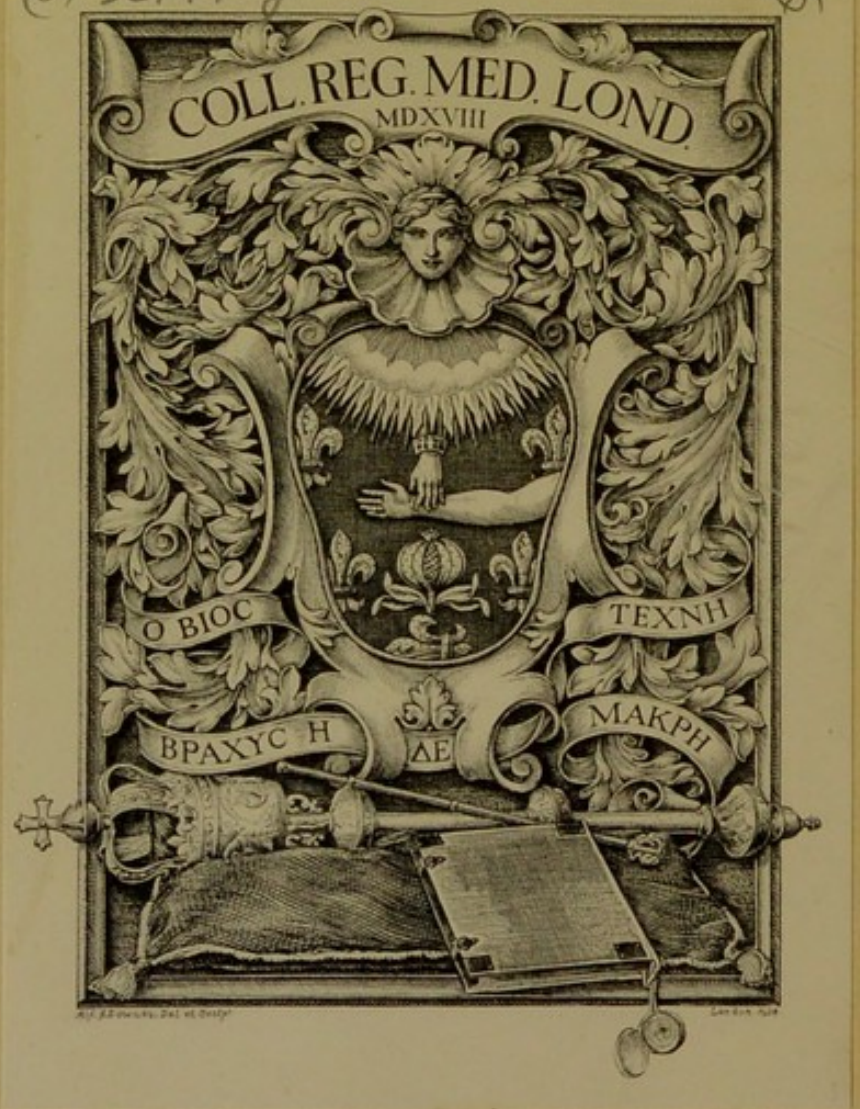
An inquiry into Dr. Gall's system concerning innate disposition, the physiology of the brain, and materialism, fatalism, and moral liberty: including reflections on prison discipline, the prevention of crimes and the reformation of malefactors, etc.



To Dr Baillie

With the Author's Respects.

AN

INQUIRY,

&c.

AN

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INTO

DOCTOR GALL'S SYSTEM

CONCERNING

INNATE DISPOSITIONS,

THE PHYSIOLOGY OF THE BRAIN,

AND

MATERIALISM, FATALISM, AND MORAL LIBERTY:

INCLUDING

SOME GENERAL REFLECTIONS

ON

PRISON DISCIPLINE, THE PREVENTION OF CRIMES, AND THE REFORMATION OF MALEFACTORS, ETC.

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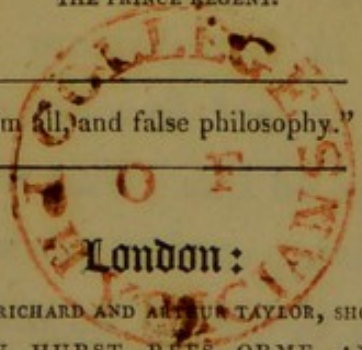

"Vain wisdom all, and false philosophy." MILTON.

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MDCCCXIX.

PREFACE.

Some of the subjects discussed in the following pages are worthy of the ablest pen, and include considerations highly interesting to all classes of society :— it is, therefore, with great diffidence that the author ventures to present himself on this occasion before the tribunal of the public.

He has confined his inquiry to the doctrines promulgated in the work which has induced him to undertake the present task ; and he has avoided to speak of the various opinions of metaphysicians on the subjects adverted

to, because this would have led to a discussion far beyond the intent of this Essay. But such as it is, the author indulges the hope that the reflections with which it concludes will embrace an acceptable apology for its imperfections; and encouraged by that hope, he dismisses it from his hands without further observation.

Paris, July 1819.

CONTENTS.

ERRATA.

Page 40, Note °, first line, *for* tage *read* étage.
136, sixth line from the top, *for* seventh *read* sixth.
147, ninth line do. *for* Perhap *read* Perhaps.

AN

INQUIRY

INTO

DOCTOR GALL'S SYSTEM

CONCERNING INNATE DISPOSITIONS,

&c.

"WHOEVER will examine man in his most noble part, that is to say, in his moral and intellectual attributes, should commence the research by inquiring how his propensities and faculties are acquired, and under what conditions they can manifest themselves[a]." This observation

[a] "Quiconque veut examiner l'homme dans sa partie la plus noble, c'est-à-dire, dans ses facultés morales et

forms the first paragraph of the work which it is the object of the present essay to examine.

The author then lays before his readers a variety of questions which metaphysicians have at all times considered as very important to be discussed ;—Is man born with or without determined faculties and dispositions? or does he acquire them in consequence of his relation with the external world after birth? To what degree are the impressions on the external senses the source of our sensations and ideas? What is the origin of good and evil in man? Does he come into the world either with a good or bad dispo-

intellectuelles, doit commencer par rechercher comment l'homme acquiert ses penchans et ses facultés, et sous quelles conditions ces qualités peuvent se manifester." *Vide* the author's work "*Des dispositions innées, &c.*" 8vo edit.

sition, or with a mixture of both these qualities? Are the corporeal organs superfluous, or indispensable for the manifestation of the faculties of the soul? Are all men endued to an equal degree with the qualities essential to human nature, or are the differences observable in this respect due to the influence of accidental causes after birth? or are they on the contrary determined while man is yet in the womb, &c.? These questions, it is very justly remarked, will, when solved, lead infallibly to the knowledge of the real source of our intellectual faculties and dispositions, and consequently to the *primum mobile* of our actions.

Dr. Gall observes too, that those philosophers who have undertaken the discussion of these questions, have failed hitherto in their attempt to establish a complete

and sound doctrine upon the subject of them, and he adds;—"we now propose to arrange in due order the phænomena, and to show the cause of them by references to positive facts[b]. This observation holds out a promise of great interest, and the elucidation of the subject to which it refers is a task of great magnitude. Dr. Gall, however, seems to pledge himself to the performance of it, with a conscious assurance of success; and he lays down the following as a principle, which he tells his readers is to be considered as the basis of his doctrine concerning the functions of the brain, and as comprehending too the ultimate object of his researches.

[b] "Nous nous proposons aujourd'hui de ranger par ordre les phénomènes, et d'en exposer les causes en les prouvant par des faits positifs." *Vide* the author's work "*Des dispositions innées, &c.*" page 5.

"*Les dispositions des propriétés de l'ame et de l'esprit sont innées, et leur manifestation dépend de l'organisation*[c]."

The author observes, however, that when he speaks of propensities and of dispositions innate, or of moral and intellectual faculties innate, he does not mean to say that there are ideas innate or principles innate. He therefore distinguishes ideas and principles from dispositions and faculties innate, by ascribing ideas and principles to impressions made upon the mind through the medium of the external senses, while faculties and dispositions innate exist independently of the operation of external causes. This appears to be a fair distinction; and he observes,

[c] I give this in the author's own words without attempting any translation, not having a clear conception of the nature of the distinction he makes between "*l'ame*" and "*l'esprit*."

moreover, that when he says the exercise of the faculties of the soul depends upon the condition of the material organs, he does not mean that those faculties are the production of the organization, because this would be confounding the condition or state of things with efficient causes.

But although he may not regard the intellectual and moral faculties as the produce of the organization; yet, according to his doctrine, we shall find that this very organization has such a powerful influence over the soul itself, as not only to affect the exercise of its faculties, but also even the character of its moral qualities. Hence there must necessarily be a time when the character of the intellectual faculties begins to be dependent upon the intellectual organs; or, in other words,

when the influence of these commences to operate upon the intellectual faculties. This is of itself a curious subject of inquiry, and embraces the consideration of other very interesting questions, the preliminary discussion of which appears to be also intimately connected with the author's doctrine:—Is the influence of these organs upon the intellectual faculties reciprocal, or only partial; and in either case, under what probable circumstances does that influence take place? Are the intellectual and moral faculties attributes belonging exclusively to the soul, or are we to consider them as adjunct properties of organized matter? These questions are likewise adverted to by Doctor Gall; and the mode in which he enters upon the subject of his inquiry awakens the expectation that he is going to

enter into the discussion of the abstruse and interesting points which all those questions embrace. But he renounces the task, by affirming that whatever may be the opinion of the theologist and metaphysician upon those matters, such opinion cannot affect the fundamental principle of his doctrine[d].

The author however cannot, consistently, separate from his inquiry the consideration of the subjects embraced by the questions alluded to; and indeed he appears to contradict his own observation upon this point, by what he tells us respecting the nature of that inquiry, which he says has no reference to the inanimate body, nor directed to the soul alone, but relates to man as a living being, the result of the union of the soul and body[e].

[d] *Vide* the author's work "*Des dispositions innées, &c.*" page 6.

[e] Ibid. page 7.

And moreover, one of the principal objects of that very inquiry is to prove that there exists an essential relation between the exercise of the faculties of the soul and some particular part of the organization.

Besides these preliminary discussions into which the author should have entered, there are several terms of which he ought to have given some explanation, or attached some definite meaning to them.

He speaks frequently of "l'ame *et* l'esprit," and the conjunction "*et*" between the two words shows that they are not used synonymously, but as meaning to convey the idea of two distinct somethings belonging to our nature, or adjuncts to it. It appears too, that he ascribes the exercise of the moral qualities to the one, and the exercise of the intellectual faculties to the other; for on the subject of

mental alienation he says, " *L'aliénation partielle n'est pas toujours une suite du dérangement des propriétés de l'esprit ; souvent l'ame ou les sentimens moraux souffrent seuls, et l'esprit ou les facultés intellectuelles restent parfaitement saines*[f]." This is indeed making a very nice distinction, which the converts to the author's philosophy must place to the account of truth upon his *ipse dixit*.

" *Substance spirituelle*" is another expression not very comprehensible. It is a term which appears to confound *spirit* with *substance* and *substance* with *spirit*. But according to our known properties of matter, and our idea of spirit, what is material cannot be spiritual, and on the

[f] *Vide* the author's work " *Des dispositions innées, &c.*" page 355. I also renounce the translation of this observation for the reason expressed in note (c) page 5 of this essay.

other hand, what is spiritual cannot partake of the nature or character of matter.

When we are in the first instance to dismiss from our consideration the discussion of abstruse questions, and to regard them as unimportant to a particular subject of inquiry, on the mere affirmation of an author; also when his readers are left in the dark about his meaning of particular terms, which demand a particular explanation; he endangers at once the reputation of his future arguments, and pursues a course which does not appear very well suited to a philosophical research.

It is not, however, my intention to attempt to give to those unexplained terms a definite meaning, or to enter into the discussion of the several subjects embraced by those questions to which I have

alluded. My chief object is to show that Doctor Gall has attempted to raise a system upon a very imperfect foundation, and completely failed to afford to it that support which alone could ensure its stability. In this object I shall feel at least the satisfaction of contributing my humble labours in exposing the fallacy of the very dangerous doctrines which that system embraces;—doctrines, which tend to stifle in its birth every motive to the performance of good, and to render merit but an empty sound. Even the murderer and the thief, and every other profaner of moral laws, may find in those doctrines an excuse for his crimes, and an apology for his transgressions!

We must, however, acknowledge to a certain extent the principle which the author has laid down as the basis of his

doctrine. But we are not on that account to admit the truth of that doctrine. A principle may be true in itself, but false inferences may be drawn from it, which consequently will lead from one error to another; and by this means the unwary imagination may be cheated into the belief of the truth of the most inconsistent opinions. However, we must necessarily admit that the soul has something innate; for, if we deny that it has innate properties, we may as well contend that things can exist without having any properties at all; and this would be an opinion too absurd to support, and too idle to require any formal refutation.

But although we must necessarily admit that the soul has something innate, yet it may be very fairly questioned

whether the different qualities and dispositions which our nature manifests in different individuals, are really to be regarded as properties innate, according to our generally received ideas of such properties in matter. Every thing that belongs to the material world has its own particular properties, and these are constant and invariable in the same kind of matter, whether living or inanimate. Hence, if the different faculties and propensities observable in different individuals were in reality innate properties of the soul, we should expect, by analogy, that faculties of every kind and dispositions of every variety would be manifested in every individual as the inherent properties of the human soul, and as inseparable from its nature, and as invariable as are the specific properties of every dif-

ferent kind of matter. But this is not the case. The character of man, or, in other words, the faculties and dispositions of his soul are different in different individuals, constituting a good or a bad moral character; one who is skilful and intelligent, another in whom stupidity and folly predominate: and although this difference in the moral and intellectual character exists in different individuals, yet the structure and properties of the corporeal frame appear invariably the same in all. Instead, therefore, of considering the dispositions and intellectual faculties as properties innate of the soul, we should perhaps approach nearer to the truth, when we speak of these, to call them an *innate susceptibility* to acquire various dispositions and faculties, associated with a certain power to exercise

the same to a greater or less degree. But why this susceptibility and power should be so various and so opposite in different individuals, is a question which involves in its consideration the very intricate one concerning the origin of evil, but which does not form any part of the object of the present discussion.

Doctor Gall, however, maintains that the brain is the special instrument of the soul, inclosing within itself as many intellectual organs as there are fundamental faculties moral and intellectual, essentially different, and that the character of each of these will be influenced by the condition and state of development of their respective organs[5]. Hence he accounts

5 "—— le développement défectueux des organes a toujours pour résultat la foiblesse de leur fonctions."

"Quand les organes de l'esprit et de l'ame ont acquis

for the increase and decrease of energy in the intellectual capacities at different epochs of our existence ;—for the difference in the nature and energy of talents in different individuals in the same and in the opposite sex ;—for the fertility of the intellect in some, and the general poverty of it in others:—even the difference observable in the general character of a particular race of people, and of different nations, he also ascribes to the particular development of the organs to which belongs, as he pretends, the manifestation of the dispositions and talents, which form in a greater or less degree the distinguishing character of those nations or people[h].

un haut dégré de développement et de perfectionnement, il en résulte pour ces organes la possibilité de manifester leur fonctions avec beaucoup d'énergie." Vide the author's work "*Des dispositions innées, &c.*" page 30.

