

16 6/6 35360

PHRENOLOGICAL ENQUIRIES,

PARTS I & II,

BEING

AN INVESTIGATION

FIRST, OF THE CAUSES WHICH HAVE PREVENTED THE GENERAL RECEPTION
OF PHRENOLOGY;

SECONDLY, OF THE NATURE AND ADVANTAGES OF THE RESEARCHES OF
ITS ADVOCATES;

AND ELUCIDATING

THE IMPERFECTIONS OF THE "PRESENT SYSTEM," AND THE IMPROVE-
MENTS AND DISCOVERIES OF THE AUTHOR.

BY LUKE BURKE.

QUEBEC,

PUBLISHED FOR THE AUTHOR BY WM. COWAN & SON.

1840.

*District
of Quebec.* }

PROTHONOTARY'S OFFICE,
the 5th August, 1840.

BE it remembered that on the sixth day of August in the year of Our Lord Christ one thousand eight hundred and forty, one Luke Burke hath deposited in this Office the title of a work, which title is in the words and figures following, that is to say, "Phrenological Enquiries, parts I & II, being an Investigation first, of the causes which have prevented the general reception of Phrenology; secondly, of the nature and advantages of the researches of its advocates; and elucidating the imperfections of the "present system," and the improvements and discoveries of the Author. By "Luke Burke," the right whereof he claims as proprietor.

Entered according to the Act of the Provincial Legislature, intituled "An Act for the protection of Copy Rights."

FERRAULT & BURROUGHS,

Prothonotary of Her Majesty's Court of King's Bench, for the District of Quebec:

PREFACE.

The immediate object of the present work may be sufficiently explained in a few words. In the first part of it, the author examines the principal causes of the rejection of Phrenology, and endeavours to prove that those usually assigned by Phrenologists are but *accessaries* to this result, while its *essential* causes have been very generally overlooked as well by the advocates of the doctrine, as by its opponents. He seeks to convince both the one, and the other, of the necessity of a careful reconsideration of their respective opinions ;—to lead the believer to question the propriety of the unhesitating assent usually given by Phrenologists to the whole of the doctrine as at present understood, and to awaken in the mind of its opponent the *suspicion* at least, that after all there may be much truth in Phrenology, though appearances have hitherto seemed to him so decidedly opposed to it. In the second part, he first endeavours to shew, that even on the supposition of Phrenology being false, the researches of its advocates are extremely important, while if true, it is a science which must confer on mankind benefits of the very highest order ; and secondly he examines the disadvantages which some imagine would attend the introduction of a science of this nature—especially in reference to its bearing upon the questions of materialism, and fatalism—and endeavours to prove that all such objections have originated partly from superficial views of the moral influence of scientific truths in general, and partly from ignorance of the true nature of Phrenology.

Such is the immediate, and direct aim of the work.—As however there are many ulterior objects which it is designed to accomplish, as it is the first of a series intended some time or other to be laid before the public, and as the circumstances of its appearance as well as the author's views of Phrenology are in many respects peculiar, some preliminary explanations will be necessary before

S OFFICE,
August, 1840.

Our Lord Christ
ted in this Office
ng, that is to say,
rst, of the causes
rdly, of the nature
the imperfections
the Author. By
titled "An Act

istrict of Quebec:

entering upon the immediate subjects of enquiry. He trusts to be excused for touching upon matters of a personal nature, since the pleasure of his task, (and in some degree the success also) must very much depend on the reader's understanding the circumstances which have led to its being undertaken.

To the study of Phrenology the author has for many years past devoted a great deal of attention, and it has happened that the peculiar direction which his enquiries have taken, has led (so at least he conceives) to a variety of important improvements, and discoveries in it. Till within the last three years, no publicity has been given to those views except in a single instance—about seven years back—when an announcement of some of them was made to a body of Phrenologists. The sweeping condemnation then passed upon them as the crude notions of a young man—the hacknied charge of presumption &c., made against the author by men who would not condescend to examine his opinions though submitted to them with much more deference and humility than was due to them—the grossly inaccurate representation of the whole affair in the pages of one of the periodicals of the day—were sufficient to satisfy him that he must expect to share the usual fate of innovators, and to determine him not again to give any publicity to his opinions until he was prepared to follow up their announcement with a work fully explaining, and defending them. Such a work has hitherto been deferred, and the author remained silent on the subject until about three years back, when he determined again to bring it forward. Anxious however to submit his opinions to the severest test of experiment before giving much publicity to them, and wishing at the same time to avail himself of every opportunity of making further improvements, he undertook a course of travels, in conjunction with lectures and experiments:—a method which the peculiar nature of Phrenology renders almost indispensable to those who aim at improving the science, especially in its more practical departments. As the nature of his peculiar opinions was such that it was impossible to avoid stating them in his dis-

cussions, he felt from the commencement the extreme inconvenience of having no work explanatory of them to place in the hands of his auditors. For not only did his general defence of Phrenology depend much upon them, but they were themselves also occasionally matters of controversy, and in either case the discussion could be but imperfectly carried on without the aid of some such treatise. Then again his statements were continually liable to be misunderstood, and misrepresented, since there was nothing to depend upon but the attention and memory of his auditors, or of those to whom they repeated them. Finally the impression made by his arguments could at best be but evanescent, since with the termination of a course of lectures nothing remained to refresh the memory, or to keep alive any degree of ardour which happened to have been excited.

Still with these and many other inducements before him, the author has to the present moment refrained from publication ; first, because there was much in the science which he wanted still to examine, and he hoped by further delay to be able to do something more like justice both to his own system, and to the cause in general, than he felt to be then in his power ;—secondly, he was unwilling to bring forward a partial view of his system, and it would have been too great an interference with his studies to have attempted the preparation of a large work ; and thirdly, he wished to defer till a period of greater leisure the controversy in which his peculiar views were likely to engage him. This silence however was at last found so serious an impediment to the successful prosecution of his labours, that he resolved partially at least to break it. With this intention he commenced the preparation of a brief abstract of his system of Phrenology, merely intending it as an accompaniment to his lectures, and consequently purposing to confine its circulation to those places where he had already explained his views, or designed shortly to do so. With this intention he proceeded to his task ; but he found it quite impossible to satisfy himself with the very imperfect explanations which the nature of the

work admitted of: he therefore abandoned it, and as his intention of immediately publishing had often been announced to his friends, a feeling of consistency, as well as the reasons already stated, made him anxious to produce something upon the subject as soon as possible. After therefore considering and rejecting different plans, he came to the determination of preparing for the full discussion of his opinions, and of issuing the present essay as the first step in the process. Still as he does not desire for some time to come to seek any further publicity than may be necessary to aid his researches, the circulation of the work will for the present be limited to this side of the Atlantic.

As frequent allusions will be made both in the present work, and in those which are intended to follow it, to the discoveries, and changes which the author proposes to introduce into Phrenology, it may be as well thus early to give some notice of them, that his readers may at once perceive—"the very head, and front of his offending"—while *he* may have an opportunity of extenuating in some degree the grievous fault of innovation.

He has to observe then, that the reflections and experiments of many years, have forced him to regard the present system of Phrenology as being not only extremely imperfect (which was to be expected) but also as abounding in positive errors. These errors may be referred to two classes—the first resulting from the very imperfect system of *mental analysis* which has hitherto been brought to bear upon the subject—the second from the slight knowledge hitherto possessed by Phrenologists of the nature, and extent of the influence of *temperament*.

As to the first, it appears to him that in few instances only has the exact function of any of the organs been ascertained, though it is usually considered that every thing requisite has been discovered in regard to most of them. Thus (generally speaking) what is termed the function of an organ, appears to him a complex manifestation of mind depending *chiefly* on that organ, but *very much* also

upon the combined action of several others.* Many of these imperfections he conceives he has remedied, while in regard to others he has been unable to do more than point out their existence. He believes too that he has discovered several *new organs*, and satisfactorily ascertained the functions of most of them, those of others being as yet more or less desiderata. These changes and additions have necessarily led to several alterations in the classification, and nomenclature at present adopted, as well as to several subdivisions of the spaces at present assigned to some of the recognised organs.

