Illustrations of phrenology: being a selection of articles from the Edinburg phrenological journal, and the transactions of the Edinburg Phrenological Society. With twenty-six wood cuts / Ed. by George H. Calvert. With an introduction by the editor.

Contributors

Calvert, George Henry, 1803-1889.
Phrenological Society (Edinburgh, Scotland)
Harvey Cushing/John Hay Whitney Medical Library

Publication/Creation

Baltimore: W. and J. Neal, 1832.

Persistent URL

https://wellcomecollection.org/works/rmmh298t

License and attribution

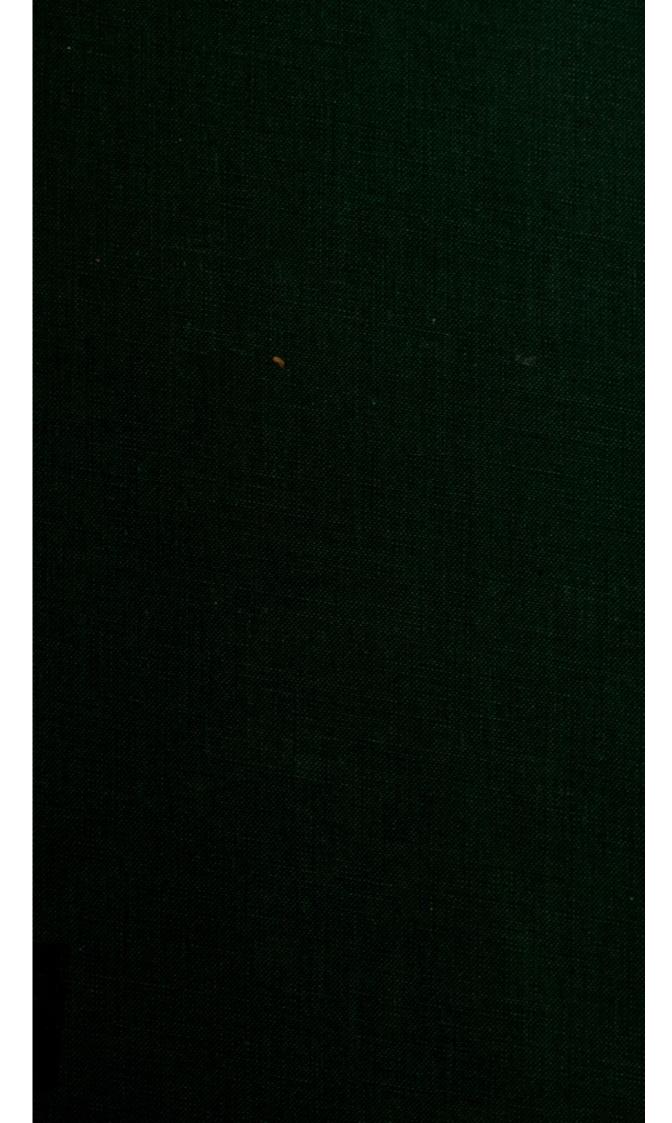
This material has been provided by This material has been provided by the Harvey Cushing/John Hay Whitney Medical Library at Yale University, through the Medical Heritage Library. The original may be consulted at the Harvey Cushing/John Hay Whitney Medical Library at Yale University. where the originals may be consulted.

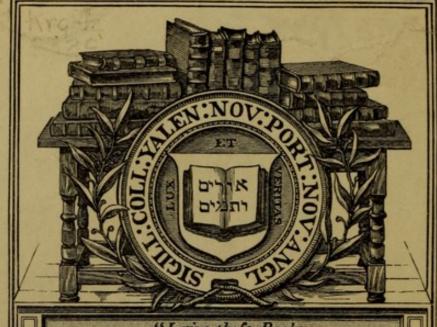
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org



