THREE
FAMILIAR LECTURES
ON
CRANILOGICAL
Physiognomy,
DELIVERED BEFORE THE
CITY PHILOSOPHICAL SOCIETY.
BY A MEMBER.
EMBELLISHED WITH ENGRAVINGS.

London:
PUBLISHED BY EFFINGHAM WILSON, 88, CORNER OF
THE ROYAL EXCHANGE, CORNHILL; AND RODWELL
AND MARTIN, 46, NEW BOND STREET.
1816.
PREFACE.

In an age like the present, distinguished at once for learning, licentiousness, and wit, some apology may justly be expected for presenting to the public a literary production which lays claim to neither of those recommendatory qualities.

In this volume will be found no description of the manners, customs, and habits, of the Antediluvians; no eulogiums on the strength and ingenuity of the men, or the beauty and artless simplicity of the women; nor any attempt to furnish a satisfactory solution of the extraordinary length of their lives, or their beards. Here are no inuendos against religion—no sarcasms against the clergy—no demands for political reformation: and the reader will in vain look for a single passage that may remind him of Scarron, Voltaire, Piron, Chesterfield, Sterne, or Porson. Conscious as he is of these capital defects in his book, (which are much easier ac-
knowledged than remedied,) the author most sincerely laments his utter inability to furnish the proper and expected apology for them; but will endeavour to console himself by the consideration that such qualities were by no means necessary to the present undertaking. Craniology, in the hands of Drs. Gall and Spurzheim, is such an *intelligible* subject, that a plain man may readily comprehend and state it; and, as its doctrines lead to fatalism and materialism, no uncommon portion of logic or eloquence is required to refute them.

The design of these lectures is to give a correct outline of this new system of physiognomy; to explain, in a familiar manner, its leading principles; and to illustrate them in a way somewhat more *amusing* than the discoverers (i.e. the inventors) have themselves attempted, or, perhaps, will feel inclined to approve in any other person; to expose its absurdities with innocent raillery, and to invalidate its positions with popular arguments.

Should any of the remarks be considered too severely satirical, let it be remembered what a *solid* recompense the satirized individuals have received from the princely liberality (alias thoughtless extravagance) of our munificent
countrymen, renowned throughout the world for their generous patronage of foreign singers, foreign dancers, foreign puppets, charlatans, and doctors; and that no man can be considered ill-treated in a nation, who obtains, in exchange for gratuitous assertions, inconclusive arguments, and incredible relations, a sufficient quantity of the "precious metals" to retire into his own country, and there openly laugh at the unsuspecting credulity of the people whom his impudence and cunning have enabled him to dupe.

That these lectures should be as favourably received by the public as they were by the audiences before whom they were delivered, it would be folly to expect. Readers are generally more scrutinizing than hearers; they have leisure to pause upon an ill-constructed sentence, to analyze a sophism, and to refer to authorities: their judgments are not influenced by the unfriendly plaudits of ever-partial friendship, nor are they irresistibly determined to be pleased by the magic power of a "well-selected assortment" of beauty, taste, elegance, and fashion. There is, moreover, in detecting and exposing error a secret gratification, which few readers are disposed to forego from any of those considerations which an author's mind is so fruitful in suggesting. And should this
volume be fortunate enough to be read by any of those persons, (a sample of whom may be found in every literary circle,) who are more partial to censuring faults than to commending beauties; it will constitute a source of lasting satisfaction to the author, when he reflects that some of his readers must have experienced pleasure in its perusal.

ERRATA.
Page 2 line 7 for art read arts.
3 - 3 - ther - other.
12 - 12 endorsed - endowed.
28 - 1 - o - to.
34 - 24 - favor - favour.
CRANIOLOGICAL PHYSIOGNOMY.

LECTURE I.

Among the variety of subjects to which speculative men direct their attention, one of the most interesting in its pursuit, and important in its consequences, is a knowledge of the human character.

In a state of society in any degree civilized and refined, a desire to know the abilities, tempers, and governing principles of those with whom we associate, is at once so natural, universal, and strong, that we need not be surprised at the extraordinary efforts which, in various ages, have been made to gratify it.

This species of knowledge, so extremely desirable, and so eagerly sought for, is, however, of the most difficult attainment.

The ordinary method of determining the character of an individual, is by an accurate observation of his voluntary conduct; for, when the actions of men are unrestrained, they are fairly presumed to flow from inclination, habit, or principle; the nature of the action indicating the moral character, and the manner in which it is performed the degree of intellectual ability. However just and satisfactory this mode of judging may be thought, it is certainly the most tedious of
any; and from the artful manner in which some persons can conceal their motives, sentiments, feelings, and designs, is, unhappily, but too often ineffectual; the hypocrite, the swindler, the assassin, and the debauchee, not being detected until the objects of their duplicity, finesse, violence, and seduction, have fallen victims to the art by which they were assailed. It is not, therefore, to be wondered at if thinking and ingenious men, on perceiving the comparative inutility of the ordinary mode of proceeding, should strike out into some new path, and endeavour to facilitate the acquisition of this important branch of knowledge by a method more compendious than that of experience.

At what period of time, or in what part of the world, the science of physiognomy was first regularly studied is, to me at least, entirely unknown. It is conjectured to have been first introduced into Greece by Pythagoras, who is said to have acquired a knowledge of its principles during his residence among the priests of Egypt; it was certainly adopted as a profession more than four centuries before the Christian era, and practised with success upon the virtuous Socrates. Aristotle was an admirer and teacher of physiognomy, and appears to have been among the first of those who entertained the opinion, that not only the face, but every part of the body, possesses a certain degree of physiognomical expression. The opinions of that acute philosopher—always ingenious—frequently just, had considerable influence with his countrymen; they prosecuted with enthusiasm the study of a subject so congenial with the ardour of their imagination, and supposed to be so useful in their peculiar circumstances: there was, consequently, a great number of Greek wri-
ters on physiognomy; most of whose works are now lost; and the science itself shared the same fate as the other sciences, when the Roman empire was overthrown by the northern barbarians.

About the commencement of the sixteenth century the science of physiognomy again became popular, and was studied and taught with so much zeal and success, that for near two hundred years it continued to be one of the most fashionable objects of attention in the higher circles, and to such a height of extravagance was it carried in some instances, that gentlemen made love on the principles of physiognomy, and ladies withheld their consent till, with nearly mathematical precision, they had taken the dimensions of their lovers' features.

Among the modern supporters of this science may be reckoned Bartholom, Cocles, Jacobus de Indagine, Michael Schottus, Gaspar Schottus, Cardan, Behmen, Barclay, Spontanus, Andreas Henricus, our worthy countryman Robert Fludd, the learned Italian Baptista Porta, the amiable divine of Zurich, John Gaspard Lavater, and Camper the celebrated Dutch anatomist.

Baptista Porta reasoned on the analogy observable between the features and propensities of certain men and animals, and argued that wherever there is a similarity in the form of the face, or in the expression of the countenance, there is also a corresponding resemblance in the natural inclinations and in the intellectual qualities. When, therefore, we perceive in the face of a man a decided resemblance to that of a lion, a bear, an ox, a sheep, or a hog, it is fair to infer that the natural character of the individual is dignified and firm, or churlish and solitary, or peaceable and labo-
rious, or meek and timid, or covetous and groveling. This was considered a good general criterion, and attempted, though in vain, to be reduced to practical utility.

The ingenuity of Professor Camper was employed in discovering the line of beauty in the human countenance, and in ascertaining the capacity for brain in the anterior portion of the skull. "Concluding that the energy of the intellectual faculties is in proportion to the quantity of brain situated in the fore part of the cranium, he drew a vertical line from the upper lip to the uppermost point of the forehead, and a horizontal line from the upper incisors to the external opening of the ear, and taught that men and animals have the more understanding the more the angle formed by the two lines is obtuse; and, on the contrary, that men and animals are the more stupid, the more this facial angle is acute." This doctrine acquired much popularity, and still retains many advocates.

But of all the modern physiognomists (till within these few years) Monsieur J. G. Lavater is unquestionably the most eminent. This worthy clergyman was of an active and persevering character; a man of considerable genius and learning; endowed with a most ardent imagination, blessed with a most amiable disposition, and governed by principles of the most rational piety, he was celebrated and beloved for his exemplary deportment.

His passions unusually strong, and his imagination vivid, he became an enthusiast in the propagation of his favourite science; "and so confident was he of the truth of its principles, that upon an occasion of some persons being poisoned with the wine in the Eucharist,
he, supposing it to be done intentionally, delivered a sermon with extraordinary vehemence, in which he uttered this remarkable saying, "I would not advise the perpetrator of this horrid deed to come in my way, for I shall certainly know him by his look, if ever I set my eyes upon him."

This zealous physiognomist formed his opinions of the moral and intellectual character, by the general expressions of the countenance; by the peculiar form of the particular members of the face; by the form of the whole body; by the mode of walking, of speaking, and even of writing. In his system, the forehead, the eyebrows, the eyes, the nose, the lips, the chin, the cheeks, the ears, the teeth, the hair, and even the nails, are all particularly described; with the several good and bad characteristics of each minutely pointed out: affording, if not a treasure of useful information, most assuredly a fund of rational amusement.

Lavater, being a man of sense and observation, was particularly attentive to the expression of the eyes; and he declares that it would "require the pen of an inspired writer to describe the astonishing variety of which they are capable; being situated near the supposed seat of the soul, every sensation of that invisible spirit appears to rush in full vigour from those intelligent organs; all the passions may be seen in them; we shrink from their indications of anger; we find pleasure, with all her train of joys, dancing in them; we feel their force in love, and melt into tears upon observing them suffused with the moisture of grief: in short, their language is far more powerful than that of the tongue." Mr. Addison affirms, that he has seen "an eye curse for half an hour together, and an eye-
brow call a man a scoundrel; and nothing is more common," he says, "than for lovers to complain, resent, languish, despair, and die, in dumb show." Every one must admit, with Lavater, that there are certain external indications in the human body, of certain internal dispositions of the mind; though none but the most enthusiastic will be disposed to go so far as that amiable man, when he declares, that honesty and knavery are discoverable by the colour of the hair; an opinion, it must be acknowledged, in existence long before he was born, and stands recorded in the following epigram of Martial:

"Thy beard and head are of a different dye;
Short of one foot, distorted in an eye;
With all these tokens of a knave complete,
Should'st thou be honest, thou'rt a dev'lish cheat."

Last, though not least, in the list of physiognomists, must be reckoned the two celebrated German doctors, Gall and Spurzheim, who have recently astonished and delighted the scientific world with the novelty, the variety, and the importance, of their discoveries.

These gentlemen are practical surgeons, as well as speculative philosophers; they have, therefore, not contented themselves with an external and superficial view of the subject, but, with a resolution highly commendable on every occasion, have carefully endeavoured to trace it to its foundation.

To accomplish this desideratum in philosophy, they have demolished the horn works of the mental fortifications, torn off the dura and pia mater of the brain, and, armed with a scalpel in one hand, and forceps in the other, have daringly entered the sanctum sanctorium of the soul.
The result of this arduous undertaking is an improved (and still improving) system of Craniological Physiognomy, infinitely superior to every preceding system, the only system whose principles can be demonstrated, and the very system (its abettors assert) which must, ultimately, universally prevail.

The object of these discourses is an humble attempt to render this system more clearly understood, and more justly appreciated, than it appears to have been by many intelligent and well-meaning persons.

The principal sources of information to which I have had recourse for my present purpose are Dr. Spurzheim's English octavo book, and a compendious sketch of the science by Mr. Forster, who has had the honor to discover a new organ; a discovery, by the way, as interesting to a Craniologist as that of a new planet to an Astronomer.

I must here acknowledge, that I was rather surprised to see published so early an epitome of this important publication; because, it is well known that few good books on scientific subjects are capable of being usefully abridged; but I afterwards discovered, by means of Mr. Forster's abstract, that such is the peculiar and original character of Dr. Spurzheim's work, that it will bear to be very considerably curtailed without receiving any material injury.

I am aware that the learned critic of Dr. Spurzheim's work in the Quarterly Review has said; "we would not willingly speak with a foolish emphasis; yet we can assure our readers, that from the beginning to the end of this huge volume, containing, we may presume, all the arguments by which so many have been convinced, we have not met with one single re-
mark which a man of sense would not blush to have made, nor a single inference fairly drawn from the premises to which it is attached.” I know, also, that the Editors of the Edinburgh Review, with their usual precipitation and boldness, have declared that they “look upon the whole doctrines taught by these two modern peripatetics” (as they please to call them) “anatomical, physiological, and physiognomical, as a piece of thorough quackery from beginning to end.”

This, however, is nothing more than what Dr. Spurzheim expected, and even “prophesied would come to pass:” for in one passage of his celebrated book he observes, “we are far from expecting that ignorance and knavery will not attack our doctrine with abuse”—“but,” he pathetically adds, by way of consolation, “what does not man abuse?” To which we may sympathetically subjoin, if any persons can be found with feelings sufficiently depraved, and minds sufficiently brutalized to treat with contemptuous harshness an inoffensive system of craniology, what will not man abuse!

Were I to attempt answering the authors of these and similar calumnies, I would recommend them to devote a few years to dissecting the brains of men, monkies, water-rats, and magpies, as Drs. Gall and Spurzheim have done; to traverse the continent of Europe from one end to the other; to visit lazarettos and prisons, madhouses and palaces; to examine with accuracy the heads of lunatics and philosophers, of thieves and legislators, of mechanicians, poets, painters, musicians, warriors, orators, wits, and buffoons; let them encounter dangers by land and by sea; let
them, by mixing with persons lingering under the most infectious and loathsome diseases, hazard their healths and their lives; and by associating with miscreants of the most vile and abandoned characters, run the still worse risk of receiving *moral* contamination; of acquiring certain ill habits, such as *lying*, &c. and escape almost by miracle, as these two philosophers have done, and then it is a hundred to one but they are as much in love with the opinions they form under so many privations, difficulties, and dangers, as Drs. Gall and Spurzheim are with their's.

Dr. Spurzheim has occupied a considerable portion of his book in explaining his subject by negatives, and is indeed so long in telling us what does not constitute his system, that we almost begin to doubt whether he intends to inform us what does constitute it. Now, although I do not mean to imitate the learned doctor in this respect, yet there is one remark, of a negative character, which I consider myself in some degree bound to make, as it may tend to clear the reputation of that gentleman from a foul aspersion which has been invi¬diously cast upon it. Dr. Spurzheim informs us, in the introduction to his book, that his new system of craniological physiognomy "is commonly considered as one by which it is possible to discover the individual actions of every one," and that "it is treated as an art of *prognostication*," thus indirectly charging the inventors and promulgators of it with being dealers in "art magic." This charge the learned doctor endeavours to repel; and, after having investigated the subject with the closest attention, ascertained its nature, and traced its consequences; after having studied his book with the most scrupulous exactness, analyzed
every argument with logical accuracy, and followed every chain of reasoning (broken and unbroken) to its source, I am most decidedly of opinion, and do here most solemnly declare, that there is not the least ground for such an accusation, nor the slightest reason in the world for giving to Dr. Spurzheim the opprobrious appellation of a conjurer!

Having thus, I trust, exonerated Dr. Spurzheim from the imputation of being supernaturally assisted in the discovery of his system, or the composition of his book, I shall engage no more of your time in stating what this science of craniology is not, but, in as few words as the important nature of the subject will admit, shall endeavour to explain to you what it is.

The science of craniological physiognomy, as invented and taught by Messrs. Gall and Spurzheim, is a new and beautiful theory of the human mind, "founded on an anatomical and physiological examination of the nervous system in general, and of the brain in particular;" explaining in the most familiar manner how readily we may, by merely inspecting the size, number, and situation of the protuberances on the outside of a head, ascertain with the nicest precision the number, quality, and power of the propensities, sentiments, and faculties of the mind within.

The system, if I rightly understand it, is, concisely, this:—Man is known to have a body, the object of our senses; he is also said to have a mind, of which we know nothing but by its effects: this mind, or soul, is endowed with an undetermined number of propensities, sentiments, and faculties; each particular propensity, sentiment, and faculty, has appropriated to its peculiar service a limited portion of the brain, by which it acts,
and which is therefore called its organ; the surface of the brain is unequal in proportion to the greater or less development of these organs; the skull covers the brain, in most cases, as closely as one coat of an onion covers another; consequently, the same inequalities must be apparent on the outside of the cranium as exist on the external surface of the brain; and, lastly, by a proper attention to those elevations, protuberances, embossments, bumps, knobs, or excrescences, as they have been differently denominated, we may soon become as familiar with the mind as we are with the body.

As it is only with Dr. Spurzheim's philosophical speculations and intellectual character that I am concerned, I avoid any allusion to his moral principles, and shall not therefore enquire by what motives he was induced to travel from Germany to promulgate his ingenious and useful doctrines in this country. This extraordinary conduct has been variously ascribed to the "love of mankind," to the "love of fame," to the "love of craniology," and to the "love of money;" and in this last motive the generality of persons seem inclined to acquiesce. On the contrary, however, the advocates for the science affirm that it was pure disinterested philanthropy alone which drew (or drove) the learned doctor from the place of his nativity to "sojourn among strangers in a distant land;" and that he is capable of demonstrating that his new system, when once established, may easily be rendered more extensively and more lastingly beneficial to mankind than even the famous "elixir of life," discovered by his never-to-be-forgotten predecessor and prototype, Paracelsus the great.
It seems natural enough that philosophers should endeavours to learn something of that principle within them by which they think and reason: conscious of an ability to attend to the impressions made upon them by external objects, to treasure up those impressions in their memories, and to recall them again at pleasure to their view; continually experiencing a variety of different and even opposite feelings, excited by the circumstances in which they are placed, and the conduct of those by whom they are surrounded; it is to be expected that they should enquire by what particular constitution of their nature they possess this power.