[h] " C'est tantôt tel organe, tantôt tel autre qui est

And he asks how certain qualities could be transmitted from family to family, if those qualities were not founded upon the organization, and if the dispositions were not innate? It is true that some very remarkable analogy is often observable in the dispositions of the individuals of the same family; but precept and example aided by the constant society of each other, which naturally leads to the adoption of the same general habits, will in a great measure contribute to this effect, independently of any qualities or dispositions derived from the parents. It is at least certain, that we often find analogous dispositions and talents in different

plus ou moins développé dans une variété, dans un individu, dans un peuple; et c'est ce qui produit le caractère particulier des individus, des races, des nations." Vide the author's work "*Des dispositions innées, &c.*" page 38.

individuals in no ways consanguineous, and dissimilar dispositions and abilities in children of the same father and mother[i]. Parents too of very superior talents have sometimes offsprings who are possessed of only a very small share of intelligence, and children of very distinguished genius are sometimes born of parents of very barren abilities. These circumstances therefore show, that although there may be a great similitude in the intellectual and moral character of individuals of the same family, yet that similitude may be accounted for without any reference to the author's theory.

It is evident, indeed, that whatever

[i] I have been informed by a gentleman who keeps an academy, that some time ago he had five pupils who were brothers, and not one of them resembled the other, either in disposition or talents.

an individual may be in his intellectual and moral faculties, and whatever difference or analogy may exist in these respects between that individual and another, there must necessarily be a cause for such difference or for such analogy. But I apprehend we may as well expect to find out the efficient cause of animal existence, as presume to explain the cause of any difference in the intellectual and moral character of different individuals whose anatomical structure is similar and equally complete in all its parts, and the functions of whose organs are respectively the same.

Nor, because the corporeal organs must be exerted in a particular way, in order to *manifest* the exercise of any intellectual faculty, are we necessarily to infer that the soul is incapable of acting independently

of them. Doctor Gall, however, pretends it is destitute of that power: and as his philosophy is founded in a great measure upon the presumed truth of that opinion, he has been at some pains to prove that opinion true. With this view he adverts to various circumstances relating to dreams. On this subject he says: "The material organs are the only ones that get fatigued and exhausted, and need repose. This repose, this inactivity of the organs, of the sensations, of the propensities, and of the intellectual faculties in a state of health, constitutes sleep. During its continuance the brain acquires fresh vigour, and at our waking the functions of the soul are resumed with ease and energy. If any of the cerebral organs, irritated by whatever cause, be put into action, while the action of

the other organs remains suspended, there will result from this partial sensations and ideas which constitute dreams. The nature of these dreams almost always depends upon certain material causes. The individual who is young and in health, dreams of cheerful and agreeable events. But men and women of a nervous and irritable system meet in their dreams nothing but contrarieties and painful sensations, and incessantly experience trouble and anguish. We dream that we are dead of an inflammation in the bowels, and we awake with griping pains. This connection between our dreams and our organs may be demonstrated by millions of examples, and consequently there results a new proof that the soul does not act independently of the body."

On comparing the above translation

with the original, which I have given as a note below[k], it will be found that I have adhered closely to the text; and I appre-

[k] "Les organes matériels sont les seuls qui se fatiguent, s'épuisent, et ait besoin de repos. Ce repos, cette inactivité des organes, des sensations, des penchans et des facultés intellectuelles, dans l'état de santé, est le sommeil. Pendant sa durée, le cerveau prend de nouvelles forces; et au réveil les fonctions de l'ame se font avec énergie et facilité. Si quelques organes cérébraux, irrités par une cause quelconque, sont mis en action, pendant que l'action des autres est suspendue, il en résulte des idées et des sensations partielles qui sont des rêves. La nature de ces rêves est presque toujours un résultat de certaines causes matérielles. L'homme jeune et sain rêve d'événemens gais et agréables; les hommes et les femmes doués d'un système nerveux trop irritable, ne trouvent dans leurs rêves qu'obstacles et contrariétés, et éprouvent sans cesse des peines et des angoisses. L'on rêve que l'on est mort d'une inflammation d'entrailles, et l'on se réveille avec des tranchées. Ces rapports entre nos rêves et nos organes sont constatées par des milliers d'exemples; il en résulte par conséquent une nouvelle preuve que l'ame n'agit point indépendamment du corps." Vide the author's work "*Des dispositions innées, &c.*" 8vo ed. p. 44.

hend it will be also evident, that the observations which the passage embraces consist chiefly of conjectures and assertions, from which the author deduces an inference that is altogether hypothetical, but which he considers as necessarily true.

In the first place, he says "that the material organs are the only ones that get fatigued and exhausted, and need repose[1]."

[1] This is an implied distinction, which supposes two different kinds of organs, the one *material* and the other *immaterial*, and the distinction may not be an improper one. Yet it may be asked,—what idea can be formed of an immaterial organ? But is it not equally difficult to form any conception of the nature of the soul, the existence and immateriality of which cannot admit of doubt? and for aught we know to the contrary, it may be composed of several organs of the same immaterial nature as itself. However, be this as it may, the implied distinction alluded to leads to the inference, that the immaterial organs of the soul are not subject to exhaustion

And here we must bear in mind that he considers the brain as a system of organs, to each of which he ascribes the exercise and manifestation of some particular intellectual or moral faculty. If, therefore, dreaming depend, as he asserts, upon the action of some of the cerebral organs during the time of sleep, we should naturally expect that those which have been more particularly exerted and fatigued during our waking hours, would share the repose of the other parts of the body; while on the other hand, those organs which had not been so exerted would now be the most likely to

and fatigue like the material organs of the body, and therefore may act independently of them:—hence, Doctor Gall has indirectly afforded an argument against that part of his doctrine which would render the soul incapable of acting without the aid of the material organs.

have their action called forth. Hence dreams should be for the most part unconnected with any subject-matter that more particularly occupied and fatigued our waking thoughts. But the reverse is most generally the case: for we often find the very subject of those thoughts the source of our dreams; and sometimes during that period the intellectual faculties seem to be exerted even with more energy, at least with more effect, than before. School-boys occasionally afford very remarkable examples of this curious fact. After toiling ineffectually for hours at their exercise, they have gone to bed fatigued, and despairing of their capability to accomplish their object. They have fallen asleep; and yet in that state have so exerted their intellectual faculties as to effect what they

had before attempted in vain. It is also to the exertion of the intellectual faculties under similar circumstances, that the poet and the artist will be sometimes indebted for some very happy touches in their respective performances. The poet with his manuscript before him looks with his intellectual eye over some of the passages already composed; and while his imagination is thus actively occupied, new ideas are born in his mind, and these will sometimes exceed in interest and energy those that have preceded them. The artist too sees his picture before his "mind's eye;" and, while he is contemplating what his pencil has already achieved, imagines some improvement, or conceives some new idea which he afterwards embodies upon the canvass, and gives to the whole composition a happier and more im-

posing effect. Even the merchant, when slumbering on his pillow will often calculate the profit or loss of his commercial adventures, which have occupied much of his time and thoughts in the course of his waking hours.

A variety of other instances of a similar nature will probably occur to the mind of the reader; but those few which I have mentioned are sufficient to show that the intellectual faculties are capable of considerable exertion, although the corporeal system is in that state of rest and inactivity which constitutes sleep. Nor do those faculties appear to lose any of their energy under these circumstances; for their exertion may be renewed with full vigour as soon as the corporeal system returns to its state of vigilance. Hence, as we can exert when asleep, and with

such effect, the same particular faculties that we previously employed when awake, it is very improbable that dreaming is to be accounted for in the way that Doctor Gall pretends.

Also, if we attend to the nature of those dreams to which he alludes, as connected with bodily pain or some morbid condition of the system, we shall find that although those dreams may not immediately contradict his inference, yet they do not in any way lead to it. In the state of vigilance particular ideas are often associated with bodily sensations; and as dreams are generally influenced by the particular associations which have prevailed while awake, it is to be expected that the state of sleep should be more or less affected by the physical condition of the body. Accordingly, when any part

of it is in pain, or when some unhealthy action is going on in the system, the sleep will be very imperfect; and a state of disease, which may thus disturb the natural repose, may indeed show that the body cannot be under the influence of pain to a certain degree, and the soul insensible of it; but the circumstance does not prove that the soul is incapable of acting independently of the body.

But a very strong physiological fact can be also adduced against the author's opinion upon this subject. We know that the living body undergoes a continual waste and repair, and there is a time when not one particle of matter exists as part of the same system, which matter constituted a part of that system a few years before. Now as all the cerebral or intellectual organs form a part

of the system, it is evident that they must have been also renewed. If the soul, therefore, cannot act independently of the body, we must infer that all ideas of things concerning which we have any future memory, are, as it were, mechanically imprinted on the intellectual organs, and that ultimately the new formed ones have transferred to them those same impressions which the absorbed organs had originally received. Otherwise, how could we recollect any thing beyond the time when the intellectual organs no longer possess any portion of that matter of which they were formed when we first received the impression of those things which constitute the subject-matter of our recollection? But, if we admit that our recollection of things is to be accounted for upon this principle, it is acknowledg-

ing at the same time the doctrine of the materiality of ideas. Now if ideas be material, they must of course partake of the common properties of matter, and therefore every idea must be composed of parts, and each part must be divisible, and decomposable, and must also have ponderosity, length, breadth, and thickness,—consequently, bulk. Such being the general properties of which ideas must partake if their nature be material; and as their materiality is implied by what the author has advanced,—it is evident that memory or the idea of things past cannot be rationally explained upon the principles of his philosophy. Moreover, if what we call *intellectual impressions* were transmitted to the new formed portions of the intellectual organs, as the old became absorbed, we should naturally expect that

those impressions would become weaker and weaker by the successive absorptions and renewal of the organs, until at last every trace of the original impressions would get completely obliterated. But this is not the case; for we often recollect circumstances of such very remote date, that, strictly speaking, the body is not the same it was when those circumstances first occurred, of which we have the present recollection. And what is still more mysterious, sometimes the most lively recollection of things will take place, although in the interval between the time when they originally awakened our attention and the recollection of them, they have been totally forgotten and every part of the frame wholly renewed [m].

[m] A most remarkable example of this kind occurred some years ago at St. Thomas's Hospital. A man was

The inference which the author has deduced from the phænomena of dreams, is further contradicted by those circumstances when in the course of our waking hours the mind engages itself about some interesting subject. In this case a train of ideas arise successively in the mind; but the manifestation or communication of them is not the necessary consequence, because the mind has the power to avoid

brought in who had received a considerable injury of the head, but from which he ultimately recovered. When he became convalescent he spoke a language which no one about him could comprehend. However, a Welch milk-woman came one day into the ward and immediately understood what he said. It appeared that this poor fellow was a Welchman, and had been from his native country about thirty years. In the course of that period he had entirely forgotten his native tongue and acquired the English language. But when he recovered from his accident, he forgot the language he had been so recently in the habit of speaking, and regained the knowledge of that which he had originally acquired and lost.

the same if it will it. Nevertheless an intellectual function is performed, whether such manifestation take place or not, and in either case the will is equally concerned. In the one instance we give effect to it by *willing* to communicate and by communicating those thoughts; and in the other case, by willing to keep and by keeping them to ourselves. It is therefore very obvious that an intellectual operation may be performed without necessarily affording any evidence of it. To what then does the performance of that operation belong? Is it performed by the soul alone, or with the aid of some of the cerebral organs? If the soul be incapable of performing it by itself, then these organs must necessarily be considered as intellectual auxiliaries: and here also it may be asked, What

is the efficient cause which, in that case, enables these organs to aid the soul in its operations? Before this question can be solved, we should first inquire and know what is the nature of the soul itself, and how it comes to exist. The Platonists may have persuaded themselves that they have ascertained its nature and properties; but many able philosophers of modern days have shown by their researches that this is a task which in all probability is far beyond the compass of human ability to achieve. In every inquiry that relates to the subject we find ourselves involved in a labyrinth of abstruse questions, every one of which supposes the pre-solution of others equally intricate; so that each question will bring us round and round to the same point, without having advanced one step to-

wards the attainment of the object of our inquiry.

As accidental and other causes appear on some occasions to give birth to new faculties and propensities, or to give additional energy to those which existed before, it is inferred by Dr. Gall that we have faculties and propensities of which we are unconscious, and that these may or may not be manifested, according to particular circumstances. The very effects alluded to of those causes, whether accidental or otherwise, corroborate so far, the truth of the author's inference. But he also ascribes those effects to the sudden development of the particular organs to which he assigns the exercise of those faculties and propensities which are called forth in so singular a manner from their dormant and inactive state.

For the purpose of illustrating this part of his doctrine, he alludes to the periodical manifestation of particular instinctive aptitudes in different species of animals, and also mentions several cases of injury of the head which were followed by an extraordinary display of talents, but of which there had been no previous indication.

As he considers these cases of importance to his subject, I shall quote in this place two of the most remarkable ones, and then examine the merit of the inference which he has deduced from them, and also from the periodical instincts of animals.

One of the cases alluded to, relates to "FATHER MABILLON, who from his infancy had shown very limited faculties; but in the midst of his intel-

lectual mediocrity he received a most severe injury of the head, and from that moment displayed superior talents[n]." Another case which Dr. GALL mentions, is that of a lad who until between his fourteenth and fifteenth year gave but very little promise of future abilities. At this epoch, however, he met with an accident which occasioned a very extraordinary revolution in his intellectual faculties. Dr. GALL tells us that "the accident occurred at Copenhagen. The lad fell over a staircase from the fourth story, and since the fall he displayed great intellectual facul-

[n] "Le Père Mabillon n'avoit eu dans son enfance que les facultés les plus bornées; mais au milieu de sa médiocrité il reçu à la tête une blessure des plus fortes, et dès ce moment il déploya des talens supérieurs."—Vide the author's work "*Des dispositions innées, &c.*" 8vo ed. page 53.

ties. Nor was this the only change. No one had previously observed in him any bad qualities; but after this same fall he showed a very bad moral character, which caused his dismissal from an eminent situation which he enjoyed, and ultimately led to his imprisonment°."

The above cases are certainly very curious in a physiological point of view: but, whatever plausibility they may seem to give to the doctrine in question, yet when closely examined they will be found very inefficient arguments in support of it.