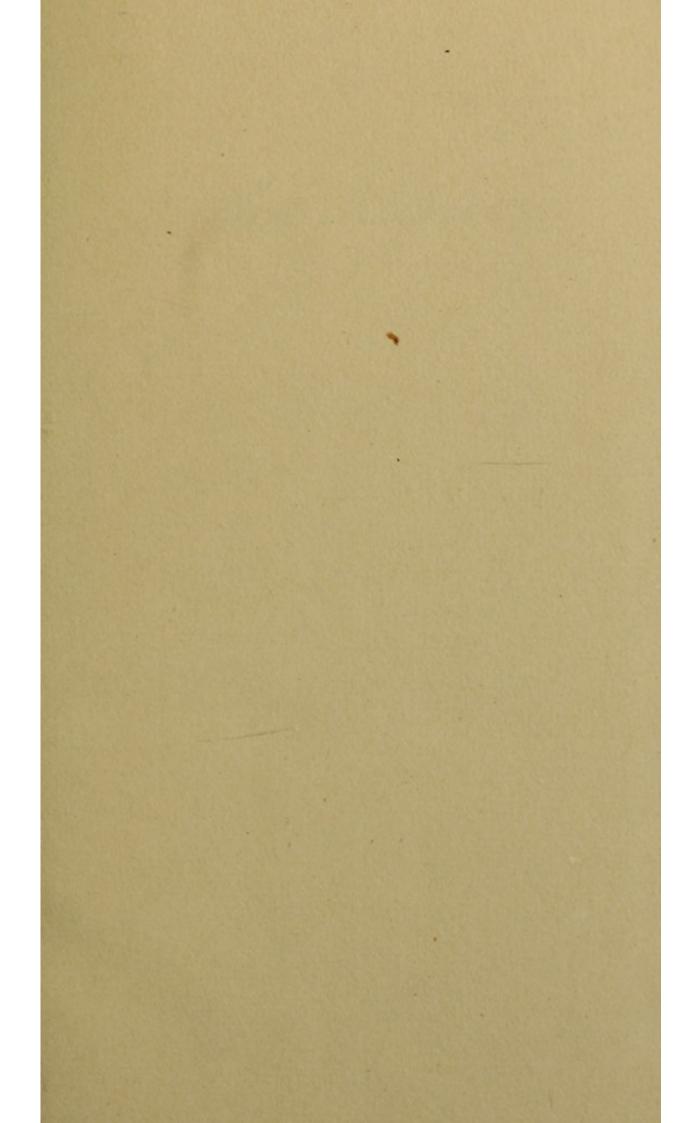


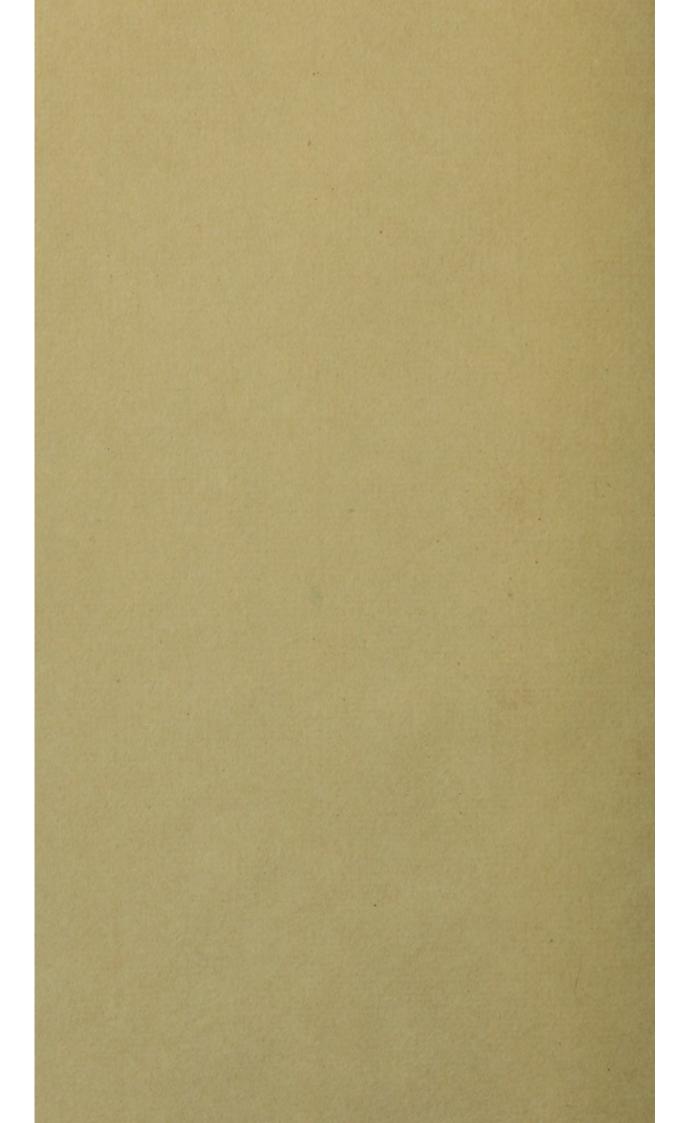
"I give these Books for the founding of a College in this Colony"