Whether, like the powers to walk, to speak, or to see, it results from the organization of the body, and the principle of life; or whether they are endorsed with something whose nature is peculiar, possessing properties wholly unlike the properties of body, the recipient, and the retainer of those impressions and feelings, and the active agent by whom they may be recalled, arranged in an almost infinite diversity of form, and applied to as great a variety of purposes.

This subject did engage the attention of the earliest philosophers in India, in Egypt, and in Greece; and most sorely did its abstruseness puzzle and confound them. It has also occupied the attention of philosophers in all succeeding ages; and notwithstanding every means have been resorted to that ingenuity could suggest, and every exertion made that the most unwearyed industry could sustain, it has hitherto eluded their search; and a question may still be agitated, whether the antients or the moderns evince the more rational notions of the human mind.

Opinions, however, have not been wanting, hypo-
theses have been advanced, theories have been pro-
posed, systems have been formed, doctrines have been
 taught, believed, acted upon, and found false.

By one class of philosophers we are told, that the
mind is merely an indefinite collection of ideas; by a
second, that it is an improved instinct; by a third,
that it is a spiritual spherule, surrounded by elementary
matter, and situated in the pineal gland, the corpus
callosum, the third ventricle, or some other part of the
brain; and, by a fourth class, it is boldly asserted to
be a nonentity; and that the organization of the brain,
with the irritability of the nervous system are fully
adequate to the production and solution of every vari-
ety of mental phenomena. Luckily, there is one point
in which all these aërial castle builders are compelled
to agree, and that is in allowing to the mind a number
of distinct powers, or faculties; as perception, sensa-
tion, association, memory, imagination, &c. though
some will not grant us more than three faculties;
others, more liberal, supply us with ten; Dr. Reid has
given us twice their number; and Dr. Spurzheim,
whose liberality in this respect is truly unprecedented,
has already furnished us with thirty-three, and will, no
doubt, do his best to supply us, if possible, with as
many more. It appears not improbable, but that, with
every new edition of his book, he will publish the dis-
covery of some new faculty, which will certainly be
found an irresistible temptation for those persons to be-
come purchasers who are conscious of their deficiency
in that particular; which is strongly suspected to be
the case with the generality of those who have hitherto
put themselves in possession of the work; and believe
with confidence its multifarious contents.
The faculties of the mind, with the portions of the brain by which they are manifested, and the protuberances on the skull by which they are discoverable, will be considered in the two succeeding lectures: suffice it here to observe, that there are faculties of all sorts, good, bad, and indifferent, with organs of all shapes and sizes, from a quarter of an inch to three inches, and projections on the skull corresponding with them all.

As it is on all sides agreed, that the mind possesses faculties, the first question to be decided is, how does it come by them? To this, Dr. Spurzheim answers, "they are given by nature," and "are born with us:" the consideration of this answer will occupy the remaining part of the present lecture.

The first and fundamental principle of this new system of Craniological Physiognomy is, that "all the faculties of the human mind are innate." This principle, being the basis of the whole system, required to be very particularly proved, and it is very particularly proved accordingly.

The proof of this principle is two-fold, negative and positive. The negative proof is made out by shewing what does not, and what cannot, produce them.

In the first place, by way of introduction, (for these well-bred gentlemen are extremely careful not to bring us abruptly to the point,) we are informed, that the functions of man must be divided into two classes; into those which are produced by means of the organization alone, without consciousness—automatic life;—and into functions which take place with consciousness,—and which are the effects of the soul,—animal life.

The faculties of automatic life, it is argued, must be innate, because they are the effects of the organization,
and the organization is itself innate. This truth is sufficiently obvious, and it might be supposed, that very few persons would require to have it rendered more clear by any mode of argumentation; but, as there exists in the world a certain description of persons, whose prejudices render them obstinately deaf and wilfully blind to the most palpable facts, it was necessary, in order that all might be convinced, to shew that men have flesh and blood, and skin and bone, as well when they are born as at any period of their existence afterwards.

We are then informed, that "there is a resemblance between men and plants, that the organic life of both is supported by the same circumstances, namely, by the influence of caloric, air, light, food, &c.; plants are produced from germs, which formerly made part of a similar being, they take food, convert it into their proper substance, increase, decrease, and die. This comparison of man with plants takes place not only with respect to the healthy state, but even to the state of disease. It is certain that various diseases in man are explicable by certain laws of nutrition, which are observed in plants; if too much food be given to a peach-tree, its bark bursts, grows rough, and secretes gum; in the same manner, a person who is too well nourished," is attached to venison pasties, frequents turtle feasts, and prefers drinking claret and champagne to bottled oxygen gas, "has a red countenance, pimples, boils, and various eruptions of the skin. Wounds heal in man as in plants; a smooth circular cut in a plant heals sooner and better than a lacerated wound; the healing of wounds begins from the margin both in man and in plants. In the same way, all
the organic laws of *animals* are preserved in man; and the constituent parts of animals are much more analogous than the parts of plants to those of man: their bones, muscles, viscera, arteries, veins, and nerves, perform the same functions. Hence it follows, that all the faculties of man which contribute to the production and reproduction of the organization, namely, all the faculties of automatic, or organic, life, are innate."

We now come to examine whether the faculties of animal life, that is to say, those which act *consciously*, are also innate. These faculties may be subdivided into four orders; into voluntary motion, into the five external senses, into propensities, and sentiments, and into the faculties of the understanding. According to the principle before laid down, that when man possesses any faculties in *common* with animals he *does* possess them, it is evident, that as voluntary motion and the five external senses are inherent in the nature of both men and animals, they must be considered as innate, or given by nature. And no one, it may fairly be presumed, will endeavour to prove that the five senses are the production of our will. Now this is a mode of reasoning peculiarly gratifying to an anxious and inquiring mind; it produces conviction at every step, and will not allow us to doubt for a moment respecting its validity. But Dr. Spurzheim is not the only person who has excelled in it, for the learned reader may gather from Cicero, and the unlearned reader from the Spectator, that there existed an author in ancient days who was able to prove by reasoning *à priori*, that generals could not achieve those actions that have filled the world with their fame, if they had not had men to assist them; and who, by a long induction of particu-
lars, most clearly demonstrated that ministers at home, as well as commanders abroad, absolutely required men to be their instruments and assistants.

Voluntary motion, and the five external senses, being thus proved to be innate, we are next to examine into the origin of the propensities, sentiments, and intellectual faculties. This, our authors say, there are three modes of explaining: First; man and animals acquire their propensities, sentiments, and intellectual faculties, either by external impressions; or, secondly, by internal causes; or, thirdly, either one or several general faculties produce all particular faculties, or each special faculty is determinate and given by creation; and this last is the opinion these gentlemen support.

In the first place, they shew that external influences cannot be the cause of the faculties of the mind, though many learned authors have supposed this to be the case. "Demosthenes," says Helvetius, "became eloquent because he heard Callistratus speak, whose eloquence made so deep an impression on his mind, that he aspired only to this talent."—"Milton would not have composed his poem of Paradise Lost, had he not lost his place of secretary to Cromwell. Shakespeare composed his tragedies because he was an actor; and he became an actor because he was forced to leave his native county on account of some juvenile errors. Corneille fell in love, and made verses for the object of his passion, and therefore he became famous in poetry. Newton saw an apple falling, and this fall revealed to him the law of gravitation," &c. &c. These facts, adduced by Helvetius and others, do not explain in what manner the faculties are produced, but are merely a
collection of instances in which opportunities have been presented to faculties already existing: the individuals possessed the faculties before, and those circumstances only called them into exercise; "without food we cannot eat," but the faculty of eating exists before the food is presented; "a dog cannot hunt if he be shut up," (fleas excepted,) but the hunting faculty exists in that dog notwithstanding. And it seems to be extremely probable that many faculties exist in both men and animals, which are never exercised for want of the proper external circumstances to call them into action.

But this is an important subject, our proof must therefore be the more particular; and the first negative proof that external influences do not produce the propensities, sentiments, and intellectual faculties, is drawn from society; and "many works" of several eminent philosophers are condemned in the lump because they consider many qualities of man to be the result of social life.

Let it never be forgotten that animals are divided into two classes, the social and the solitary: in the last class we find the bear, the fox, the hare, the magpie, and the shark; but man is formed by nature for the social class, and takes his stand with monkies, dogs, sheep, hogs, geese, and crows; whence it follows that he must be endowed with faculties destined for society; and it is an evident consequence therefore that society is not the cause of his faculties.

The second negative proof is drawn from our wants and necessities: and we are told that "wants, that is disagreeable impressions, painful situations, poverty, and misery," are not to be considered "as the source
of the instincts, propensities, sentiments, and intellectual faculties of man and animals.” It is well known that animals act according to their natural instincts, and indulge their peculiar natural propensities, when they are actually secure from wants of every kind. “The beaver, although shut up and defended against the injuries of the weather, builds its cottage; and the weaver bird, though in a cage, makes its tissue.” Animals and men under the same circumstances act differently, according to the nature of their different faculties: thus, “the partridge dies from hunger and cold during sharp winters, and benumbed sparrows fall from the house top, while the nightingale and quail have gone into temperate climates before the season of hunger and thirst has arrived. The cuckoo wants a nest to lay its eggs in as well as the wagtail or the redbreast, and yet it builds none. The idiot makes no effort in order to prevent the injuries of the air and to preserve himself, while the reasonable man covers himself with clothing.” Here I should presume by an error of the press the word dead has been omitted, because it is generally supposed that living idiots feel cold and hunger; and, unless they are very poor idiots too, will mostly contrive to supply their necessities.

As a third proof, it is shewn that the faculties are not derived from “climate and mode of living.” The faculties, indeed, depend upon the organization, and the organization is materially affected by the influence of heat and cold, moisture and dryness, as well as by the different kinds of food, and the various qualities of the nurses milk; but this only proves that those circumstances have a degree of influence in modifying the
manifestations of our faculties; and not that those faculties are produced by climate, eating and drinking, &c. "If parents were right," asks Dr. Spurzheim, "in attributing the inferior propensities of their children to nourishment, why might not grown up persons, who live upon beef, veal, mutton, pork, &c. accuse the ox, the calf, the sheep, or the pig, for their own want of intelligence, and for their peculiar character?"

"Finally, education has been particularly considered as a cause of the faculties of the mind. According to this opinion, the minds not only of men, but also of animals, are born without determinate faculties, indifferent, as tabula rasa, or blank paper; and all the instincts and aptitudes of animals, from the insect to the dog and the elephant, are the effects of instruction. Thus foxes hunt, because they learn it from their parents; birds learn to sing; and man becomes man by education. It must be answered, that neither in animals nor in man does education produce any faculty whatever."

But as the erroneous opinion, that education does produce faculties, very generally prevails, it is necessary to be the more particular in demonstrating its fallacy. That education does not produce faculties is proved, first, from the "constancy of animals and men." The hen brought up among pigeons does not learn to coo, but goes about cackling like another hen. The cuckoo does not learn to sing like the bird which hatched and nourished it, but perseveres in its monotonous note as inflexibly as the Dutch clock of a village alehouse. It is the same with man; "young children pass the most of their time with their mothers and nurses, and consequently with women; yet boys and
girls shew, from the earliest infancy, their distinctive character, and this difference between the sexes continues through life."

It is proved secondly, by the "geniuses among men and animals; for, several individuals excel others which have absolutely the same manner of living, and the same instruction;" "one nightingale sings better and more constantly than another in the same wood;" one man walks better and more perseveringly than another on the same heath. "Among a drove of cows or oxen, or horses, one individual is good-natured and meek, and another ill-natured and furious. M. Dupont de Nemours had a cow which alone understood to open the enclosure of a field; and none of its companions learned to imitate its manner of proceeding; but, if near the entrance," (with long faces, and blushing at their own stupidity,) "they waited with impatience the arrival of their leader. A hunting dog, when hindered from taking a comfortable place near the fire, by his companions occupying every surrounding situation, went out into the yard and barked; immediately all the other dogs did the same, and then he ran in and took the best place near the fire; though he thus often deceived his companions, yet none of them were capable of imitating his stratagem:" silly dogs! "A little dog, when eating with several large dogs, conducted himself in the same manner, in order to secure his portion, or to catch some good bits."—"Such genius," Dr. Spurzheim triumphantly exclaims, "is not the result of instruction."

It is proved thirdly, by the "individuality" of animals and men. "All individual animals of the same
kind," says the doctor, "present to us, in their talents, something particular; every young bird of the same brood does not learn to sing with the same facility; one horse is more fit for the race than another; and sportsmen know very well that there is a great difference among dogs:" there is an obvious difference between the ass that draws a sand cart, and the one kept for my young mistress to ride on; and the rat-catchers know that some rats are more cunning than others.

"It is the same with mankind: children of the same parents are entirely different, though their education is uniform."—"Notwithstanding the same education, every individual preserves some peculiarity in his manner of feeling and thinking:" hence the elegantly laconic remnant of wisdom, 'so many men so many minds.' Moreover, if education could produce faculties, why have instructors not yet found the means of conferring understanding, judgment, and good qualities in general? Why are we not all men of genius? Why are we obliged to lament so many errors and crimes? Why cannot moral and satirical discourses prevent the abuses of our faculties?" This last question, I humbly conceive Dr. Spurzheim's experience will enable him to answer much more satisfactorily than any other person.

Thus endeth the proof, that the faculties of men and animals are not produced by external circumstances; the second way of accounting for them is to admit an internal cause: this, however, is an equivocal expression, and may imply either that one or more primitive and general faculties are innate, which produce all the special faculties, or that every faculty general and spe-
cial is born with us. "Let us first consider the doctrine, that one or several general faculties produce all other special faculties."

In the first place, "attention is commonly considered as the cause of all internal faculties." According to this doctrine, there is no natural difference among men, but they are all born equal; and the superiority of some is the consequence of a better education, and a closer application to the objects they pursue. But this is altogether a mistake, for "sheep will never pay attention to philosophy nor theology; and while the squirrel and pigeon see a hare pass with indifference, the fox and eagle watch for it." It is the same with mankind. "Different individuals are attentive to different objects, even according to their sex and age; for among children, girls prefer dolls, ribbons, &c. while boys take horses, whips, and drums; and among adults, one is pleased with philosophical discourses, and another with witty replies; one with events which touch the heart, and another with sanguinary battles." And nobody will surely attempt to prove, "that the rabbit, badger, mole, marmot, or hamster, make burrows, because they have examined with attention the advantages of them, or that the beaver builds a cottage because he has studied the laws of mechanics." No, no; nobody can believe that he understands the difference between an inclined plane and a fly-wheel.

Secondly. "Pain and pleasure, desire and aversion," are said by some authors to produce all the faculties; but the fact is, "that pain and pleasure are the result, and not the cause, of the particular faculties."

Lastly. The passions, it is also said, as "the love of glory or ambition, are the sources of the faculties;" but
this is also incorrect: "the passions often *excite* the faculties, but they never can produce them."

We have thus completed the negative proof of the innateness of the faculties; there are, however, many positive and direct proofs of the same doctrine which must by no means be overlooked. These proofs may be divided into analogical, historical, philosophical, and theological.

First. The analogical positive proof. "By examining nature we perceive that every kind of earth, every salt, every metal, has its determinate qualities, by which we are enabled to distinguish one species from another;"—"it is the same with plants; their general laws are fixed, and every plant has its own character. A pear-tree never bears apples, nor an apple-tree pears; we never gather figs from a vine, nor grapes from a thorn-bush."—"Every species of animal presents a specific character;"—"we can never change a cat into a dog, nor a tiger into a lamb." It is the same with mankind; men born in different climates are of different colours, forms, and sizes; nor can we by the most ingenious contrivance give to the African a rosy complexion, or reduce the clumsiness of the Patagonian figure to the elegant form of the females of Circassia. "Hence we must say with Moses, "God created all beings, earths, plants, fishes, birds, and all animals, each according to its kind." Why then should man be excepted?"—Why, indeed!

Secondly. "Man possesses many faculties in common with animals; it is evident that these must be innate; for the new-born child sucks the fingers, and seeks the breast, as the *puppy* and *calf* seek the dug." Let not the dignity of mankind be offended because
we are here likened unto puppies and calves, for this is by no means the only instance in which such comparisons have been drawn. "Moreover, if man and animals in common feel certain propensities, and sentiments, with clear and distinct consciousness, we must consider these faculties as innate. Thus, if in animals we find examples of mutual inclination between the sexes; of maternal care for their young; of attachment; of mutual assistance; of sociableness; of union for life; of peaceableness, or of desire to fight; of propensity to destroy; of circumspection; of slyness; of love of flattery; of obstinacy;" &c. all these faculties must be considered as innate. Now, only allow us (according to our usual custom) to make a justifiable transition from brutes to human creatures. "Let all these faculties be ennobled in man; let the animal instinct of propagation be changed into moral love; the inclination of animals for their young, into the virtue of maternal care for children; animal attachment, into friendship; animal susceptibility of flattery, into love of glory and ambition; the nightingale's melody into harmony; the bird's nest, beaver's hut, and rat-hole, into palaces, temples, and extensive tunnels;" only suffer these few reasonable changes to be made, and you at once identify the faculties of animals and men; they are in their nature precisely the same, but "modified and ennobled in man by the influence of superior qualities."

Thirdly. Man possesses faculties which are peculiar to him. If it should be questioned whether the faculties which distinguish men from animals, are innate, the subject is easily decided by begging the question; for, says Dr. Spurzheim, "it must be answered, that
All the faculties of man are given by creation, and human nature is as determinate as that of any other being."