Why such accidents should occasion

° "Il tomba à Copenhague du quatrieme tage d'un escalier, et depuis cette chute il déploya des grandes facultés intellectuelles. Ce changement ne fut pas le seul. On ne lui avoit connu jusqu'alors aucune mauvaise qualité, et après la même chute il manifesta un très mauvais caractère, qui par la suite le fit chasser d'un poste éminent, et confiner dans une prison." *Ibid.* p. 54.

such an extraordinary change in the intellectual system it is difficult and perhaps impossible to explain. Injuries apparently of much less violence have not only proved fatal to the intellectual capacities of some individuals, but even occasioned the loss of life. Yet, whatever may have been the immediate cause which for a time kept Father Mabillon and the Copenhagen lad, perhaps even in the rank of idiots, it appears that the violent injury which some part of their brain received, was the remote cause of the extraordinary revolution which took place in their intellectual faculties. But it would have been a matter of physiological and metaphysical interest, and essentially connected with the doctrine in question, if its author had informed us what particular part of the brain was ac-

tually injured. It would also have been important to know whether, after the accident, either of these individuals were deprived of those intellectual faculties, the exercise of which belonged to that part of the brain that was wounded, and whether the organs of the newly developed talents escaped any mechanical injury. But he is silent upon these points. However, in another part of his work he mentions a case of injury of the head, and about which he is somewhat more explicit. The subject of it was a young man who received a considerable wound near the temporal bone. The patient was trepanned, and when he recovered he never could abstain from thieving, although we are told he never had any propensity to that crime before the accident. Now the author places the organ of

theft, "*l'organe du vol*," in the vicinity of the temporal bone and under the frontal one, and probably the organ itself was one of the parts actually injured by the wound. Of this, however, we are not informed: but at any rate we may fairly presume, from the described situation of the wound and of the organ of theft, that the part of the brain of which it is formed was either mediately or immediately affected by the accident; and it is difficult to comprehend how a part which has any particular and *distinct* function to perform should have its energy more developed under circumstances like these. Upon what physiological principles, or by what known law of the animal œconomy, is this phænomenon to be explained? Perhaps the advocates for the author's philosophy will reply, that the destruction or

removal of a part of the brain in the immediate vicinity of any given organ will allow of more room for its greater development, and that consequently its functions will become more energetic. Or it may be argued, that the injury or destruction of an organ on one side will occasion a greater degree of energy in the functions of the corresponding one. These explanations may do in theory; but they will not afford any satisfactory solution of the circumstances which relate to either of the cases alluded to.

According to the author, every intellectual attribute essentially different, has its appropriate and *distinct* organ in each hemisphere of the brain; and these attributes will be manifested with different degrees of energy, in proportion to the greater or less development of their respective organs.

Now let us suppose the sum of *four* to denote the utmost degree of energy that any given individual organ may be capable of exerting by itself, and the sum of *eight* to denote the degree of energy that may be manifested by the two corresponding ones when in health and under their state of greatest activity. Hence, if an intellectual organ be so injured as to have its functions destroyed, and that the sound corresponding one were to inherit even all the energy that belonged to the other, yet the sound or healthy organ could only exert the energy which the two fellow-organs had conjointly: consequently even this degree of energy in the individual organ would not be sufficient to account for the phænomenon alluded to. Or, if we suppose any part of the brain to have been destroyed, and that the space which it

occupied gives more room for the greater development of some organ in the immediate vicinity of the destroyed part, it argues that the organs of the intellectual system have no definite point of growth like other organs, and consequently must be liable to impede each other in that respect, and in the performance of their functions. But this also would imply a degree of imperfection in the organization of man, and an imperfection too, which cannot be supposed to exist without impeaching the wisdom of the Creator. It is therefore obvious, that the cases mentioned by Doctor Gall in support of his philosophy, can only be considered as some of those extraordinary circumstances which often excite our wonder, while they confound, and sometimes mislead the understanding.

Moreover, if we suppose that we have propensities and intellectual faculties which may never be manifested, merely because their proper organs are not developed to some particular point of growth, it will naturally lead us to consider man as a being fated to be a good or a bad moral character, intelligent or stupid, according to the caprice of nature in the moulding of his brain, or in giving to one organ a few more particles of matter than to another. But these inferences are so much at war with reason and common sense, that the reflecting mind feels at once convinced of the fallacy of a doctrine which embraces absurdities like these.

With regard to instincts, whether periodical or permanent, it cannot be disputed that they are associated with some peculiarity of structure. But the author

pretends that "the several talents for music, painting, architecture, mechanics, mimicry, geometry, mathematics, &c. which seem to be only talents acquired and produced by social life, are innate in man, and equally indicated to himself by his organization, as are to the honey-bee the laws of its hexagonal cell, to the nightingale its song, and to the beaver the art of building its particular habitation:" and he adds, "without such organization the manifestation of these several talents would be as impossible to man as they are to the earth-worm [P]."

[P] "Les talens de la musique, de la peinture, de l'architecture, de la mécanique, de la mimique, de la geométrie, des mathématiques, &c. qui semblent n'être que des talens acquis et produits par la vie sociale, sont innés dans l'homme, et lui sont indiqués par son organisation, comme le sont à l'abeille les lois de sa cellule hexagone, au rossignol son chant, et au castor ses constructions.

Plausible as these observations may at first appear, yet when more closely examined they will be found to embrace assertions which are for the most part hypothetical and even inconsistent. They confound what is intellectual with what is instinctive, and what is intellectual and instinctive with physical ability, so far at least as such ability is connected with the mechanical structure of the frame by which the animal is enabled to perform with ease those things to which it is prompted by that impulse which we call instinct. This structure is varied more or less in the different species, and we can discover the different intentions of

Sans cette organisation, la manifestation de ces qualités auroit été aussi impossible à l'homme, qu'elle l'est au ver de terre."—Vide the author's work "*Des dispositions innées, &c.*" page 125.

nature towards them by the peculiarity of their structure. But with regard to man; we perceive no analogous variety of contrivance in the corporeal system of different individuals, although there may be a very great difference in their respective attributes, whether moral or intellectual. It is evident, therefore, that the author's observations upon this subject are futile, and his comparison false. His observations amount merely to this, —that any animal could not be that animal without being what it is; that man is not a worm, nor a quadruped a bird.

The author, however, always presuming upon the validity of his arguments and correctness of his deductions, boldly affirms that he has established as a demonstrated truth, that the different instincts of different animals depend upon the pre-

sence of particular cerebral organs, analogous to what he pretends with regard to the intellectual faculties of man. But whatever analogy there may be between any of his instinctive faculties and propensities, and the instincts and propensities of the brute, yet instinctive operations are very different from those intellectual ones of which man alone is capable.—The instinctive abilities of an animal are for the most part confined to the sphere of its particular wants. Every particular species directs its operations to the same general end, and that end is accomplished in a similar manner by all the individuals of that species, without experience, without instruction, without deliberation, and without calculating upon the consequences. But man as a rational and intelligent being, is prompted by motives, and

enabled to act according to the suggestions of his own mind and the dictates of his reason. Even those animals which are greatly his superiors in physical strength, he renders tributary to his wants, to his comforts, and even to his amusements and luxuries.

There are indeed some actions of many animals that, perhaps, we cannot reasonably refer solely to instinct; but this will not alter in any manner the feature of the present argument:—instinct will be always instinct, and reason, reason; although both these attributes may be blended to a certain degree in many species of animals in the performance of some of their actions.

The author also appears to forget that in the lower orders of the animal creation, there exists a tribe of creatures in which

no apparatus like that of the brain has been found. Yet these creatures must necessarily be endued with such instinctive abilities as are adapted to their mode of existence. Among these instincts we must include at least those which relate to self-preservation and to the continuance of the species. But where shall we find in those animals the organs of their instincts? It may indeed be argued, that we may infer from analogy that they are furnished with something corresponding to the cerebral system of other animals, and that, consequently, their instincts will be referable to a similar source. But on the other hand, no physiologist has yet *proved*, and perhaps because it never can be proved, that the brain is positively the source of the instinctive principle; and much less

that the number and energy of the instinctive talents of an animal depend upon the presence and degree of development of as many different and distinct cerebral organs.

Comparative anatomy shows a very great variety of shape in the corresponding bones of different species of animals; and these bones, like the other parts of their anatomical structure, are duly adapted to the peculiar nature of their œconomy. This variety necessarily extends to the bones of the head: and as the cranial cavity which they form is filled up by the brain, the figure and arrangement of its parts will necessarily have a corresponding difference. The author may therefore adduce different-shaped heads with corresponding-shaped brains of animals of different species and

of different instincts; but this will not afford any physiological proof that the brain is in reality the organ of instinct, or that it must be composed of different organs for the manifestation of different instinctive attributes.

But even admitting that the brain were the source of the instinctive principle, it can be very easily demonstrated that the size of it is not necessarily proportional to the excellence or energy of the instinctive attribute, nor is the degree of perfection of any instinctive talent proportional to the size of the organ to which that talent may owe its existence. The honey-bee affords a most interesting example of the truth of this observation. Its architectural talent excites the wonder and awakens the admiration of the naturalist and of the mathematician. But

if this exquisite ability, as well as the other instincts with which the bee is endued, depend upon different organs in its cerebral system, how very diminutive must be that very particular one which is accordingly to be regarded as the source of this wonderful talent! Dr. Gall, however, may say, that although the organ is absolutely small, yet it is large in relation to the development necessary for the manifestation of the talent alluded to. But large as it may be, even thus relatively considered, yet there is a very great disproportion between the *size* of the organ itself and the eminent talent of which it is supposed to be the source.

If, therefore, the brain of this little animal be in reality composed of as many different organs as it has instincts, then it is obvious that a talent *eminently*

great owes its existence to an organ *minutely small*,—a talent too of such a nature as to enable the animal endued with it to produce a piece of work so exquisite that it can in no wise be improved, nor even equalled in degree of perfection, by any work of art of which human ingenuity can boast. Hence, although instinctive talents be innate, and a peculiarity of corporeal structure accompanies the particular instincts of different species of animals, yet this does not prove that the character of their instincts depends upon the size or development of any given part of their cerebral system. Indeed, it would be quite absurd to suppose that magnitude should be an essential requisite to perfection of structure, and to render the functions of an organ more complete.

But the advocates for the author's doctrine may ask, whether these objections are equally applicable to the cerebral organs and the intellectual faculties of man? It is true, indeed, that intellectual and instinctive operations depend upon very distinct attributes. The former proceed from an intelligent and discoursive mind, while the latter are performed without any intellectual exertion on the part of the agent.

Although, however, these attributes are distinct in themselves, yet there are certain actions which, as before observed, cannot be referred, solely, either to instinct or to reason, but seem to partake of the character of both. It may be therefore very difficult to determine, under particular circumstances, when actions cease to be instinctive, and the reasoning

faculty begins to be exercised. This shows, however, that there are some points of analogy between the natures of these two attributes: consequently, if the energy and perfection of the instinctive abilities in animals be not necessarily connected with the size of their corresponding cerebral organs, we may also infer that neither the size of the brain, nor that of any of its parts, can have any influence either on the degree of the intellectual faculties or on the character of the moral qualities in the human subject. This inference, which is so contrary to the principles of the doctrine in question, is nevertheless supported by the author himself; and that too, by the very means to which he has recourse for the purpose of demonstrating practically the truth of that doctrine. With this view he has published

a plate representing a delineation of the cranium, the external surface of which is divided into several parts like a geographical map; and these divisions are intended to indicate the particular and relative situation of the different organs. It is, however, a circumstance not a little remarkable, that he should consider the energy of a moral or intellectual faculty proportional to the magnitude or development of the organ destined for its manifestation, yet that the size of it should bear no corresponding relation to the importance or value which the faculty itself may hold in the scale of moral or physical excellence.

If we compare the different sizes of the different cerebral organs, we shall find that those to which is ascribed the manifestation of the higher orders of attri-

butes, are formed of much smaller portions of brain than any of the rest. Accordingly, the organ which when duly developed is supposed to endue with a great talent for the abstract sciences, occupies but a very small space; while several other organs to which belongs the manifestation of inferior qualities, are comparatively of considerable magnitude, as instanced in those particular portions of the brain which the author has named "*l'organe de la vanité*," "*l'organe de la ruse, &c.*"

I have a skull marked under the direction of Dr. Gall; and the frontal bone, the two parietals, the two temporals and the occiput, are made to cover twenty-seven pair of organs, making in all fifty-four organs. Of these, thirteen pair and a half lie under the frontal bone alone, one pair being situated partly under that bone and partly

under the two parietals, where the sagittal suture meets the coronal. Nearly the whole of the occiput, however, is made to cover two pair of organs only, and the faculties ascribed to these partake much more of the instinctive than of the intellectual character. According to the author, one of these pairs is the source of parental affection and of animal love or attachment, which will be more or less ardent in proportion to the developed state of the organs: the other pair is the source of voluptuous ideas and propensities.

He may perhaps endeavour to get over this difficulty by observing, that although the magnitude of the intellectual organs is not proportional to the degree of intellectual excellence of their respective attributes; yet it may be fairly presumed that their smallness of size is com-

pensated by the nature of the materials of which they are formed, or by some other something that fits them for their destined functions. But, plausible as this explanation may at first appear, it is subversive of the doctrine which it may seem to support.

If we admit that the superior order of the intellectual or moral faculties may have their respective organs of a structure more exquisite, because they are smaller than those of the inferior attributes, or that they may be endued with some other something to compensate for their smallness of size, then the very same reasoning may be applied to any of the superior order of intellectual organs: and hence any deficiency of development in any of these may be most effectually compensated by exquisiteness

of structure, or by that something which may equally compensate for magnitude.

Again: notwithstanding the number of intellectual organs which the author points out, yet it is not equal to all the different attributes which are at times manifested by different individuals. If, therefore, the doctrine of the plurality of intellectual organs be true, the brain must necessarily be composed of a still greater number than he has hitherto described; and they consist already of such a crowded assemblage, as to render it next to impossible to determine, at least by external examination, the actual situation of many of them.

It might perhaps be replied, that every kind of talent is not possessed by the same individual; and therefore such organs only will be developed, as correspond

to his particular intellectual abilities and moral qualities. But even this explanation will increase the very difficulty which it was meant to remove. Although only a part of the organs within any given space may have acquired a high degree of development in one individual, yet in another person the order of the development of the corresponding set of organs may be reversed. In either case, the developed organs will encroach, more or less, upon the space which the others would have occupied if they had been the developed ones: consequently mistakes must always be very liable to occur about the real situation of any organ which may be in the immediate vicinity of several others.

But Dr. Gall mentions in his public lectures a circumstance which throws another great difficulty in his way. He asserts

that some of the intellectual organs only begin to exist at different periods of life. It is true, indeed, that some particular talents manifest themselves more or less late, but it does not necessarily follow that this is owing to the presence of new intellectual organs. In order to prove this consequence, he should at least point out the situation of those organs that are formed after birth, and state the periods when their respective existence commences; also what organs, if any, occupy the place of the future ones, and what becomes of the old when the new organs are formed; or whether we are to consider any particular portions of the brain in infant life, as only the soil or matrix in which some of the intellectual organs are to be afterwards generated and evolved. But Doctor Gall does not make the least allusion

to any of these matters, although the inquiry is particularly connected with the assertion alluded to, and with the principles too upon which his doctrine is founded. It is therefore evident, how very equivocal and delusive must be the criterion by which he pretends to judge, even by external appearances, of the intellectual capacities and moral character of individuals.