In the second place he conceives that *as far as practical Phrenology* is concerned, undue importance has hitherto been set upon the mere *size* and *shape* of the brain. In *theoretical Phrenology* indeed the brain may almost be said to be every thing, since it is the immediate instrument of intelligence and desire, but when these faculties are considered in reference to particular individuals, and we have to determine their various degrees and modes of manifestation—their excitability, duration, and power—their delicacy coarseness, and other modifications more easily felt than explained—then it appears to him that the mere size and shape of the brain might *almost* be said to be of secondary consideration, so great is the importance of the *quality* of the nervous substance, and of the influence exercised on its action by the other systems, and *vicera*. Here the author believes that he has greatly extended the phrenological applications of the knowledge already possessed on the subject of temperament, as well as pointed out the only method of studying it with full advantage.

* It may be as well to observe at once to prevent all mis-conception, that when a mental manifestation is said to depend on this or that organ nothing more is meant than that it depends on it *as far as matter is concerned in the process*. Phrenologists regard the organs of which they speak as *mere instruments*, by the means of which the soul manifests its powers. As it sees with the eye, and hears with the ear, so it thinks, and desires with the brain.

In regard to all these matters the author seldom differs from his brethren upon points of fact ; it is rather upon the inferences to be drawn from those facts that he varies from them. His own experiments have satisfied him that they have been close and careful observers of nature, and so far from his views being in contradiction to the facts they have brought to light, he conceives that they constitute the true explanation of them. It seems to him however that they have often generalized too much, and that many manifestations of mind which they conceive to be *always* proportionate to certain peculiarities of organization, will upon closer investigation be found to be only *occasionally* so. It is seldom therefore that his inferences are altogether different from those of other Phrenologists. He believes that the opinions of the founders of the doctrine will almost always be found to be at least partially correct, though from the peculiar direction which their enquiries have taken, and the circumstances under which they have been introduced, they have often made but an approximation to the truth, where they fancied that all had been discovered. So far therefore from these discrepancies of opinion serving as an argument against Phrenology, they will be found when there is an opportunity of fairly examining them of a decidedly opposite tendency.

Among the consequences of these changes and additions it may be mentioned that with all the improvements which the author conceives he has made, he still regards Phrenology as much more imperfect than it is usually considered by its advocates. It appears to him that in the present system there is too much explained—too ready an answer for every difficulty—a great deal too little of doubt. There is an apparent simplicity in it which is peculiarly deceptive, and which has often won for it the admiration of those who have examined it, and led the majority of its advocates to consider its comprehension, and application as quite an ordinary affair. Nothing could be plainer it would seem, than to say that this organ enables us to perceive and remember *forms*, that *events*, this other *places*—that this produces *wit*, that *caution*, that *firm-*

ness &c. But when we look a little below the surface, and ask what are forms, and events, and places—what wit, or caution, or firmness,—and when we compare the answers given, with the fundamental principle of the science—the unity of function of each organ—and seek to make elementary manifestations of mind of these perceptions or powers,—then matters are entirely reversed, and we perceive obscurities, and contradictions, where we had imagined that all was simple and obvious.

An other consequence is, that the author frequently finds himself occupying a middle ground, between the extreme of antiphrenology on the one hand, and the present system of the science on the other :—that for instance he readily admits the validity of many of the objections (especially the metaphysical ones) which have been urged against Phrenology—not as affecting the *real science*, but as directly militating against much that is at present considered as such ; while in other cases he approximates to many ancient, and generally received opinions with which Phrenology has hitherto been considered altogether at variance. These approximations to antiphrenology have not been made designedly.—The author did not commence by believing these views, and then endeavouring to bring Phrenology in harmony with them. On the contrary, like other Phrenologists, he has been in the habit of rejecting them, but has been brought to his present position gradually, and often imperceptibly, by the course of his experiments. Whether he has succeeded in attaining in most, or any of these cases to the *juste milieu*, must be for others to determine, when his views have been fully laid before them.

As a third consequence he may state, that his system seems to him to enable us to account minutely, and satisfactorily for the various discrepancies of opinion existing in regard to this subject—its rejection by the majority of the learned—its ardent support by some among them—the differences of opinion between Gall, and Spurzheim—the partial differences between other Phrenologists—and finally,

those between the present system in general, and that of the author.

There are other important consequences that must also result from these changes in Phrenology, should they prove legitimate ; but it is unnecessary to touch upon them at the present time.

The author is well aware that the freedom with which he has here, as well as through the work generally, stated his opinions, and ventured to criticise the received doctrines of the science, and above all the many changes which he proposes to introduce, and the discoveries to which he lays claim, are little calculated to gain for him the sympathy or favour of a certain portion of his brethren. A rigorous criticism of their doctrines by one of their own body—one who professes to be a Phrenologist in the full sense of the word—an experimentalist, as well as a theorist, is (if he mistake not) a circumstance so unusual, that it can hardly fail to excite the displeasure of some of the more zealous advocates of the science :—of those especially who, not having experimented extensively themselves, have been in the habit of placing almost implicit reliance on the opinions of the leading members of their body. If such a result should follow the appearance of this work (and it would be contrary to the almost invariable rule in such matters of it did not) the author will certainly regret it, but he cannot suffer his desire of pleasing to interfere with a course to which he can see no valid objection. Why should he refrain from the free expression of his opinions ?—Perhaps he will be told that he is unknown to science—that this stepping forth with such innovations is premature—that it argues much presumption—that these views should have been in the first instance laid before a body of Phrenologists, and if approved of, then submitted to the public, &c. But after all, what is there in these objections ? If he happens to reason justly, if he brings forward truths not generally known, or places known truths in a new light, of what great consequence is it to the public—what indeed does it at all matter to the cause of science—whether this be his first, or his twentieth effort ? If on the other hand, he offers errors,

instead of truths, the less his influence, the less his talents—the less of course the mischiefs his errors will produce. If the communications of error be at all dangerous, it is only when it comes stamped with the characteristics of genius, or recommended by the voice of authority. Such at least is the case in matters of science.

As to being premature, or presumptuous,—this is his answer.—He has not approached this study without preparation, nor given to it a small share of attention. For more than *twelve years* it has been with him a subject of constant reflection: during many portions of that period it has almost exclusively occupied his mind. His peculiar views are not mere theoretical notions: they have been subjected to the test of a rigorous, and extensive course of experiments, repeatedly discussed both publicly, and privately before persons of the most varied orders of mind, and the results both of his arguments, and experiments have been eminently calculated to give him confidence in their accuracy. And yet there are persons who will find fault with him for thus laying them before the public. He has already been blamed for advocating them even in his lectures. He has been advised to refrain for some time at least. He has been told that it will be injurious to the cause to create divisions; that it will give a new impulse to the opponents of the science when they find Phrenologists differing amongst themselves &c. But he really cannot see the reasonableness of such advice, or the force of such arguments. To follow out a course like this, would be to prevent altogether, or at least greatly retard the discovery of truth.—Why should Phrenology be thus protected? If it be true, it cannot suffer from investigation. If it cannot bear the most *searching* investigation, why wish to support it?—If there are errors in it as at present understood, the sooner they are detected, and discarded, the sooner will it recommend itself to the favour of those now opposed to it. If on the contrary the errors are to be found in the views which the author advances, Phrenology has an abundance of advocates capable of detecting, and willing to denounce them. And the public will surely look

on with more favour when they find Phrenologists reasoning, and experimenting with entire independence, freely stating their difficulties, their doubts, and their objections, and pointing out the imperfections of their system, as well as its excellencies,—than if they perceived among them a rigorous uniformity of opinion, and a dread of innovation. The very fact of unanimity among the disciples of an infant science—such a one especially as Phrenology—would alone be sufficient to excite the suspicion of judicious observers.