The second positive proof of the innateness of the faculties is historical: and, first, by history we learn that the "human character is constant," "mankind are always the same, not only in respect to organic, but also to animal, life." Should this be doubted, there is still extant a number of books and manuscripts of a very ancient date, which treat of the nature of men and animals; in these writings we find no descriptions that materially disagree with our own observations; nor is there to be found, in either ancient or modern authors, any authenticated account of human beings that would not as well accord with men of the present generation, excepting, perhaps, in the works of the renowned Mr. Gulliver, whose extraordinary descriptions of the inhabitants of Laputa, &c., though related with the utmost simplicity, and an apparent regard for truth, have sometimes, by thinking men, been shrewdly suspected of fabrication. But the most convincing proof that mankind are always organically the same, is derived from the well-known fact, that some of the ancients used to embalm the bodies of their deceased friends, and those mummies that have been discovered among the ruins of ancient cities, are found to have just the same parts of the skeleton, as may be seen at any of the hospitals in and about London! This is a curious and interesting fact.

Secondly. We learn by history that the moral character of man is always radically the same. The virtues and vices of men are essentially the same at all times, and under all circumstances. Thus, humility
and pride; avarice and liberality; courage and cowardice; benevolence and selfishness; sincerity and hypocrisy; veracity and falsehood; have always been found among men, and may, by an "ingenious and penetrating" person, still be found. There always have existed heroes, and bullies; patriots, and rebels; tyrants, and slaves; effeminate princes, and an all-enduring people; profound scholars, and superficial pretenders to learning; lying travellers, and credulous readers; impudent quacks, and gaping multitudes; inventors of wild systems of philosophy, and deluded disciples to promulgate them. "Hence mankind have not acquired any faculty, and never lose any."

We learn from history, thirdly, that there are particular geniuses amongst mankind; and that "children endowed with particular dispositions, shew their peculiar faculties before they have received any kind of instruction."

"Shakespeare, when he was a boy, exercised the trade of his father, who was a butcher; but when he killed a calf, he would do it in a high stile, and make a speech," though few or none of those orations have been preserved. "Moses, David, Tamerlane, and Pope Sixtus the Fifth, were originally shepherds; Socrates, Pythagoras, Theophrastus, Demosthenes, Moliere, and Rousseau, were the sons of artificers." William Huntingdon was a coal heaver, and John Bunyan was originally—a vile reprobate. "There is also a difference between the sexes, and it is impossible to change one sex into another."

The third positive proof is philosophical. "In all nations, notwithstanding the uniformity of opinions, customs, professions and arts, sciences, laws, religion,
and whatever relates to positive institutions, every in-
dividual, by means of his peculiar character, differs from another." "It is a fact generally known, that every one excuses his frailties by saying, It is my na-
ture, It is stronger than I am, I cannot help it, &c. The cause must therefore be internal.”

"Finally. Man has been created as well as every other being; consequently it is rational to think that his faculties are determinate, and ordered by creation. We consequently maintain that every faculty of man is innate."

The last and most convincing proof of this doctrine, is theological or scriptural. It is a well known fact, that hypocrites in religion, and empirics in medicine and science, are perpetually appealing to the Scriptures, to justify their crimes, or to countenance their quackeries; as if those sacred writings were given to serve as a cloak for licentiousness, and to instruct us in the principles of philosophy and the arts of life, instead of being intended to teach us the most pure and refined morality, to assure us of the reality of a future state, and to direct us in what manner we should conduct ourselves, so as to ensure the greatest possible portion of happiness in this life, and complete felicity beyond the grave.

If a man wishes to advocate the old Ptolemaic sys-
tem of the universe from sinister motives, or from a spirit of opposition; instead of offering a mathematical demonstration of its truth, he refers to the Mosaic ac-
count of the creation of the world; and, with profes-
sions of reverence for the sacredness of revealed truth, endeavours to render it subservient to the propagation of what, if he is a man of common understanding, and
has paid the slightest attention to the subject, he must know to be a falsehood.

Another, desirous to establish a particular theory of the principle of animal vitality, informs us from the same authority, that "the blood is the life thereof," thus impiously compelling the legislator of Israel to sanction the falsehoods of mere nostrum venders. By these, and a thousand similar artifices, the weak and the ignorant are imposed upon, the Bible is rendered accessory to the dissemination of error, and Moses and the prophets are made responsible for the pernicious absurdities of Drs. Sibly and Solomon.

But who will lay any thing of this kind to the charge of Dr. Spurzheim? "The wants and faculties of man," says he, "being given, laws are given also; and though we make them, God, who created us with such wants and such faculties, is in fact our sole legislator. In following those laws conformably to nature, we obey God; and this is the completion of the morality of our actions." The religion of Christ also admits the innateness of the faculties. According to it all is given from above. "A man can receive nothing, except it be given him from Heaven." "No man can come unto me, except it were given him of my Father." "Who hath ears to hear, let him hear!" There are various other texts brought forward equally applicable, and equally convincing; but I forbear to repeat them, being satisfied that these three will produce as strong a conviction of the truth of this doctrine as three hundred such texts would do.

I must acknowledge that I was both surprised and pleased to find that the philosophical doctrine of the innateness of the human faculties forms so striking a
part of the Christian religion. I was already aware that a great variety of very extraordinary doctrines had been deduced from the books of the New Testament, but certainly should never have supposed they were capable of affording such powerful assistance towards establishing this new system of craniological physiognomy. Nor do I find, on enquiry, that any of my friends were aware of this circumstance; and there is reason to believe that it has been entirely overlooked by every commentator previous to Dr. Spurzheim: to this enlightened expositor, and to him alone, are we indebted for so gratifying a piece of intelligence.

Thus then we have endeavoured, with much care and exactness, to demonstrate the first principle of this new science, that "all the faculties of the human mind are innate."

It is very true that all this might just as satisfactorily have been proved in a few words, for it was only necessary to say, "the faculties of the mind depend on the organization of the body;" and as every one must admit (if not without, most certainly with, our learned Doctor's demonstration of the matter) that we are born organized, or come into the world ready made, it will necessarily follow that we are born with all our faculties; and, as a matter of course, that those faculties are not produced by external influences, or by the commonly ascribed internal causes. But as Dr. Spurzheim has not thought proper to treat the subject in so summary a manner, but has kindly taken such extraordinary pains to ground us in the knowledge of his science; as it is impossible to feel otherwise than grateful to him, we ought not to be backward in expressing our gratitude.
I shall conclude this lecture with noticing another calumny by which the intellectual character of Dr. Spurzheim has been attacked; a calumny so cruel as to excite the regret of the more liberal of the learned Doctor’s opponents, and of so bare-faced a kind as to carry its own refutation along with it. Dr. Spurzheim having ingenuously told us, that Dr. Gall was the real inventor of this new system of physiognomy; and that great and original genius had made considerable progress towards its establishment before he was so happy as to become acquainted with him; but that Gall finding him to be dexterous at dissecting agreed to divide the profits of the speculation between them; and that for a long time he has been especially charged with the prosecution of the anatomical part of craniology:—some witling has most wickedly and maliciously said, that if the book which Dr. Spurzheim has published in our language proves nothing else, it must be allowed to prove, at least, the possibility of the poet's declaration being true, when he says,

"That in your nice affairs of system,
Wise men propose, but fools assist them."
Specimens of Partial Genius.

Destructiveness.

Veneration.

Philoprogenitiveness.
LECTURE II.

In the last lecture we rapidly glanced at the general nature of this science, and endeavoured to establish its first and fundamental principle.

On that occasion we proved (in the most satisfactory manner the subject would admit) that all the propensities, sentiments, and faculties, of the human mind are innate.

This was done by shewing that the origin of the animal and intellectual powers cannot be ascribed to those causes which preceding philosophers have generally assigned; that they are not produced by external influences, such as society, wants, climate and mode of living, or education; nor by internal causes, as attention, pleasure and pain, or the passions: but that, on the contrary, they belong to the very nature of man, considered as a being of creation, which was proved by analogy, by the history of all ages, by philosophical reasoning, and, finally, by the testimony of Scripture.

Having settled the question as to the origin of the faculties of the mind, the next point to be considered is, upon what do those faculties depend? to which Drs. Gall and Spurzheim answer, "the organization of the brain:" the second principle of this new science is, therefore, "the manifestations of all faculties of the mind depend on organic conditions."
This general position is proved to our entire satisfaction, by the facts that there is a difference between the minds and bodies of the two sexes; that some faculties appear in infancy, others at mature age; and that the state of the bodily organization is different at these different periods. It is natural next to enquire upon what particular part of the bodily organization they immediately depend? and the answer to this enquiry is "the brain." This principle, like that of the innateness of the faculties, in order to make "assurance doubly sure," is established by a double demonstration, and conviction is enforced by a variety of proofs both negative and positive. It is first clearly shewn, that the faculties of the mind "do not depend upon the whole body," because parts of the body may be mutilated (arms and legs may be severed from the trunk) and yet the mental powers remain unchanged.

It is shewn secondly, that they "do not depend upon the size and shape of the whole body, as otherwise, whales, elephants, and horses, ought to have more understanding than men; nor can we measure the understandings of men according to their size and shape, though, in general, little people have more understanding than tall men." This concession in favor of "little people" will be recognized as an exuberance of candour, when it is known that the learned gentleman who made it stands five feet ten inches—without his shoes.

Neither do the faculties depend upon the "temperaments; sanguine, phlegmatic, choleric, or melancholy;" nor upon the "viscera of the abdomen, or thorax;" nor upon the "spinal marrow;" nor upon the "five external senses." Finally: we are taught
by experience, that every part of the body may be injured, (the brain and vital parts excepted,) without immediately affecting the faculties of the mind.

The positive proof of this position is derived from actual experiments which were made upon the brains of living animals. "Duverney took out all the brain from some pigeons, which, however, continued to perform all their animal functions." This experiment makes strongly against the second principle of craniology, and therefore neither Gall nor Spurzheim would believe it: and this latter gentleman informs us, that, in order to be quite certain, he "cut off the greatest portion of the hemispheres of the brain of some hens and pigeons, even the great commissure, and down to the lateral or, rather, the great ventricles; and these animals manifested distinctly their senses of seeing and hearing," doubtless of feeling also; "they did not take the food presented to them, but they swallowed bread and seed introduced into their bills. Rabbits, mutilated in the same manner, walked, saw, and heard; they even took food spontaneously;" but he found it was "impossible to take out the whole of the brain without killing the animals."

Besides these ingenious experiments, we are informed that "Haller mentions an idiot who was wounded on the head, and that while the wound lasted he manifested great talents, but, as soon as the wound was cured, he fell into his former stupidity." Father Mabillon was more fortunate: "In his infancy he shewed very limited faculties; he got a blow on his head, and from that moment he manifested talents;" and Dr. Spurzheim "has been told, that a boy, at 14 years of age, seemed incapable of improvement;" he was lucky
enough to "fall down a stair-case, and get several wounds in his head, and after that period he excelled in his studies." These experiments and facts demonstrate, in a very pleasing manner, the dependence of the mental faculties on the organization of the brain.

It being thus shewn that all the faculties of man are innate, and that all mental faculties depend upon the organization of the brain, we come next to consider the manner in which they are classified: and we are told that the faculties of man may be divided into three kinds, general, common, and special. This division is quite general throughout all nature; in metals, salts, earths, plants, and animals. Secretion, for instance, is a common faculty; and the secretions of saliva, bile, tears, &c. are special faculties. Sensation is a common faculty; and the sensations of sight, taste, hearing, and smelling, are special faculties. Understanding is a general faculty, including the common faculties of perception, memory, judgment, and imagination; and then the perception, or memory, or judgment, &c. of space, or form, or time, or number, &c. are special faculties; and it is by these special faculties that men are distinguished when compared together as individuals. All men have understanding, sensation, memory, judgment, and imagination, of some sort or other; but some men have a strong natural genius for music, for mechanics, for poetry, for painting, or for picking pockets; by the predominance of these special faculties the character becomes formed, and the individual distinguished from his fellows.

The special faculties, only, are said to have certain portions of the brain, in which they reside, by which they act, or manifest their existence; and which are
therefore denominated the organs of the special faculties of the mind. Upon the size of these organs depends the strength of their respective faculties; and, as the general size of the brain must be regulated by the relative size of the organs of which it is composed, it follows, that whoever possesses a mind uncommonly strong must have a head unusually large; and, consequently, that the vulgar aphorism of "great head and little wit," must henceforth be considered a proverbial fib.

The skull being originally soft, and forming itself upon the surface of the brain, so as to fit it close in every part, will of necessity receive its particular size and shape from the size and shape of the cerebral organs; and for every protuberance on the surface of the brain, there will consequently be a corresponding elevation on the outer surface of the skull. If then we can determine the particular elevations which cover the organs of the different special faculties of the mind, it becomes an easy matter, with the assistance of the two senses of sight and feeling, to discover the moral and intellectual character of any person, (dead or alive,) whose head is submitted to our examination.

Another principle of this new science is, that all men perfectly organized (that is, whose brains are entire) have all the organs, and, by a necessary consequence, all the faculties. So far, therefore, men are universally equal; the mind, with respect to the number and nature of its faculties, is precisely the same in every individual; and that decided difference, so observable in the minds of different persons, arises from the greater or less degree in which these organs are developed. Thus, all the organs may be much developed, the mass
of the brain, consequently, large, and the mind, according to this theory, energetic; or all the organs may, on the contrary, be very little developed, the mass of the brain consequently small, and the faculties proportionably feeble; or again, some few of the organs may be very large, while all the rest are either middle sized, or small, and thus the individual become eminent enough in a particular line, though, in other respects, he is a mere dolt: this latter case constitutes what is called *partial genius*, very beautifully illustrated by the plate at the head of this lecture. A man, for instance, may have his organ of constructiveness, or colour, or tune, of considerable size, and become in consequence an excellent mechanic, painter, or musician; while his organ of wit may be so extremely diminutive as not to cause the slightest elevation on that part of the skull which covers it; in this case, though he may construct a steam-engine, delineate a landscape, or compose a concerto, yet he will be naturally and perpetually incapable either of being witty himself, or of understanding and enjoying the wit of others: and should it so happen that his organs of covetiveness and combativeness are of moderate dimensions, rather than make a pun, he would commit a highway robbery.

I would beg leave here to make a short digression to notice a very interesting subject, which has either escaped the observation of the craniologists, or was considered by them as being at once so delicate and dangerous, that they had not the temerity to meddle with it: I mean the physical cause of the intellectual inferiority of females—a subject which I consider to be wholly inexplicable upon any other principles than
those of craniology. If it can be shewn, that the whole mass of the brain is uniformly smaller in women than in men, according to this doctrine the phenomenon is accounted for; or if it can be demonstrated, that the organs of the intellectual faculties are invariably more developed in the male than in the female brain, it is then also explained, upon the same principles which establish the existence of the organs, and demonstrate that their energy is in proportion to their size; and thus this curious fact, to account for which has puzzled the gravest philosophers, Dutch as well as German, will, upon the principles of this enlightening science, be satisfactorily explained.

My conscience whispers that it may be said, I ought in justice to have proved the existence of this inferiority before I attempted to ascertain its cause: this, I acknowledge, would have been the true philosophical method, but it is by no means the craniological mode of proceeding; and, besides, we should never attempt what we know to be impossible. My leaving the demonstration of this fact unattempted is, however, of no great importance, as the ladies themselves never will believe it, and those gentlemen who give credence to it have minds of such a peculiar cast, that if the demonstration could be made they would be quite unable to comprehend it, and must for ever form exceptions to the doctrine. We cannot, indeed, help hearing of the want of genius, of imagination, of penetration, of comprehension of views, and strength of understanding, in females: we hear also of the golden thigh of Pythagoras, of the ghostly monitor of Socrates, of the power of royalty to cure the scrofula by a touch, and of a corpulent conjurer gliding into a quart bottle; and
certainly cannot doubt but that he who can be prevailed upon to believe any one of these facts will make very little scruple as to the others.

I know that in taking for granted that females are naturally inferior to men, I should have the hearty concurrence of every discarded lover before me, but might justly expect to be assailed with the indignant groans and hisses of every enlightened and unprejudiced individual. Ignorant and narrow-minded people always judge partially; they are also easily prejudiced, and easily imposed upon; and were I to meet with a man who seriously believes that women, if educated in precisely the same manner as ourselves, would, notwithstanding, be incapable of attaining the same degree of intellectual excellence, I should consider him the very person to swallow a story of the gas-lights being artfully invented by the Papists, for the purpose of blowing up this Protestant city, and destroying all its heretical inhabitants. But we must descend to craniology.

According to Dr. Spurzheim, there are thirty-three faculties of the mind, the topography of which is pretty accurately determined; and if the one christened by Mr. Forster be allowed legitimate, they will amount to thirty-four; all manifesting themselves by as many distinct portions of the brain, and discoverable by the same number of craniological tumours on the skull. The number that may hereafter be discovered, will depend in a great measure on the sagacity, industry, and inventive genius, of those employed to search for them.

The animal propensities are situated in the back part of the head; and, except in cases of absolute baldness, are difficult to be detected without a minute examina-
tion by the touch; while the intellectual faculties are placed in the front, and cannot be concealed without resorting to artifice, which certainly appears to be a most judicious distribution of the different faculties; and if Nature and Spurzheim were to become candidates for the merit of the contrivance, every man of sense must vote for the Doctor.

The thirty three faculties of Drs. Gall and Spurzheim are divided, and subdivided, into orders, genera, species, and varieties. The orders are two: feelings and intellect. The order of feelings is subdivided into two genera, propensities and sentiments. The order called intellect is also divided into two genera, knowing faculties, and intellectual faculties; and under these are comprehended the following species: In the first genus of the first order, the genus of the propensities, we find nine faculties, all common to men, and the inferior animals, which, in the new phraseology, are denominated amativeness, philoprogenitiveness, inhabitiveness, adhesiveness, combativeness, destructiveness, constructiveness, covetiveness, and secretiveness. In the second genus of the same order, there are likewise precisely the same number of sentiments; the first four being common to men and animals; the other five peculiar to the human species. These are self-esteem, love of approbation, cautiousness, benevolence, veneration, hope and faith, ideality, righteousness, and determinateness. In the first genus of the second order, the genus of the knowing faculties, there are the eleven following, viz. individuality, form, size, weight, colour, space, order, time, number, tune, and language. In the second genus of this order, there are three faculties, comparison, causality, and wit; mak-
ing together thirty two: the thirty-third is a faculty sui generis, which cannot be referred to any of these classes, and is called imitation. The faculty which Mr. Forster has named is mysterizingness; or the organ that disposes us to believe in such things as ghosts, astrology, craniology, &c. &c. he has made a tender of it to Dr. Spurzheim, but it is at present uncertain whether that organ collector will condescend to place it in his collection.