The delusion will appear further evident when we examine another circumstance which forms a very important article of his creed. I allude to the inequalities or protuberances upon the cranial bone, which are said to indicate the degree of cerebral protuberance immediately underneath any given part of that bone.

He pretends we can ascertain the situ-

ation, and the degree of development of any particular organ, by the elevations observable upon the outer surface of the cranium, and accordingly form an opinion of the intellectual capacity and moral character of individuals. But it is easy to show the fallacy of this pretension. Although the internal surface of the cranial bone has the imprint of the external figure of the brain, and although there are elevations and depressions upon the outer surface of that bone, yet their situation does not correspond with that of the cerebral protuberances and depressions. In fact, considerable elevations are often observable on the outer surface of the cranial bone, without any corresponding hollowness within, and great concavity on its internal surface, without any corresponding convexity externally.

The author, however, admits in his public lectures, that there are skulls in which some difference is observable between the situation of the concavities of the cranial bone internally and that of the outer protuberances. But he says this does not affect in the least the general principles of his doctrine, because this difference is not evident until about the age of thirty-five or forty, which he calls "*l'age stationaire.*" But whoever will take the trouble to examine the cranial bone, even under the adult age, will find that the situation of the convexities and depressions externally very seldom corresponds with the convexities and depressions internally, except in such parts where the bone is thin and very little diploë between the external and internal tables.

Moreover, the course or figure of the convolutions of the brain is very dissimilar in different individuals, nor are these convolutions symmetrical in the two hemispheres even of the same brain; and therefore the figure and relative situation of any given organ will vary not only in different brains, but also in each hemisphere of the same brain.

These are *incontrovertible* anatomical facts, to which, however, the author has not at all adverted in his work: but he has there expressed himself in a manner which would lead the ignorant in anatomy to conclude that the outside of the skull uniformly represents the exact figure of the surface of the brain, and that the convolutions of that organ always described the same figure, though varied more or less in the dimensions of some of its parts: he

says, "There are many organs the considerable development of which manifests itself by greater and more extensive circumvolutions upon the surface of the brain, and these circumvolutions are in their turn represented upon the external surface of the cranium. Add to this, what we shall demonstrate for each particular organ; namely, that we have found the means of determining that such or such part of the brain is the organ of such or such faculty of the soul. Hence it will be understood, how from a particular and considerable elevation of the cranium one is able to infer a greater development of one part of the brain, and consequently a greater degree of energy of some determined quality[q]."

[q] "Il y a plusieurs organes dont le développement

These observations may serve to impose upon the understanding and credulity of those who have had neither time nor opportunity to acquire any anatomical knowledge of the human frame. But when they find that anatomical facts are in such contradiction to mere assertion, they will at least hesitate before they acknowledge their conviction of the truth

plus considérable se montre par des circonvolutions plus grandes, plus grosses, plus élargies, plus allongées sur la surface du cerveau ; et ces circonvolutions sont, à leur tour, représentées par des élévations sur la surface extérieure du crane. Que l'on ajoute à cela ce que nous démontrerons pour chaque organe en particulier, savoir, que nous avons trouvé des moyens de déterminer que telle ou telle partie du cerveau est l'organe de telle ou telle faculté de l'ame ; alors on comprendra comment, d'une élévation considérable et déterminée du crane, on à pu inférer un plus grand développement d'une portion du cerveau, et par conséquent une plus grande énergie d'une qualité déterminée." *Vide* the author's work "*Des dispositions innées, &c.*" page 227.

of a doctrine which rests upon such unstable ground.

Is it reasonable to suppose that perhaps only a line's breadth in the elevation or extent of some given portion of the brain would affect some particular moral or intellectual faculty? Will the heart, the stomach, or the liver, perform their respective functions better or worse because they may be a little larger or smaller in one individual than in another? and why should the brain, or any part of it, form an exception in this respect[r]?

But whether the size of the brain, or any of its parts, may or may not have any influence on the moral and intellectual character, it is certain that, of whatever nature the character may be, it is not

[r] Vide "Observations on the instinctive organs," p. 55 of this essay.

necessarily influenced by the physical condition of the frame; for we often meet with great vigour and great capacity of mind associated with a body physically weak, and great physical strength with an intellect that is poor and barren, and which no cultivation can improve. Yet in all these individuals the brain is composed of the same kind of matter, and its different parts and contrivances appear the same. If therefore the character of the moral and intellectual faculties did really depend upon the causes which Dr. Gall pretends, how could all this be? We should naturally expect, that as the intellectual organs form a part of the corporeal system, they would also partake of its constitutional vigour and debility, and accordingly perform their functions with more or less energy. We should expect,

too, that the loss of some portion of the brain would be *universally* attended with the loss of some faculty, and that a diseased condition of that organ would always affect the state of the intellect. But a crowd of well authenticated cases might be mentioned, where even considerable portions of the substance of the brain have been lost, and where this organ has been greatly diseased, without any detriment to the intellect.

Several curious instances of this kind are brought under one view by Dr. Ferriar in "*An argument against the doctrine of materialism*," which will be found in the fourth volume of the Memoirs of the Literary and Philosophical Society of Manchester; and those instances are so very applicable to the present subject of discussion, I shall take the liberty to relate some

of them in this place. Among these is a very remarkable case of a child six years old: he received a pistol shot in the head; a suppuration followed, during which he lost a great quantity of the brain at every dressing. At the end of eighteen days the child died, *having retained his faculties to the last.* When the head was opened, the portion of brain remaining did not exceed the size of a small egg[s].

Another very curious case is related upon the respectable authority of Bonnetus. He had a patient who died after an illness of twelve years without having experienced any alienation of mind. When the head was examined after death, he found the *whole substance of*

[s] This case is mentioned by La Peyronie in the "*Mémoires de l'Académie*" for 1741.

the brain watery, and so soft that it would hardly bear the knife. The spinal marrow was equally tender, and shrunk to half its natural size. But Dr. Ferriar also mentions an analogous case which came under his immediate notice; and as it is so much in point, I shall give the relation in his own words.

"A girl died in the fourth month of an arthritic complaint, with evident symptoms of an oppressed brain, but in perfect possession of her intellectual powers. When the upper part of the skull was removed before opening the *dura mater*, I was surprised at the flaccid appearance of the brain; it did not seem to fill its membranes, and it moved under the fingers with a very trifling resistance, so as to feel almost like a poultice. The patient had not been dead more than twenty-

four hours. We found the ventricles quite full of water, and an effusion of blood upon the tentorium on the right side. But the principal disease seemed to be a total change in the consistence and colour of the brain throughout. It would scarcely bear handling or cutting, and the parts were uncommonly indistinct[t]."

All these cases are greatly at variance with Dr. Gall's system, because, if the intellectual faculties were dependent upon the cerebral organs, as he pretends, we

[t] Dr. Gall has also alluded to similar cases mentioned by different authors; but he seems to consider the relation of them as incorrect. I believe, however, that the cases which I have quoted are from authorities too respectable to be doubted; and as such cases are so much at variance with the doctrine in question, it is to be expected that its author would endeavour to hold them up in a suspicious light. See the author's work "*Des dispositions innées, &c.*" page 58, 59.

should of course expect that any loss of the substance of the brain, or unhealthy condition of that organ, would universally affect in a greater or less degree the intellectual functions, and consequently the intellectual faculties. But the cases related above prove that such an effect is not the necessary consequence, and the one of the child mentioned by La Peyronie affords a very remarkable instance of the preservation of the intellectual faculties notwithstanding the almost total loss of the substance of the brain itself. Hence, if the doctrine in question be true, we must infer that the very small remaining portion of the brain contained all the organs of the faculties with which the child had ever been endued: and it would be a most extraordinary circumstance indeed, that the only part of

the brain which was essential to their preservation should have escaped destruction, or any particular morbid change.

On the other hand, however, cases can be adduced where death and mental alienation have followed apparently trivial injuries of the head; and when these cases are abstractedly considered they may seem to give some plausibility to the doctrine in question. But yet the cases quoted above, together with the other circumstances alluded to, will be always very powerful obstacles to the establishment of it. They prove, too, that the existence and exercise of the intellectual faculties depend upon something more than what we know of the brain, whether we consider it as a single organ, or as formed of several ones; and every sober view of the subject points out how

very uncertain must be any theory that has in view the explanation of any phænomenon connected with our intellectual operations.

The different effects of education upon different individuals is another ground of argument upon which the author has attempted to establish the truth of his doctrine. But in this he has failed too, and the fallacy of any system cannot be more effectually shown, than by exposing the contradictions furnished by the detached arguments and illustrations which are advanced in its support.

Doctor Gall maintains that education can have no influence, except in as much as the individual may possess the requisite disposition to receive instruction, and that he is prepared for the purpose by his organization. It cannot be denied

that different persons show different dispositions as well as different talents, and also exhibit different degrees of aptitudes, even towards the same acquirements. Some individuals too appear altogether deficient of abilities which are found to exist in others, even in a very high degree; and Doctor Gall pretends that the cause of those differences exists in the particular state of development of particular parts of the cerebral system. He relies so much upon the truth of this doctrine, that he considers it as affording the ground upon which even the future character of an individual may be determined, while that individual is yet only a child: he says,—"Man even from his childhood indicates the character that will distinguish him in the adult age. At a later period he is heard to exclaim, I

cannot do otherwise, because it is in my nature to act as I do[a]." But how will this observation be reconciled with those several instances alluded to of early imbecility followed by an unexpected development of talents? Among these instances are the cases which I have quoted of Father Mabillon and of the Copenhagen lad, both of whom received a violent injury of the head. And in an earlier part of his work Doctor Gall also cites several cases of tardy and unexpected development of talents, but which was spontaneous. A Swiss poet and a celebrated physician of Berlin are mentioned among other instances of this

[a] "Dès son enfance l'homme annonce le caractère qui le distinguera dans l'age adulte. Plus tard on l'entend s'écrier: Je ne peux faire autrement, c'est plus fort que moi; c'est dans ma nature." Vide the author's work "*Des dispositions innées, &c.*" page 78.

tardy and unexpected change in the intellectual system. Of the former he says:—"Born of a family where the rickets was an usual disease in the early part of life, when he had attained his tenth year his instructors declared that he was incapable of any attainment[v]." Of the physician he tells us: "One of the most celebrated physicians of Berlin, until his thirteenth year could neither combine his ideas nor make any use of his organs of speech[w]." Dr. Gall, however, accounts for the tardy development of talents in these individuals by ascribing it

[v] "Né dans une famille où le rachitisme est habituel, dans la jeunesse ses instituteurs, quand il eut atteint l'age de dix ans, le déclarèrent entièrement incapable de faire aucun progrès." Vide the author's work "*Des dispositions innées*," page 25.

[w] "Un des plus célèbres médecins de Berlin n'a pu jusqu'à sa treizième année, ni combiner des idées ni se servir des organes du langage." ibid.

to a corresponding tardiness in the development of their proper organs. Be the cause what it may, these cases are in direct contradiction with what he states respecting the opinion we may form of the future character even of a child. He may perhaps endeavour to reconcile these contradictory inferences, by referring the cases of the Swiss poet and of the Berlin physician to that class of phænomena which form exceptions to general rules. But the number of analogous instances which he relates would form too many similar exceptions to come under that denomination. It is therefore evident there is yet something hidden and inexplicable, upon which depends the early or tardy manifestation of talents in different individuals, whether we regard the subject as connected or as unconnected with education.

Doctor Gall also calls the attention of his readers to the opinions of different philosophers concerning the nature of man, and the organization and instincts of animals, and he refers to these opinions with the view to corroborate his own. But as those which he quotes are for the most part of a speculative nature, they neither prove nor disprove the truth of the doctrines which they are intended to support.

Also, for the purpose of giving to that system some additional stability, he concludes the first section of his book by laying down a series of propositions, the truth of which, he pretends, it would be necessary to establish, in order to invalidate the fundamental principles upon which he has endeavoured to establish his system. But as these propositions exhibit

only a kind of contrast view of the opinions that he has before advanced, it is unnecessary to notice them in detail. It is, however, affirmed by Dr. Gall, that until the truth of those propositions shall be proved by reasoning and by facts, as positive as those upon which he grounds his system, he will have the right to consider the truth of it fully demonstrated[y]. It is, however, far more easy to form conclusions according to our partial view of things, than to prove such conclusions true: and I hope I have shown that he has failed to establish his doctrine upon such ground as to give validity to the argument and sanction the inference which form the conclusion of this part of his subject.

[y] Vide the author's work "*Des dispositions innées*," pages 126 and 130.

THE second section includes observations upon MATERIALISM, FATALISM, and MORAL LIBERTY. And the author begins by boldly affirming that he has proved by incontestable facts that the properties of the soul are innate, and that the exercise of them depends upon the material organs. He also tells us, with equal confidence, that he has demonstrated that in no other way could be explained either the origin of the intellectual or moral faculties, or the different modes by which they are manifested. But he reminds his readers that certain objections will always be opposed to new truths, more especially when they lead to great and important discoveries. Ignorance, prejudice, envy, and often bad faith will all league against these truths; and if the principles of a doctrine cannot be

attacked with success, every attempt will be made to hold it up to mistrust, by inferring from it consequences of a dangerous tendency.

But, however applicable such observations may be to times of remoter date, we live in an age when the field of science is no longer encumbered with the rubbish of ignorance and superstition, and the philosophical inquirer may now pursue his researches fearless of the attacks or persecutions of fanaticism. The whole field is freely opened to him, nor shall he be plundered of the laurels he may gather there. Every man of science who is capable of distinguishing between true and pretended merit will know how to appreciate the claim of any candidate for scientific fame, and will impartially award the meed to whomsoever it may be due.

These observations, however, are not made with the intent to depreciate in any way the scientific labours of Doctor Gall. He has extended his researches over a very wide field; and whether they may or may not have led to any other result than the very interesting discovery relating to the dissection of the brain, that alone ought to secure to him the respect of the physiologist, and confer immortality on his name[z].

No one will hesitate to admit that the brain is an organ of very great import-

[z] I do not mean to refer here to the diverging nervous fibres, and some other matters, which have been the subject of physiological controversy. I allude principally to the manner in which Dr. Gall has shown that the brain is capable of being unfolded and extended, almost similar to a piece of cloth that had been previously put up into folds. What are called the convolutions of the brain are formed of the outer surfaces of these folds; and it has been also recently discovered, that this folded

ance in the animal œconomy ; and if we are still in the dark concerning some of its uses therein, it is very probable that Doctor Gall has opened the road that will lead to the knowledge of them. But we are not consequently to place his arguments upon the subject to the account of fact and demonstration, and subscribe our belief to his system; a system, too, that leads to the very dangerous doctrine of materialism, and even renders moral liberty a mere phantom.

The author pretends, however, that those who accuse his system of materi-

cerebral substance has a great number of divisions forming so many compartments, which are the interior of the intellectual organs; and Dr. Gall also pretends that these divisions indicate their respective boundaries. Be this as it may, those compartments and divisions do exist, and the brain may be unfolded in the manner in which I have attempted to describe.

alism confound the faculties of the soul with the organs by the means of which those faculties are exerted and manifested. But this is a very unavailing endeavour to make that accusation appear futile. It is the particular influence which Dr. Gall ascribes to the cerebral organs in our intellectual operations, and on the moral and intellectual character, that exposes his doctrine to the imputation of materialism; and not, as he pretends, to any want of distinction between those organs and the intellectual attributes.