· YALE · VNIVERSITY ·

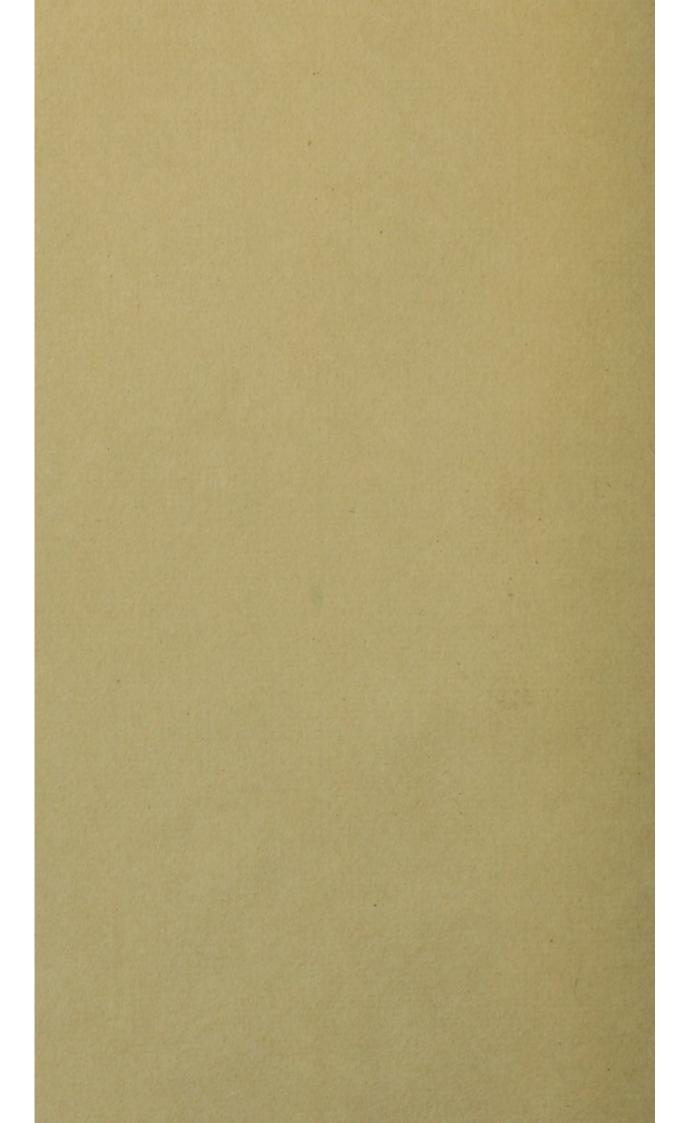
Deposited by the

Linonian and Brothers Library
Yale University Library
1908



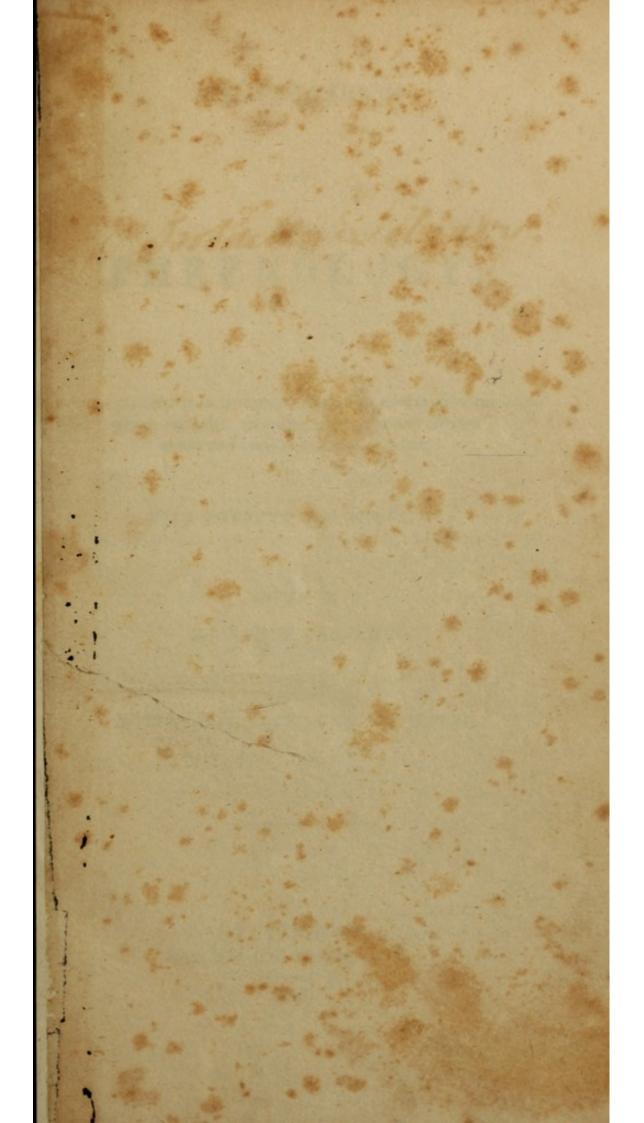


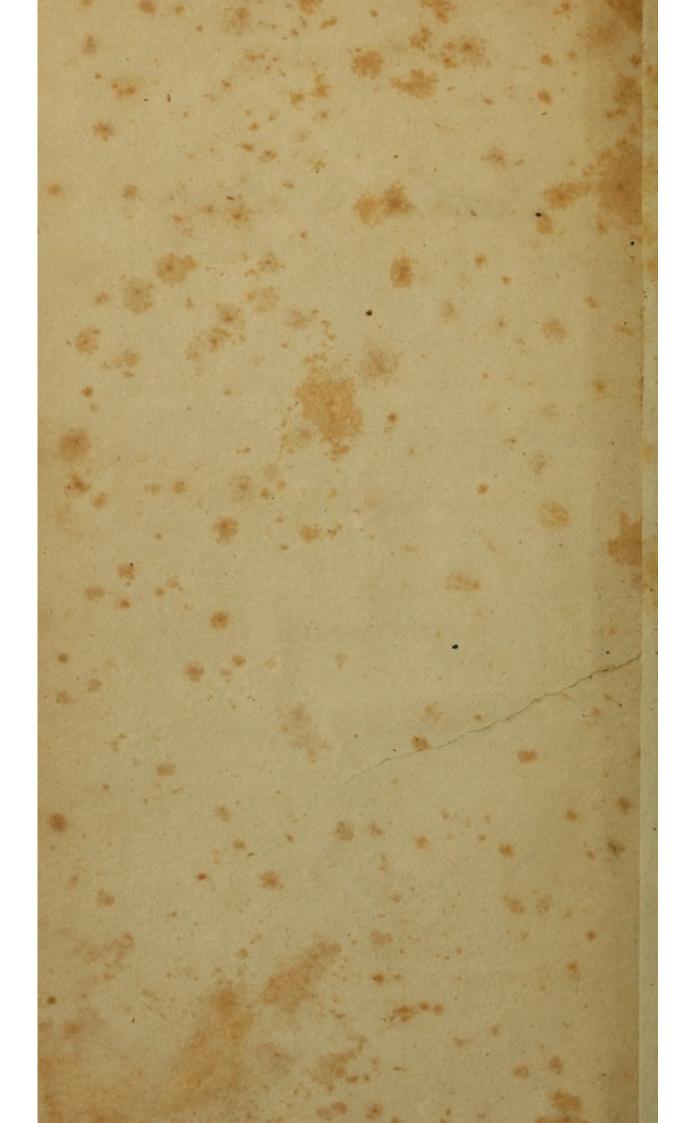
Inthus Library.



Inthus Library.

Liber





ILLUSTRATIONS

OF

PHRENOLOGY;

BEING A SELECTION OF ARTICLES FROM THE EDINBURG PHRENOLO-GICAL JOURNAL, AND THE TRANSACTIONS OF THE EDINBURG PHRENOLOGICAL SOCIETY.