We begin with the first genus of the first order, the genus of the propensities, in which there are nine organs.

1. Amativeness.

The organ of the propensity, situated lowest in the head, is made to stand highest on the list, and is No. 1, denominated the "organ of amativeness." As it was presumed that this word might not be very clearly understood by a merely English reader, it is, very properly, followed by a definition, and is explained to mean "the propensity to physical love." Should the definition prove as unintelligible as the word defined, and you are desirous to have it further elucidated, I shall beg leave to refer you to Dr. Spurzheim's work, where, in fifteen octavo pages, you will meet with a very detailed and satisfactory account of its nature, character, uses, and abuses. I may be allowed just to observe, that in men notorious for their amours, this organ is sometimes of a frightful magnitude; and though the effects of its "o'erpowering heat" are too often disease, ruin, and disgrace, yet the deluded victims of its influence are, from a variety of
circumstances, frequently entitled to our sympathy and tenderest compassion.

"God bless the Regent and the Duke of York."

2. Philoprogenitiveness.

The second propensity is distinguished by the term philoprogenitiveness; a word which the Edinburgh Reviewers flippantly remark, in passing, they have written once, "but which they cannot spare another day to write again." This extraordinary word is also very humanely followed by a definition, and is explained to mean "love of progeny." As there is both in man and animals a propensity to love their offspring, there must, according to Messrs. Gall and Spurzheim, be a particular organ by which that propensity manifests itself. It seems, indeed, very reasonable to conclude, that as Nature has been pleased to endow us with amativeness, or a disposition to marry, and to be given in marriage," she should also furnish us with philoprogenitiveness, or a disposition to love our offspring; as otherwise her intentions in giving us the one would be rendered abortive by her withholding the other; and if mankind had no more regard for their progeny than the cuckoo, soldier-crab, and crocodile, they would never be at the trouble and expense of rearing them; and therefore their numbers would rapidly diminish; consequently the human race would soon become extinct, in spite of all the exertions of amativeness to perpetuate it.

"In the human race this propensity is, in general, stronger in women than in men." Among inferior animals it is more powerful in the bitch-fox than in the
dog, "for if both be pursued, the male leaves the young ones sooner than the female." But how it comes to pass that philoprogenitiveness, or a love of progeny, should be a propensity very sensible in children, is a mystery which must be left for Nature, or her two worthy confidants, (to whom she has undoubtedly imparted the secret,) to unfold. It may, perhaps, be as well to state the proof of this extraordinary fact, lest for want of it some of you should be disposed to suspect the truth of the doctrine. "If we present to children various playthings, boys will immediately choose horses, whips, drums, &c.; girls, on the contrary, will prefer dolls, cradles, ribbons, &c." ergo, girls have philoprogenitiveness more powerful than boys.

Dr. Spurzheim allows to Dr. Gall the whole and sole merit of discovering this organ, and ingenuously implies that he has had no hand in it; and as the history of its discovery is very instructive, I shall give it you in Spurzheim's own words. "Dr. Gall," says he, "observed a distinct protuberance on the posterior part of the heads of women; and in comparing the skulls in his collection, he found a similar elevation on the heads of children, and even on those of monkies. It was, consequently, necessary to point out a faculty common to all of them;" and this faculty, be it for ever remembered, which is common to women, children, and monkies, is love of progeny. "During five years he was occasionally occupied with this consideration; and he for some time thought that it might indicate the greater irritability of women and children; but this supposition he did not long entertain, because irritability is a common quality of every organ. He
was, however, in the habit of suggesting his difficulty relative to this protuberance to his auditors,” (anxious, modest creature,) “when a clergyman, who attended him, observed that monkies had a strong attachment to their progeny. Reflecting accordingly on this suggestion, Gall found that this protuberance, which is situated immediately above that of physical love or amativeness, and corresponds with the general protuberance of the occiput, is the organ of philoprogenitiveness.”

The use of this faculty is the preservation of our children; the abuse of it is spoiling them by indulgence; and when the organ is very small, it is “an indirect cause conducing to destroying them.”

3. Inhabitiveness.

Respecting the third organ, called inhabitiveness, there unhappily exists some slight difference of opinion between these sworn friends and supporters of craniology—Gall affirming it to be one thing, Spurzheim asserting it to be another; and the controversy on the subject is highly entertaining to all those who, espousing neither side of the question, are at liberty to enjoy the follies of both. This is, indeed, frequently the case in refined metaphysical speculations, where, as in the present instance, neither party knows what the other means, nor perhaps, very precisely, what he means himself.

“Dr. Gall,” says Spurzheim, “observed in animals which have a great propensity to elevated stations, as in the chamois and wild goat, a protuberance which he identifies with the organ that in mankind produces
pride and haughtiness."—"He thinks that the point where both organs are situated, viz. the organ of self-esteem in man, and the instinct to physical height in animals, is in the same part of the head." He supports also his opinion by those natural expressions by which the sentiment of pride is manifested; that is, the mimickry of this faculty is allied with physical elevation. From the earliest infancy proud children are pleased with mounting upon chairs, in order to be on a level with adult persons; and adults of little stature often do the same, (i. e. mount upon chairs,) in order to gratify their self-love. Proud persons also keep their body upright, and maintain a haughty gait. In general, all expressions of pride and superiority are combined with some physical elevation: thus kings and emperors sit upon elevated thrones, &c. Is it then surprising that the same organ should at once preside over physical and moral elevations," (should induce the goat to seek the summit of a mountain, and the conqueror the subjugation of the world,) "since there are so many relations between them? Such is the reasoning of Gall;" yet so extraordinarily sceptical is Dr. Spurzheim, that even he, who appears in general to have considerable faith in the truth of the affirmations, and the justness of the arguments, of his master, becomes in this instance an infidel, and ventures to doubt the correctness of both.

In the first place he says, "It is certain, and must be conceded, that animals which dwell upon mountains, or which are fond of high regions, have one part of their brain more developed than the varieties of the same kinds which live in low countries or in plains; and this difference is quite sensible in roes, hares, rats,
Of this last creature he mentions a circumstance of rather a dubious character; yet so true, and so important in a craniological point of view, does it appear to Mr. Forster's understanding, that he voluntarily stands forward to vouch for it; and would, no doubt, fight any man who dare dispute its correctness. "One species of rat," says Spurzheim, "lives in canals, cellars, and the lower parts of houses; another dwells in corn-lofts, and in the higher parts of the houses; and the difference of their organization is very sensible." Yet, notwithstanding this concession, which Spurzheim's devotion to truth compelled him to make, he thinks, "that this circumstance does not authorise the supposition that the faculty which leads animals to elevated stations is essentially the same with that which makes man proud and haughty;" and thus he very luckily avoids the awkward consequence so fairly deducible from the argument of Gall; that "because proud people get upon chairs and tables, and kings and emperors sit upon elevated thrones, therefore they must be endued with an organ in common with rats who live in hay-lofts!"

Dr. Spurzheim admits that animals have a distinct organ which leads them to seek elevated situations, and agrees in calling it the organ of inhabitiveness; though, like an honest man, he acknowledges that its place in the head is "merely conjectural." He says, however, that it must "be deep seated in the brain, and must be looked for in the region of the other propensities, while self-love is a sentiment, and its organ occupies a higher seat in the head."

The learned gentleman further opines, that if the two organs were in precisely the same part of the head, it
would prove nothing as to their identity. "When different animals are spoken of;" and, therefore, taking it for granted that goats and men are different creatures, their organs being in the same parts of their heads will not prove that they are the same organs.

Still more instructive are the succeeding arguments. "Finally, the expressions or external manifestations of haughty persons, as their mounting upon chairs in order to be physically higher and ideally greater; this behaviour of children in order to be on a level with adult persons; the haughty gait of proud persons, &c., do not at all prove the identity of the organs alluded to. Let it be examined what kind of proud children mount upon chairs and tables in order to shew their height, and I am sure they will be found to be children to whom certain things have been interdicted because they are still little, or, in general, children who have observed the advantages of grown-up persons, or in whose presence adult age has been praised. Say to such individuals that those who are placed at the head of the company, or at its lower part, occupy those places by way of distinction, and they will endeavour to occupy the place that is praised."—"Thus I separate the instinct which carries animals to physical elevation from the sentiment which in mankind produces self-love and pride, and I seek for two different organs." Now, as it is a necessary preliminary to the expounding an obscure passage in any author, that the expounder understand his author's meaning, I must beg leave to decline attempting to render this metaphysical reasoning of Dr. Spurzheim intelligible, from a consciousness of wanting the preliminary qualification.
4. Adhesiveness.

The fourth propensity is called adhesiveness, or friendship. The organ of this faculty should be known to all young people just entering upon the world, as that knowledge will enable them to select such persons for their friends as are capable of a reciprocal attachment. Friendship, however, is only a part of this organ; for its grand object is attachment in general: it gives the propensity to attach ourselves to inanimate beings; to plants, flowers, fruits, medals, coins, pictures; to study, riding, walking, swimming; to insects, cats, dogs, parrots, monkies, men, women, and children. "Combined with the organs of firmness and benevolence, it makes a sincere friend; combined with amativeness and ideality, a romantic lover."—"Abuse results from its too great energy, in nostalgia, or in regretting too deeply the loss of a friend, &c.; without attachment men become anchorites and hermits." This organ is situated (as near as Dr. Spurzheim can tell) on each side of inhabitiveness, and gives a fullness to the lateral posterior part of the head.

5. Combativeness.

The next organ is called combativeness; it gives the propensity to fight. This organ was discovered by Dr. Gall in a very humane and interesting manner. It appears that this ingenious and tender-hearted, father-like, philosopher "called together boys from the street, and made them fight each other; there were some who liked it very much;" some poor, ragged,
urchins who, in all probability, did it for a little money; and who, like certain soldiers, would rather fight than starve; "there were others, who, on the contrary, were peaceable and timid. In the former, that part of the head which corresponds to the posterior inferior angle of the parietal bone, behind the mastoid process, was prominent; and, in the latter, the same place was depressed." The same prominence has also been found on the heads of great warriors, duelists, quarelsome students, bulls, horses, dogs, rabbits, game-cocks, and some "delicate women." The information to be gathered from Dr. Spurzheim's remarks on this organ, respecting the good and bad qualities of dogs, cocks, and horses, I purposely omit to notice, presuming that we have a sufficient number of native professors in the sciences to which those subjects belong, to render referring to a German amateur quite superfluous.

6. Destructiveness.

We come now to consider the nature of a most dreadful organ, the organ of destructiveness, which I am almost afraid to describe, lest the recital of its atrocities should petrify you with horror. It is, however, very important to know this organ, and I hope, therefore, you will prepare for the worst.

The seat of this propensity is on the side of the head, just above the ears; and the very sight of it is enough to make the stoutest of us tremble: though, at the same time, it must be confessed that, had we not been apprized of its diabolical nature, we might have looked at it without turning pale; this only shews the lia-
bility of superficial observers to be imposed upon by specious appearances. Who could possibly have divined that this innocent-looking organ is the hateful cause of tyranny, cruelty, murder, oppression, and every species of enormity? It may be readily answered, that no one could have conjectured it; and it is probable that even now there are persons who hesitate to believe the accounts which Dr. Spurzheim has given us of its barbarities. This circumstance should render us cautious, and induce us constantly to bear in mind, while studying this new science, that appearances cannot be depended on.

"The propensity to kill," says Spurzheim, "exists beyond doubt in certain animals: there are some species which do not kill more than is sufficient for their nourishment, while others, as the wolf, tiger, polecat, &c. kill all living beings around them, and that seemingly for the mere pleasure of killing alone."—"Gall had a little dog which had this propensity in so high a degree, that he would sometimes watch several hours for a mouse, and as soon as it was killed he left it: notwithstanding repeated punishment, he had also an irresistible propensity to kill birds." This appears to have been a terrible little animal; a sort of bloodthirsty tiger in miniature. And I am personally acquainted with a cock robin who is stimulated by a similar propensity to kill flies, with this slight difference only, that he also buries them in his capacious stomach; which, like the grave, seems quite insatiable: the exact shape of his cranium is at present unascertained, as the shaving a live robin is rather too delicate an experiment for a tyro in cranioscopy to perform.

It cannot now be doubted that certain animals have
the propensity to kill. "Is man also endowed with this faculty?" asks the learned gentleman; and thus he immediately answers his own question. All carnivorous animals are endowed with this propensity, as the tiger, lion, cat, wolf, &c. therefore man ought to have it also, for he is omnivorous; consequently man has got it. "Man kills from the insect to the elephant and the whale, and eats of a greater variety of animals than any other creature; and anthropophagi even eat one another:" which is certainly at once a damning proof of the reality of its existence, and the diabolical effects of its operation.

"Some persons," we are next informed, "feel a pleasure in tormenting animals, and in seeing them tortured and killed, even when it is impossible to ascribe this disposition to bad habit or bad education. There are even individuals who choose their profession according to this propensity, if it be very energetic. A student often shocked his school-fellows by his extraordinary pleasure in tormenting insects, birds, and other animals; and in order, as he pretended, to satisfy this inclination, he became a surgeon," (an infamous sarcasm, which every member of the Royal College is bound to resent.) "A journeyman apothecary, at Vienna, felt so great a propensity to kill, that he became an executioner." The profession of an apothecary in Germany must certainly be very different from the same profession in this country, or the worthy person here spoken of need not have wanted objects on whom to indulge his enviable propensity: the executioners in England have unquestionably less practice this way than the apothecaries; and where the former gentlemen take one life, the latter may be allowed to
take twenty. "The son of a rich merchant gave up commerce, and became a butcher: and a rich Dutchman paid the butchers who furnished the navy with beef, for permission to kill the oxen."—"Mr. Bruggmans, professor at Leyden, told us of a Dutch priest who had so violent a desire to kill, and to see animals killed, that he became chaplain of a regiment, solely in order to have an opportunity of seeing men destroyed; and the same clergyman kept in his house a great number of different domestic animals, as cats, &c. in order to satisfy his natural" (or rather unnatural) "propensity by killing their young: he also killed all the animals for the use of his kitchen. He was, moreover, acquainted with the hangmen of the country, received notice of every execution, and travelled on foot for several days in order to witness it, when the executioners always placed him near them."—"At the beginning of the last century several murders were committed in Holland, on the frontiers of the province of Cleves. For a long time the murderer remained unknown; but at last an old fiddler, who was accustomed to play on the violin at country weddings, was suspected in consequence of some expressions of his children. Led before the justice, he confessed thirty-four murders, and he asserted that he had committed them without any cause of enmity, and without any intention of robbing, but only because he was extremely delighted with bloodshed." Poor fellow! too much fiddling had made him mad. "Prochaska relates that a woman of Milan flattered little children, led them home, killed them, salted their flesh, and eat of it every day," (except saints' days;) "he also quotes the case of a person who, excited by this heinous propensity,
killed a traveller, and a young girl, in order to eat them. Gaubins speaks of a girl, whose father was incited by a violent propensity to eat the flesh of man, and who, for this purpose, committed several murders. This girl, though separated from her father for a long time, and though educated carefully among respectable persons, who had no relation to her family, was overcome by the inconceivable desire of eating the flesh of man,” and actually committed the same crimes that her father did, for the same purpose.

This disposition in young ladies to kill, we may remark by the way, is by no means singular, even in our own happy time and country; it is certainly a most shocking propensity, and proves to a demonstration that the most amiable of the human species are endowed with this organ of destructiveness, as they do not wish to kill men for the purpose of devouring them, but, like Dr. Gall’s little dog, merely for the pleasure of killing alone.

“Pinel mentions a person whose propensity to murder was quite involuntary, and utterly irresistible; and notwithstanding his great tenderness for his wife, he endeavoured to sacrifice her to gratify his inclination.” “The same author speaks also of a credulous vine-dresser, whose imagination was so violently shaken by the sermon of a missionary, that he thought himself and his family were damned to everlasting pains, and considered the baptism of blood or martyrdom as the only means of saving them. He therefore first (very religiously) endeavoured to murder his wife, who with difficulty escaped; then he exercised his fury in killing quietly two of his children, in order to procure for them eternal life. He fancied himself the Almighty,
or, according to his own expression, the fourth person in the Trinity, and that he was sent to save the world by the baptism of blood." The science of craniology must want support very much indeed if it is necessary to haul in such poor lunatics as this to its aid: it will be much more to the purpose if we mention the barbarous cruelty and unparalleled savageness of voracity in the behaviour of a Mr. Hacket, in the reign of Queen Elizabeth, which is thus related in a "Memorial for the Learned," published in the year 1686. "At this time was memorable the prodigious carriage of one Hacket, a mean fellow, of no learning; who, when in shew of reconciliation to one with whom he had been at variance, he embraced him, he bit off his nose; and when the man desired to have his nose again, that it might be sewed on while the wound was green, he most villainously eat it up, and swallowed it down before his face." An impudent scoundrel!

All these facts prove that the propensity to torture, kill, and destroy, is innate in man as well as animals; and it having been shewn that all the propensities of mankind depend on the organization of the brain, it clearly follows that we are blessed with the possession of the organ of destructiveness. "Does not, indeed, the whole history of mankind confirm this assertion? In all ages the earth has been drenched with blood." Alas! how vain must be the pleasing expectation of the millennium while this cursed organ retains a place in the human head!

