of the Scottish church ! †

I leave the assertions relative to your own misrepresentations, &c., to be estimated, without any further comments. In regard to the anonymous articles in the Scotsman, I am, to this moment, utterly ignorant of their author. I certainly never

* “ Dr Price, universally known by his mathematical, moral, and political writings, was the son of a dissenting minister at Brigend, in Wales. His father was a rigid Calvinist ; but young Richard occasionally started his doubts and difficulties, (HIS SELF-ESTEEM AND DESTRUCTIVENESS BEING SMALL,) and often incurred his father's displeasure, by the arguments which he advanced against the tenets of his sect.”—SPURZHEIM'S *Physiognomy*, 1826, p. 105.

† See report of the speeches at a phrenological dinner, somewhere in the Phrenological Journal.

took the trouble of inquiring; and if I had wasted a thought upon the matter, I should have deemed it unjust to have attributed on suspicion, to any respectable individual, such creditable productions. But though, in themselves, beneath consideration, if your approbation extends so far, as to print them in the Phrenological Journal, I may be disposed to deal with them as representing the school; and shall be happy, in that case, if you will permit me to illustrate their merits by a commentary.

I am glad to hear that you mean hereafter "to confine yourself strictly to the proofs." *This is precisely the lesson I have been desirous of teaching*: and in following you, for a moment, in your irrelevant excursions, I only intended, by retorting your own warfare on yourself, to put you out of conceit with a favourite mode of disputation, and to compel you, even *for your own sake*, to limit the controversy to the facts.

I allow many statements of yours to pass without observation; because, though easily refuted, their importance would not compensate the trouble. I remain, my dear Sir, very truly yours,

W. HAMILTON.

16, Great King Street, 14th March, 1828.

IV. REPORT OF DR SPURZHEIM'S LECTURE ON THE FRONTAL SINUS,

(From the Scotsman Newspaper of February 2, 1828, referred to by Sir William Hamilton on pages 32 and 33.)

As mentioned in our last, Dr Spurzheim did treat of the *Frontal Sinus* on Wednesday. He requested that it might be observed, in the first instance, that, although all which had been asserted respecting it were true, there was still a large field of usefulness left for Phrenology. The *sinus*—or, in other words, the hole or cavity betwixt the inner and outer plates of the skull, affected only our means of judging of the amount of the brain *in the forehead*—and generally a very small portion of the lower part of the forehead. But even although the sinus were found in every instance, (which is not the case,) the means of judging as to the great mass of the brain—of the whole regions assigned to the propensities and sentiments—were left unaffected. And how much of character—how much of conduct, depended on the propensities and moral feelings of each individual! But let it be observed, in the second place, that there is no sinus or cavity in the crania of children at their birth, nor until they reach a considerable age,—none at six months, two, five, or even seven

years. The cranium is very thin in infancy, and no one can deny that the external conformation of the skull is then—in all healthy and ordinary cases—indicative exactly of the size and form of the internal brain. Here, then, although we should not go beyond ten years of age, is a clear and unimpeachable field on which we may judge of the comparative volume and distribution of those portions of brain in the forehead assigned to the perceptive or knowing faculties,—of what nature has originally done and intended for each individual in regard to intellectual powers: and is not this of very great importance? Is there not a great deal of the characters and talents of individuals—even without Phrenology—known and indicated by the age of seven? But Phrenologists do not stop here. They say that of two skulls one may have a cavity, and the other not, and yet the skull without an open space betwixt the plates may be thicker than the one which has a cavity. Dr Spurzheim produced instances of this. The existence or non-existence of a sinus, therefore, was no absolute criterion of the thickness of bone or skull; and Phrenologists contend,—what, they say, anatomists and physiologists who attend to *the facts* must admit,—that in the average of healthy individuals, in middle life, there is an average thickness of bone or skull, embracing both the outer and inner plates, and the space between, when there is a space unoccupied; that, in the average of healthy adults, the sinus is small, affecting only a small portion of the forehead above, and laterally from the root of the nose, seldom occupying, and still more seldom extending beyond the external spaces assigned to Size, Weight, or perhaps a small part of Locality, or Lower Individuality; and never, in the absence of insanity or old age, extending to Causality. In old age, and in disease, unquestionably, various anomalies are presented. Every old person has not a sinus; but frequently the sinus increases as the faculties decay; and decay, it is well known, commences in different individuals at very different periods of life, and reaches very different degrees. There is a precocity in decay as well as in talent; and many diseases affect the condition of the brain; but, taking the mass of ordinary cases of healthy adults, the external size and conformation of the forehead may be relied on, as indications of the amount of brain to be found within. This was as much as was to be obtained in any science connected with morals. Dr Spurzheim did not maintain that there were no anomalies in nature, no difficulties to be overcome. On the contrary, he strongly enforced on his audience, that many difficulties presented themselves to those who would judge of the intellectual powers from the external form. There was frequently a bony ridge at the extremity of the eyebrows, which gave a sharpness to them,—which was sometimes solid bone, sometimes hollow, and forming what might be called a crest,—which sometimes accompanied a sinus, and sometimes not,—but

which did not indicate the presence of brain. This ridge, when it existed, and the presence of which could not be mistaken, must always be *abstracted*, or held as *entirely removed*, in judging of the volume of brain. It was also not enough to attend merely to the *breadth* and *height* of the forehead; it was still more essential to ascertain its depth, or the extent in which—examining it *en profile*—it projects forward from the portions of brain assigned to Benevolence in the upper region, and Constructiveness in the lower—as to which the total mass of brain forward from the centre of the ear—but still more the amount of brain forward from the *temple*—affords an important and readily-observable *indication*. We may thus—by careful observation,—but only by very careful observation,—be able to say of an individual whether his intellect be *shallow* or *deep*. But the lecturer impressed strongly the necessity of Antiphrenologists *taking the trouble* of ascertaining *what Phrenology* is,—what it professes to deal with—and what it still leaves unexplained,—before they slight it or attack it. If another course be taken, it merely proves the rashness, conceit, prejudice, and ignorance of the opponents. He then went on to explain the seat of Individuality, or that faculty or tendency which made persons curious, active, and desirous to ascertain all the *individual existences* by which they were surrounded,—a propensity generally strong in children, but stronger in one than another, not only in infancy, but through life. There were individuals constitutionally observant or unobservant. The French had more of this character than the English,—speaking of them nationally,—and the Scotch were certainly more inclined to reason than to know individual objects:—but still, let the reasoning powers be ever so powerful, it was necessary that they should lay in a stock of materials on which to operate;—they should ascertain objects and facts—even of Phrenology—previously to their disposing of the science on metaphysical grounds.

It will be understood, of course, that we have not followed Dr Spurzheim through a lecture which occupied the greater part of two hours:—we have merely endeavoured—in this instance, from the controversy which is going on about the *Sinus*—to give *the essence* of his prelection.

THE END.