WITH TWENTY-SIX WOOD CUTS.

EDITED BY

GEORGE H. CALVERT.

WITH AN INTRODUCTION BY THE EDITOR.

BALTIMORE: WILLIAM AND JOSEPH NEAL. ENTERED, according to the Act of Congress, in the year 1832, by William and Joseph Neal, in the Clerk's office of the District Court of Maryland.



BF 870 1832C

J. D. Toy, printer.

CONTENTS.

PREFACE,	
The life of Gesche Margarethe Gottfried, murderer by poison.	
The life of Gesche Margarethe Gottfried, murderer by poison.	
Compiled by Dr. F. L. Voger, her Counsel, from her own	
Confessions and from Judicial Documents. Bremen, 1831. 45	
ARTICLE II.	
Cases of Williams and Bishop, Murderers, 63	3
ARTICLE III.	
Phrenological observations on the cerebral development of William Burk, executed for murder at Edinburg, on 28th January, 1829, and on the development of William Hare, his accomplice,	0
ARTICLE IV.	
Spurzheim on Physiognomy,	8
ARTICLE V.	
Remarks on the cerebral development of King Robert Bruce, compared with his character as appearing from history. By Mr. William Scott,	4
ARTICLE VI.	
Case in which the natural talents and dispositions of the Rev. Mr. M. were inferred from the development of his brain. Communicated by Mr. BRIAN DONKIN,	10

в			
7			7
П	۱	ı	•

CONTENTS.

ARTICLE VII.

Report of Mr.	Combe's visi	t to Dublin,		1	E 300		150
---------------	--------------	--------------	--	---	-------	--	-----

ARTICLE VIII.

Dr. Gall's visit to the prisons of Berlin and Spandau, . . . 177

ARTICLE IX.

Result of an examination, by Mr. James De Ville, of the heads of 148 convicts on board the convict ship England, when about to sail for New South Wales, in the spring of 1826, 188

PREFACE.

THE editor of the present volume has been induced to prepare it, from a belief that a selection of articles from the EDINBURG PHRENO-LOGICAL JOURNAL and the TRANSACTIONS of the Phrenological Society of Edinburg, would be an acceptable addition to the works on Phrenology already in the hands of the American public. The rapid progress which the science has made, within a few years, in Europe; the sanction of many of the most distinguished European Savans to its truth and importance; the strong advocacy lately given it in our own country in the medical profession; and the increased and growing interest with which the subject is generally viewed among us, recommend the present as a suitable moment for issuing such a volume. The conviction the editor entertains of the vast importance of the Phrenological discoveries, and of the beneficial results to be produced by a diffusion of a knowledge of them, has entered largely into his motive to undertake the task.

In making the selections, those articles have been taken which contain evidence, derived directly from nature, of the truth of the phrenological positions. The editor thought that a collection of the most striking of the practical cases, reported in the Journal, would form a volume which would give satisfaction to the American Phrenologists, and at the same time, present the subject in a strong light to those who are not at all, or only partially, acquainted with the principles and pretensions of Phrenology. The means through which the discoveries were originally made, and then confirmed, viz: the observation of EXTREME CASES in the manifestation of mental qualities and in the development of the brain, and the remarking, in all such cases, of the connexion between the mind and the brain;-this same means is the most efficient for teaching to others the truths thus discovered, and of producing an effectual impression of the reality and solidity of the basis on which the whole doctrine rests.

The editor has prefixed an Introduction, in which he has endeavored to explain briefly, but distinctly, the fundamental facts and general principles of the science. His aim in the Introduction has been, both to facilitate the understanding of the illustrations from the Journal, and to give a clear idea of what Phrenology is.

The reader is advised that the wood cuts are not made by one common scale. Those only are made on the same scale which are placed in juxta-position, or between which there is a direct comparison.

BALTIMORE, Sept. 1832.

ILLUSTRATIONS OF PHRENOLOGY.

INTRODUCTION.

THAT the brain is the organ of the mind, has always been among the conjectures of physiologists. Phenomena which ordinary observation as well as scientific investigation presented, inclined them to this conclusion. With many, the impression, that the office of this part of the human frame is to be the instrument of mental manifestation, was so strong, as to lead to very positive expressions to this effect. Thus, the celebrated Dr. Cullen, of Edinburg, states, that, "The part of our body more immediately connected with the mind, and therefore more especially concerned in every affection of the intellectual functions, is the common origin of the nerves; which I shall, in what follows, speak of under the appellation of the brain." The same author says again; "we cannot doubt that the operations of our intellect always depend upon certain motions taking place in the brain." Dr. Gregory, when speaking of memory, imagination, and judgment, observes, that, "although at first sight these faculties may appear to be so purely mental as to have no connection with the body, yet certain

diseases which obstruct them prove, that a certain state of the brain is necessary to their proper exercise, and that the brain is the primary organ of the internal powers." The great German physiologist, BLUMEN-BACH, says, "that the mind is closely connected with the brain, is demonstrated by our consciousness, and by the mental disturbances which ensue upon affections of the brain." MAGENDIE, an eminent living physiologist, asserts, "The brain is the material instrument of thought. This is proved by a multitude of experiments and facts." Dr. Neil Arnot, in his recent work on natural philosophy, writes as follows: "the laws of mind which man can discover by reason, are not laws of independent mind, but of mind in connection with body, and influenced by the bodily condition. It has been believed by many, that the nature of mind separate from body, is to be at once all-knowing and intelligent. But mind connected with body, can only acquire knowledge slowly, through the bodily organs of sense, and more or less perfectly, according as these organs and the central brain are perfect. A human being born blind and deaf, and therefore remaining dumb, as in the noted case of the boy MITCHELL, grows up closely to resemble an automaton; and an originally mis-shapen or deficient brain causes idiocy for life. Childhood, maturity, dotage, which have such differences of bodily powers, have corresponding differences of mental faculty: and as no two bodies, so no two minds, in the external manifestations, are quite alike. Fever, or a blow on the head, will change the most gifted individual into a maniac, causing the lips of virgin innocence to utter the most revolting obscenity, and those of pure religion to speak the most horrible blasphemy: and most cases