It has been already observed, that he considers the brain as the special instrument of the soul, and that it incloses within itself as many organs as we have moral and intellectual faculties essentially different; and that the character of these is influenced by the condition of

their respective organs. If this be the case, then each intellectual organ must be endued with its own intellectual attribute; and as we have reason to believe that what is intellectual emanates from the soul, we shall be led to infer either that we are endued with a plurality of souls, each of which is of a different character, or that the soul is a divisible one, and each part endued with the particular attribute, such as is manifested by the organ appropriated for the purpose. But such conclusions demonstrate at once the fallacy of the doctrine that leads to them.

Also, if we admit that the soul cannot act without the aid of the material organs, it is at the same time rendering it subject to the laws of matter, at least of organized matter; and it is inconceivable how the soul could be subject to

those laws, unless it partook also of the nature of that matter. Hence, as this is perishable, the doctrine in question leads not only to materialism, but even renders the immortality of the soul an ideal thing. But whatever may be its nature, there is no doubt that it is totally different from that of matter, and independent of its laws; consequently we are led to infer that the soul is something that is not perishable, but—IMMORTAL!

The author, however, pretends that his doctrine concerning the plurality of intellectual organs does not lead more to materialism than if we admit the whole body, or the brain individually, as the organ of the soul. But this will not give more stability to the doctrine in question, or render it less objectionable. Whether the character of the different intel-

lectual or moral attributes be made to depend upon a single organ, or each of them upon a different one, yet, the objection which may be available against one doctrine will be equally so against the other.

However, as we have intellectual faculties and moral qualities as distinct from each other as the different senses themselves, it was not perhaps a very unreasonable supposition that we should also require different and distinct organs for the exercise and manifestation of our different intellectual attributes, as Doctor Gall pretends[a].

It is certainly a curious fact, that some

[a] "Les différentes facultés primitives de l'ame sont affectées à différentes parties du cerveau, de la même manière que les diverses fonctions des sens sont attachées à divers systèmes nerveux." Vide the author's work "*Des dispositions innées, &c.*" page 227.

individuals who labour under a state of mental alienation, will appear sane upon some subjects, and betray their alienation upon others. Nor has the author failed to adduce this circumstance in support of his doctrine. The analogy, however, is quite theoretical, and most probably false; but it is not necessary, in order to show its fallacy, to be able to account in any way, for some of those phænomena that at first appear to give it support. The probable truth or fallacy of any doctrine or hypothesis may be equally demonstrated by considering the nature of the inferences to which such doctrine or hypothesis will lead, by admitting the truth of it.

Before we can hear, see, taste, smell, or feel, it is essentially necessary that a certain mechanical impression should af-

fect the organ which is to give us the sensation or perception it is destined to afford. But none of these organs are necessarily concerned in operations which are purely intellectual. On the contrary, the less they are excited the more freely will the mind exercise its faculties; and when it is intensely engaged, it often happens that those things which at another time would have made a sensible impression on some of the organs alluded to, and awakened our attention, will now pass quite unregarded.

When we are thus employed, different ideas necessarily arise in the mind, and one idea becomes the producing cause of another. It is therefore evident that this succession of ideas is also a succession of effects, of which the preceding ideas are successively the causes; so that every idea

becomes a cause as well as an effect. Now, in common language, when speaking of things that more or less affect the mind, we often say that such and such ideas are impressed upon it. It would, however, be very absurd to consider such impressions as analogous to those which may be made by the mechanical operation of one body upon another. This would be admitting the very absurd doctrine of the materiality of ideas, and acknowledging too the materiality of the mind. But intellectual impressions, and the intellectual operations that result as the effect of those impressions, afford an example of cause and effect, very different from any instance that can be adduced of things that appertain to the material system.

Yet these impressions must be made somewhere, and that somewhere must be

either on the mind alone, or on some of the material organs, or on both. If, however, we are to form our opinion on the subject according to the functions and influence which the author ascribes to the cerebral organs, we shall be led to conclude that these are endued with some auxiliary intellectual attribute, on which those impressions are also made. But I have already endeavoured to expose the character of a doctrine, that leads to a conclusion which embraces other inferences of a tendency which the rational mind can never admit as true.

The false and dangerous doctrine of fatalism will also be found to link itself to the system of Dr. Gall,—that species of fatalism which renders man the very slave of himself, and supposes him to be

necessarily impelled to act as he does, without having the moral power to act differently.

But Dr. Gall also denies these consequences, and pretends that those who would deduce such absurdities from his disquisitions, must be very little acquainted with the spirit of the principles of his doctrine, and as little familiarized with scientific discussions. If, however, I may presume to express an opinion upon the subject, with as little ceremony I apprehend that those whom he may persuade to believe in his system, and that it is compatible with the free agency of man, are either incapable of judging for themselves, or do not take the trouble of examining the subject with due attention.

As the doctrine of fatalism has much

reference to moral liberty, I shall include the consideration of both subjects under one head. But the reader who may expect a profound and learned disquisition upon those very abstruse matters, will be greatly disappointed. I shall not engage in the discussion any further than I apprehend may be necessary to expose some of the contradictions into which the author betrays himself, and to show that the very arguments which he advances with the view to reconcile his doctrine with the free agency of man, have the very reverse tendency.

When, however, his observations upon moral liberty are, as it were, considered abstractedly, he seems to advocate the cause; but when any thing relative to his philosophy is made to form a part of those observations, they appear as if they

were introduced merely to mask the real tendency of it.

Dr. Gall, indeed, very justly observes, that we cannot reasonably admit of any other kind of moral liberty than that which is in accordance with the general laws of nature, and with the nature of man. But where is the philosopher whose knowledge of these will enable him to unravel the mysterious blendings of good and evil which are associated in his nature, and account for the origin of that evil? After every view hitherto taken of the subject, even by the most enlightened philosophers, many things still remain incomprehensible, but the author's philosophy will not tend to bring these more within the compass of our understanding.

In the course of his discussion upon

this subject, he observes—"It may be asked how far the idea of moral liberty may be reconciled with the existence of innate dispositions dependent upon material organs for their exercise; for, as man cannot change what is innate, he must consequently act as the organs of his moral and intellectual faculties may *permit* or *command?*"

To this question the author himself replies—"It is true that man cannot change his organization, neither has he any empire over impressions which are accidental and external. Hence, when in consequence of his internal organization and of exterior irritations, there are awakened in him certain sensations, propensities, ideas, and inclinations, we must consider him with relation to these, and to the desires that result from them,

as the slave of his internal organization, and of external impressions. Each organ put into action will give him a sensation, a propensity, and a train of ideas; and he has no power in respect to these, except in as much as he may in some degree prevent or call forth the action of the organs. He cannot, however, possibly avoid the sensation of hunger, when the stomach acts in a particular way; and it is equally impossible not to feel certain desires when the sexual organs are excited;—he cannot therefore be responsible for his sensations and desires[b]."

[b] "Il est vrai que l'homme ne peut pas changer son organisation; il n'a pas non plus d'empire sur les impressions accidentelles du dehors. Ainsi lorsque, par l'effet de son organisation intérieure et des irritations extérieures, il s'éveille en lui des sensations, des sentimens, des idées, des penchans, des inclinations, on doit

Now, if we apply these observations to the intellectual organs,—then, as some of them, according to the author, dispose to good and others dispose to evil, it will follow that when either of them act in a particular manner, they will lead to the performance of a good or a bad action, as necessarily as the sensation of hunger will prompt to take nourishment: hence, the performance of a good action, and even

le considérer, quant à ces impressions et quant aux désirs qui en résultent, comme esclave de son intérieur et du monde extérieur; chaque organe mis en activité lui donne une sensation, un penchant, une suite de pensées; et sous ce rapport, il n'a d'empire qu'autant qu'il peut empêcher ou produire l'action des organes. Il ne lui est pas possible de ne pas sentir la faim, quand son estomac agit d'une certaine manière; il lui est impossible de ne pas éprouver un penchant vers le sexe, lorsque les organes de ce penchant sont irrités; il ne peut donc être responsable de l'existence de ses sensations et de ses désirs." Vide the author's work "*Des dispositions innées, &c.*" page 180.

the commission of a crime, is made to appear under the circumstances alluded to, as indispensable as the taking of food. The mind indeed naturally revolts at such an idea ; nevertheless, it is one that intrudes itself there as the offspring of the observations I have just quoted, and which at once advocate the doctrine of fatalism, and deny the free agency and therefore the responsibility of man.

Doctor Gall pretends, however, that the false consequence which his opponents have deduced from his doctrine of innate dispositions against moral liberty, is due to their not having sufficiently distinguished *propensities*, *inclinations* and *desires*, from the *will*. He tells us, therefore, that when propensities, inclinations, and desires are not awakened or nurtured

by any participation of the individual, he is not responsible for them, but that he is so for his *determination*, *will* and *actions*[c]. This distinction is very obvious; but it does not render his doctrine less objectionable or more true, nor give more credit to his arguments.

It is true, indeed, that man may have propensities and desires independently of the *will*. He is responsible too for those actions which may be the consequence of those same propensities and desires, because he is endued with reason to check and control their influence. By the agency of that noble attribute, a conflict is occasioned in his mind between his moral and sensual feelings, and this warfare with himself shows that he is not un-

[c] Vide the author's work "*Des dispositions innées, &c.*" pages 191 and 192.

consciously led into error, nor necessarily forced into the commission of a fault without the possibility of avoiding the same. He must therefore feel himself free to choose between the avoidance and the commission of it, and consequently he must be a responsible agent. But if we are to believe what we are told about the influence of the intellectual organs upon the moral character, we must necessarily consider moral liberty a mere ideal attribute.

With the view to illustrate the difference between propensities and desires, as distinguished from the *will*, Doctor Gall observes:—"It is, and it will be for ever true, that the organs of the moral faculties bestowed by the Creator, are the principle of what we call sometimes propensity, sometimes inclination, desire,

or passion, according to the energy of the action of those organs. Every one is convinced, that in this respect the empire of man is under restraint. It is not in his power to annihilate propensities, nor to give himself at will inclinations. But in the midst of desires the most ardent, if several of the superior order of faculties, the exercise of which is assisted by a perfect organization, operate in conjunction with those motives which education, the laws, religion, &c. may furnish, these desires will become conquered. The will that man then manifests is no longer the action of a single organ, it is the work of a rational being, in a word, it is the work of the soul[d]."

[d] " Il est et il sera éternellement vrai, que les organes des facultés morales données par le Créateur, sont le principe de ce que nous appelons tantôt penchant, tantôt inclination, désirs ou passion, suivant la différente

It is difficult to understand how the author can pretend to reconcile such observations with the idea of free agency. According to the logic which these and the preceding quoted observations embrace, it necessarily follows that if the organs of the superior order of faculties are not developed to a certain extent, then man will be unable to gain the victory over himself in the conflict

énergie de l'action de ces organes. Chacun convient qu'à cet égard l'empire de l'homme est restreint; il n'est pas en son pouvoir d'anéantir ses penchans, ni de se donner à son gré des inclinations. Mais au milieu des désirs les plus vifs de l'homme, si plusieurs facultés d'un ordre supérieur dont l'exercice est soutenu par une organisation parfaite, agissent en lui et se joignent aux motifs extérieurs que lui fournissent l'éducation, les lois, la religion, etc. ces memes désirs se trouvent vaincus. La volonté que l'homme manifeste alors n'est plus l'action d'un organ unique, c'est l'ouvrage de l'homme raisonnable ; en un mot, l'ouvrage de l'ame." Vide the author's work "*Des dispositions innées, &c.*" page 192.

between his moral and sensual feelings; and his propensities, inclinations, and desires, instead of being conquered, will *drag* him into errors of greater or less magnitude. The author, however, speaks of the influence of education and religion in checking that of evil inclinations and desires: but then he has told us in another place, that education will be of no avail, unless the individual is endued with certain innate qualities, and prepared to derive benefit from it by the happy condition of his intellectual organs[e]. Hence, notwithstanding the favourable influence which the author ascribes to education and religion, yet he makes that influence

[e] "L'éducation et les circonstances ne pouvant agir sur l'homme, qu'autant qu'il possède les dispositions nécessaires, et qu'il est preparé par son organisation." Vide the author's work "*Des dispositions innées, &c.*" page 74.

to depend upon the state of development of the intellectual organs, upon which therefore must also depend the nature and character of our actions. But under such circumstances they cannot be the actions of a free agent, nor consequently of a responsible being. What kind of moral liberty could that be, which depended for its exercise upon the state of organs which may operate even with irresistible influence on our moral conduct, according as some of them might have acquired a little more or a little less growth than those which are the source of other faculties, other propensities, and other desires[f]?

Indeed it is impossible to believe in Dr. Gall's system, and at the same time

[f] This influence of the organs on the moral and intellectual character will be again noticed when we consider what the author has said on the two-fold nature of man.

recognise the free agency of man. And this will appear further evident if we embrace in our consideration some other observations which he has advanced upon the subject.

He also pretends that there is a sentiment of satisfaction which has been confounded with moral liberty, but of which it is only a false appearance: hence he says, that when man acts only in consequence of propensities and *independently of the will*, and he feels under these circumstances a sentiment of satisfaction attending the accomplishment of his desires, such satisfaction creates the illusive idea that he has acted with moral liberty. With the view to corroborate this opinion, we are told that man supposes himself a free agent when he walks upright, not thinking that he is constrained to do

so by his organization.—So then, because he feels a greater satisfaction in walking upright than in crawling upon his hands and knees, we are to conclude that the former is a constrained action. He can however do either; consequently, although he naturally walks upright, yet he is free to crawl upon his hands and knees if he wish to do so. Indeed, this often forms a part of the amusements of children: but are we therefore to conclude that they act more as free agents when playing upon their hands and knees, than when running about upon their legs? This, however, is the inference to which the author's observation leads; and the absurdity of that inference is sufficient in itself to show the incorrectness of his reasoning upon this point.

In illustration of the same opinion he

says,—"No one will maintain that brute animals do really enjoy moral liberty; they act notwithstanding without feeling any constraint. In like manner, man enjoys satisfaction in the accomplishment of his desires, and which is only a false appearance of liberty. Can it be said that the sheep and the tiger are free, because the one browses on the grass, and the other tears his prey with delight[8]?"

Dr. Gall, however, has evidently taken up his argument upon false ground, and degrades the sentimental feelings of human nature by placing them on a level

[8] "Personne ne soutiendra que les animaux jouissent d'une véritable liberté morale; ils agissent pourtant sans ressentir aucune contrainte. A l'instar de l'homme, ils éprouvent le contentement qui suit à l'accomplissement des désirs, et qui n'est qu'une fausse apparence de la liberté. Peut-on dire que la brebis et le tigre sont libres, parce que l'une broute l'herbe et que l'autre déchire sa proie avec plaisir?" Vide the author's work, page 183.

with the sensual appetites and sensations of the brute; whereby he confounds sentiment with sensuality, and reason with instinct.