As to submitting his views to the decision of his brethren, he would ask, how is this to be accomplished? Is he to call together a congress of Phrenologists?—Will they come at his requisition? Or is he to take a journey to London, or Edinburg, or Paris, and lay his opinions before the societies established there? If so, is he sure that any of them would condescend to enquire into them? In fact the very circumstances that cause this course to be recommended to him, are those which render its success questionable. A person standing high in science or literature, or being otherwise influential, would have no difficulty in obtaining such an enquiry as is here proposed; but the case is very apt to be different in regard to those who have no such advantages. It is idle in fact to talk of consulting the heads of the science, few, and dispersed over the world as they are—and as to consulting any particular Phrenological society, there would not after all be much advantage in it. If the major part of the members of such societies were really deeply informed upon the subject, even theoretically, the inducement to consult them would be great, if also skilful experimentalists, there would be every reason for deferring to their judgement: but this is not the case; and if the author is to judge of other societies by those he has known, he does not consider that the majority of their members are much more entitled to pronounce definitively on his opinions than any other body of scientific men. This to some persons may seem an unwarrantable assertion; but those who take the trouble of investigating the matter, will find it true. The author therefore

prefers to plead his cause before the public, even in the first instance, rather than by adopting the course proposed, to submit himself to so many certain inconveniences, for the sake of very questionable advantages. Indeed after all, his present course is the only one by which his views can come effectually before either the advocates, or the opponents of Phrenology.

As to his opinions indeed, they are most certainly legitimate objects of attack, and he should be sorry to complain of any criticism however searching, that may be applied to them. However he may at present be convinced of their truth, he has no idea of claiming for himself, the infallibility which he denies to others. He has already given up many opinions in Phrenology which he had long held, and some too which he had publicly taught, and it is quite possible that he may have to do so again; at all events he is perfectly ready to do so, whenever he finds himself in error. If this confession does not satisfy the class of persons for whom it is intended, he has really nothing further to offer.

These observations are not of course meant for the candid, and enlightened advocates of this science. *They* will no doubt narrowly sift every novelty that may appear either in the present work, or in those to which it is intended to serve as an introduction—and this is what should be done, for too much care cannot be used in matters of science—but they will at the same time readily acknowledge truth when it is made manifest to them.

To those opposed to Phrenology the author has to observe, that as the discovery of truth is his only object, he has laid down for himself as severe a test of the accuracy of his opinions as the most determined adversary could require. Satisfied of the invariableness of the laws of organization, he is ready to abandon any opinion against which *a single unexceptionable fact* can be adduced. And when it is considered that Phrenology professes to be *altogether a science of facts*, and that almost all its positions require to be supported by thousands of facts before they can be admitted as proved, surely no one can require more from him than a readiness

to abandon any of them, when found inconsistent with even a *single* fact. If then he has erred, it has not been from an undue attachment to his opinions, or from the want of careful, and frequent examination of them, in the various bearings in which they have been presented to his mind ; for it so happens that even upon mere personal considerations, he feels the utmost anxiety to arrive at the truth, *whatever it may be.*

These statements are not made from an affectation of candour, but rather from a desire that his readers should from the commencement understand his feelings, and thus be the more ready to approach this discussion, when they find that *truth*, not *victory* is the object aimed at :—when they perceive that he enters this arena not as a disputant merely, or as one determined to support a favorite theory, but as one who having taken much pains to investigate a certain department of science, is desirous of laying his opinions before the tribunal of the public, both as the surest means of ascertaining their truth, as because in the event of that being established, their extensive diffusion must be productive of numerous, and great advantages.

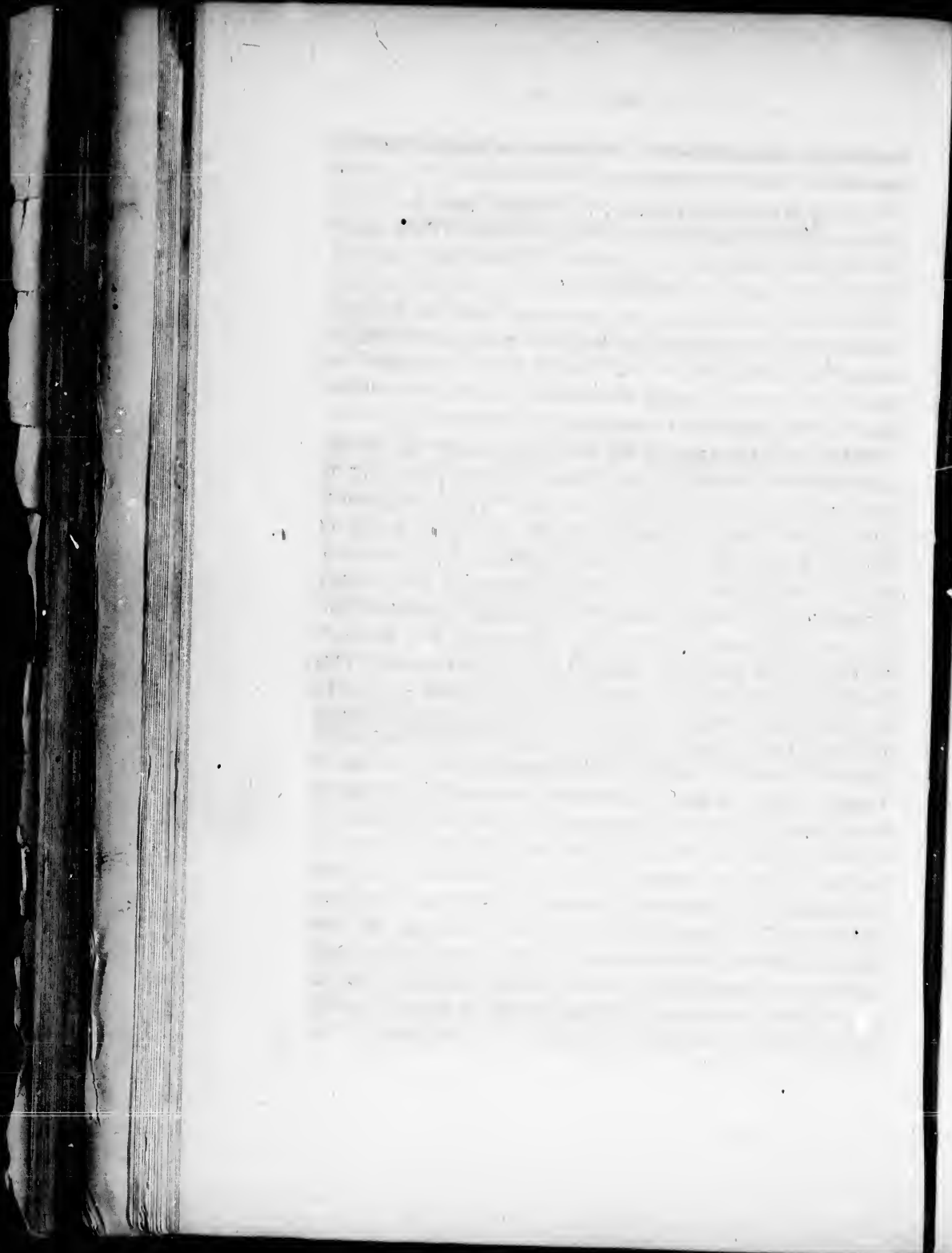
As to the contents of the present volume, little need he said beyond what has already been stated. In regard to the first essay it will be sufficient to observe, that although by no means intended as a regular discussion either of the imperfections of the present theory of Phrenologists, or of the improvements which the author proposes to introduce, yet the course of the argument will require him to treat of both with sufficient minuteness to enable the reader clearly to understand the chief peculiarities of his system, viz. his views of *analysis* and *temperament*.—In the second essay, he has examined at considerable length the *religious bearings* of Phrenology, and he trusts to be able to satisfy his readers that on these points, the science has been most unfairly treated, and most completely misunderstood. This subject indeed would have fallen more appropriately within the range of a succeeding work, but knowing that a great many worthy persons have been deterred from investigating the

doctrine, by a misconception of its tendencies, he thought it better to endeavour to remove that obstacle in the first instance.