of madness and eccentricity can now be traced to a peculiar state of the brain." A writer on the nervous system, in the 94th number of the Edinburg Review, says, "Almost from the first casual inspection of animal bodies, the brain was regarded as an organ of primary dignity, and more particularly in the human subject-the seat of thought and feeling, the centre of all sensation, the messenger of intellect, the presiding organ of the bodily frame." "All this superiority, (of man over the brutes) all these faculties which elevate and dignify him, this reasoning power, this moral sense, these capacities of happiness, these high aspiring hopes, are felt, and enjoyed, and manifested, by means of his superior nervous system. Its injury weakens, its imperfection limits, its destruction (humanly speaking) ends them."*

The opinion, then, in regard to the relation between the brain and the mind, at first adopted from general reasoning, has been found to rest on visible individual facts. From being a probable inference it has become a certain deduction. That the nervous mass called the brain is the organ of mind, is now an admitted position in physiological science—admitted without reference to the discoveries of Gall,† and by those who

^{*}These quotations are originally made by Mr. Combe.

[†]The results of Gall's investigations had, however, their influence in producing the conviction as to the general function of the brain before his discovery of the appropriation of separate portions of the brain to the manifestation of individual faculties of the mind had been admitted. In like manner, the influence of the phrenological philosophy is perceptible in the critical and ethical opinions of the present day. Truth, like virtue, is so powerful and insinuating, that it makes itself felt even by those who do not appreciate its value nor acknowledge its supremacy.

are unacquainted with the nature of the facts he was the first to bring to light. It is, in short, a generally received truth, that has been reached by that means which only in modern times has been used, and to which alone the rapid advance of all the sciences within the last fifty years, is to be ascribed, viz: the observation and comparison of facts.

This truth is the basis of the phrenological doc-

It is a common opinion (so liable to delusion and extravagance is the human mind) that Phrenology is something extraordinary, out of the way—something totally different from and opposed to all that is already known. Here, on the contrary, we find the fact to be, that it has as its foundation, a simple undisputed position; one that was ascertained to be a constituent part of the harmonious system of natural laws the moment that men had learnt how to study nature. By pursuing the natural process that has resulted in the discovery of this law, it is confidently believed, that all candid inquirers will be led to consider as alike clearly demonstrable the existence of other laws relating to the brain and the mind.

The brain, then, is the organ through which the mind acts—the instrument of thought and feeling. This, independently of Phrenology, may be stated to be an established uncontroverted fact. The first principle of Phrenology is identical with it. The second principle is, that the mind consists of distinct primitive faculties, and that each faculty manifests itself through a separate portion of the brain. This position is peculiar to Phrenology. Let us examine how far it accords with known phenomena and with other discovered laws of physiology. From the in-

valuable work of Mr. George Combe of Edinburg, the third edition of "A System of Phrenology," I derive the following observations bearing on this point.

- 1. "In the economy of the human body it is ascertained, that different functions are never performed by the same organ, but, the reverse: each function has an organ for itself: the stomach digests food, the liver secretes bile, the heart propels the blood, the eyes see, the ears hear, the tongue tastes, and the nose smells. Nay, on analyzing these examples, it is found that wherever the function is compound, each element of it is performed by means of a distinct organ; thus, to accomplish taste, there is one nerve whose office is to move the tongue, another nerve whose duty it is to communicate the ordinary sense of feeling to the tongue, and a third nerve which conveys the sensations of taste. A similar combination of nerves takes place in the hands, arms, and other parts of the body, which are the organs of feeling; namely, one nerve gives motion, another feeling, and a third conveys to the brain the condition of the organ; and, except in the case of the tongue, all these nerves are blended in one common sheath.
 - 2. "Genius is almost always partial, which it ought not to be, if the organ of the mind were single. A genius for poetry, for mechanics, for drawing, for music, or for mathematics, sometimes appears at a very early age in individuals, who, in regard to all other pursuits, are mere ordinary men, and who, with every effort, can never attain to any thing above mediocrity.
 - 3. "The phenomena of dreaming are at variance with the supposition of the mind manifesting all its faculties by means of a single organ, while they are quite consistent with, and explicable by, that of a plurality of

organs. In dreaming the mind experiences numerous vivid emotions, such as those of fear, joy, affection, arising, succeeding one another, and departing without control from the intellectual powers;-or, it is filled with a thousand varied conceptions, sometimes connected and rational, but more frequently disjointed and absurd, and all differing widely from the waking operations of the mind, in wanting harmony, consistency, and sense. These phenomena harmonize remarkably with the notion of a variety of faculties and organs, some of which, being active, would communicate these ideas and feelings which constitute a dream, while others, remaining asleep, would by their inactivity, permit that disordered action which characterizes the pictures formed by the fancy during sleep. Were the organ of mind single, it is clear, that all the faculties should be asleep or awake to the same extent at the same time; or, in other words, that no such thing as dreaming could take place.

4. "The admitted phenomena of partial idiocy and partial insanity, are so plainly and strongly in contradiction with the notion of a single organ of mind, that PINEL himself, no friend to phrenology, asks if their phenomena can be reconciled to such a conception.