When man feels a sentiment of satisfaction in the accomplishment of a desire, it necessarily implies the association and influence of a motive to act, with the view to obtain the thing desired; and that motive operates with the *consent* of the will. But actions are of a very different kind when they are merely the result of a propensity *independently of the will*, or, in other words, in which *volition has no concern*. Such actions assume a distinct character, and appertain to instinct. It is by instinct the tiger tears his prey, and that the sheep browses on the grass; and although each may feel delight in what it does, yet

that delight is referable only to the mere sensual gratification of hunger.

It may not be very practicable to give such a definition of moral liberty as may be free from every objection, and perhaps we can feel what it is, better than we can define it. I apprehend, however, that disputes have arisen on the subject, by attaching to the idea of free-agency a latitude of meaning that does not in reality appertain to it.

However, be this as it may, man either is a free agent or he is not. If the former, the doctrine of fatalism is false; if the latter, then that doctrine must be true, and moral liberty a mere phantom. But, notwithstanding all the sophistry to which the materialists and fatalists have recourse in order to support their doctrines; yet, when their arguments are

weighed in the scale of reason, their futility is at once detected, and man is obliged after all to recognise himself a free agent and an accountable being. Nor will he feel his state of responsibility either unjust or unreasonable, when he considers that nothing beyond moral possibilities are required of him. We must therefore distinguish what is morally possible to be performed, from what it is morally impossible either to prevent or achieve.

Let us for a moment suppose a man in the water, either for the purpose of recreation or there by accident. The situation is one foreign to his nature; and it is morally impossible that he should continue in it, and at the same time preserve his existence by keeping in a state of inaction or passiveness, as he may do out of that situation. He is therefore under the

necessity of exerting himself in a particular way, in order to prevent himself from sinking, and avoid inevitable destruction, *unless* he could change his nature at will, and transform himself into an aquatic or an amphibious animal. But this is as morally impossible for a man to achieve, as to preserve his existence in the water without some particular exertion. That element is destined for the habitation of a race of beings totally different in their nature from him; consequently the compulsion which he feels under the particular circumstances alluded to, does not affect his moral liberty properly so called. Indeed, his exertions evince his free agency, because it remains with the individual so placed either to exert himself or not. If he can do it and will not, then he becomes a culpable

agent, and guilty of self-destruction; but if his physical powers should become unequal to the efforts necessary to preserve his life, then it does away all idea of culpability, but not that of his moral liberty.

Again: we are often placed in situations where it is morally possible either to do or to avoid the doing of particular things, the performance or avoidance of which will depend entirely upon ourselves, without affecting, in either case, our existence. Whatever may be our determination, it necessarily supposes the prior exercise of the judgement, and the subsequent consent of the will. But as the judgement may err, the event consequent upon that determination may not always accord with our expectations or wishes. The disappointment, however, does not prove

the want of free agency, because the power existed of acting differently; and such disappointment may be owing to a *hasty* judgement formed without due reflection, or in consequence of some unforeseen circumstances, which therefore could not be embraced in the calculation at the time the determination was made. We may also allow a spirit of opposition to influence our actions, which may lead to disappointment. But neither will this indicate any want of free will, because opposition implies choice, and the idea of choice is associated with the idea of free agency. *Moral liberty*, then, would appear to be a power to call into exercise certain rational attributes or faculties, in consequence of which we determine either to do or to leave undone those things that it is morally

and physically possible to perform or to avoid.

But, whatever may constitute *moral liberty*, Doctor Gall pretends that the exercise of it cannot be explained without reference to his doctrine concerning the plurality of intellectual organs, of which he considers the brain composed. For the purpose of illustrating and proving the truth of this position, his imagination engenders a being endued with only *one* intellectual organ, which being we are told could only exercise one particular faculty, and direct its actions unavoidably to one and always to the same end[h]. But this illustration is of no value, because it presupposes the belief in the doctrine alluded to, and in that

[h] Vide the author's work "*Des dispositions innées, &c.*" pages 187 and 188.

case the illustration would be superfluous and unnecessary: and I apprehend that those who may hold that doctrine as chimerical will not become easily converted by an argument which is supported by a reference to things of imaginary existence. Nor can any thing be more unphilosophical than to offer an explanation of any particular hypothesis, by imagining a being which does not, and cannot possibly exist; for then the laws of nature would necessarily be different, and another order of things established.

Illustrations of this kind can only be admissible when treating theoretically of mechanical operations; because ingenuity may devise some new machine accordant with the principles upon which the hypothesis is formed, and the effect produced by that machine may establish or

refute the hypothesis in question. But when we speak of organized and living beings, endued too with an intelligent mind, such fanciful illustrations are unphilosophical, and totally inadmissible. We may indeed chisel out or model the semblance of the human form, and imitate the external character and general arrangement of the organs of the frame: but where shall we find materials analogous to those of which they are composed; and how endue the machine with that principle without which the whole must remain a lifeless and inert assemblage of parts? And where too shall we find a substitute for that *thinking principle*, to superadd to the intellectual organ with which the artist may choose to endue the being of his own formation? Yet until the artist is found who can

accomplish such a piece of work, the illustration alluded to can never be admitted as an evidence of the truth of the doctrine which it is intended to support.

Dr. Gall has also offered to the reader's attention some strictures upon his doctrine by professor Ackerman of Berlin; but as these do not appear to afford any very strong argument against that doctrine, nor the author's replication to give to it more of the features of truth, it will not be necessary to enter into the observations which each party has advanced against the other. However, if any further proof should appear necessary to demonstrate the fallacy and very evil tendency of the doctrine in question, that proof will be found in some of the arguments which the author has advanced in the third and last section of his work,

where he speaks of man as an object of education, of correction, and of punishment.

We are there told that man is a being of a two-fold nature ; the one belonging to him exclusively as man, and the other which he possesses in common with the brute. He is therefore said to be furnished with two different sets of organs, which Dr. Gall distinguishes by naming the one "*les organes des propriétés animales*," and the other "*les organes des propriétés humaines;*" and in proportion as either of these sets of organs is more developed than the other in any individual, his faculties shall partake more or less of the human or of the brute character !

Perhaps, those who have not perused the work in question, may be inclined

to suppose that the ideas of the author have been in some measure misunderstood, and therefore misrepresented. But in order to remove such conjecture, I shall refer to some of his own observations upon the subject, and give the original text as a note.

Alluding to man, he says,—"As an animal, he has to a certain degree an organization in common with the brutes, and participates in their propensities, inclinations, and faculties. He is too, like animals, the slave of his senses, and has not the free moral use of his innate faculties. But, as man, he is furnished with organs of superior faculties, that realize in him the human character, and render him a moral agent[1]."

[1] "Comme animal, il a, jusqu'à un certain degré, une organisation commune avec les brutes, et participe à leurs penchans, à leurs inclinations, à leurs facultés.

Doctor Gall then divides this mixed organization into five different kinds.—1. Where the organs of the superior order of the human faculties are completely developed, while the organs of the animal properties have only a moderate degree of development and activity.—2. Where the development of the organs is the reverse of the above.—3. Where the organs of the human and animal properties have all acquired a considerable and equal degree of development and activity.—4. Where only a few particular organs, either of the animal or of the human properties, manifest an extraordinary degree

Il est, de même que les animaux, esclave de ses sens, et n'a point le libre usage moral de ses facultés innées. Mais, comme homme, il est pourvu d'organes de facultés supérieures qui réalisent en lui le caractère de l'humanité, et qui en font un être moral." Vide the author's work "*Des dispositions innées, &c.*" page 243.

of activity, while the other organs have acquired only a moderate degree of development and activity.—5. Where the organs common to animals and those proper to man have acquired a moderate but equal degree of development; and in this kind of mediocrity there exists an infinity of shades and varieties between different individuals[k].

But in order that the reader may form a more complete idea of this compound organization, I shall adduce another specimen of what Dr. Gall has advanced as illustrative of this part of his doctrine. He says,—"When the properties of a superior order have considerable ascendancy over the animal properties, or those of an inferior order, these can only de-

[k] Vide the author's work "*Des dispositions innées, &c.*" page 169.

termine the actions of man, in as much as the properties of a superior order hold them in activity, and direct them. The whole conduct of men thus organized is a model of moral perfection. They are the elect of Providence to serve as an example to others," &c.—"The reverse of such men are those in whom the organs of the superior faculties are but little developed and have but little activity, while their animal organs have a considerable degree of development and great activity. In these individuals every thing is subjected to the brutality of the senses. The temptations are numerous and violent, and man is the more exposed to the danger of yielding to them in proportion as he receives less assistance from the superior faculties, in consequence of their feeble condition; too happy if the pro-

pensities which are active in him are not among those of the most annoying kind[1]."

Dr. Gall, however, admits the great utility of education, and extols those public establishments which have for

[1] "Quand les propriétés d'un ordre supérieur l'emportent de beaucoup sur les propriétés animales ou d'un ordre inférieur, celles-ci ne peuvent déterminer les actions de l'homme, qu'autant que les propriétés d'un ordre supérieur les maintiennent en activité et les dirigent. Les mouvemens intérieurs et la conduite toute entière des hommes ainsi organisés, ne sont que perfection et moralité. Ils ont été élus par l'éternelle Providence pour servir d'exemple et de modèle," &c. "Le contraire de ces hommes se montre dans ceux dont les organes des facultés supérieures ne sont que peu développés et peu actifs, tandis que leurs organes animaux ont un développement et une activité très-considérables. Dans ceux-ci, tout est soumis à la brutalité des sens. Les tentations sont nombreuses et violentes; l'homme court d'autant plus souvent le danger de succomber, qu'il reçoit moins de secours des facultés supérieures, à raison de leur extrême foiblesse;—trop heureux lorsque les penchans qui agissent en lui, ne sont pas du nombre des plus nuisibles!" Vide the author's work "*Des dispositions innées, &c.*" page 245.

their object the education of certain classes of society, and the amelioration of their morals. But how will he reconcile the idea of the utility of education with regard to those individuals in whom the organs of the animal properties bear the sway? And yet the reformation of bad characters is one of the chief objects of the establishments alluded to;—but what benefit can be expected from these, *if*, according to Dr. Gall, bad characters are constituted what they are by the particular state of the organization, *and if* education can be of no avail, unless that organization endues the individual with the necessary disposition to receive instruction[m]?

Such contradictions are not calculated

[m] Vide the author's work "*Des dispositions innées, &c.*" page 74, &c.

to inspire great faith in the doctrine to which they refer; nor will it derive any additional support from those other arguments which the author has advanced with that view.

Even the Scriptures are referred to and quoted in corroboration of the truth of that doctrine. The references and quotations alluded to may indeed apply to the general fact,—that some men are morally better than others, and none perfectly good; but they are by no means applicable to the purpose which Doctor Gall intends.

In the course of his observations upon the subject, he says that the individual who is *dragged* into the commission of a crime by an *internal* propensity, will rarely show any repentance, because the inclinations which lead him on to criminal

deeds are predominant, and constitute his proper character. All his actions are therefore in accordance with those inclinations, and his peace of mind is seldom disturbed. Hence, continues the author, if we look at the usurer, the libertine, or the cheat, we shall find each of these happy only in proportion as he can satisfy his desires. It is in vain that the injured orphan, and seduced and deserted innocence, console themselves with the idea that such characters will one day feel the remorse of conscience.

With the view to corroborate these observations, he refers to the following text from the book of "PROVERBS."—"*The soul of the wicked desireth evil, his neighbour findeth no favour in his eyes*[n]."

[n] Vide the author's work "*Des dispositions innées, &c.*" pages 267 and 268.

But Dr. Gall must have strangely misinterpreted to himself this passage, to infer from it what he has. It can only mean that "the soul of the wicked desireth evil," merely so long as the individual may continue unreformed; but it does not lead to the inference, that the consoling idea alluded to, of the injured orphan, or of seduced and deserted innocence, shall always be vain, or that he shall never feel remorse for his evil deeds; for then we must suppose that a man who is once depraved will always be the same wicked character.

Some individuals may indeed be heard of, now and then, who will show to the last the most incorrigible depravity. But happily such instances are too few to sanction the interpretation which Doctor

Gall appears to have given to the passage alluded to [o].

He has quoted several other sentences from the same writings, for the purpose of corroborating other observations relative to his doctrine, but it is generally with some forced application of the text. How-

[o] He does not deny, however, that there are criminals who show and feel repentance: but in admitting the fact, he does not fail to attribute the same to a favourable development of that part of the intellectual organization which he says disposes to religion and piety. Accordingly, he illustrates this part of his doctrine by adverting to a certain individual, who formerly belonged to a noted banditti in Germany. "Charles Benzel, né de bons parens et avec un *penchant intérieur à la piété*, avoit été bien élevé ; aussi fut-il le seul de toute la bande de Schinderhannes, qui se repentit de sa conduite." And in a former part of his work the author says "l'homme est pourvu d'organes intérieurs pour la morale et la religion ; pour connôitre et honorer une être eternel et indépendant." Vide the author's work "*Des dispositions innées, &c.*" pages 267 and 190.

ever, as the author has quoted Scripture, I will quote Scripture too, and remind him of two short, though very important sentences, which will be found of much closer connexion with his subject. These sentences comprehend the ~~seventh~~ sixth and the eighth commandments :—"THOU SHALT DO NO MURDER"—"THOU SHALT NOT STEAL." And do not these high commands imply the power of obeying them? *Or*, shall we dare presume even for a moment that the ALMIGHTY and BENEVOLENT CREATOR would have imposed conditions upon beings of his own creation, and at the same time denied them the power of performing his commands? Such an inference is totally incompatible with his infinite benevolence and wisdom; and yet to that inference we shall be led if we acknowledge

the truth of the author's doctrine, or we must impiously deny the divine authority of those commandments!

But amidst the war of opinions which Dr. Gall wages against himself, candour demands that we should give him due praise for some good observations which he has introduced upon the means of reforming malefactors, and of lessening their number. It is very truly remarked, that the system generally adopted towards imprisoned criminals, does not only fail to effect their reformation, but is for the most part calculated to render them more corrupt in their morals, and consequently more dangerous and troublesome members of society when the period of their imprisonment terminates. This is a most serious evil; and I shall avail myself of the present opportunity to join my

humble voice in keeping attention awake to the subject for its own sake, and because, too, the author has associated it with the subject-matter of his doctrine concerning innate dispositions.

In England the government of prisons has undergone various important improvements, but many evils still remain to be remedied ; and among these may be numbered the very improper and heedless manner in which malefactors of every denomination are commonly allowed to mingle together, and the culpable indifference also usually shown with respect to their moral deportment. The untried culprit and the convicted felon, the youthful and perhaps repentant delinquent and the hardened offender, form as it were one common society in the prison. And what else but a greater corruption of morals

already corrupted, can be expected from such an union! Some of those wretches, even with fetters clanking about their limbs, are often to be seen idly, and alas! even cheerfully amusing themselves in the court-yard of their prison, and they have too their pastimes in the apartments allotted for them[P].