It may be as well to observe also, that it would have been more consistent with regularity to have reversed the order of these essays;—to have first considered the importance of Phrenology, and then sought for the causes of its rejection; but it happened that the essay commenced with was in a state of greater forwardness than the other, and as the appearance of the work had been much longer delayed than had been anticipated, it was thought better to sacrifice the advantage in regularity for that of an earlier issue.—After all, the matter is hardly of sufficient consequence to require notice.

Such then are the objects of this little work—such the circumstances which have called it into existence—such the position of its author in reference to the subject he treats of. He now submits it to its ordeal;—with confidence indeed as far as the general truth of his theory is concerned, but with much diffidence in every other respect. Should it be deemed worthy of attention, it is his design to follow it up, as soon as possible, by a more direct and minute investigation of the merits of Phrenology—an enquiry into the truth of its fundamental principles. Should he be deceived however in his anticipations regarding it, he must only wait with what patience he can, until time, and further investigation shall enable him to produce something that *may* deserve attention.

Quebec, July, 1840.



n
o
e
v
o
v
h
n
a
a
q
(
re
en
th
th
co
Fo
me
sa
ric
fac

PHRENOLOGICAL ENQUIRIES.



CHAPTER I.

INTRODUCTION.

MORE than forty years have now elapsed since the first announcement of Phrenology, and its truth still remains a matter of controversy. It is not that it has been regarded with indifference either by the public or the learned ; on the contrary it has every where excited intense curiosity. It is not that few have had an opportunity of judging of it ; for enthusiastic teachers have every where introduced it, while extensive and valuable treatises upon it have been widely circulated. It is not that it is a mere theory, a matter depending on abstract reasoning, or a question of feeling and taste, and on which consequently it would be natural to expect a variety of opinions ; the very reverse of this : it is altogether a question of fact, a matter of simple induction. Neither in fine is it (at least in its more prominent, and important features) a matter of research so deep that few have either the means or the abilities to enquire into its truth ; on the contrary more than a sufficiency of the facts requisite for its verification are accessible to all men—the more important inferences drawn from them within the comprehension of persons of ordinary capacity and education. For the time that it has been before the world, no subject has been more discussed both in public and in private : it has been a thousand times advocated and controverted in the columns of the periodical press, as well as in laboured works of Science : every facility has been afforded for testing it experimentally : its

advocates have had every opportunity of submitting all their opinions to the world in any form they pleased to adopt and they have brought nothing forward bearing the slightest impress of talent which has not been received with attention :—why then if this doctrine be true, is it not generally received ? This is an important and a frequent question. Have Phrenologists given to it a satisfactory answer ? Let us examine what may be urged in reference to it.

The fact of Phrenology being a *novelty* interfering with many long established opinions, of its being the discovery of a young, and uninfluential man, of its partaking in its earliest forms of much that was calculated to shock the religious feelings of many persons, is alone sufficient to account for its first rejection even on the supposition of its general truth. There are however many other reasons for this result. Amongst these may be mentioned the false representations of many of the Reviewers, and journalists of the time, who directed against a novelty which they dreaded, or despised, every weapon of wit, sarcasm, or argument of which they could avail themselves. Some would seem to have criticised on mere heresay, without taking any pains to ascertain from the only legitimate sources, the precise views of Phrenologists ; some seem to have given their works so hasty a perusal as to mistake their opinions in many essential matters ; while others again appear to have satisfied themselves with understanding the mere annunciation of their principal positions, and then to have proceeded to disprove them on the theory of their supposed tendency to materialism, fatalism, or some other obnoxious doctrine. In a word the most widely circulated and popular criticisms, were little better than appeals to the passions, and prejudices of men, and many of them are of such a nature, that it requires no small stretch of charity to forbear charging their authors with such conscious misrepresentation. Neither is it in works of a comparatively ephemeral nature such as those alluded to, that these imperfect and unfair criticisms are to be met with, we find them also in the pages of regular scientific treatises, and often from the pens of writers of un-

questionable eminence. Indeed we occasionally meet with the most ridiculous blunders where (judging from appearance) we should least expect to meet them.

Prejudice however has not been the only source of misrepresentation; much is also due to the natural difficulties of some portions of the subject, much to the inaccuracies necessarily incidental to the cultivation of a new science, still more to the well-meant though injudicious efforts of incipient Phrenologists, who often undertook to explain and defend the science before they had thoroughly mastered its principles, or appreciated its difficulties. But whatever may be the cause of these false views, there can be no doubt of their having greatly influenced the reception of Phrenology. Had the real opinions of Phrenologists been always given, coupled even with the severest animadversions of their opponents, they would have been favorably received by a portion at least of the public—for we find them at the present day continually advancing in favor—but when the representation was such as to convey the falsest ideas, it is not surprising to find them almost universally scouted as absurd, and impious. It may be readily imagined then that under these circumstances much time must necessarily have elapsed before the Phrenologists were able to force their real opinions upon the attention of even a limited portion of the public; to the present hour the majority, (and I speak solely of the educated public—of the reading classes of the community) are not aware of them. In a word, a very moderate acquaintance with the facts of the case, will be sufficient to satisfy any one that Phrenology has but shared the common fate of all innovations, and that its first rejection at least, was far more an affair of prejudice, than of reason.

We will now refer to an other cause which has operated powerfully not merely against its first, but also against its subsequent reception. I allude to the frequent failure of the experiments made to test its truth.

These experiments are made by three classes of persons ; those who are opposed to the science, those who are neutral, and those who believe in its truth. To any one at all acquainted with the preliminary difficulties necessarily to be encountered in some classes of these experiments, it will occasion no surprise to hear of frequent failures in them when conducted without the assistance of some experienced manipulator, more especially when the mind is at all under the influence of prejudice. For though there be much that it needs but a glance to determine, still difficulties continually present themselves that the most experienced can but partially obviate. Such experiments therefore have led to no satisfactory results ; for though it is universally admitted that frequent and striking confirmations of the views of Phrenologists have been noticed, it is also asserted that equally numerous, and equally signal exceptions have appeared. These contrarieties then whether announced by acknowledged opponents, or by those whose minds had not previously been made up upon the subject, must have greatly influenced the decision of the public ; and yet taken by themselves they ought not to weigh much against Phrenology for the advocates of the science have invariably contended either that the experimenters had not made a sufficient preparation against the difficulties to be overcome before their experiments could be entitled to consideration, or that they were insufficiently acquainted with the very opinions which they had undertaken to test, and consequently that facts were continually represented by them as directly opposed to Phrenology, which a more careful investigation would prove to be as decidedly in its favor.

Where however failures have been made by Phrenologists themselves, the case is very different, and as these also have been very frequent, they have afforded still more plausible arguments against the science ; and yet such errors are quite possible consistently even with the entire truth of Phrenology. These errors may be divided into two classes : those made by experienced Phrenologists, and those made by persons who merely *imagine*

that they understand the matter. Unfortunately for Phrenology, there have been too many of this latter class ; and as their blunders of every kind however obvious to those who were really acquainted with the science, could not be equally so, sometimes not at all, to those who were not—the frequent failure of their attempts at inferring character from organization, has naturally enough been usually considered as decisive against Phrenology. And yet it is almost needless to say that errors of this kind prove in reality nothing against it.