"Partial idiocy is that state in which an individual manifests one or several powers of the mind with an ordinary degree of energy, while he is deprived to a greater or less extent of the power of manifesting all the others. Pinel, Haslam, Rush, Esquirol, and, in short, every writer on insanity, speaks of the partial development of certain mental powers in idiots; and Rush, in particular, not only alludes to the powers of intellect, but also to the partial possession of the moral faculties. Some idiots, he observes, are as

remarkable for correct moral feelings as some great geniuses are for the reverse.

"Partial insanity, or that state in which one or more faculties of the mind are diseased, without affecting the integrity of the remainder, is known by the name of Monomania, and appears, equally with the former, to exclude the possibility of one organ executing the functions of all the mental faculties; for the argument constantly recurs, that if the organ be sufficiently sound to manifest one faculty in its perfect state, it ought to be equally capable of manifesting all,—which, however, is known to be in direct opposition to fact."

Is, then, the second principle of phrenology in opposition to what is already known? Is it contradicted by the universally observed phenomena relating to the exhibition of mental qualities? Is it not, on the contrary, corroborated by a vast variety of known facts connected with the operations of the mind? Is it not in analogy with the laws already discovered to exist in the human economy?

It is ascertained, that all the known functions of the body are performed by different organs; and it is admitted, that the function of that part of the body called the brain is, to be the organ of mind: it is found, that nerves in close contact, enveloped in one common sheath, have totally distinct functions; and the anatomy of the brain shows it to consist of many nerves: it is ascertained, that one nerve never performs two functions. What should be inferred from these facts? Are we not impelled to the conclusion that the brain, in fulfilling the general office of organ of the mind, performs this duty through the appropriation of separate nerves to different mental faculties? That there are distinct faculties of the mind will not

be disputed. The feeling of attachment to offspring and the power of multiplying nine by seven are as distinct from one another as the faculties of sight and hearing. Are not the sense of justice and the capacity to recollect places as different in their nature as sensation and motion? the latter have been discovered to be performed by different nerves running side by side: is not the inference direct that the former are so likewise, knowing, as we do, that through the brain they are performed, and that the brain consists of a plurality of nerves?

I appeal to the reason of the candid reader, and ask him—is there any thing unreasonable or eccentric in the phrenological position, that the mind, whose organ is the brain, manifests its various faculties through different portions of the brain? It is not hazarding too much to say, that had not Gall anticipated the march of science, the development of the laws of the human organization consequent upon the severe method of investigation latterly introduced, and the zealous industry and philosophical spirit with which science is now cultivated, would certainly in a short time have, by regular process of discovery, led to those results which the genius of Gall suddenly seized by one of those quick grasps of intelligence which genius alone can make.

Having noted the accordance of the second fundamental principle of Phrenology with well known phenomena and established laws, let us endeavor to obtain a clear understanding of its force and nature.

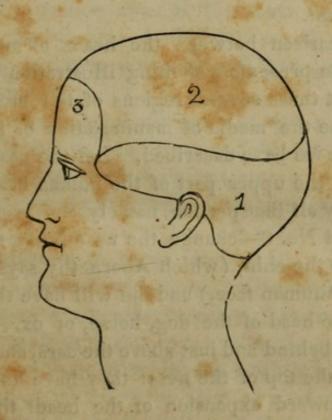
Gall arrived at the conclusion, that different portions of the brain were dedicated to the manifestation of particular faculties, by observing the unfailing coincidence between the unusual prominence of particu-

lar parts of the cranium, and the existence in more than common strength of particular feelings or talents. The plan of this introduction will not permit me to enter into the interesting and instructive detail of his labours. After he had, by a persevering course of observation and experiment, satisfied himself of the relation between certain faculties of the mind and certain portions of the brain, he, for the first time, directed his attention to the structure of the brain.-His examinations and dissections, and those of Dr. Spurzheim, who became associated with him in 1804, resulted in the discovery that the nervous mass of the brain consists of fibres running from that part of the base of it, (as from a common starting point,) where the junction between the spine and the brain takes place, to the surface. At the surface they form the convolutions observed when the skull is removed. Here was a totally new discovery in anatomy: nothing was before known of this fibrous structure of the brain. Mark now how truth strengthens truth .-GALL, urged by the disclosures which the developments of the brain at its surface had made, to investigate its interior, discovered in its structure, (hitherto unknown,) a perfect conformity to what the most extensive observations and often repeated experiments had convinced him must be its functions. Dr. Spurz-HEIM, who, as Mr. Combe observes, "has not only added many valuable discoveries to those of GALL, in the anatomy and physiology of the brain, but formed the truths brought to light, by their joint observations, into a beautiful and interesting system of mental philosophy," devoted himself at this time especially to the anatomy, which he thoroughly investigated, and he explained the best method of dissecting the brain,

and exposing its parts. I refer the reader to his valuable work, entitled "The Anatomy of the Brain." GALL and Dr. Spurzheim always found, on removing the skull, that the brain presented a form corresponding to that which the skull had exhibited during To this fact other physiologists and anatomists bear testimony. MAGENDIE says: "The only way to measure the volume of the brain in a living person, is, to measure the dimensions of the skull; every other means, even that proposed by Camper, is uncertain." Mr. CHARLES BELL observes:- "Thus, we find that the bones of the head are moulded to the brain, and the peculiar shapes of the bones of the head are determined by the original peculiarity in the shapes of the brain." The celebrated Cuvier says:-"In all mamiferous animals the brain is moulded in the cavity of the cranium, which it fills exactly; so that the description of the osseous part affords us a knowledge of at least the external form of the medullary mass within."