Such is the depravity of some culprits, and such the guilty negligence of those who might prevent the shameful exhibition,—I have been informed, and that too by an eye-witness of the scene,—that in the court of justice of a certain county town,—and it may be the same in others, it is not an uncommon thing to see some of the criminals idly amusing themselves

[P] Some of these pastimes are of a most mischievous tendency; and some idea may be formed of the nature of them, by referring to the very interesting publication of Mr. Buxton on Prison Discipline, page 48.

even while waiting for their turn to be summoned before their judges to be tried for crimes which perhaps may bring them very soon even to the scaffold[1]! But would such heart-rending scenes of depravity ever be witnessed, if due attention were paid to the internal government of the prisons where such things are allowed? It is a most grievous offence against public morals,—it is revolting to every Christian feeling,—and throws a stain upon the national character that should be removed.

With the view to avoid the evils alluded to, the first object should be to keep particular offenders from the cor-

[1] The place where they thus amuse themselves adjoins the hall of justice, and in a part called "*the crib*," which is a certain space iron-railed deeply round, and where all the prisoners who are about to be tried are kept in waiting.

rupt and corrupting society of each other, and regulations should be instituted and very strictly enforced, to prevent every denomination of malefactors from disposing of their time idly, and as they deem fit. Their situation, in some points of view, demands as much attention as that of the wretched criminal who is prematurely doomed to eternity by the laws which he has daringly transgressed. While the condemned malefactor is taught to prepare himself for the awful close of his earthly existence, it is also due towards the other species of offenders to endeavour to recall them from the "error of their ways," and to render them more fit for their future intercourse with society. With this view they should be inured to industrious occupations by regular and appointed labour. This will give them a habit of

employment for one of idleness; and by appointing a time too for the performance of their religious duties daily, it will also awaken in their minds proper sentiments of morality, which may have a happy influence upon their conduct for the remainder of life, and operate as a salutary example to their former associates in vice.

It is, therefore, not only the voice of philanthropy that calls for reform in the government of those abodes of human depravity, but the public good loudly demands it too!

Upon this subject Doctor Gall adverts to the establishments in Philadelphia. *Reformation*, *correction*, *instruction*, and *the amelioration of morals*, form the united objects of these institutions. The plan is so excellent and so very practica-

ble, and at the same time so truly worthy of imitation, I shall give a general sketch of it in this place[r].—Reading, writing, arithmetic, and lessons upon subjects of morality and religion, each forms a part of the daily occupation of the prisoners. Their attention is also particularly directed to the reciprocal duties of social life. Those who are acquainted with any particular art, exercise it; and those who are not so, are taught to work at some useful labour; and the prisoners who conduct themselves the best, are appointed to superintend the others. The produce of their labour more than defrays the expenses of the particular establishment wherein they are confined, and the un-

[r] It appears, however, very analogous to the system adopted in the government of the jail at Bury, an interesting account of which is given by Mr. Buxton in his publication on Prison Discipline.

pleasant necessity is avoided of furnishing, at the expense of society, food and raiment to those who have offended the laws. Moreover, whatever each individual may earn by his labour and industry, over and above the sum at which is valued the work prescribed for his performance, that earning is appropriated to the use of his family, if he should have one; otherwise it is kept for him, and applied to some useful purpose when he is released from his confinement.

I would upon the present occasion also call the attention to a subject which indeed may not have an immediate reference to the government of prisons,—yet, as it concerns the morals of society, and even the national character, I shall offer no other apology for introducing it

here. I allude to the balls, theatrical and other entertainments which take place in some county towns when the assizes are held for the trials of malefactors. These balls are under the immediate patronage of the most respectable inhabitants of both sexes in the town and neighbourhood, and this seems to throw an odium upon the British fair that must tend to lower them in the esteem of the stranger.

But whoever is acquainted with their real character knows indeed how highly it deserves to be appreciated. With hearts replete with benevolence and compassion, they take delight and seem to vie with each other in deeds of charity, and would even avoid to tread upon the worm, for the sake of humanity. Yet, with such an amiable disposition, and

such an exemplary exercise of it, they expose themselves to the imputation of hypocrisy, by joining in scenes of gaiety at a time and under circumstances very ill suited for the purpose.

The arrival of the judge, which is the forerunner of these gaieties, is announced by the church bells, that ring in merry peals, as on some joyous event. Perhap , however, the manner in which he is otherwise attended into the town has a kind of solemnity about it that is imposing, and calculated to bring on an association of ideas in accordance with the occasion. Also his first public act after his arrival is to assist at the performance of divine service, when a suitable lecture is delivered from the pulpit. But, alas! whatever impression all this may make at the time, that impression seems to be but of

short duration! Pleasure soon usurps the reign of decorum, and some of the evenings of the very days which are occupied in the trials of malefactors, are passed in the theatre or in the ball-room, in dancing and merriment. O! shame! shame!

If these entertainments be provided in compliment to the judge, and to do him honour, the mode is indecent and disgraceful, and unworthy a generous and civilized people. To the judge respect is due; but then that respect should be marked throughout by a solemnity suitable to the melancholy duty which he is come to discharge. But how very inconsistent with that solemn respect are the ringing of bells, and the gay entertainments which custom so very improperly sanctions at these times! It would

seem as if such unseasonable gaieties were intended to hold up to derision the procedure of the law, and to mock the awful situation of the wretched criminals, some of whom may perhaps be doomed to perish shortly upon the scaffold!

If however the tender sex would give the subject due consideration—would they join in the gaiety provided for them at such a time?—The known benevolence of their hearts gives the assurance that they would cease to countenance any sort of public amusement which was associated to an occasion when humanity is in tears! It is therefore to be hoped that "assize balls," and all other amusements that are appointed at this particular period, will cease to disgrace the annals of the present times. It will be more becoming

in the promoters of these unseasonable gaieties to hold up a different example, and refrain from all public entertainments for the short time that the assizes may last, that the uneducated classes more especially may no longer be taught to associate the idea of merry-making with the time appointed for the solemn trials of malefactors. This is not only reproachful to humanity and to the national character, but it is also an example pregnant with evil for society.

On the subject of punishments, Doctor Gall also questions, very reasonably, the right of any country to sentence an individual to simple banishment, except for offences of a mere political nature, such at least as are free from all moral turpitude. It is undoubtedly a species of punishment not suffi-

ciently positive in itself to answer the moral ends which justice has in view in inflicting penalties for moral offences, and it is at the same time burthening one country with the condemned malefactors of another.

Whoever is guilty of any moral transgression, which no civilized state can tolerate with impunity, should be punished; and if the offender be deemed unfit to remain at large among his own fellow-citizens, in consequence of his misdeeds, he is assuredly an improper subject to be allowed his liberty elsewhere. As soon as he is overtaken by the hand of the law, he will anticipate with impatience the moment when he knows he will cease to be a prisoner in the country whose laws he has offended, and enjoy his liberty in another, where he may en-

rol himself among its citizens with as little impediment as a respectable member of society who may emigrate for purposes associated with honest and industrious pursuits[s]. It is therefore difficult to associate the idea of punishment to simple exile; and it is most likely that malefactors will hail the sentence of such a doom as the harbinger of their future good fortune. They will regard it as a new kind of adventure; and when they quit the soil from which

[s] England, however, is exempt from that particular reproach, as she sends her exiles into a distant colony of her own, where they are kept under certain restrictions during the term for which they are exiled. But, alas! the humane heart throbs with indignation at the contemplation of the very reprehensible and very shameful manner in which the law is abused on many occasions, but more particularly so with regard to the female convicts.

The abuses alluded to will be found detailed in the Letter addressed to Lord Sidmouth by Mr. Bennett on the transportation laws.

they are driven by the hand of the law, then may they say, as in the language of the bard,

"———— now go we in content
To liberty, and not to banishment."

Nor is it less reprehensible to afford protection to any individual who has exposed himself to the danger of some severe punishment, but who exiles himself before justice could overtake him. Yet such protection is afforded every day and every where, although it constitutes, in effect, an exchange of malefactors between different countries; and is at the same time a most pernicious encouragement given to fraud and to villany. It is, therefore, a gross offence against public morals, and affects even the well-being of the society of every country to grant an asylum to

any individual under either of the circumstances alluded to.

The author has also offered some good observations respecting the punishment of death. He very truly remarks, that this punishment is in itself very little dreaded by certain classes of malefactors, and consequently must be inadequate to deter them from committing those atrocities which often accompany their depredations on property. He observes too, with equal truth, that the villain who administers poison, the incendiary, and midnight assassin, will not encounter a death that is slow and painful with the same carelessness and indifference as that species of it which cuts the thread of life asunder "in the twinkling of an eye." Would it not therefore tend to prevent their cruelties, if the punishment of death,

like other species of punishments, had different degrees of severity attached to it, according to the particular character of the crime, and the particular circumstances under which it was perpetrated?

Perhaps, indeed, this might be deemed judicial cruelty: but I speak of the severity of the punishment only with reference to the brutal wretch, who can deliberately stain his hands with blood, and of whom even GOD himself hath said, "WHOSO SHEDDETH MAN'S BLOOD, BY MAN SHALL HIS BLOOD BE SHED!" That crime stands pre-eminent in turpitude in the scale of offences, and the murderer has no claim on human mercy, which is not consistent with the general good of society.

The end of all punishments is the re-

formation of criminals and the prevention of crimes; and the assassin who deliberately spills blood for private revenge, and the brutal villain who dares lift the murderous knife for the sake of plunder, perpetrates a deed that calls aloud for public and exemplary vengeance! And if the ordinary mode of inflicting death has no terror in it for such daring offenders, then the general good of society demands, that the law should endeavour to alarm them by the more appalling prospect of death, *armed with a painful sting!* It is therefore a mistaken idea of humanity that would condemn, as cruel or unjust, the infliction of a painful death on the murderer, more especially when he has been merciless and cruel towards his victim.

But with regard to other offenders,

then "let mercy go hand in hand with justice." Is it, however, merciful, or conformable to the dictates of morality and justice, to doom to the same punishment as the assassin, the malefactor who, though he may be guilty of very serious wrongs, may yet hold the crime of murder in just abhorrence? The punishment of death is the highest penalty that man can inflict on man; and as life is the immediate boon of the Creator, it should never be taken away without the undoubted sanction of his divine authority. It is, therefore, very questionable whether any law can stand approved in the eye of the ALMIGHTY, which law awards and inflicts the awful penalty of death for any crime but murder:—it may be the law of the land; but this will not be sufficient to justify the infliction of the punishment. The legislature of every country should therefore

make a serious pause ere it dooms to death a fellow-creature, to whom the crime of murder is not among the transgressions imputed to his charge. Corporeal chastisement, imprisonment, hard labour in exile, and pecuniary fines, are among the penalties that—wisely imposed—seem better adapted to meet the intentions of morality and justice, when such offenders are the object of punishment. But, in order to answer those ends more effectually, some system must be adopted towards those offenders, after the example of the prison institutions adverted to; and thus by instilling into their minds sentiments of morality, and inuring them into habits of industry, it is reasonable to indulge the expectation, that the consequences will be most beneficial to society at large.

The very laudable interest which many

private and respectable individuals have taken in the cause, and the good which their humane interference has already effected in some prisons, confirm the hope that by the continuance of their very meritorious labours, aided by the legislature, the time is not very remote, when jails shall cease to be nurseries of vice, and become schools of reform; and when, too, the punishment that is awarded to the malefactor shall be measured out to him according to the real turpitude of his offence: when the individual, who kills a sheep, shall no longer be subjected to the same awful punishment as the assassin! Humanity will hail with a kind of holy and sacred triumph the arrival of that period; and the British character will be freed from the reproach to which it is exposed, by the undue and unnecessary severity of our penal code.

Now, Doctor Gall would persuade his readers, that what he has advanced about the means of reforming malefactors and of diminishing their number, results as the immediate consequence of his doctrine concerning the innate properties of the soul, and moral liberty; and he asks, "Will it now be said that it favours crimes?"

This question, however, is already answered by the author himself in the affirmative, by several of the observations which I have already quoted from his work; and for the purpose of placing that affirmative in a further and equally evident point of view, I shall give in this place his recapitulation of what he has advanced respecting the two-fold nature of man. He says,—"We have already shown that man is to be considered in a two-fold view: first, as having qualities

in common with animals; that is to say, those of an inferior order: and in the next place, as being also endued with the human character, or, in other words, with a superior order of faculties. We have shown too, that by reason of this superior order of faculties, he has the power to subdue and govern the propensities of an inferior order. But if circumstances are such, that the actions of the superior order of faculties cannot take place, while those of the inferior order are, on the contrary, very active, then the animal part of man will hold *exclusive* sway, and the brutal desires will keep in subjection the nobler dispositions of the soul. With such an organization, it will be with regard to the functions of the soul that belong to the superior order of faculties, what it is with respect to each organ the

development of which is defective; that is to say, there will result a partial or relative imbecility, and consequently an incapability to act with moral responsibility, while the brutal propensities act with the most energetic force. Such an individual will feel himself under the *absolute necessity* to act *solely* after the impulse of the predominating propensity; and he is often placed in a state less capable of vanquishing himself, than even the brute animal well organized[t]."

[t] "Nous avons déjà fait voir que l'on doit considérer l'homme sous deux rapports: d'abord comme ayant des qualités communes avec les animaux, c'est-à-dire, celles de l'ordre inférieur; ensuite comme étant doué du caractère de l'humanité, ou des qualités d'un ordre supérieur. Nous avons montré aussi que l'homme, par le moyen de ces qualit s supérieures, est en état de dompter et de diriger ses penchans d'un ordre inférieur. Mais si les qualités de l'ordre supérieur sont comprimées d'une manière extraordinaire, au point que leur action ne peut avoir lieu, tandis que celles de l'ordre inférieur

Yet these are tenets of a philosophy which Doctor Gall would hold up as one that points out effectual means for reforming malefactors, preventing crimes, and ameliorating the condition of society. But if the degree of guilt of any criminal is to

sont au contraire très-actives, alors la partie animale de l'homme domine *exclusivement*; et la chair, ou les désirs brutaux tiennent en sujettion l'esprit ou les dispositions des propriétés supérieures qui sont à peine ébauchées. Il arrive, avec une telle organization pour les fonctions de l'ame qui tiennent à un ordre supérieur, ce qui a lieu pour chaque organe dont le développement est défectueux, c'est-à-dire, qu'il en résulte une imbécillité relative, et par conséquent l'incapacité d'agir moralement, tandis que les penchans brutaux agissent avec la force la plus énergique. Un tel individu se trouve dans la nécessité absolue d'agir uniquement d'après l'impulsion du penchant qui le domine, et son organsiation le met souvent moins en état de se dompter que ne l'est un animal bien organisé." Dr. Gall makes this kind of recapitulation also for the purpose of illustrating the principles of his doctrines with regard to a young thief confined in one of the prisons at Berlin. Vide the author's work "*Des dispositions innées, &c.*" page 343.

be measured according to that philosophy, we must necessarily cease to attach any idea of guiltiness to the most culpable malefactor, unless the human qualities should have the predominance. Otherwise Justice herself would become criminal in dooming him to any severe punishment. In effect, it would be inflicting a penalty for an act he could not avoid, but which he was necessitated to perform in consequence of the unhappy state of his intellectual organization, which gave the animal qualities an absolute dominion in his intellectual system. And hence, if there were no culpability to be attached to bad actions when these qualities had the ascendancy, it might with equal propriety be argued, that there could be no merit due to the most worthy actions when the organs of the superior order of qualities

bore the sway. Instead, therefore, of considering Dr. Gall's philosophy as calculated to answer the good purposes which he pretends, it is one that has the very reverse tendency; and one too, that furnishes a most fertile source of excuses for the commission of crimes, and is subversive of all civil and social order.