As for the errors of experienced Phrenologists, they may be such as directly militate against the truth of the doctrine, or they may merely affect the individual skill or knowledge of the manipulator. When for instance the case is such that different Phrenologists may arrive at different conclusions, the opinions of any one, or even of a number of them, might be erroneous, and yet the truth of the science be not affected thereby.—A glance at the nature of Phrenology will make this evident.—As each of the organs is the instrument of a single element of mind only, and as what are usually termed traits of character, or particular talents, are always made up of many of these elements, the Phrenologist has continually to speak of the organs in their combined action. Now it is evident that his accuracy here, must depend on much more than his judgment of the precise size, and function of each organ. It will in fact be proportionate to his general power of combining, analyzing, drawing inferences, &c., and to his skill in estimating the effects of temperament, education, and other modifying circumstances. There is here therefore a wide field for the display of individual talents, and knowledge, and the result of the calculation must often vary with these, precisely as happens in the calculations of medicine, or other sciences. Errors of this class therefore not involving principles, do not affect the truth of Phrenology ; but yet speaking generally, they very much affect the decision of those opposed to it, who being usually unaware of the necessity of making these allowances, consider the failure of the advocate, as an evidence of the

fallacy of his principles. And when an explanation is attempted it has too much the appearance of an endeavour to cover defeat, to carry much weight with it. These errors therefore though incidental to every imperfectly developed, and difficult science, have from their frequency, and their apparent weight, powerfully aided in preventing the reception of Phrenology.

When however the case is such that all Phrenologists are by their principles bound to pronounce alike, then indeed *a single fully investigated fact* must be fatal to the opinion against which it militates. Thus if speaking of the organ of a certain faculty, a case should occur in which it is unquestionably large according to all the rules by which Phrenologists measure the size of an organ, and it should appear also that there are no indications of the individual's being, or having been, affected by any disease, or injury, cerebral, or otherwise which could be reasonably supposed to interfere with its action, and that still the faculty supposed to depend upon it has not been manifested by him at all, or only in a very feeble degree—then that single case might fairly be considered as counterbalancing a thousand of an opposite tendency, for noting would be wanting but the *certainty* of there being no cerebral injury to render the case absolutely decisive. Or better still, if the converse of this had taken place, if for instance a person remarkable for a certain trait of character, were found to have an extremely small development of the organ on which that trait was considered entirely to depend, *that single case* would be sufficient to prove the error of that opinion; for it is contrary to all the views of Phrenologists to suppose that very energetic manifestation could ever result from a very feeble organization. If Phrenologists fall into errors of this kind, they must to be consistent give up every opinion against which they militate. A few such facts directed against each organ, would in the opinion of all candid reasoners entirely destroy the whole pretensions of the science. Phrenologists will of course maintain that no facts of this kind have been brought against them. Still as the most experienced of them often make great errors, and as the ge-

nerality of persons seldom trouble themselves about going beyond the mere fact that such errors are made, it happens of course (whether justly or not) that all such failures very much interfere with the reception of the science.

In addition to all this, an other cause of the slight advance which the science has made in public estimation may be found in the numerous difficulties inherent in it—difficulties which are far greater in reality, than in appearance. In this respect indeed there is no science so deceptive. It would seem at the first glance the simplest thing in the world to investigate one's own feelings and powers, and to make experiments on the size and shape of the head, but the farther we proceed with these investigations, the more do we experience their difficulty. Those therefore who are satisfied with a superficial view of the matter, usually remain ignorant of them, and consequently decide too readily from first appearances.

Thus then a multitude of causes individually powerful have been from the beginning conjointly acting against the reception of Phrenology. Still though these and similar reasons if fairly weighed, be acknowledged to afford not merely a plausible, but to a certain extent a fair answer to the question "why has Phrenology not been generally received?"—yet when all the circumstances of the case are considered they do not by any means give an answer that can be regarded as *entirely* satisfactory. Did the matter concern the public only, these causes might perhaps have been sufficient to have hitherto prevented the general reception of Phrenology, but it must be remembered that on questions of pure science it is the *few*, not the *many*, who give the tone to opinions, and it is evident that several of the causes stated, cannot have much, if at all, influenced the decision of the higher class of scientific men. It is then to the causes acting on their minds, that we must look for the reception, or rejection of opinions of this nature, especially when they have been so long before the world as those of Phrenologists.

Independently too of all this, the state of public opinion in reference to this science has at all times past been very favorable for the discovery of truth. Phrenology has now ceased to be a novelty, the prejudices against it have to a considerable degree died away, and the public have evinced their willingness to be convinced of its truth, by giving it a greater share of their attention than they are in the habit of according to most other matters of science. The writings of Gall, Spurzheim, Combe &c. &c. have been extensively read—their lectures listened to—their experiments witnessed, by candid and intelligent Anti-phrenologists, and if these have still remained unconvinced, is it fair to assert that the fault lies *entirely* with themselves? What more can Phrenologists require than is at present accorded to them? What more can the advocate of any opinion require than the patient attention of candid and intelligent hearers? It is certain that many have been converted by the labours of Phrenologists—some partially, some entirely—but under the circumstances of the case, it would be unfair to infer that these were the only persons who happened to be in the proper frame of mind for receiving truth, or that they were superior either in candour, talent, or knowledge to those who remained unconvinced. Their conversion is certainly an argument in favour of Phrenology, but by no means a decisive one, for it might be as justly asserted on the contrary side, that they were led away by the enthusiasm of the advocate, or swayed by arguments, specious, rather than profound. For my own part I see no reason for supposing that at the present time there exists in the minds of any considerable portion of the intelligent public, any thing like an unfair prepossession against the science. In the numerous instances I have had for the last three years of publicly discussing this subject, I have rarely ever found any thing exhibited but the fairest spirit of controversy. Were I to judge indeed from my own experience I should certainly say that the majority of the intelligent public would be delighted *to be able to believe* that Phrenology could realize its pretensions; and if a portion of them still regard it with dread, it is

public opinion in
been very favo-
now ceased to be
considerable degree
willingness to be
of their attention
t other matters of
be &c. &c. have
their experiments
gists, and if these
rt that the fault
Phrenologists re-
more can the ad-
ention of candid
e been converted
some entirely—
e unfair to infer
e in the proper
e superior either
remained uncon-
ent in favour of
it might be as
ed away by the
ments, specious,
reason for sup-
nds of any con-
like an unfair
ous instances I
ng this subject,
e fairest spirit
n experience I
nt public would
uld realize its
ith dread, it is

simply because they have taken a false view of its bearing on some questions of morality, and religion. In a word, it seems to be rejected merely because it is deemed false, not because there is any reluctance to receive it could it be proved true. If then we find the prejudices of the public so much abated, we may be certain that men of science are not behind them in this respect. And such indeed is the case; for not only have many very eminent men declared decidedly in its favour, but there are comparatively few among the learned who do not now speak of it with more or less of respect.

The question then returns with full force—"why, under such favorable circumstances, is the science not more generally received?" I confess I cannot see how the present school of Phrenologists can answer satisfactorily this question. Were Phrenology all its advocates deem it to be—unexceptionable in its principles, fully borne out by facts in its leading details—I cannot see what could have so long prevented its universal reception. Even at first sight, it appears in the highest degree improbable that at a time like the present when, in pure science at least, facts are every thing, when the learned are familiarized with constant innovations, improvements, wonders of every kind, that Phrenology should be still rejected, were there not some very good reasons for that rejection. I readily admit that the investigation which it has generally received has not been sufficiently minute, extensive, and long continued;—but why has it not been so? What has prevented those who commenced, from continuing? Is it not that they met with what they considered insuperable objections either in theory, or in fact? And is it probable that a conclusion arrived at by so many men of high talent should be *entirely* erroneous? Was there ever a controversy of such a nature as this—embracing so many opinions—extending into so many ramifications—connected with so many other subjects—in which either side, much less the minority, happened to be entirely right? I cannot but think then, that both the advocates, and opponents of this science, have still to learn the

true cause of its continued rejection on the one hand, and of its ardent support on the other, although this has often been sufficiently apparent to those who have taken a middle ground in the controversy. I cannot but think that as the one result would not have appeared did it not contain much that was inaccurate, so neither would the other did it not also contain a great deal that was true. I cannot but think that the peculiar state in which it has hitherto been presented—a state in which errors and truths are so intermingled that it is often extremely difficult to separate the one from the other—is the true cause of this protracted controversy, the cause to which all others have been but accessories, and without which their influence, even if powerful, could not have been of long continuance.