We have, then, the structure of the brain disclosed to us: we find its nervous fibres, originating at the medulla oblongata, or point of junction between the spinal marrow and the brain, running in all directions to the surface, and there forming the convolutions: and we know that the skull is a faithful index of the general size of the brain, and of the development of particular parts of it. It is affirmed, that those fibres which terminate in the posterior and lateral surface of the base of the brain are the organs of those feelings denominated, from their nature, PROPENSITIES; that those which run in a vertical direction and terminate in the surface of the upper part of the brain are the organs of another class of feelings, differing some-

what in their general character from the first, and called SENTIMENTS; and that the fibres which terminate in the surface of the forehead are the instruments through which the INTELLECTUAL faculties perform their operations.* It must be borne in mind that the brain is double, being divided lengthwise into two equal similar hemispheres by a membranous partition running vertically and called the falciform process; so that each mental faculty, like the external senses of sight and hearing, has two organs. Here is the outline of a head with the three above described divisions indicated—the region marked 1 being that portion of the surface where the nervous fibres devoted to be the organs of the propensities terminate, 2 that of the sentiments, and 3 presenting a part of the forehead.



*This classification is not hypothetical. It has not been made by Gall or Spurzheim: it has been discovered. When Gall had made a certain progress in his researches, he observed, that of the mental qualities whose connexion with particular portions of the

It has been stated that all these fibres begin at the medulla oblongata, or point of junction between the brain and spine; consequently, in order to learn their relative lengths, we must ascertain the position of this common starting point. Now, the orifice of the ear is always in a fixed relation to this point, being in every head directly opposite to the anterior edge of the orifice through which the junction takes place; so that we have in the living head an external index by which we can determine the relative development of these general regions of the brain. If, for instance, in a given head, the ear is placed far back, we know that the nerves which terminate in the region marked 3, are long in comparison with those of No. 1, and that the mental constitution is in conformity with this development.

A comparison between the heads of animals and that of man presents a striking illustration of the position, that these several regions of the brain are devoted to be the media of manifestation of the classes of faculties we have described. Let the reader figure to himself the upper part of the human brain removed—nearly all that portion, namely, comprehended in No. 2, and No. 3—change the nose into a snout, and take away the chin, (which Abernethy says is peculiar to the human face,) and he will have the general form of the head of the dog, horse, or ox. All their brain lies behind and just above the ears, and between them and the top of the nose: they have no forehead, nor no upward expansion of the head: the portion

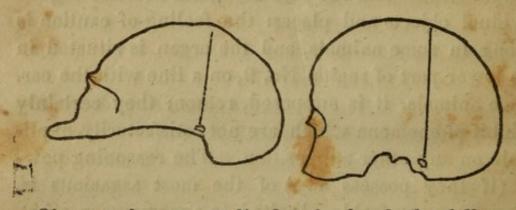
brain he felt himself authorised to look upon as certain, those between which there was a sympathy or resemblance had their organs near to one another. Thus, this general arrangement of the organs has developed itself out of the individual discoveries.

also of their brain anterior to the ears is narrow and low. Now, what are the faculties we have stated to be manifested through this remaining portion of the brain? Chiefly the propensities-all of which are possessed by some animals, and most of them by many: the small portion of anterior brain, corresponds (as the reader will hereafter see,) to the ascertained position of the organs of several of the simplest intellectual faculties-those of perceiving and recollecting individual objects and places: the feeling of caution is strong in some animals, and the organ is situated in the lower part of region No. 2, on a line with the ear. Some animals, it is supposed, reason: they certainly exhibit phenomena which are not satisfactorily explicable on any other supposition. The reasoning power (if they possess any) of the most sagacious is, however, very feeble-limited to a momentary effort. No animal can trace cause and effect to the extent of keeping up a fire.

The peculiar mental attributes of man are:—the capacity of distinguishing colours, of observing and producing symmetrical arrangement among physical objects, of counting and making numerical combinations, of noting the passage of time—the adaptation of cerebral organization to these intellectual powers gives the breadth immediately above the eyebrows peculiar to the human head;—the capacity of abstract reasoning, of tracing back causes into the distant past, and foreseeing consequences in the remote future—corresponding to which is his lofty expanded forehead; the sentiments of the Beautiful, of Hope, of Wonder, and the elevated ones of Benevolence, Veneration, and Conscientiousness—whose appropriate cerebral organs expand and enlarge the top of the head. In

order to make the comparison between the human and the animal head more complete, I have anticipated somewhat the enumeration of the individual faculties given at the conclusion of the introduction. The reader is referred to it.

To illustrate this position by a comparison of human heads, you have here the profile of two which present a strong contrast in their general developments.



Observe the perpendicular forehead, the full swell and distance from the orifice of the ear of the upper outline, in the one on the right; and the rapidly retreating forehead, (it scarcely deserves the name,) and shallowness of the upper region in the second: the only resemblance between the two is in the development of the region of the propensities .- The first is the head of Raphael, one of the most extraordinarily gifted men whose character is recorded in historyendowed with a superior intellectual capacity, with the finest susceptibilities of the beautiful, the true, and the good, and with that strength of animal impulse which communicates the energy and warmth of character that are essential to make a man useful and attaching. Raphael, although he died at the early age of thirty-three, has left an imperishable fame. - The other is the head of one of the natives of New Holland .-Sir Walter Scott describes them in the following lan-

guage:-"The natives of New Holland are, even at present, in the very lowest scale of humanity, and ignorant of every art which can add comfort or decency to human life. These unfortunate savages use no clothes, construct no cabins or huts, and are ignorant even of the manner of chasing animals, or catching fish, unless such of the latter as are left by the tide, or which are found on the rocks; they feed upon the most disgusting substances, snakes, worms, maggots, and whatever trash falls in their way. They know, indeed, how to kindle a fire; in that respect only they have stept beyond the deepest ignorance to which man can be subjected; but they have not learned how to boil water; and when they see Europeans perform this ordinary operation, they have been known to run away in great terror."