On the subject of responsibility for our actions, Dr. Gall has introduced several observations from a letter read before the Royal Society by the late Doctor William Hunter respecting those unfortunate females who are accused of infanticide, and arraigned in consequence at the bar of justice.

Dr. Gall says, that this letter is so remarkably conformable to the principles of his doctrine, that he is for the most part promulgating his own opinions through

the local circumstances relating to the medium of what he quotes from it. I believe, however, it would be very difficult to find a man of medical science, educated in any part of the British dominions, who would accuse Dr. Hunter of having grounded his opinions upon principles similar to those of that doctrine of which Doctor Gall is such a zealous advocate. The only correspondence of opinion relates to the degree of culpability which we ought to attach to the accused, according to the particular circumstances under which she may have been placed. Every individual, however, who is acquainted with human nature, is aware that the same unlawful act does not always bear the same feature of turpitude; and the judge, who may have to preside over the fate of the unhappy culprit, will not fail to take into

his serious and humane consideration all the local circumstances relating to the deed. But Doctor Hunter has never alluded to the form of the head of the accused, nor to the association of particular propensities with the greater or less development of particular parts of the brain.

With the view to afford further support to the doctrine concerning the plurality of the intellectual organs, Dr. Gall has, lastly, introduced the subject of mental alienation, which he divides into five different kinds:—First, he speaks of intermittent alienations; secondly, Of partial alienations; thirdly, Of alienations associated with appearances of reason; fourthly, Of those accompanied with the idea of seeing apparitions; and fifthly, Of those alienations which lead the individual to attempt his own life and that of others.

The author then relates some cases illustrative of the particular condition of the intellectual faculties alluded to in each division above mentioned; and he pretends it is impossible to explain the partial or incomplete state of mental alienation without admitting, according to his system, the plurality of intellectual organs. But as this has been already the subject of discussion, I shall avoid any unnecessary repetition, by referring the reader to what has been advanced upon the occasion alluded to [u], and proceed to examine the other grounds upon which Dr. Gall expects to derive new arguments in support of his system.

He asserts that each particular visceral organ may be morbidly affected, while the rest of them may remain in a healthy

[u] Vide pages 35 and 92 of this Essay.

condition: and as this is also sometimes the case with regard to the organs of sense, he infers that any intellectual organ, and consequently its faculty, may be affected, independently of the rest.

The incomplete or partial state of alienation alluded to, may seem to corroborate this opinion; but when the subject is more closely examined, the physiologist and pathologist will perceive, at once, the futility of the analogy.

In partial or trifling derangements of one or other of the viscera, none of the rest may be sensibly affected; but if a real diseased action be established in either of these, then the others will be more or less affected by it. If, for example, a diseased action is going on in the liver, the stomach will have also its own functions more or less deranged, and *vice versa.*

Also if the kidneys be morbidly affected, the functions of the stomach, and sometimes those of the liver, will be impaired in a greater or less degree; and whenever the stomach or the liver is affected, various circumstances prove that the kidneys are not exempt from all influence of the diseased action of those other organs. It is therefore evident, that the analogy to which the author alludes, concerning the separate morbid affections of different visceral and intellectual organs, has no real existence. I have shown too, in another part of this essay[v], that intellectual operations are of a nature very distinct and different in themselves from any of the animal functions; and therefore, although there may be laws in common to the animal and intellectual systems, yet

[v] Vide page 96 of this Essay.

the phænomena which often attend diseases of the mind seem to indicate, that the intellectual system is besides subject to particular laws of its own. The mind may be partially or totally alienated, and yet all the animal functions shall go on without interruption, and the whole frame continue in the highest state of health and vigour: hence, although we may require different organs for each of our organic or animal functions, including those of the different senses, yet this is no evidence that different intellectual faculties require also distinct organs for the exercise and manifestation of them.

But I shall endeavour to expose still further the delusive character of the arguments which the author has advanced upon the subject in support of his philosophy.

The nervous system is known to be the medium of very curious associations or sympathies between distant and dissimilar parts. Even the visceral organs, when morbidly affected, have sometimes great influence upon the state of the intellect; and on the other hand, the passions of the mind may affect the healthy condition of it. In some instances, even a considerable degree of mental alienation has been occasioned by the morbid action of one or more of these organs: and future observations may show, that there are other parts immediately connected with the intellectual system, although unknown to be so at present. However, without speculating upon the possibility of these future discoveries, the phænomena of the associations or sympathies alluded to, would afford sufficient ground for an in-

genious theorist to make it appear plausible, that even the visceral organs take a part in our intellectual operations. But plausibility is not always the associate of truth, nor will it be sufficient in itself to give support to the philosophy which Dr. Gall would wish to establish.

I have already observed, that he has divided mental alienation into five different kinds; and before the subject is dismissed from our consideration, it may be necessary to advert to some of those cases which he has adduced in illustration. These cases, he says, are of a nature which will authorize us to pronounce with certainty, that there is an absence of moral liberty on the part of the agent, and, consequently, no responsibility attached to his actions. But when these cases are compared with some others which

the author has adduced as examples of culpable actions, we shall find by the comparison, that for the most part he confounds the non-responsible state of mental alienation with that of responsible criminality.

Humanity shudders at the very idea of madness, and its history furnishes appalling pictures of the ills that are attendant upon it. Some of the horrid deeds which the author relates, were, without doubt, committed under a very deplorable state of alienation of mind. But, revolting as such deeds may be to the common feelings of our nature, yet it is a lamentable truth, that actions not less atrocious have been perpetrated by individuals, to whom mental alienation was never imputed in extenuation of their crime.

Among other examples of highly criminal and culpable actions, the author relates the case of a person at Vienna, who assassinated his mistress for the purpose of robbing her of 300 florins: he then cut up the body, and put it into a box. This done, he goes to a ball, where he passes the whole night, spends all his money, and gives himself up to the most extravagant joy.

The author also informs us, that at Leyden he was shown the skull of a captain of a Dutch banditti. This man had precipitated several persons in the canals, for the pleasure of seeing them struggle with death. He was at last taken up, and on his trial he observed "What can be done to me? Am I not an honest man?"

We are told of another most extraordinary case, which also happened in Hol-

land about the beginning of the last century. The story, however, partakes a little of the marvellous, and requires no small share of credulity to attach to it all the credit which Doctor Gall appears to do: at any rate, if true, it throws great blame upon the police of that country at the time the deeds were perpetrated. However, be that as it may, he relates the "tale of horror" upon the authority of a magistrate at Amsterdam. At the period alluded to, several murders had been committed, and the criminal remained unknown for a long time. At last, an old fiddler, who was accustomed to go and play the violin at all the weddings of the neighbourhood, was suspected of the crimes, owing to some expressions that were used by his children. He was in consequence taken up,

and when brought before the magistrate, he acknowledged himself the author of *thirty-four murders!* declaring at the same time, that he committed them without any cause of enmity towards his victims, but *solely* because he found a most *extraordinary pleasure* in what he did [w].

I am induced on the present occasion to mention another case equally shocking in all its circumstances, and which Dr. Gall quotes with the same degree of confidence that he has done the preceding one.

A woman of Milan was in the habit of enticing little children to her house by the most artful caresses; she then put them to death, salted their flesh, and regaled herself upon it every day. We are

[w] Vide the author's work "*Des dispositions innées, &c.*" p. 337.

not told, however, the number of children this cannibal succeeded in entrapping, nor how long she escaped detection, and enjoyed her horrid repasts in peace [x].

It is worthy of remark, that neither of the cases above mentioned is considered by Doctor Gall as characterizing a real diseased state of mind; and the two last are among some of the examples which he has adduced in illustration of that part of his doctrine concerning the propensity which relates to the destroying of life; a propensity which, he tells us, exists in different degrees, from the pleasure that is felt by some individuals to see a living being suffer death, to the most *imperious* desire in others to inflict it themselves. But on comparing these

[x] Vide the author's work "*Des dispositions innées, &c.*" p. 310.

cases with some of those which the author considers as absolutely indicating an alienated state of mind, it will then be seen, that they are adduced without due discrimination, and the believers in the author's philosophy must have the complaisance to view them exactly in the light in which he represents them, and accordingly take it for granted that they afford the most satisfactory evidence of the truth of that part of his doctrine to which they refer.

Among the particular instances characteristic of insanity, the author relates a deplorable case of a tutor at Hamburgh. This man killed his wife together with his own five children, but spared two others who had been intrusted to his charge [y].

[y] Vide the author's work "*Des dispositions innées, &c.*" page 878.

He also mentions the case of a woman who was more particularly affected at certain periods, on which occasions she felt a very strong desire to commit murder. For a long time she had been afraid to bathe the youngest of her children, because an inward voice was incessantly urging her to let the child sink. Often, she had scarcely the power necessary to throw away from her a knife, which she was tempted to plunge into her own breast and that of her children, and even of her husband, who was also occasionally in danger of falling a sacrifice to her dreadful temptation [z].

Now, when all the several cases which I have quoted are duly considered, I apprehend it will be rather difficult to se-

[z] Vide the author's work "*Des dispositions innées, &c.*" p. 380.

parate the idea of insanity from any of them. Some strong features of analogy may even be traced between the case of the captain of the Dutch banditti and that of the woman who was tempted to drown her infant. But while the former is classed among the greatest of criminals, and no question made about his sanity, the other individual is adduced as an instance unquestionably characteristic of an alienated state of mind. If, however, this unfortunate woman had yielded to her horrible temptation, would she have been equally criminal or less so than the robber? According to Dr. Gall's philosophy, we shall be authorized to conclude that she was deterred from yielding to her temptation by the counteracting operation of the organs of the superior order of faculties; while the

robber perpetrated his cruelties owing to the ascendancy of the animal organs; and in this point of view he would have been even less guilty than the woman, *if* she had effected what she was *only tempted* to perform.

Plunder, more than murder, is the object of banditti. Many lives may, indeed, be sacrificed to the cupidity of some of those ruffians; but it is for the most part with the view to complete their plunder, and in the hope too of eluding the hand of justice, when the voice that would accuse them is silenced in the tomb. But there is something unusual portrayed, even in the hasty sketch given of this robber's character; and the circumstance alluded to of him seems to partake as much of the features of insanity as any of the actions of either

of the other individuals. Nor do the cases of the old fiddler and of the Milan woman appear to show the features of a sane mind. The author, however, has not imputed insanity to either of these wretches, nor has he assigned any reason why they should or should not be so considered:—but, as I have already observed, we are to regard these cases as so many satisfactory evidences of the truth of that doctrine of which he has made them an illustrative part.

There are, indeed, cases of mental alienation about which no question can exist: but doubtful ones sometimes occur; and when such do present themselves, shall we determine upon the degree of innocence or guilt of the individual, by a reference to the doctrines which Doctor Gall has advanced? If so,

the greatest criminal may plead an imperious and irresistible impulse which betrayed him to commit unlawful actions, and ascribe that impulse to the unhappy condition of his intellectual organization. And if such a plea were admissible, alas! how many useful members of society might become the victims of private jealousy, revenge, and other ignoble passions! and how easy for any species of criminals to screen themselves from the sword of offended justice! But I hope I have succeeded in exposing the futility of the arguments which the author has advanced in support of his doctrine: not, however, by any vain attempt to solve inscrutable phænomena, which he pretends his philosophy will explain; but by showing the great improbability of its truth, by exposing the contradictions into

which its author has betrayed himself, and the inconsistent inferences to which it will lead by admitting its validity.

There are various effects, which in living bodies are the result of the combined and reciprocal operation of causes the real nature of which is beyond the sphere of our inquiries. Of this class are those effects connected with the mysterious operations of the soul; whether we regard such effects as constituting the particular character of an individual, or as those actions dependent upon the mood of the mind at the time they are performed. In either case we must indeed consider the living body as the agent of the soul: but yet we feel there is still something wanting, to enable us to arrive at the *efficient* cause of our actions. The inquiry, however, is a very

interesting one, and affords a wide field for the speculations of the metaphysician. But in such pursuits the judgement may be easily led astray by the delusory influence of fancy; and the ardent theorist may easily argue himself into the belief of the truth of some favourite system, which may rest only on the shallow foundation of inexplicable facts and erroneous principles.

If we admit as true the explanation that may be given of particular phænomena, because we may suppose they cannot be accounted for upon any other ground, we shall by so doing arrogantly presume upon the infinity of our finite abilities: as if abilities of such a nature could enable us to penetrate into the *inscrutable first cause* of things. But reason will convict at once such

philosophy of error, and remind us that Providence has affixed limits to the acquirement of human knowledge, and in any inquiry beyond them the finite mind is lost in a chaos of useless and unprofitable conjectures, and the illusions of fancy are mistaken for the images of truth. Doctor Gall, however, cannot be denied the praise of great industry in the pursuit of his object, nor refused the merit of having shown much interesting novelty in his researches. But the praise that is bestowed upon industry, or the merit that is awarded to ingenuity, does not necessarily imply any acknowledgement of success with regard to the subject of praise; and Doctor Gall aims at the establishment of a system that relates to things which appear far beyond the reach of all human understanding.

And now I shall close the discussion in which I have engaged. The work which has occasioned it has been very extensively circulated in France and other parts of the Continent. I believe, however, it is yet a stranger in England; although the doctrines which it inculcates have been made known there by the co-parent and co-professor of the same philosophy. The doctrines are moreover propagated by Doctor Gall through the medium of public lectures in the metropolis of France; and I feel zealous to expose the fallacy of those doctrines, and the evil to which they tend. In their particular or general application they confound good and evil, and render it next to impossible to discriminate between virtue and vice, and to distinguish innocence from guilt. They impeach even

the wisdom and the goodness of the Deity! Such doctrines therefore cannot be reprobated in terms too strong, nor their fallacy and pernicious tendency proclaimed too loudly!

Doctor Gall may perhaps consider some of the foregoing strictures severe: but whatever character they may bear, they are directed solely against his doctrines, without the least intention to derogate from any meritorious qualities associated with his private character, or to disturb his title to the meed of praise belonging to him in his professional calling. It is therefore against the doctrines and not against their author I wage the war. I am aware, however, that I have engaged in a task which I have very imperfectly performed; but in laying down the pen

I indulge the hope that the difficulty of the subject, and the motive which has prompted the undertaking, will ensure me the favour of the intelligent critic, and perhaps also the applause of the moral philosopher.

THE END.

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