"It remains still that we should examine what is the essential nature of this faculty?" "I think," says Spurzheim, "that its sphere of activity is more extended than the instinct to kill. It seems to me that
this faculty gives the propensity to destroy in general, without determining the object to be destroyed, or the manner of destroying.” In short, “it gives the propensity to pinch, scratch, bite, cut, pierce, devastate, demolish, ravage, burn, massacre, strangle, butcher, suffocate, drown, kill, poison, murder, and assassinate.” The use of this faculty is to destroy what is useless; its abuse consists in destroying what is useful.

7. Constructiveness.

From the last disgusting propensity it will be a relief to turn to the organ of constructiveness, or the propensity to build up what its predecessor has wantonly thrown down. This then is the building faculty, of incalculable benefit to civilized man.

“Gall observed that those who had a particular disposition to mechanical arts, presented a face of somewhat parallel form, that is, a face as large at the temples as at the cheeks; consequently, a greater disposition to the mechanical arts is manifested by the development of the brain at the temples.” Gall discovered on a cast of the reputed skull of Raphael, preserved at Rome, this organ, the organs of imitation, and of physical love, very much developed; “he also possesses the skull of a milliner of Vienna, who had a good taste, and understood perfectly to change the form of her merchandises, and in this skull the organ in question is prominent;” it is likewise very conspicuous in the field-mouse.

“Adversaries of our doctrine,” says Spurzheim, “may ridicule a comparison between Raphael, a milliner, and a field-mouse. They may laugh at a doctrine
which, as they (according to our system must) conclude, attributes to a similar organ the sublime conceptions of Raphael, the pretty productions of a milliner, and the inartificial habitation of a field-mouse. But,” he satirically asks, “does not the sloth creep by means of organs similar to those by which the horse can gallop, and the roe can run? Does not the ass bray by means of organs similar to those by which a Catalani sings?”

This organ is found in great mechanicians, architects, sculptors, designers, lock-makers, watch-makers, joiners, cabinet-makers, turners, engravers, milliners, toy-makers, beavers, rabbits, and field-mice; for a very obvious reason the house-mouse is not endowed with this faculty.

“To this organ,” says Mr. Forster, “subject to numerous mutual influences, we are indebted for all the useful instruments of music, agriculture, and astronomy; sciences whereby we gratify and extend the functions of other organs, compose concerts of musical instruments, till the earth, and penetrate into remote space with telescopes, and contemplate the position and movements of the celestial bodies. Important, indeed, then to society is this organ, whose activity we may trace through all the costumes of the world, and through every building, from the hut of a savage to the Temple of Solomon; from the Monument by London bridge, to the beautifully painted Porcelain tower at Nankin; and back again, from “the beautifully painted Porcelain Tower at Nankin,” to the “beautifully painted,” but unfortunately decapitated, Anglo-Chinese Pagoda in St. James’s Park.

Notwithstanding the great importance of this faculty,
there is one awkward circumstance attending its being very much developed; for, as in that case it will act with considerable energy, Dr. Spurzheim informs us, that a man may ruin himself and family by building, or may get hanged for coining false money. Let the possessors of constructiveness be aware of these consequences.

8. Covetiveness.

No. 8 is the organ of covetiveness, or the propensity to steal; which, it appears from Dr. Spurzheim's account, is enjoyed by a number of very worthy persons. Soldiers, priests, and even kings and emperors, are addicted to stealing; and great collectors, whether of antiquities or taxes, are universally allowed to have an itching that way.

Nearly at the head of Dr. Spurzheim's list of illustrious thieves, stands the name of the learned, virtuous, and amiable Saurin, pastor at Geneva, who, "though acquainted with the best principles of reason and religion, was overcome continually by the propensity to steal." However extraordinary this charge may appear to those who never heard of it before, there is no reason why they should not believe it, with the same implicit reliance on the veracity of the learned Doctor, as they do a variety of other similar facts supported by the same authority. Though, at the same time, I candidly acknowledge my own want of faith when I first read the statement in Dr. Spurzheim's book. What! said I, Saurin perpetually addicted to stealing! The author of the most eloquent and pious discourses ever delivered from the sacred rostrum, con-
stantly pilfering whatever he could lay his hands on! 'Tis impossible! This surely must be classed with the relation given by Jeffery, of Monmouth, in his fabulous history of our beloved country, when he says that "Cadwallo being tossed on a certain island, and longing for venison, his servant Brian went in search of some; but, finding none, he cut out a piece of his own thigh, roasted it on a spit, and carried it to his master for venison!" And I almost involuntarily applied to this charge, what a certain Dutchman once said of the whole history just referred to, that it was "a groote, grove, lange, dicke, tastelücke, ende, unbeschaemte logen;" which, being "done into English," readeth thus, "a great, heavy, long, thick, palpable, and shameless lie."

As a proof that Nature is no respector of conditions, we find some of the best organs in the heads of individuals moving in the lowest ranks of society, while many of the worst are often strongly developed in persons enjoying the most exalted and honourable stations. Thus Dr. Spurzheim informs us, "that Victor Amadeus Ist, King of Sardinia, pilfered everywhere things of little importance," which fact naturally suggests two very interesting queries. First, is it not extremely probable that this organ may be seen, with the assistance of a good telescope and a clear atmosphere, at the distance of half a league, on the skulls of some of the European potentates of the nineteenth century? If it may, then, secondly, does it lead them, like the King of Sardinia, to rob their neighbours of things of "little importance?"

The next is "an individual of good breeding, who was given up to this inclination from his infancy; he
went into the army in hopes of being restrained by the severity of its discipline; and, as he continued to steal, was in danger of being hanged.” This appears to have alarmed the soldier to such a degree, that he took the desperate resolution of studying theology as a cure, and actually became a capuchin; yet so powerful was this propensity, that it continued irresistible still; and even in the convent he took whatever he could meet with, “as candlesticks, snuffers, scissors, drinking-cups, and glasses.” His inclination to honesty was constantly at work to counteract the operation of his inclination to thieving; he read good books, associated with the most conscientious men of his order, and preached zealous sermons on integrity—but all without effect: his imagination was bewildered, and his reason battled, to learn the cause of this strange propensity; he thought of every thing, except his brains; and tried every means to rid himself of it, except the only effectual one, of extracting the organ.

“A person employed by the government of Austria, and established at Presbourg, had filled two chambers with stolen furniture, but,” being destitute of the organ of courage, “he never dared to make use of it.”—“Moritz, in his Treatise on the Human Mind, relates, with much detail, the history of a certain thief, whose propensity to steal was so energetic, that even when dying he stretched out his hand in order to steal the snuff-box of his confessor;” but the good confessor, being an old fox, was on the alert, and prevented him.

“Lavater speaks of a physician who never left the rooms of his patients without putting something into his pocket,” a practice, it must be granted, for which gentlemen of the faculty are every where notorious.
The clergy, it seems, are endowed with this faculty also; and we are told that "the chaplain of a regiment in Prussia, a man of great intelligence and ability, could not avoid stealing handkerchiefs from the officers on the parade. The commanding officer esteemed him much; but as soon as the chaplain made his appearance, all cabinets, presses, and cupboards, were shut up, for he had carried off handkerchiefs, towels, shirts, and even women’s stockings;" and it must have been highly amusing to the philosophic craniologist to observe the bustle and confusion which the unexpected appearance of this "much esteemed" chaplain always created: butlers clearing their sideboards, house-keepers locking up their wardrobes, gentlemen buttoning up their pockets and hiding their watch-chains, and ladies fastening their garters, would have formed a group worthy of the pencil of the inimitable Hogarth.

It appears from the writings of Drs. Gall and Spurzheim, that before a man can become a good practical craniologist, he must have a pretty close acquaintance with pickpockets, housebreakers, highwaymen, and sharpers of every description; so that, from the information he is enabled to gather of their modes of life, lurking places, and various methods of committing depredations, he will be a most valuable acquisition to the police of any metropolis in the world.

The organ of covetiveness is a very troublesome and expensive one; for we are told by Mr. Forster, that "when combined with amativeness, it produces jealousy, and is the cause why we are obliged to pay watchmen to be walking about," or snoring in their boxes, "all night, to prevent the incursions of our neighbours;" from which we may conclude the learned
gentleman does not admit the definition of a neighbour as given in the tenth chapter of St. Luke's gospel.

This organ is situated at the temples, "on the anterior inferior angle of the parietal bone," lying contiguous to the organ of constructiveness, which inoffensive faculty has sometimes been mistaken for it; a common consequence of keeping bad company.

It may be consolatory to those who discover any of the naughty organs on the skulls of their friends, to learn that a man may have the organs of destructiveness and covetiveness, and be, notwithstanding, a very honest and humane sort of person; for, Dr. Spurzheim informs us, that a man may have the propensity to murder, without having murdered; the propensity to steal, without having stolen; the propensity to marry, without being married; and the propensity to write dramatic poems, without the ability for such an undertaking!

Gall supposed this to be the organ of cunning; and observes that theft is sometimes an exuberance of cunning, and a very great propensity to exercise one's cunning; but, very naturally supposing that such recondite remarks would not be very intelligible to ordinary capacities, he endeavours to elucidate them as usual by the practices of brutes. "Certain dogs," says he, "prefer bad bits which they steal, to good dishes which are given them;" also, by the introduction of an ancient proverb, a thing he is as much attached to, and uses with as much discretion as honest Sancho Panza himself. "The proverb says, 'stolen morsels are sweet.' But the fact is, there are thieves who are not at all cunning, and cunning persons who never steal; this is therefore not the organ of cunning. It
is, in short, the long organ of covetiveness; and gives "the propensity to covet or desire, to gather or acquire in general every thing that pleases, as money, property, animals, servants, cattle, or any thing upon the earth, and, perhaps, under the earth; and it is, in consequence, of this organ that we ask, what is this or that object good for?" It is found in magpies, ravens, nightingales, robins, bees, dogs, foxes, weasels, ants, misers, plagiarists, stock jobbers, resurrection men, and in some "English ladies of fashion!"


The last organ in this genus is secretiveness, or the propensity to conceal. It is situated in the midst of the side of the head, just above the organ of destructiveness. This is rather an unintelligible sort of faculty; for Gall makes no scruple of ascribing to it "cunning, prudence, the savoir faire, the capacity of finding means necessary to succeed, hypocrisy, lies, intrigues, dissimulation, duplicity, falsehood;—in poets, the talent of finding out interesting plots for romances and dramatic pieces; and, finally, slyness of animals."—"Gall first discovered this organ in a person who had many debts, but who had the address to conceal his real situation, so that the creditors could have no knowledge of each other."—"The special faculty of this organ is the propensity to be clandestine in general, to secrete thoughts, words, things, and projects;" a cat watching for a mouse does not move a single limb, but endeavours to conceal both her "project" and herself; a rat, if pursued, runs into his hole and strives to "secrete" himself from his pursuers; "and cunning per-
sons conceal their opinions and intentions; and sometimes even manifest an opinion opposite to their own." Villars speaking of this organ observes, that "it is remarkable in knaves of every kind, and in all who are very expert in discovering their own interest. Those good souls," he continues, "who suffer themselves to be easily led, in short, all such as in this lower world of ours belong to the honourable company of the dupes, have in this part of the skull a very sensible hollow. Such heads, in a revolution, are not worth a single farthing, and on that account they are cut off by hundreds."

I have thus endeavoured to convey some notion of this new physiognomical system; and have described, at tolerable length, the nine propensities which constitute the first genus of the first order of the human faculties; the nine sentiments, which form the second genus of this order, and the order of the intellectual faculties, will furnish sufficient matter for another lecture.

The propensities we have just been considering are, 1. amativeness, or "physical love;" 2. philoprogenitiveness, or "love of progeny;" 3. inhabitiveness, or "love of physical height;" 4. adhesiveness, or "love of friendship;" 5. combativeness, or "love of fighting;" 6. destructiveness, or "love of murder;" 7. constructiveness, or "love of building;" 8. covetiveness, or "love of stealing;" and 9. secretiveness, or love of hiding what we have stolen. And if the accounts which we have given of the positions of the organs of these propensities may be relied on, ladies will be able to ascertain the probable ardour with which their lovers will persevere in addressing them,
by the thickness of their necks; and thus determine, before hand, how long they may safely trifle with them; the attachment of parents to their children may be learned by the fullness of their occiput; the probability of a man having committed murder by the projection of hair over his ears; a skilful architect by the squareness of his temples; and a staunch friend by the width of the back part of his head. Whether all or any of these criteria will be found infallible, or whether they are not liable to as strong objections as those erected by other physiognomists, will be a subject of investigation in the next lecture. In the mean time, I will relate an anecdote from Lavater, tending strongly to prove the general truth of the physiognomical expression of the human countenance; and which, I think, will be considered fully equal, in elegance, simplicity, and probability, to any of those I have had the honour to relate after Drs. Gall and Spurzheim.

"An innocent, amiable, and virtuous young lady, of high birth, who had been educated in the retirement of the country, happened one evening to pass a mirror, immediately after having attended evening prayers, and, with a candle in her hand, was depositing a Bible on a table, when she observed her image reflected in the glass: affected with a sense of humility and extreme modesty, she averted her eyes, and retired. A succeeding winter was passed in the amusements and dissipation of a city, where this young lady had the misfortune to forget all her previous devout pursuits; but, returning to the country, she once more passed the glass and the Bible, and saw her features reflected now deprived of those fascinating graces which belong
alone to the serene and happy state of mind she had lost.—Alarmed at the change, she fled from the spot, and, retiring to a sofa, ejaculated sentences of penitence, and formed resolutions of future amendment."
LECTURE III.

Having in the last lecture explained the general nature of this science, and described the nine propensities which constitute the first genus of the first order into which the human faculties are divided by Messrs. Gall and Spurzheim, I shall now, without farther preface, proceed to consider the second genus of the same order, consisting also of precisely nine sentiments. The first four of these are common to men and other animals, the last five are peculiar to the human species.

10. Self-Esteem.

The first of these sentiments is self-esteem, and its organ is therefore called "the organ of self-esteem." This organ gives us a great opinion of our own persons, and renders us proud; but this takes place only when it is of a great size, the smaller the organ the more modest we are, and the total absence of it "disposes to humility." Men have this faculty, or sentiment, more strongly developed than women; and, consequently, a greater number of madmen are found whose minds are alienated by pride; the brains of women are more frequently turned by another organ, as we shall see presently. "Gall first found this or-
gan in the head of a beggar: in examining the head of this person, he observed in the midst of the upper posterior part of it, an elevation which he had not before observed in so high a degree: he asked him the cause of his mendicity; and the beggar, "very humbly, "accused his pride as the cause of his present state, he having considered himself too important to follow any business: he therefore only spent money, and did not think of earning a livelihood." Now, with all humility, I would beg leave to submit, that both the beggar and the Doctor were, in this instance, mistaken. If the bump which Gall discovered on the head of this man had been in reality the organ of pride, why did he submit to so degrading and humbling a mode of life? Why did he not rather arm himself with pistols, or a bludgeon, and demand, instead of soliciting, the property of passengers? If this protuberance was any thing more than a protuberance, it seems to have been as much like the organ of laziness as any thing else; which, no doubt, is to be found in the heads of ninety-nine beggars out of a hundred, in every country in Europe.

"Proud persons," says Spurzheim, "and those who, alienated by pride, imagine themselves to be emperors, kings, ministers, generals, &c. possess this organ of pride in a high degree." He thinks it is also possessed by the turkey-cock, the peacock, the horse, &c. In this opinion, however, the craniologists are by no means unanimous; Gall has one notion on the subject, Spurzheim has another, and Forster has a third; leaving them to reconcile their differences as well as they can, (it not being absolutely a case of life and death,) we will pass on to the next sentiment.

This is called the love of approbation. "Persons who are fond of being caressed, honoured, and applauded, in short, who are ambitious, have the upper posterior and lateral part of the head much developed."
The organ of this sentiment is distinguished by different names, according as the objects upon which it operates vary in their character. "If the object to which we aspire be of importance, it is called ambition; if we endeavour to distinguish ourselves by trifles, it is called vanity;" though it may be questioned whether these different effects are not the result of different portions of the same organ. "Certain animals are sensible to caresses and flattery, while others are destitute of this faculty."—"Stroke a cat and she will purr, pinch her tail and she will spit." Scratch a hog's back and he will gruntle approbation; but a badger will bite the hand that pats him, though ever so fondly. "It is the same with man; for some persons are fond of flattery, or applause; wish to be distinguished and to be honoured; and with this view make use of various means—of dresses, decorations, titles, &c.;" such a disposition leads to vanity, conceit, and affectation. This faculty of love of approbation is much more active in women than in men; thousands of women become distracted through vanity, while, in all their travels, these gentlemen never met with but "one man whose mind was alienated from this cause:" this is tickling our love of approbation very pleasingly indeed.

"Men," says the Doctor, "who have become mad
through pride, show evidently the cause of their disorder; they speak little, they command, and show their importance with gravity. In the same manner women, who are insane through vanity, still continue to evince a desire to please. They are affable, civil, and courteous: they smile, ogle, simper, sing, dance, and talk, to attract attention.

The effects produced by this organ are essentially the same in individuals of all classes of society. Every person who has it loves the good opinion of others, and is pleased with their approbation. Thus a "coachman, endowed with this organ, is pleased if his manner of managing horses be approved; a general is elated if he be applauded by his nation for leading an army to victory:" a cudgel-player is in raptures if the dexterity with which he splits the head of his clownish antagonist be followed by an applauding shout; a young lady is sometimes in a delirium of delight, when the fascinations of her charms procure for her many admirers; and the philosophical lecturer, whether he has the organ or not, never feels a more exquisite pleasure than when his discourses meet with the approbation of his audience.

12. Cautiousness.

The next sentiment is cautiousness; first discovered by Dr. Gall. There were two persons at Vienna who, it seems, were notorious for "their extreme irresolution;" this was sufficient to attract the attention of the craniologist towards them; and one day this vigilant doctor met them in a public place, and, after dogging them for some time, as we may suppose, like
a man who had a design upon their pockets instead of their skulls, he succeeded in fixing these two individuals; and creeping softly behind them, he "observed their heads." He found them extremely large on the upper part of both sides of the head:” and he made no scruple of attributing their great circumspection to this particular form of their heads. This notion was strongly confirmed by finding the same form in the heads of circumspect animals, as the stag, roe, polecat, otter, mole, weasel, crane, starling, owl, and that proverbially circumspect creature, the goose!