Hence the belief, or rejection of Phrenology has generally been an affair of circumstances. Some have found its doctrines so conformable to their previous views, or have had the subject presented in so favorable a light, or have been so struck with the felicity of some experiments they have witnessed, or finally are so ready to embrace novelties, that they have become entire converts; others, on the contrary, have remained altogether unconvinced, either because their previous opinions having been of an entirely different cast from those of Phrenologists they have consequently been more clear-sighted in regard to what bore against, than what favoured the science, or because they have seen signal failures in some of the experiments they have seen performed, or because they have not examined the subject with sufficient attention, or because they have an unreasonable antipathy to innovations.

Thus, what with the natural difficulty of the subject, and the imperfect state in which it has been presented, and what with the varying prepossessions, and circumstances of those who have examined it, it still continues a matter of controversy, altogether rejected by some, either partially, or wholly received by others.

As the conclusion here arrived at must to many appear questionable, if not altogether unwarranted by facts, it will be necessary to state some of the arguments on which it is founded. To give all of them would swell this essay into a large work, and would besides be unnecessary, as my present object is simply to prove the fact of there *being* errors, not to investigate their numbers. I shall therefore speak of nothing more than appears necessary to satisfy the reader, first, that errors of various kinds exist, and secondly, that those errors are of such a nature as obviously to interfere with the reception of the science. I shall first allude to those errors of analysis which have led Phrenologists to admit as the functions of the organs which they have discovered, manifestations of mind easily proved to be very complex, and shall commence with a specimen of the system of Dr. Gall. This indeed has been much improved by succeeding Phrenologists, yet his errors, even where remedied, have greatly influenced, and still continue to influence, the reception of his discoveries; as many who have read his works, or heard of his opinions, are not aware that his disciples have already rejected, or modified much of what he taught.*

* Such at least is the case in the countries in which the English language is spoken, where the propagation of Phrenology has been chiefly effected by the labours and writings of Dr. Spurzheim, and his immediate disciples. In these countries indeed the works of Dr. Gall are far less known than they deserve to be, but his opinions have been widely circulated, and the more erroneous of them are those which have received most notice.

CHAPTER III.

ANALYSIS.

In common with other Phrenologists, I believe that Dr. Gall has laid the *foundation* of the only *useful* method of analyzing and classifying the mental powers, but I conceive also, that he has seldom done more than *approximate* to the functions of the organs which he discovered. Almost every where, he attributes to each one of them manifestations which, according to the principles of the science, must depend upon the combined action of several. As an illustration, we will consider his views of the organ and instinct of Destruction—views which have not a little contributed to the prejudice existing against the science.

He had observed that the heads of violent, destructive, blood-thirsty characters, were much developed in a certain region, viz : that immediately above the orifice of the ear, while persons of a decidedly contrary character had the same part flat, or depressed, or at least in proper proportion to other regions.—He was led to these observations by noticing among the inferior animals a difference in this region between the heads of the carnivora, and herbivora.—After therefore collecting a great number of facts, many of a remarkable cast, and all, as it appeared to him, tending the same way, he conceived himself warranted in asserting the existence in man, as well as in many other animals, of an instinct, or tendency to kill, variously modified according to the nature of the animal possessing it. The following quotations and remarks will explain the mode of reasoning by which he sought to establish this portion of his system.*

* I quote from Dr. Spurzheim, as I have not by me at the moment a copy of Dr. Gall's work. This however is not material, as both have made use of similar evidence.

"The propensity to kill exists beyond doubt in certain animals. It is more or less energetic in animals of different species, and even in the individuals of the same kind. There are some species which do not kill more than they need for their nourishment. Other species, as the wolf, tiger, polecat &c. kill all living beings around them, and that seemingly for the pleasure of killing alone."

"If carnivorous animals have the propensity to kill, man ought to have it also; for he is omnivorous. There is no carnivorous animal which eats so many kinds of animals as man does. Animals are confined to a certain number of species for the choice of their food, but man lives upon all, and anthropophagi even upon their fellow creatures." "In man this propensity presents different degrees of activity, from a mere indifference to the pain of animals to the pleasure of seeing them killed, or even the most imperious desire to kill. This doctrine shocks sensibility, but it is not less true. Whoever endeavours to study nature, and judge its phenomena ought to admit the existence of things as they are. It may be observed that in children as well as in adults, among the uncultivated, as well as among the polite and well bred classes of society, certain individuals are sensible, and others indifferent, to the sufferings of others. Some persons feel a pleasure in tormenting animals, and in seeing them tortured or killed, even when it is impossible to ascribe this disposition to bad habit or bad education."

"We may also determine the existence of this propensity, and its diversities by the impressions different persons receive from public executions. The view of them is insupportable to some individuals, and delightful to others. Mr. Bruggmans, professor at Leyden, told us of a Dutch priest who had so violent a desire to kill, and to see animals killed, that he became chaplain of a regiment solely in order to have an opportunity of seeing men destroyed. The same clergyman kept in his house a great number of different domestic animals, as cats, in order to satisfy his natural propensity by killing their young ones. He also killed all the animals for the use of his kitchen. He was acquainted with the

hangmen of the country, and he received notice of each execution which he travelled on foot several days in order to witness."

"At the beginning of the last century several murders were committed in Holland, on the frontiers of the province of Cleves. For a long time the murderer remained unknown; but at last an old fiddler, who was accustomed to play on the violin at country weddings, was suspected in consequence of some expressions of his children. Led before the justice, he confessed thirty-four murders, and he asserted that he had committed them without any cause of enmity, and without any intention of robbing, but only because he was extremely delighted by this action."

"Prochaska relates that a woman of Milan, flattered little children, led them home, killed them, salted their flesh, and eat of it every day. He quotes also the example of a person who, excited by his heinous propensity, killed a traveller and a young girl, in order to eat them. Gaubius speaks of a girl whose father was incited by a violent propensity to eat the flesh of man, and who committed several murders for this purpose. This girl, though separated from her father for a long time, and though educated carefully among respectable persons, who had no relation to her family, was overcome by the inconceivable desire of eating the flesh of man."

"Some idiots manifest this propensity to kill or to destroy. An idiot, after having killed two children of his brother, came smiling and announced the action to him. An other idiot, excited by anger, murdered his brother, and intended to burn him openly and ceremoniously before the house. A third according to Herder, after having seen a hog killed, thought he had a right to murder his fellow-creatures, and actually cut the throat of a man."

"Certain madmen are alienated only in respect to the propensity to murder."

"Pinel has also observed in various mad persons, the fierce impulsion to destroy. He speaks of one who did not shew any mark

of alienation in respect to memory, imagination, and judgement, and who confessed that in his narrow seclusion his propensity to murder was quite involuntary, and utterly irresistible."

"All these and many similar examples, observed in the healthy and diseased state of man, in idiots and madmen, prove evidently that the propensity to kill, and destroy is innate, not only in animals, but in man. Moreover does not the whole history of mankind confirm this assertion? In all ages the earth has been drenched with blood." &c. *

These facts must be admitted to be very striking, and there is no reason for questioning their truth. Indeed it would be quite useless to do so, since there are upon record numberless cases of a similar nature, perfectly well authenticated. But what do they prove? Simply, that men, and other animals have a tendency to destroy life—to kill. But no one ever questioned this. It is as evident as that they have a tendency to eat. The point to be determined is whether killing be the result of a *single instinct*, or whether it depend on the combined action of several.† Is there any thing in such facts as these to prove that the former is the more correct supposition? Surely not. But let us suppose for a moment that there is, and see what will be the consequences of such a supposition. If there must be a specific instinct and organ of destruction,

* The Physiognomical system of Dr. Gall, and Spurzheim, London, 1815. Pages 378,—388.

† It must be borne in mind that, according to the principles of Phrenology, each organ of the brain is the instrument of one kind of mental manifestation only. This is termed the faculty, or function of the organ, and must, in the strictest sense of the word, be elementary; otherwise, the number of the organs would be nearly infinite. In a subsequent part of this chapter, I shall fully explain what is to be understood by these elementary faculties. My object at present is simply to shew that this portion of the evidence in favour of the existence of a specific instinct of killing, is quite inadmissible, since it leads to a multitude of absurdities.

because there exists a desire of destroying, and because this desire varies much in intensity in different species of animals, as well as in different individuals of the same species, there must equally be distinct instincts and organs for a thousand manifestations of mind which a glance shews to be either very complex, or mere modifications of some one organ, or set of organs. Will it not follow, for instance, that there must be a special instinct, and organ of *hunting*? Carnivorous animals hunt: man hunts. The propensity varies in intensity in different species, and in different individuals of the same species. It is evidently distinct from the mere desire of killing; for some persons are fond of killing, who are indifferent to hunting; while others are very fond of hunting, who are rather averse to killing. Must there not also be a specific organ for the carnivorous instinct? Even Dr. Spurzheim considered that the propensity to eat flesh, and the desire of killing, depended on different organs, though Dr. Gall did not. He says—"the power which desires to kill is not the same as that which chooses flesh." "Some persons like meat, but they cannot kill any animal; others have no reluctance to kill and yet prefer vegetables for nourishment. Children, in general, have this propensity more energetic than adult persons, but they prefer fruits to meat. Hence it must be allowed that this propensity is necessary to carnivorous animals, but not that they are carnivorous because they have the propensity."* Yet Dr. Spurzheim did not admit the existence of a specific carnivorous organ, though such is necessary according to his own mode of reasoning. And why not also admit the necessity of herbivorous, and frugivorous organs, and in fine of a specific organ for every variety of food? Why not admit in certain individuals an organ for eating *the flesh of man*? The *propensity* exists, or has existed: why not a *special organ* for it? There have been persons possessing an irresistible propensity to eat *raw flesh*:—why not suppose them to possess, in common with the inferior carnivorous animals, some organ of which the generality of

* Physiognomical system, page 388.

men are destitute? Or (to turn to an other class of examples) why not admit an organ of *burning*? The existence of the *propensity* is unquestionable. Some persons have possessed it to a degree that has led them into crime. Dr. Spurzheim relates the case of a young man, thus circumstanced, whom Dr. Gall and himself saw at Fribourg, in Brigaw, where he was confined in prison, in consequence of having set fire to nine houses successively. "He helped to quench the fire, and on one occasion, he saved the life of a child who was nearly destroyed by the flames. When the fire was extinguished, he thought no more of it. This proves that his conduct was excited by some bestial instinct. Indeed he was half an idiot."* This is by no means an isolated case.—In the human race this propensity is usually very energetic. Most persons are delighted with witnessing conflagrations, fire-works, illuminations &c The inferior animals vary greatly in respect to it. The domestic classes have no antipathy to fire; the ferocious tribes dread, and avoid it; while in insects of the moth kind, the presence of flame seems to produce an intoxication of pleasure that occasions their destruction. Why not therefore admit an organ of *burning*, or of the *love of fire*, or something of that sort, as well as one of *killing*, or *destroying*?

But it is useless to go on with these examples. They might be multiplied to infinity. More than sufficient has been said to show that it is not by such arguments that we can prove the necessity, or existence of any organ: and yet, we continually meet with such in the pages of Phrenologists. There can be no objection certainly to the statement of facts of this nature, for they evidently lead to conclusions favorable to Phrenology: it is the use made of them which is objectionable. Nothing can be more reasonable than the supposition that where mental differences are noticed, corresponding organic differences also exist: but then these mental differences afford, of themselves, no evidence whatever as to what may be the

* Physiognomical system, page 384.

nature of the organic differences from which they result. If Phrenologists contented themselves with enumerating the mental differences existing among animals, and then endeavoured, by observations on the brain, to show the existence of corresponding cerebral differences, their course would have been unexceptionable ; but it is quite otherwise when they adduce these as evidence of the existence of the identical cerebral differences they are in search of. The first principles of Phrenology indeed once admitted, it follows, that there must be a particular organ for every mental manifestation of *a certain kind* ; but it has not been proved that *these* are of the requisite kind. It is not for *every* manifestation of mind, but for every *elementary* manifestation, that Phrenology supposes a distinct organ. Now before the existence of the tendency to destroy could be considered as any evidence of the necessity of a particular organ of destroying, it was necessary to have proved that tendency to be *elementary*. This has not been done.* We may therefore fairly conclude that neither the facts we have quoted, nor any others of a similar nature can afford any evidence in favour of the existence of a special organ of destruction. Let us now see what other evidence has been brought forward in support of the existence of such an organ

It is asserted that the energy of the tendency to kill, is found to be proportionate to the development of a particular part of the brain. " If we place a skull of a carnivorous animal horizontally,

* Dr. Spurzheim has indeed laid down rules for ascertaining whether or not any given mental manifestation requires a special organ, and his reasoning in reference to destructiveness is in harmony with many of these rules ; but Dr. Gall made use of no method of this kind. He simply considered the prominent differences found among men, and other animals, and then sought to discover by observations on the brain, whether there existed organs corresponding to them. We shall examine the rules of Dr. Spurzheim when we come to treat particularly of his opinions, and show how utterly incapable they are of leading to a knowledge of the elementary faculties. At present it is unnecessary to touch upon them.

and trace a vertical line through the external meatus auditorius, a great portion of the cerebral mass is situated behind that line. The more an animal is carnivorous, the more considerable is the portion of the cerebral mass situated there."* It is said also that the corresponding part of the human brain has been found large in the heads of several murderers, as well as in those of violent and destructive characters generally; while persons averse to destruction are asserted to have a contrary development.—Such in a few words, is the nature of the evidence, by which the opinion we are examining is supported. The facts here alluded to are certainly very numerous, most of them perfectly well authenticated, many entirely unexceptionable. But admitting that they are *all* so, admitting even that they are borne out in all cases—as well in those which have not come within the notice of Phrenologists as in those which have—still they prove nothing more than that there is *some necessary connection* between the action of that part of the brain, and the tendency to kill. They do not prove that part to be a *single organ*: the *probability* of such being the case is the very utmost that can be reasonably asserted. The space may contain two, three, or even more organs, for any thing that such facts as these prove to the contrary. Neither do they prove that the *whole* of the *manifestations* noticed depend on this particular part of the brain. There is nothing in them contrary to the theory, that several other parts are equally necessary for their production. Here a judicious system of analysis should have been brought to the aid of observation, for to prove, by observation alone, all that is necessarily involved in the assertion that a certain part of the brain is the organ of a certain feeling, requires a course of experiment far more extensive, minute, and rigorous, than Phrenologists have yet brought to bear upon any part of their science, great and well directed as have been their labours.—Some explanation will be necessary to make this assertion perfectly evident.

* Physiognomical system, page 377.