"The special faculty of this organ," says Spurzheim, "produces precautions, demurs, doubts, places sentinels, and in general exclaims continually, take care. It considers consequences, and produces all the hesitations expressed by but."—"When it acts too suddenly," says Forster, "we start." But the worst of this sentiment is, that when much developed it "predisposes to the disease of suicide!"


Number thirteen is the organ of benevolence in man, and of meekness in animals. It renders men tender-hearted, kind to those in distress, and charitable in general; it makes animals mild and gentle. This organ is situated in the middle upper part of the forehead, just where the hair begins; in all good-natured persons and animals this place is protuberant; in all of a contrary character, it is hollow. We are now in possession of an infallible criterion for determining the sincerity of the numerous ostensibly benevolent actions of our contemporaries; and one may easily tell, by ob-
serving this part of their heads, whether any of our "noble presidents" at meetings for the "distribution of the scriptures," for "lessening the number of prostitutes," for petitioning against "burthensome taxes," &c. &c. are influenced by sentiments of kindness to the poor and distressed, or of opposition to the rich and powerful; whether there is not more of self-interest and desire of popularity, than of humanity, in some of their proceedings; whether, in short, they have got the organ of benevolence, or love of approbation, the most developed.

If I was not decidedly of opinion that Dr. Spurzheim is the last man in the world to be guilty of the least levity, in a grave philosophical work, I should certainly have suspected that he is laughing at his worthy colleague, when he tells us that, "For a long time Gall did not think of placing goodness of heart in the brain;" but he did think so at last; and now neither he nor Spurzheim have the least doubt about it; for these gentlemen make it a rule never to doubt of any thing which may have the slightest tendency to support their theory.

Gall was acquainted with a family at Vienna who were very remarkable for one thing, they "often praised the goodness of one of their servants;" and families in general would, perhaps, find this practice very effectual in making servants good. These people several times told Gall he ought to mould this servant in plaster; (it should seem they were a family of German wits, and therefore persons highly distinguished). "At last," after many scruples, "he actually moulded the man in plaster, and found a considerable protuberance on the superior middle part of his forehead."
He afterwards found the same protuberance on the heads of children; likewise in the roe, goat, sheep, some horses, some cows, some dogs, &c. "In the greater number of animals it is restrained to a passive goodness:" though I might here relate an instructive anecdote of a cat, whose benevolence was extremely active in suckling and rearing a kitten which was deserted by its unnatural parent, notwithstanding she had a family of her own in a distant part of the house; but I must not presume to contend for the palm of storytelling with Dr. Spurzheim. "In man its sphere of activity is very considerable." It is the very opposite of destructiveness; and "produces goodness of heart, kindness, peacefulness, mildness, benignity, benevolence, complaisance, clemency, mercifulness, compassion, humanity, hospitality, liberality, equity, cordiality, urbanity, in one word," which is two in emphatical Italics, "Christian charity."

These four sentiments of self-esteem, love of approbation, cautiousness, and benevolence, it has been shown, are common to men and the inferior animals. We have now done with the animal part of man, and turn with pleasure to consider him as a being endowed with faculties which are peculiar to himself; those intellectual and moral principles which serve to draw the important line of demarcation between the human and the brute species.


The next sentiment is, therefore, that of veneration. The organ of this faculty is a very important one; it will, consequently, require particular attention. It is
situated in the middle upper part of the head, immediately behind the organ of benevolence; though, from the conduct of certain devout men, it is to be feared those two organs are not always conjoined. In all truly pious persons this part of the head is elevated, in all atheists it is depressed; (note—there is no medium between a truly pious man and an atheist). Let no one then in future pretend to be religious who has not a bump in this part of his head; more than a pretender he cannot be, the reality is a physical impossibility.

It is notorious enough, that all persons do not go to church from sentiments of piety, or motives of duty; but that some go from habit, some from interest, some to keep their assignations, some from a desire to exhibit themselves, and to be entertained with the exhibitions of others: few, it is to be feared, go for the purpose of setting a good example, fewer to learn their duty towards the Supreme and to each other; still fewer to humble themselves before Him in whom they “live, and move, and have their being;” and fewest of all, it may be fairly presumed, enter the temples of religion during public worship for the purpose of advancing the interests of science. Dr. Gall, however, who is extraordinary in every thing, is one of that small number; and to promote the interests of the important science of craniology, “he visited churches in order to observe the configuration of the heads of those who excelled in devotion.” The first discovery that he made was, “that the heads of all those who prayed with the greatest fervour were bald.” Upon this Dr. Spurzheim makes a remark, which, though not particularly striking either for its profundity or novelty,
was certainly never before met with fairly imprinted in a handsome royal octavo. "It is inconceivable," says he, "that the bald state of the head can produce devotion!" This position he proceeds, in his usual manner, to demonstrate from experience; for, on looking about us in the world, we shall find that "every bald man is not pious, and though women do not grow bald," (wherefore then do they wear wigs?) "yet many of them are pious and devout." Hence it follows, as a legitimate inference, that the bald state of the head is no evidence of piety, nor a well covered one the slightest indication of atheism. If, indeed, it were true that baldness had a tendency to promote piety and devotion, then the preparers and venders of bear's-grease and Macassar oil would deserve to be prosecuted as common enemies to religion. But the fact is, as the Doctor sagely determines, that a bald head, or a hairy head, have no more to do with piety and impiety than a muslin nightcap or a welch wig.

"Priests," we are informed, "who have chosen this state from natural propensity or vocation, and those who have become priests by the influence of external circumstances, or from various other views, present a very different degree of developement in the middle of the upper part of their heads." The younger sons of noblemen, for instance, who enter into holy orders to obtain a genteel livelihood, have, some of them, this part of the head quite flat; while many of the poor self-taught, or entirely untaught, enthusiasts, who voluntarily sacrifice all they might honestly earn by the thimble or lapstone to become preachers, have in the same place an elevated cone abruptly rising in
the form of a sugar loaf; its height from the base of the cranium falling something short of the Peak of Teneriffe.

The special faculty of this organ is veneration in general, without determining the object to be venerated or the manner of venerating. Hence this faculty being inherent in man, all nations venerate something or other; some adore the sun, moon, and all the host of Heaven; others adore animals, reptiles, insects, idols of wood and of stone; some adore God, and some the Devil. Christians venerate with their heads uncovered; Jews wear their hats whilst adoring; and Mahometans take off their shoes. Some sit, others prostrate themselves, and some dance at their devotions; one man sighs, another groans, and a third howls; but all these are only different ways of manifesting the existence of the same organ.

Having established the existence of this organ, it becomes an easy matter to demonstrate the existence of a God. "If God has produced any faculty," (as he does nothing in vain,) "there must be some object which that faculty may accomplish. Is it then possible, that while there is an organ of religion God should not exist? Certainly not. Hence God exists"!! An admirable proof indeed, which, taking for granted that God created the organ, deduces his existence from the existence of that organ! Hence! ye trifling Clarkes, Lockes, Bentleys, Boyles, Woollastons, and Paleys, who pretend to demonstrate the "being and attributes" of God from "necessity," from the "works of creation," or from his "work carrying on in your hearts!" Surely your ghosts must blush, (if ghosts
can blush at any thing,) when the departed spirits of Messrs. Gall and Spurzheim unblushingly enter the fields of Elysium.

This sentiment is peculiar to man, and there is, therefore, no corresponding organ in any creature inferior to him; "who then," it is with propriety asked, "would attempt to make any bird, beast, fish, or insect, acquainted with the doctrines of Revelation?" Such an attempt would be foolish and useless; for "there is a general law, that neither man nor animals can be instructed or educated if the respective faculty be not innate." Thus, although dogs learn to dance, to spell, and to perform slight-of-hand tricks, yet they can never be brought to understand a complete body of divinity, nor even to demonstrate the simplest proposition in Euclid.

15. HOPE AND FAITH.

The fifteenth appears to be a sort of compound, double, or "wheel within a wheel," faculty; it is called the sentiment of hope and faith. Its organ "seems," says Dr. Spurzheim, "to be situated on the side of veneration." Its position, however, is not quite certain, which is a pity, as it is a very good organ, and well deserves to be honoured with a landmark on this craniological map; it has indeed a number, and a portion of territory marked out, but that is to be considered as conveying precisely the same kind of information as a map of the unknown parts of the world. Men certainly have hope and faith; and, consequently, there must be an organ by which hope and
faith are manifested. "This sentiment," according to our learned doctor, "is necessary in almost every situation. It gives hope in the present and of a future life: in religion it is called faith." All this is so extremely clear, that illustration becomes needless: we may remark, before we quit it, that "persons endowed with this faculty in a high degree are credulous;" and that no man without having it of considerable magnitude can possibly become a faithful believer in the hopeful science of craniology.

16. Ideality.

The next organ is that of ideality, or the organ of poetry, situated above the temples, over constructiveness and covetiveness. The existence of this faculty is sufficiently proved by the proverb, that "a poet must be born:" for, all the instruction that can be imparted, and all the pains that can be taken, will never make a man a poet; while, on the contrary, a very few lessons are sufficient to make almost any one a tolerable craniologist.

"It seems to me," says Dr. Spurzheim, "that in every kind of poetry the sentiments are exalted, the expressions warm, and that there must be rapture, inspiration,—what is commonly called imagination or fancy." Poetry does not consist in versifying, or in rhyming; "for some authors write in prose, and yet their expressions are really poetical; while others make verses which, however, contain no poetic thought." It is pleasant, at last, after wading through so much nonsense, to meet with a just and pertinent remark;
tis like finding a diamond in a dust-hole. But who would have thought that Dr. Spurzheim could find leisure to read modern poetry?

"I observe, moreover," he continues, "that in all persons this faculty gives a peculiar tinge to all the other faculties, it makes them in every thing aspire to ideality. It is a sentiment, and if I may so speak, the opposite of circumspection: it renders us enthusiasts, while circumspection stops our career by saying, take care!"—"It also contributes to fanciful and whimsical characters, which accounts for the frequent eccentricity of men of genius." As a matter of course, it is prominent on the heads of Homer, Virgil, Shakespeare, Milton, Southey, Byron, Wordsworth, and Scott.

17. Righteousness.

The seventeenth is the sentiment of righteousness; which Mr. Forster thinks is sanctioned by the exhortatory proverb, "be just before you are generous." It is supposed to be situated on each side of determinateness;" (for, like most of the good organs, its existence is unhappily doubtful,) "and produces conscientiousness. It produces likewise the sentiment of justice only," but unfortunately does not determine what is just. There is a long squabble between Gall and Spurzheim respecting this organ, which I am much too conscientious to rob you of your time by relating. They sometimes appear disposed to give us a separate conscience to each of the thirty three faculties, and sometimes to leave us without any conscience at all. The dispute is at last brought to an end by Dr. Spurz-
heim informing us that he "divides conscience, 1st. Into **natural or absolute** conscience, which is the effect of justice combined with all the other faculties proper to mankind, while all the faculties common to man and animals are held in subordination. 2d. Individual, particular, or relative, conscience, which results from the justice of every one combined with his other faculties. 3d. Into positive conscience, which is fixed by legislation, whether divine or civil, as by the commands, Thou shalt not eat meat on Fridays or Saturdays; thou shalt go to church every Sunday, &c." But he is not so unconscionable as to insist upon our believing, or even understanding, this three-fold division of conscience. The conclusion is, that there must be a particular organ of justice; whence it follows, that no man can be conscientiously honest, who, while drawing his hand carefully over his head, finds it slide into a hollow just in this place.

**18. Determinateness.**

The last faculty in this genus is determinateness, or firmness. It is situated on the top of the head, between veneration and self-esteem, and appears to be placed "in the midst of the feelings in order to strengthen their activity." The use of this organ is to give "constancy and perseverance;" its abuse is "infatuation, stubbornness, obstinacy, and disobedience; and its want renders men unsure, inconstant, and changeable."
Order II. Intellect.

Genus 1st, Knowing Faculties.

The second order is that of intellect. This order is subdivided into two genera, the knowing faculties, and the reflecting faculties. We begin with the knowing faculties, or those faculties by which we know the existence of external bodies, and their qualities. Ignorant men, such as Lord Bacon, Sir Isaac Newton, Mr. Locke, and a few others, supposed that those faculties were sufficiently well known in their time, and strangely imagined that the five senses are the only inlets to the knowledge of sensible bodies, with their qualities; and that the mind perceives and judges the impressions made upon the organs of sense; this ignorance will be, perhaps, both accounted for, and excused, when it is remembered that they knew nothing, and, probably, never dreamed any thing, of the new science which I have now the honour to explain.

19. Individuality.

Of these knowing faculties there are no fewer than eleven. The first of which is individuality; its organ is situated in the middle and inferior part of the forehead, just above the nose. This organ is fond of collecting a variety of particular facts; it is therefore an organ which no man, who has any pretensions to the name of a philosopher, should be without—if he can possibly help it. It is necessary likewise to the naturalist, the botanist, the historian, and the editors.
of newspapers, many of whom, having the organ of ideality much more developed than individuality, frequently substitute fiction for facts. "Persons endowed with this faculty, in a high degree, are attentive to all that happens around them, to every object, to every phenomenon, to every fact; and hence also to motions. This faculty neither learns the qualities of bodies, nor the details of facts; it knows only their existence." But, (what we may conceive must render its company not very desirable in the cranium,) "it has knowledge of all internal faculties, and acts upon them." It has also a most voracious appetite for knowledge: and "desires" too (most unreasonable creature) "to know all by experience; consequently it puts every other organ in action;" it must therefore be considered as the main-spring of the organic apparatus in the head. "It wishes to hear, see, smell, taste, and touch, and to know all arts and sciences; it is" doatingly "fond of instruction, collects facts, and leads to practical knowledge;" it wants, in short, to be an universal genius.

20. Form.

"This organ seems to be placed in the internal angle of the orbit; and, if this part of the brain be much developed, it pushes the eye-ball towards the external angle, that is, a little outward and downward, and gives to the face a certain squinting look. My manner of considering this faculty," says Spurzheim, "is the following: the preceding faculty takes cognizance of the existence of external bodies; and the first quality which our intellect considers in them, is their form,
while, at the same time, persons are particularly known by their form. I therefore reduce this faculty to the general consideration of form. Persons endowed with it in a high degree, are fond of seeing pictures, and if they make collections, they collect portraits. Crystallography is the result of this faculty; and it seems to me that the conception also of the smoothness and roughness of bodies belongs to it. It is certain that vision and touch are not sufficient to make us acquainted with these qualities of bodies; they furnish only the impressions, while an internal faculty" (i. e. the mind) "forms these conceptions."

"Animals of the lower order, as insects, know well individuals of their kind and of their family, and therefore they possess the faculty in question. Honey-bees distinguish the individuals of their own hive from those of any other:) (and when Dr. Spurzheim favours the public with an anatomical representation of a bee's brain, the organ of form will, no doubt, be very conspicuous:) "in a flock of sheep the young ones know their mother; and elephants and dogs give very striking examples of this kind, by recognizing persons after having seen them a long time before;" vide the elephant and the tailors. "It is likewise very much developed in the Chinese," who, every body knows, are fond of form.


"After the existence and figure of any body, the mind considers its dimensions or size," and we insist upon it that she must have a particular organ for this purpose, though we are sorry we cannot exactly tell
where it may be found. "There is an essential difference between the idea of form and the idea of size; the form may be the same, and the size quite different; and one kind of knowledge may exist without the other. Nevertheless these two organs seem to be near each other, though not the same."

22. **Weight.**

This faculty is rather more unfortunate than the last-mentioned; for although Dr. Spurzheim as firmly believes in its existence as he does in his own, and says it must be situated near the organs of size and form, yet it has not been favoured with the smallest portion of cranium whereby it may be found when wanted; consequently number twenty-two does not make its appearance either on the plates or casts made use of to illustrate this science. It is pleasant to learn, that though its existence may be a little dubious, yet its nature is perfectly well known. "It distinguishes between weight, resistance, consistency, density, softness, and hardness." Mr. Forster is acquainted with "a person who has peculiar pleasure in mechanics, in considering different momenta, and whose constant question is, what is the weight of such and such a body?" Which naturally induces the question, what may be the "weight, resistance, consistency, density, softness, or hardness," of this same person's skull?—"His eye has a peculiar expression." Surely not an expression that would interest any but a craniologist. There must be too much specific gravity in it.
23. Colour.

"The external sign of a greater development of this faculty is a vaulted and round arch of the eye-brows; which configuration gives to the face a look of joviality and voluptuousness. This faculty is generally more active in women than in men; hence women are much fonder of colours than men:" and so wonderful is its power, that even female quakers have been known to sigh after pink ribbons, and fashionable-coloured silk stockings.

"Certain persons," we are told, "are almost destitute of the power of perceiving colours:" it was the case, I remember, with my old school-mistress, who had been pur-blind for many years; and who once gave me a flogging for worrying her cat, declaring, when I asserted my innocence, that she "knew it was me by my carotty locks," though I never had a red hair in my head. "We know a family in which all the individuals distinguish nothing but black and white." Query, is this a black or a white one? "A boy of Vienna wished to become a tailor, but he was obliged to leave this trade because he could not distinguish different colours."—"Those persons, who do not perceive colours, have sometimes the vision very acute, and readily perceive the other qualities of bodies, as their size and form."—"Thus as in man the faculty of colouring is not in proportion to the sense of sight, nor to the understanding in general, it seems evident, that there is some particular faculty which perceives the different colours, recollects them, and judges of their relations."—"It is by means of this faculty that cer-
tain persons are so much charmed with flower gardens, and enamelled meadows;" though I must confess that I have looked for it in vain on the eyebrows of some female friends of mine, who are as fond of a flower-garden as Dr. Spurzheim is of craniology.

"This faculty is necessary," as might have been expected, "to painters, dyers, enamellers, and to all those who are occupied with colours and their shades."

It is not quite determined whether or no animals possess this organ. Dr. Spurzheim thinks their having no art of painting amongst them can be considered only as presumptive evidence, and must by no means be admitted as equal to demonstration. He observes, that "it is very probable they perceive different colours, their harmony and discord, without being capable of painting, for there is a great deal of difference between perceiving a thing and being able to produce it." It is rather unfortunate that this is not a question of fact, as we should then have nothing to do but to open the head of a wagtail or a buffalo, and decide it at once by occular demonstration; as it is, we must be content with guessing.

24. Space.

"Dr. Gall," says Dr. Spurzheim, "had always good eyes, but he could not again find places where he had been before, and which he wished to discover. One of his fellow students had a surprising facility of recollecting localities and particular places. This young man never lost any place where he had discovered a bird's nest, but always found it again without making any artificial marks. Gall, on the contrary,
could not find the places again, although he was very attentive, and had recourse to artificial indications." This, by the way, appears to be a gross libel on Dr. Gall's understanding, for it seems impossible that any one so stupid as he is here represented could have invented the ingenious science of craniology; but if the fact of Gall's dullness be admitted, still it must be considered both unwise and unbecoming in Dr. Spurzheim thus to expose the failings of his master. "As Gall formed various busts in plaster, he moulded also his fellow student known to him by his excellent local memory; and he distinguished at the eyebrows, toward the mesial line of the forehead, a protuberance on each side which reached to the middle of the forehead. Observing afterwards every person endowed with a greater degree of this faculty, he one day met, at Vienna, a woman who had this organ so extremely developed, that her face was deformed by it; and, on speaking to her, he learned that she had the greatest propensity to travel, that she had left her parents at Munich, solely in order to see foreign countries, that she never lived long in the same house, because she liked change of place, and her greatest pleasure consisted in travelling." Those who ridicule our doctrine may be disposed to call this the organ of gallivantiveness; we shall still call it the organ of space. "It is found in the pictures and busts of great astronomers, navigators, and geographers, as of Newton, Cook, Columbus, &c." "Bloede, of Dresden, speaks of one who had formerly been a miner, known under the name of Augustus of Schneeberg, because he was born at that town." (Let not the suspicious reader ask, 'why are not the other
wonderful anecdotes as particularly authenticated as this? he should know, that however desirable it may be to prove them true, the thing is not always possible). "This man, with a kind of ridiculous eagerness which prevents him from staying above one or two days at the same place, runs every year over the greatest part of Saxony, Lusatia, and Silesia; he has every day, like migrating birds, a fixed station, and brings to every landlord, who gives him relief, compliments and salutations from all his friends; and he then tells all the details of his last journey, and speaks with the greatest volubility, keeping meanwhile his body immovable and his eyes shut. Blöede states that this odd person has really two large protuberances corresponding to those of this organ." So also had a blind man who "often dreamed of foreign countries, though he had never seen them."

"Animals also must be endowed with this faculty, without it they could find neither their progeny nor their dwellings, after they had been obliged to leave them in order to seek for food." The distances at which dogs and pigeons find their way to the places from which they have been taken is a proof of this, nor can we account for this phenomenon in any other way. Upon this principle also may be explained the migration of birds; as swallows, storks, starlings, quails, nightingales, &c. which change their place at certain periods of the year. And to show how amazingly accurate Dr. Spurzheim is in his researches into natural history, he informs us that these birds "come back, not only to the same climate and into the same country, but to the same place,—to the same window,
bush, chimney, or tree;" as naturally as a man who has been a voyage to China comes back to his house at Blackwall whence he set out.

The special faculty of this organ is space in general. It measures distances, and gives notions of perspective; it makes the traveller, geographer, and landscape-painter; it is at once a propensity and a knowing faculty; for it gives the propensity to travel, it remembers localities, it knows the existence of space, (which many learned men do not know,) "and it is fond of this kind of knowledge."

25. Order.

As it is possible to conceive order, and there are persons who like to see the furniture of their rooms properly arranged, and at table every dish in its proper place, therefore there must be an organ whereby all this is brought about, though, as might have been predicted, its situation is a little uncertain. Dr. Spurzheim gravely enquires "whether cleanliness or tidyness is dependant on the same faculty as order?" It is certainly a very important question, and should be referred to the consideration of a special committee of craniologists.


The organ of this faculty seems to be situated between the organs of individuality, space, order, tune, and cause. The organ of number is placed on the side of the eye; the organ of time is above the eye. These positions of the organs are sufficiently proved by
"our raising up the eyes when we think of time," and ask what's o'clock? "and by our looking downward and outward in ciphering." Mr. Forster says, he "thinks we endeavour by the over-strained activity of this organ to conceive eternal duration. In like manner," he continues, "I think we endeavour with the organ of space to conceive infinite extension. To neither of these we know any bounds, but the limited sphere of the activity of our organs prevents, in my opinion, our arriving at the conception we aim at:" so that when the "sphere of the activity" of our organs becomes infinite we shall be enabled to comprehend infinity and eternity. "This," Mr. Forster, with much self-complacency observes, "is a conception of my own, &c." and I trust he will be enabled to obtain an act of parliament to secure it to him and to his heirs for ever.

27. Number.

"Some individuals remarkable for their great talent for calculating excited the attention of Dr. Gall. There are children who excel in this faculty. A child, seven years of age, was extremely delighted with running about the fairs and making calculations for the merchants. A boy, thirteen years of age, excelled his schoolfellows in a surprising manner. He learned easily an immense number of numbers, made the most complicated arithmetical problems, and soon found their result. Mr. Mantelli, a counsellor, took particular pleasure in the solution of arithmetical problems; and his son, five years of age, did nothing but calculate during the whole of the day! In such individuals, the arch of the eyebrows is much de-
pressed or elevated,” (for it matters not which,) “at the external angle of the orbit.”—“We have an infinity of observations upon this organ, and we consider it as demonstrated.”

“I am not quite certain whether this faculty exists in animals; it is said that a bitch perceives if one of her puppies be taken away, but it is not evident that she counts her young ones. She may perceive by the faculties of individuality and form that the individual form of the puppy is missing. George le Roi has observed that magpies count three; for, if we construct a hut in the neighbourhood of a tree upon which a magpie has placed its nest, and if three persons enter this hut, the magpie is not deceived; it does not come to its nest before the three persons have left the hut; but if more than three persons enter, it can no more reckon their number, or compare those who have gone in with those who have come out. Dupont de Nemours, however, thinks that magpies can count nine;” and his opinion will have some influence, when we remember that he is the philosophical cow-keeper of whom honourable mention was made in the first lecture.

The special faculty of this organ is calculation in general, without determining the object to be calculated, or the manner of calculating.

28. **Tune.**

We now come to the interesting organ of tune, which is to be found in the heads of all persons who are naturally musical, but in none of those who study music merely as a fashionable accomplishment: and
the craniologists maintain, that the reason why the daughters of our butchers and bakers make so little progress in this science (to which some of them devote one half of their time) is, because the organ of tune is but little developed in their heads. Dancing is mostly regulated by music; and when the music is at a standstill, the dancers must stand still too; yet some persons can dance extremely well, and be always in their proper place in a country dance, who are entirely destitute of an ear for music: this may, perhaps, be accounted for by the distance there is (especially in tall persons) between the head and the feet.

Dr. Spurzheim remarks, that "it is with the organ of tune, in respect to the ears, as with the organ of colour, in respect to the eyes. The ear hears sounds, and is affected by them agreeably, or disagreeably; but the ear has no recollection of tones, nor does it judge of their relations," (nor does it even hear sounds, nor receive pleasure or pain from them,) which is considered as an indirect proof, that there must be a distinct organ of tune: but besides this, "there exists a direct proof that a distinct internal organ is necessary to the manifestations of this faculty," and here it is. "Sometimes in epileptic fits, in delirium, and in fainting fits, certain individuals sing continually, and with great precision. This faculty is then alone active, while the functions of all the other faculties are deranged;" but when this organ is convulsed, or falls into a swoon, it is wholly out of our power to sing; or at least we cannot sing with "great precision."

"This organ is marked by an angular elevation, extending upward above the eye-brow, between the organ of colour and that of number."—"The heads
and skulls of birds which sing, and of those which do not sing, present a great difference at the place where this organ is situated.” Nightingales are more endowed with this organ than linnets; linnets more than chaffinches; chaffinches more than sparrows; sparrows more than carrion-crows; and carrion-crows more than swans; notwithstanding the high estimation in which those birds have been held for singing, even in the agonies of death.

29. Language.

The last organ of this genus is that of language, situated in the orbits; and the eye, which has hitherto been considered as the organ of vision, is now discovered to be the organ of language, formerly supposed to reside in the cavity of the mouth.

“Dr. Gall,” says Dr. Spurzheim, “at thirteen years of age was vexed that while several of his schoolfellows learned by heart, even things which they did not understand, with great facility, he had the utmost difficulty in engraving in his memory a less number of words.” Another rap of the knuckles for Dr. Gall; here, however, is a plaster for the wound. “On the other hand, he excelled them in the powers of reflection and reasoning. He afterwards observed, that in those individuals who had so great a facility of learning by heart, the eyes were very prominent. Sometimes the eyes are not only prominent, but also depressed downward, so that the under eyelid presents a sort of roll, or appears swollen.” The prominency of the eye gives the memory of words; the wrinkle under the eye enables us to form brilliant conceptions re-
speecting the spirit of different languages: their combination constitutes the perfect philologist.

"Gall thinks that animals, as monkies, orang-outangs, &c. want the power of speech in consequence of their being destitute of this faculty;" and he thus honourably acquits those cunning creatures of the charge of laziness so ungenerously preferred against them by the Indians, and is justly entitled, for so praiseworthy an act, to the eternal gratitude of the species. Dr. Spurzheim seems half inclined to take part with the Indians against the monkies, for he says it appears to him "that they have this power in some degree; they learn to repeat arbitrary signs, and understand them as far as they have the respective sensations; but I think that animals want speech for the same reason that they do not make fire, have no clothes, or cannot produce food."

"The organs of speech do not produce language. It is true the organs of voice produce sounds, but they are not the origin or the cause of vocal language." The tongue is generally considered to be the organ of speech, and yet "certain persons, though deprived of the tongue, have still continued to speak. It is evident their pronunciation could not be so distinct as that of other persons, they could not pronounce certain letters; but they felt the necessity of speaking, or of communicating their sensations and ideas, and they actually spoke." Hence it most clearly follows, that cutting out the tongue is not an effectual cure for a scolding wife.

"This faculty makes us acquainted with arbitrary signs, has memory of them, judges of their relations, and produces a propensity to those functions."
30. Comparison.

The organ of this faculty is marked by an elevation in the middle of the forehead, above the organ of individuality, and below benevolence; the form of it is that of an inverted cone. "This organ is developed in all popular preachers beloved by the crowd, who speak by examples and parables, and who choose their similitudes from facts that are generally known."—"The activity of this faculty is very important. It compares the sensations and ideas of all the other faculties, and points out their difference, analogy, similitude, or identity. It compares, for instance, the functions of the five external senses with the functions of the internal faculties; and hence it often happens, that the same vocal signs or expressions are applied to both kinds of functions, so that the same expressions are sometimes positive, and sometimes figurative. For this reason the language of every nation proves whether this organ is much or little developed in the greatest number of its individuals. If they have this faculty in a high degree, their language is replete with figure."

The special faculty of this organ is comparison in general, without determining the objects to be compared, or the manner of comparing them.

31. Causality.

This is the metaphysical faculty; it is of course very inquisitive in inquiring into causes, and is a necessary
ingredient in the composition of a philosopher; it "always prompts men to ask, why?" It is also, like a pearl-fisher, frequently getting out of its depth; for Dr. Spurzheim says, "it dives into the nature of things, and into the immortality of the soul;" and it seems fond of diving, and getting to the bottom of every thing.

"The faculty of individuality makes us acquainted with objects and facts; the faculty of comparison points out their identity, analogy, or difference; and this faculty desires to know the causes of all events. Consequently, these three faculties together, forming systems, drawing conclusions, inductions, or corollaries, and pointing out principles and laws, constitute the true philosophical understanding." This faculty, like the rest, is liable to abuse; and "its too great activity produces the mania of explaining." Thus a man, whose causality is much developed, is not, like other people, contented with merely observing phenomena, but he enquires into the causes which produce them; and when those causes are ascertained, instead of remaining satisfied, he pushes on his enquiries into the cause of those causes, and endeavours to explain that which is, perhaps, in its very nature inexplicable.

This organ is indicated on the human forehead, by a fullness on each side the organ of comparison: for there is some reason to believe that this faculty (happily for their intellectual repose) is wanting in animals.

"Dr. Gall remarked, that persons who like metaphysical study, have the superior part of the forehead much developed, and prominent in a hemispherical form, as Mendelsohn, Kant, Fichte, and others," and would, no doubt, wish us to infer, that such a con-
configuration of the head is essential to the existence of the science of ontology; that without it no man will ever enquire into the general affections of being; their powers, properties, accidents, relations, actions, passions, dispositions, internal qualities, external adjuncts, considerations, conditions, and circumstances: nor perplex himself with endeavouring to prove the "existence of nihility, or mere nothing." He does not, indeed, say quite so much, and I am glad of it, because I happen to be acquainted with several worthy persons who have just such foreheads as the one here described, and who yet understand no more of metaphysics than a Laplander; nor are they a jot more troubled with abstract notions: while more than one of my friends, whose foreheads are quite dissimilar, are fond of metaphysical study, and have asked why? and wherefore? from their infancy.

32. Wit.

This organ, we are told, is to be seen on "the busts of Sterne, Voltaire, Piron, John Paul, &c." Its situation is on the "superior external parts of the forehead. Jest, raillery, mockery, ridicule, irony, &c. belong to this faculty."—"The essence of wit consists in its peculiar manner of comparing, which always excites gaiety and laughter."

I know not precisely from what cause it may arise, but Dr. Spurzheim's account of this organ is extremely short. The only description he has given of wit is a borrowed one; and even that he has not condescended to prove or illustrate by a single instance of jest, or raillery, or mockery, or ridicule, or irony; nor by a
single anecdote of any person distinguished for their talents that way. It will be remembered that in explaining the organs of covetiveness and destructiveness, the learned Doctor abounds with instances of individuals who were cursed with those unfortunate propensities; and that his anecdotes of thieves and murderers are very numerous, as well as delightfully entertaining and instructive. To what then must we ascribe this conciseness of Dr. Spurzheim, when treating of the organ of wit? Certainly not to his having it less developed than the organs of ideality, self-esteem, and love of approbation; because, even if this were true, it would be personal, and therefore extremely improper. Neither can we ascribe it to the smallness of the number of wits in Germany, compared with that of rogues, gluttons, and drunkards, because that would be drawing a comparison to the disadvantage of the people, which the history of their manners, customs, and habits, will by no means justify. If, however, impelled by the organ of causality, we are obliged to assign some cause for this conduct of the ingenious gentleman, let it be one which has at least an appearance of plausibility. Suppose, then, that Dr. Spurzheim's experience has taught him that men of wit do not place much confidence in the truth of the doctrines he is endeavouring to establish, but that they are apt to indulge themselves in attacking them with jest, and raillery, and mockery, and ridicule, and irony; is it not exceedingly probable that he would contract a secret and rooted aversion to such persons, and cautiously avoid their society? and thus being deprived of the means of studying the living, he was reduced to the necessity of collecting what few observations he
could from the portraits and busts of dead wits, whose foreheads he might handle and guage without the slightest apprehension. It seems, likewise, not improbable but that the Doctor has left this organ without a demonstration, as a just retributive punishment for the mortifying treatment he has everywhere received from it. Whatever may have been the cause, the account of this organ is certainly defective; and, as it is not my business to supply the deficiency, I shall content myself with making one remark upon it. The organs of comparison and wit have, it seems, one property in common; that is, they both compare; but the difference between them consists in the one comparing philosophically—the other, wittily. Comparison places things in such a position to each other as enables us to draw useful and practical inferences; wit arranges them so as to please and entertain us. Thus, if we compare the truths of Craniology with its falsehoods; its consistences, with its contradictions; its utility, with the mischiefs that would result from its establishment as a system of physiognomy; it is an operation of the faculty of comparison: and we are enabled to draw from it this useful practical inference—that it is much better to have thirty shillings in our pockets, than an octavo volume of quackery in our libraries. But if we compare the gravity with which these exquisite absurdities are related, with the absurdities themselves, and the eagerness with which they have been swallowed by the courtly Philos at the Rathbone-place lecture-room, with the scepticism of the same Philos in less ambiguous matters; it is an operation of the faculty of wit: and we smile at the idea of persons not having faith enough to believe in
the existence of a superintending Providence, and yet being sufficiently credulous to believe in the existence of thirty three organs of the mind, of the various shapes and sizes marked out upon this cast.