In the mental manifestations all is combination. There is no object in nature, which man can conceive of, that does not possess several properties, and consequently, require for its perception several faculties.—Even an elementary atom of matter has *form*, and *size*, and *density*: it *exists*, it is *one* &c.—Neither is there any object capable of acting upon our affections, whether of sympathy, or antipathy, which is not calculated to excite *several* of them. Whenever then mental action results from external causes, it is of necessity complex. It is nearly equally so, when its causes are internal. For though many of our abstract ideas are of course elementary, and therefore require for their perception the action of a single organ only, yet such is the nature of the laws by which the succession of our ideas is regulated, and such the close affinity between these elements themselves, that the mind cannot continue, for any appreciable time, in the uninterrupted contemplation of any of them: but either passes with inconceivable rapidity from one to another, or, which is more probable, has always many before it at the same time. If such be the action of the mind, that of its organs must be the same: the one can no more continue isolated than the other, since mental manifestation is, to a certain extent at least, the consequence of cerebral action. Indeed so intimate is the connection between the different parts of the brain that, even upon mere mechanical principles, it would seem hardly possible for action to take place in any organ without being instantaneously communicated to others. As then there is so little isolated action in the brain, as those organs which are closely allied in function are so also in position, and as large size in any part of the body must be the result of energetic, and long continued exercise, either in the case of the individual himself, or of his progenitors,* we must

* Such at least is the natural course of things. If there are exceptions, they can be regarded only as cases of monstrosity. It is easily conceivable that children may have defects of organization which their parents have not, since various accidents may interfere with the natural course of formation;

expect prominence, or depression to be met with in groups of organs, rather than in individual instances. In experimenting therefore on any organ, we have almost always to observe it as one of a cluster in equal, or nearly equal development. To find any one presenting an isolated protuberance, or depression, is a very rare occurrence, even with the large spaces at present assigned to some of the organs. Were each confined to its proper limits, there are I believe, but a few very particular cases in which any thing of the kind would ever be noticed.*—As then neighbouring organs are closely allied in function, and as actions are almost always the result of many impulses, it is evidently a problem of extreme nicety, so to distinguish these different impulses from each other, and so to observe the constantly varying developments of the different parts of each cluster, as to assign to each individual organ of the group its proper boundary, and function. And yet with all these difficulties, it is upon observation alone that Phrenologists have *mainly* depended for determining these points. This is peculiarly the case with Dr. Gall. But let us examine, a

* Except in one or two organs at the base of the brain (and for this exception there are very special reasons) I cannot recollect having met with a case in which any portion of the brain, that I should consider a single organ, presented an isolated prominence or depression. I also, of course, except cases of injury, and disease.—A depression, of the kind we are speaking of, may often be noticed at the point of junction of the frontal with the parietal bones, and also where the superior angle of the occipital meets the posterior—superior angles of the same bones, but as corresponding prominences are never, I believe, noticed in these places, and as the depressions occur in the line of the separation of the hemispheres, between two or more organs, and not in the centre of any one, they cannot be considered as indications of special deficiency in the organs situated there.

and it is conceivable also that a child may have a structure either wholly, or in part superior to that of either of its parents, since imperfection in the one may be remedied by excellence in the other, but it is quite an other affair when any particular deficiency exists equally in both parents. The rule "*nemo dat quod non habet*" must surely apply in that case.

little more in detail, the nature of the evidence really afforded by these experiments.

There is nothing in the system of Dr. Gall that could have enabled him to say, *a priori*, that such or such a space was sufficient, and only sufficient for a single organ. No attempt was made by him to fix on any standard in this respect. The spaces which his organs occupy vary considerably both in size, and shape ; some being two or three times as large as others; some being round, others oval &c.—This disproportion is even greater in the arrangements of Dr. Spurzheim.—On what then had he to rely, in asserting that a given space contained but one organ ? Simply on the fact that its development was not always proportionate to that of the other parts of the head, while there were reasons for believing that it was proportionate to the energy with which a particular trait of character was manifested. But can evidence of this kind be sufficient to establish the reasonableness of such an assertion as this ?—Admitting that the part in question is sometimes found isolatedly prominent or depressed, and at others times following the development of one or other of its neighbouring organs, still these facts prove nothing more than that this portion of the brain is distinct from the surrounding parts. It is as fair to say that there are two organs here, as that there is but one ; for no part has been found thus developed, that is not two or three times as large as some of the organs. Besides, if what we have already stated of the combined action of the mental powers be correct, it is far more likely that a part thus varying should contain a cluster of organs, than only a single one.

It must be evident then that mere craniological observations are not sufficient to prove that the parts of the brain considered by Gall as single organs are really such. And as for anatomy, it is still more silent on the subject.—Neither does the study of the mental manifestations, as hitherto conducted, supply the deficiency. Every thing is here so vague and complex, that it is far more reasonable to attribute the phenomena to many, than to one organ. In fact the only way of proving (at all events in the earlier stages of this science)

that a particular part of the brain contained but a single organ, was by demonstrating, in the first instance, that the mental peculiarity noticed in conjunction with it was an *elementary* faculty, and depending, consequently, on a single organ, and secondly that the energy of its manifestation was always proportionate to the developement of the part in question—making, of course, the requisite allowance for the particular constitution of the individual, the effects of education &c. Until the manifestation had been analyzed, *probability* was the utmost that could be attained to in regard to its dependance on one, or more organs.

This reasoning is still further supported by the fact that Phrenologists have, already, in different instances, admitted the existence of two organs, where Gall spoke of but one. Besides there are few of them who do not think it likely that further subdivision will yet take place.*

Granting then the experiments of Gall, in reference to the organ we are treating of, to have been ever so extensive, and unexceptionable, it is clear that they were quite insufficient to prove all that he aimed at proving. In point of fact however, they were not by any means so complete. The desire of killing, or the propensity to destroy, or whatever else may be its name, is not *always*, not even *usually* proportionate to the development of the part of the brain considered as its organ. A thousand facts might be brought in support of this assertion†—making full allowance also for all that

* It is not for the sake of finding fault, that I have insisted so much on these points; but simply to lead my readers to the conclusion, that the errors of Phrenology are merely *incidental* to it, not *necessary*; that they spring from the imperfect method in which it has been investigated, not from the fallacy of its principles.

† Its truth may easily be tested by any person moderately skilled in phrenological manipulations. Let him enquire, of those in whom this organ is well developed, what are their feelings in regard to destroying life, shedding blood &c., and he will find that where one will acknowledge the desire to be strong, hundreds will assert the contrary, numbers will maintain that it is absolutely

phrenologists tell us of *the counteracting influence of other organs*. I readily admit however; indeed I fully believe, that the instinct or rather instincts of which *destruction* is one of the manifestations, depends in a great degree on the part of the brain spoken of by Gall; but, I cannot admit that there is a *primitive* instinct of *killing*, any more than that there is one of *digging*, or *walking*, or *swimming*.

In selecting this particular organ as a specimen of the Phrenology of Dr. Gall, I have by no means chosen one of his most vulnerable points. On the contrary, he here approximates to accuracy of analysis far more than he does in the majority of cases. When we mention such organs as Poetry, Mechanics, Theosophy, or the organ of God and Religion, Metaphysical subtlety &c. &c. It is clear that *elementary* faculties are entirely out of the question.*

* It is far from being my object, in these remarks, to depreciate the labours of Dr. Gall: on the contrary, I regard them as of the very highest value; and this not merely as originating Phrenology, nor as bringing to light a vast collection of important facts, but even for the very inferences which I have here ventured to criticise. For though I regard these as extremely erroneous, yet they bring us so near the truth as to render its attainment a comparatively easy task. No one, who examines with candour the writings of Gall, can refuse him the praise of being, not merely, a most careful, and diligent observer of nature, but also a profound, a fair, and a fearless reasoner. If he has generally failed in his attempts at discovering the true functions of the cerebral organs, yet he has proved that many such organs exist; and if he has not succeeded in ascertaining their precise boundaries, he has at least shown where they are situated, and what are the principal phenomena that result from their action. In a word, he has laid the foundations of a science which, when recognized, must be deemed one of the most important in the whole circle of human knowledge.

painful to them even to witness any thing of the kind. He will find this organ as often well developed in the female, as in the male head, if not oftener indeed. He will find it so in the heads of all very active, bustling, restless characters, whether destructive or not. In fact he will find that the violent passions supposed by Gall to depend on it, are much more the result of temperament than of any peculiar development in this region of the head.