33. Imitation.

The last faculty of all (yet discovered) is imitation. "It seems to be a faculty sui generis." It should seem that one of Dr. Gall's acquaintance was an excellent mimick, and indeed possessed this faculty in such a surprising degree, that he was (what the most favoured among the sons and daughters of Thespis never yet were) "a perfect actor." This gentleman "desired Gall to examine his head, because it had a transverse furrow in the middle of it," where he supposed his great histrionic talent lay hid; but he was mistaken. "Gall found the hollow place," but he also found, as might have been anticipated, just before it a considerable elevation: for "there is a general law," that, as on the earthy shell of the great globe which we inhabit, there cannot be a valley without a hill; so on the osseous shell of the little globe, which we are now treating of, there cannot be a hollow without a bump. In the travels of these gentlemen they have met with many individuals whose heads presented similar protuberances, and they invariably found that such individuals excelled in the power of imitation. They therefore consider this organ as demonstrated, and affirm that persons who are endowed with it "imitate, with great precision, the gestures, voice, manners, and in general, all the natural manifestations, of man and animals. They are also fond of being actors."
I remember being once at a fair in the neighbourhood of the metropolis, where, for a few pence, I was shown, in a travelling tea-kettle, a variety of natural and artificial curiosities. Amongst the former was an ingenious personage in the form of a little shabby fellow, about forty years of age, who imitated, much to my satisfaction, the squeaking of a pig, the mewing of a cat, the bleating of a sheep, and the braying of an ass, with such varied modulation of voice, and such decided truth to nature, that I could hardly persuade myself I was not in company with those animals, more particularly the last; I was much puzzled to understand by what means he performed all this, whether by any small instrument in his mouth, or by his natural ventriloquial powers; but my veneration for him as an extraordinary individual was so great that I dared not to ask him the question. Had I then been as profoundly skilled in the science of craniology as I am now, I should have concluded that he had got the organ of imitation, and have been satisfied; but this science, like myself, was at that time only in its infancy.

These are the thirty three special faculties of Drs. Gall and Spurzheim, which I hope are all clearly understood; as to the new or additional faculty of Mr. Forster’s baptizing, the sentiment of mysterizingness, the description is so perfectly in character with the name he has bestowed upon it, that I am not ashamed to acknowledge my utter inability to comprehend the one or to pronounce the other: awful obscurity, impenetrable darkness, and perfect unintelligibility, being the quintessence of all mysteries; and a locked-jaw being the not unfrequent punishment of those persons
who perversely endeavour accurately to articulate the crabbed technical terms of this exalted science.

It has been shown, that all these propensities, sentiments, and intellectual faculties, reside each in a separate portion of the brain: that they are consequently born with us; (when we are not born without brains;) that the energy of these faculties is in proportion to the size of the organs by which they act, and that every organ is capable of being pointed out by the protuberance which it forms on the outside of the skull. With such persevering diligence, and such wonderful success, have these principles been by their inventors applied, that the physical structure of any individual being given, they can find, in a second or two, his moral and intellectual qualities.

This system has been attacked and grossly abused by numerous ignorant and interested persons; but by none with more violence, and greater disregard to the feelings of its authors, than the conductors of the great northern Review, who, at the conclusion of their criticism on Dr. Spurzheim’s book, roundly assert, that “the writings of Drs. Gall and Spurzheim have not added one fact to our knowledge respecting either the structure or the functions of man; but consist of such a mixture of gross errors, extravagant absurdities, downright misstatements, and unmeaning quotations, from Scripture, as can leave no doubt, we apprehend, in the minds of honest and intelligent men, as to the real ignorance, the real hypocrisy, and the real empiricism, of the authors.” The wanton cruelty of such an attack will appear the more flagrant when it is remembered what extraordinary labour those gentlemen have
undergone, by visiting the prisons, hospitals, asylums, and institutions of every description scattered over the continent of Europe, to collect those wonderful facts, and instructive stories, upon which the whole of their doctrine entirely depends; when also we consider the great anxiety which Drs. Gall and Spurzheim evince for its establishment, and that it is the only apparent mode by which they can gain an honest livelihood. And after all, those learned reviewers are palpably inconsistent with themselves; for, in the very same critique from which the above passage is quoted, but a few pages before, when speaking of the doctrine of the thirty three faculties, they observe, with an emphasis, that they "look upon the whole to be one great discovery from beginning to end."

It may here, with much justice, and, perhaps, with great gravity be said, that "assertion is not proof and that ridicule is not argument;" and as that is a doctrine in the truth of which I most cordially acquiesce, I shall now take into consideration the reasoning, arguments, and facts, by which this system is supported. It was my intention to have devoted a whole lecture to the examination of the unexampled proofs, and never-before-heard-of system of logic, of Drs. Gall and Spurzheim; that however is by no means necessary, and I am heartily desirous to have done with the subject. But, lest it should enter into the heads of certain persons that we are unreasonably sceptical in refusing it our hearty concurrence, as well as unpardonable for treating its doctrines with levity, I will take the liberty to trespass a little longer on your patience and good humour, while, "laying aside all malice, and all hypocrisy, and all guile, and all evil speaking;" and
guarding carefully against "the sin that does most easily beset us," we consider, with as much seriousness as the subject will allow, the principal proofs upon which this science depends.

The first thing to be noticed is an assertion, that the faculties of the mind exist separate and distinct from each other in the brain, and that they are capable of performing their respective functions independently of each other; of which an instance was given in the faculty of tune being active, while all the other faculties were in a state of insensibility. If this assertion were true, it seems to follow that two or more mental operations may be carried on at the same time, and that a man whose organs are equally developed may, at the same instant, be unraveling a metaphysical question with his causality, calculating the annual interest of the national debt with his number, and composing a birth-day ode with his ideality: but, as experience convinces us that it is impossible to perform more than one mental operation at the same time, the inference is much more favourable to the theory which assumes the brain to be one undivided organ of the mind, than to that which considers it to be divided into as many organs as there are intellectual faculties and powers.

This assertion is, however, supported by arguments; and it is said, in the first place, "that study too long protracted produces fatigue, but we may continue to study by changing the object. Now, if the brain were a single organ, performing all the functions of the mind, why should it not be more fatigued by this new form of study?" The plausibility of this argument seems to have blinded the craniologists to its weakness, and it is advanced with as much confidence as
though it were completely irrefragable: but it unfortunately happens with the invincible arguments of the champions of this new science, that, like the invincible soldiers of the "great exile," they are brought forward only to be beaten; and the height to which their prowess has been extolled, and the celebrity they have obtained, serves only to render their overthrow the more mortifying to their leaders, the more honourable to their antagonists, and the more universally known. The argument we have now to do with is merely an inoffensive sophism, which an observation or two will be sufficient to expose.

In the first place, may we not retort; the eye becomes fatigued by looking too long at any one light, though we may continue to gaze by changing the colour. Now, if the eye were a single organ, performing all the functions of vision, why should it not be more fatigued by this new form of exercising it?

This, however, is only to oppose one sophism with another; we remark, therefore, secondly, that if the brain is at all concerned in the operations of the mind, the manner in which it is affected by one operation must be as different from the manner in which it is affected by another, as the operations are different in themselves; and that, consequently, the sense of relief which we experience by changing the object of study, is produced, not by employing a different portion of the cerebral mass, but by inducing a different series of affections of the same portions; as the eye is relieved, not by the exercise of different parts of its organization, but by the refrangibility of some rays of light producing a different stimulus from others in the same parts of it.
And, lastly, we may observe, that if the organs exist separate, and are capable of being exercised independently of each other, the sense of fatigue produced by an over exertion of the faculties must be local, and can be felt only in the organ or organs exercised at the time. Thus, an accountant would feel pain only in his number, a botanist in his individuality and order, a musician in his tune, and a fine lady in her love of approbation; but as every man who pays the slightest attention to his feelings knows that this sense of fatigue is not local but general, it follows that the argument adduced by these gentlemen in support of their assertion does them more harm than good, as it tends to disprove the very fact it was brought forward to demonstrate.

Another argument in support of this assertion is adduced from the phenomena of sleep. Some persons, it is said, dream when they sleep; others talk, sing, preach, walk, and so on, which proves that particular faculties are then alone active, while all the others are at rest,—a mode of reasoning very pardonable in a dreaming man, but quite inexcusable in any one awake. Again, Dr. Spurzheim tells us, that some somnambulists do things of which they are not capable in a state of watching; and dreaming persons reason sometimes better than they do when awake. "This phenomenon," he continues, "is not astonishing. If we wish to reflect upon any object, we avoid the noise of the world and all external impressions; we cover the eyes with our hands, and we put to rest a great number of organs, in order to concentrate all vital power in one or in several. In the state of dreaming and in somnambulism this naturally happens; consequently, the manifesta-
tions of the active organs are then often more perfect and more energetic; the sensations are more lively, and the reflections deeper, than in a state of watching."

Now, so far as this argument is intended to apply to Drs. Gall and Spurzheim, I can in my heart find no reason to object to it; for that those learned gentlemen are capable of reasoning much better, and of making much profounder reflections, whilst they are asleep, than they do when they are awake, is a fact most clearly proved, and very beautifully illustrated, by a variety of passages in the volume from which this argument is extracted; but that the generality of people are equally gifted with this extraordinary talent is, I humbly conceive, a mistake.

Another argument in favour of this position is drawn from partial insanities, and other diseases; "for how is it possible," asks Dr. Spurzheim, "to combine partial insanities with the unity of the brain?"—"Any nerve may be diseased, while the others are in health; we may be blind, and hear; or we may be deaf, and see."—"Now every one, from such partial indisposition, draws the inference, that the nerves perform different functions. Why should it not be the same with the cerebral parts? One faculty may in reality be deranged, while the manifestations of all the other faculties of the mind may be regular."—"On the other hand, there are madmen, who are reasonable only in one kind of the manifestations of the mind. A chemist was a madman in every thing except chemistry; and an embroiderer, during her fits, and in the midst of the greatest absurdities, calculated precisely how much stuff was necessary for any particular piece of work. From all these considerations it follows, that there are as
many organs as there are special and independent faculties; and, consequently, that the brain cannot be considered as one single organ, but as composed of several."

The facts which constitute the premises of this argument are so indisputably true, and the inference drawn from them so logically just, that it would be a convincing proof of total insanity either to suspect the one, or not to admit the other. For if a man, whose mind is deranged, can occasionally talk with coherency upon a subject to which his life has been devoted, or a lunatic mantua-maker can tell the number of yards required to make a garment, nothing certainly can be more evidently true, than that the mind consists of thirty three faculties, and that there is in the brain an organ for each.

The next thing to be considered is the doubleness, or, as Dr. Spurzheim, with the strictest propriety of language, calls it, the duplicity of the organs.

Against every theory of the human mind which considers the brain as the organ of intellect, the numerous injuries which every part of that organization has received, without deranging the faculties of the mind, have been constantly urged. In a discourse delivered in this room, to prove the immateriality and natural immortality of the soul, a great number of instances were adduced to show, that no part of the brain can be pointed out, which has not been either mutilated or destroyed, without impairing the faculties of the mind. Those instances, however painful the enumeration, were necessary to that argument, and I shall not now repeat them. The facts themselves are well known, and are too glaringly in opposition to the system of Drs. Gall and Spurzheim, for those gentlemen to be
wholly silent respecting them: they have, therefore, with admirable skill, and their accustomed liberality, not only bestowed upon us twice the number of faculties we have received from any other philosophers, ancient or modern, but, as a wise precaution against accidents, have provided us with double sets of those faculties, one on each side of the head.

The first proof of the doubleness of the cerebral organs is derived from analogy; "the organs of every sense are double, as the organs of animal life in general. There are two eyes, two ears, and two nerves of smell, of taste, and of feeling; why should it not be the case with the brain?" If in the whole of Dr. Spurzheim's writings there could be found no other truth, this must certainly be recognized as one: and nothing indeed can be more clear than that we should be thus provided with two sets of organs, because, if we are not, the system which that gentleman is endeavouring to establish, must inevitably fall to the ground; whether we should be justified in admitting the fact merely on account of this unfortunate circumstance, is a question which I shall not now stop to discuss.

But what, may we not ask, is the fact? Is there a constant correspondence between the two hemispheres of the same brain? Is there any between the opposite lobes of the two hemispheres? or between the convolutions of the corresponding lobes? Does not every anatomist know that there is not? Does not every person who has been gratified with a sight of Dr. Spurzheim's most correct anatomical representations of the brain, know that there is not, but that so far are those parts of the encephelon, which are numbered as the organs of the special faculties of the mind, from corres-
ponding to each other, either in size or figure, that they differ as one to six, one to four, and one to two; as an apple and a pear, a quince and a cucumber! And what, may we not again ask, is the irresistible conclusion from this fact? What, but that as these gentlemen teach the energy of the faculties depends upon the size of the organs, the faculties on one side of the head may be as strong again as those on the other? a state of mind that would perpetually produce the most dreadful anarchy and confusion in the intellectual kingdom.

The next proof of this doubleness of the faculties is biographical; and Dr. Spurzheim asserts, that "one half of the brain may be destroyed, while the other half continues to exert the manifestations of the mind." Moreover, "it is evident that both hemispheres of the brain may be in quite a different or even opposite state;" and Dr. Gall (unquestionably the best adapted of any man in Europe to collect the materials for a wonderful museum) once found one half of a man's brain "entirely mouldy."—"Tiedman relates the example of one Moser, who was insane on one side, and who observed his insanity with the other. Gall attended a minister who, having a similar disease for three years, heard constantly, on his left side, reproaches and injuries; and turned his head to that side in order to look at the persons; with his right side he commonly judged the madness of his left side; but sometimes in a fit of fever he could not rectify his peculiar state: long after being cured, if he happened to be angry; or if he had drunk more than he was accustomed to do, he observed in his left side a tendency to his former alienation." Gall also attended another
clergyman in the Theresian Institution at Vienna, who, for a long time, had a pustular erysipelas, which disappeared and re-appeared from time to time: his left side became weaker by degrees, so that at last he could not walk without a stick: and finally, he was struck with apoplexy, and died in a few hours: three days before, he had preached and delivered a lecture at the school. On dissection, the middle part of the right hemisphere, as large as one's hand, was found changed into a yellowish and grumous substance.” So that it plainly appears by these gentlemen’s own account, that a man may go about preaching and delivering lectures whose brains are by no means in a sound state.

But in all the objections which are commonly made to the brain being considered as the organ of the mind, “the duplicity of the nervous system in general, and of the cerebral organs in particular,” we are told, “has been forgotten;” that this, however, is a subject not intitled to the slightest attention, on the present occasion, becomes evident from a well known truth, which Dr. Spurzheim has incautiously acknowledged, that there are “numerous examples of derangement in the intellectual faculties, while not the least defect could be discovered in the brain. Indeed, in many cases of mental alienation, instead of finding out any cause in the brain, an evidently diseased state has been observed in quite different parts, as in the liver, bowels, &c.” After this admission any attempt to demonstrate the existence of two sets of faculties, in order to reconcile the injuries which the brain has received without affecting the mental powers with this system of craniology, becomes not only decidedly absurd, but the grossest in-
sult that can possibly be offered to the understanding of a human being.

The last thing which I consider it important to notice in this popular view of the proofs of craniological physiognomy, is the prominences on the skull by which the existence and power of the mental faculties may be discovered in the living subject; and here it is that the adversaries of Drs. Gall and Spurzheim must be allowed to triumph; for, unless it can be demonstrated that there are eminences on the skull which correspond with the convolutions of the brain, it becomes evident, that although we were to admit the convolutions to be the organs of the mind, this science is incapable of being established.

Drs. Gall and Spurzheim assert, what few persons will be inclined to dispute, that the skull is formed upon the brain, and that it takes its peculiar (internal) shape and size from the shape and size of that organ: so far, so good; these are the premises; now for the conclusion;—consequently, its external surface must be the exact counterpart of the surface of the brain; and for every concavity in the inner plate of the skull, there must be, and there is, a corresponding convexity on the outer plate of it. These learned doctors are, however, much more quicksighted than Nature; and the fact, which to them is so extremely obvious, has, unfortunately, been by her quite overlooked.

That there are a variety of indentations, or concavities, within the skull, and those formed by the convolutions of the brain, will be most readily granted, because, on inspection, they plainly appear; but that there are any corresponding protuberances on the out-
side of the cranium, will be as promptly denied, because, on inspection, no such protuberances can be seen. It was well known to anatomists, long before the inventors of this theory were born, that the inner plate of the skull bears an exact impression of the surface of the brain; and that the various convolutions of that organ mark it with the most evident indentations; it was, moreover, equally well known, (what even Gall and Spurzheim cannot possibly be ignorant of,) that those indentations, instead of causing prominences on the outer plate of the skull, serve no other purpose than to vary the thickness of those parts of the bone immediately above them; so as to render the skull, in some instances, where the convolutions are large and the concavities deep, semi-transparent: and nothing is more common than to find a skull with numerous deep and varying sinuosities on the inside, while the outside is as smooth and as free from any kind of elevation as a billiard ball.

Although these important facts may not be considered sufficient to show that this new theory has no foundation in truth, yet they most clearly prove (what will perhaps be thought equally fatal to it) the utter impossibility of ever reducing it to any practical utility; for, unless the mind is composed of numerous faculties, and those faculties do reside each in a distinct cerebral organ; unless those organs do make indentations in the skull, which are constantly accompanied by corresponding protuberances on the outside of it; it becomes perfectly clear, that, though we shave a man's head ever so close, and examine it with ever so much care and exactness, we shall learn no more of his propensities, sentiments, and faculties, than by measuring and examining his fingers and toes.
Upon the whole, then, we may conclude, that if the inventors of this new system of physiognomy propose it as an ingenious and entertaining theory, which gentlemen may have engraved on their snuff-boxes, and ladies painted on their fans for their amusement, it may, without any serious scruple, be accepted of them; and, considered in such a light, I have no doubt but that many of the gentlemen belonging to this society would cheerfully undertake to add thirty-three additional faculties to the present valuable collection of Dr. Spurzheim, and to distinguish them by as many names, as whimsically characteristic as those which the learned doctor has coined. But if Dr. Spurzheim seriously believes that this system is true,—and supposes that he is able to make one sensible disinterested person believe the same; if he imagines that a revolution must take place in the science of human nature in consequence of his discoveries; that the treatment of the sick and the insane is to be regulated according to his rules; and that children may be educated on craniological principles;—if he really be not in jest, but is honestly serious in proposing all this; then I have only one remark to make:—the English people have sometimes been charged with enjoying a kind of unnatural pleasure in gazing upon maniacs of every description; and the great anxiety which most persons, acquainted with this new science, have evinced to obtain a sight of its most strenuous advocate, generates a strong suspicion that such a charge is, indeed, but too well founded.

THE END.