My design in these few introductory pages is merely to explain succinctly the first principles of Phrenology, to point out to the reader, in a general manner, their conformity with other known principles and ascertained laws in the economy of nature, and to direct the attention to hitherto unobserved, or unappreciated facts. All that I, therefore, can do further in explanation of the law, that the mind consists of distinct faculties, and that each one has its appropriate separate organ in the brain, will be, to enumerate the faculties, state in a few words the sphere of action of each, and indicate on a representation of the cranium the part of the surface where each individual organ terminates.

This enumeration I will leave for the conclusion, and proceed now to make some remarks on the third principle of Phrenology, which is, that other things being equal, the strength of each particular faculty is in proportion to the size of its organ.

Does this principle involve any new element?-Does the admission of its truth require the abandonment of any other established principle? Will the experienced naturalist, on hearing it announced, exclaim-"Here is a new doctrine in physiology, I know of nothing analogous to it, I doubt its correctness?"-Will he not, on the contrary, say-"Show that the mental faculties manifest themselves through physical organs, and this follows of course; it is but the application of a law of nature operating universally?" Let us, to test its conformity to discovered laws of organization, inform ourselves of what is the effect of size with other nerves: illustrations drawn from the same department will be most apposite. From Mr. Combe's third edition of his "System of Phrenology," I derive the following facts, stated on the authority, chiefly, of DES MOULINS, a celebrated French physiologist.

"Speaking generally," says Mr. Combe, "there are two classes of nerves distributed over the body, those of motion and those of sensation or feeling. In motion, the muscle is the essential or chief apparatus, and the nerve is required only to communicate to it the impulse of the will; but in sensation the reverse is the case,—the nerve itself is the chief instrument, and the part on which it is ramified is merely a medium for putting it in relation with the specific qualities which it is destined to recognize."

"The horse and ox have much greater muscular power, and much less intensity of sensation in their limbs than man, and the nerves of motion going to the four limbs in the horse and ox are at least one third more numerous than the nerves of sensation going to the same parts; whereas in man the nerves of motion going to the legs and arms are a fifth or a sixth part

less than the nerves of sensation distributed on the same parts. In like manner, in birds and reptiles which have scaly skins and limited touch, but vigorous powers of motion, the nerves of sensation are few and small, and the nerves of motion numerous and large. Farther, wherever nature has given a higher degree of sensation or touch to any particular part than to the other parts of an animal, there the nerve of sensation is invariably increased; for example the single nerve of feeling ramified on the tactile extremity of the proboscis of the elephant exceeds in size the united volume of all the muscular nerves of that organ. Birds require to rise in the air, which is a medium much lighter than their own bodies. To have enlarged the size of their muscles would have added to their weight, and increased their difficulty in rising. Nature, to avoid this disadvantage, has bestowed on them large nerves of motion which infuse a very powerful stimulus into the muscles, and increase their power of motion. Fishes live in water, which is almost in equilibrium with their bodies. To them nature has given large muscles, in order to increase their locomotive powers, and in them the nerves of motion are less. In these instances, nature curiously adds to the power of motion, by increasing the size of that part of the locomotive apparatus which may be enlarged most conveniently for the animal; but either the muscle or the nerve must be enlarged, otherwise there is no increase of power.

"In regard to the external senses, it is proper to observe that every external sense is composed, first, of an instrument or medium on which the impression is made—the eye for example; and, secondly, a nerve to conduct that impression to the mind or brain. The

same law of size holds as to them: a large eye will collect more rays of light: a large ear more vibrations of sound; and large nostrils more odorous particles than small ones." In support of this position Mr. Combe cites Monro, Blumenbach, Soemmering, Cuvier, Magendie, Georget, and states that many other physiologists might be mentioned. I will quote from him only one more illustration of it.

"The organ of sight affords a most interesting example of the influence of size. The office of the eyeball is to collect the rays of light. A large eye, therefore, will take in more rays of light, or, in other words, command a greater sphere of vision, than a small one. But to give intensity or power to vision, the optic nerve is also necessary. Now, the ox placed upon the surface of the earth is of a heavy structure and ill fitted for motion; but he has a large eye-ball, which enables him to take in a large field of vision without turning; but as he does not require very keen vision to see his provender on which he almost treads, the optic nerve is not large in proportion to the eyeball. The eagle, on the other hand, by ascending to a great height in the air, enjoys a wide field of vision from its mere physical position. It looks down from a point over an extensive surface. It has no need, therefore, of a large eye-ball to increase artificially its field of vision; and, accordingly, the ball of its eye is comparatively small. But it requires, from that height, to discern its prey upon the surface of the earth, and not only is its distance great, but its prey often resembles in color the ground on which it rests; great intensity of vision, therefore, is necessary to its existence. Accordingly, in it the optic nerve is increased to an enormous extent. Instead of forming a

single membrane lining only the inner surface of the posterior chamber of the eye, as in man and animals of ordinary vision, and consequently only equalling in extent the sphere of the eye to which it belongs, the retina or nerve of vision in these quick-sighted birds of prey is found to be composed of a great number of tolds, each hanging loose into the eye, and augmenting, in an extraordinary degree, not only the extent of nervous surface, but the mass of nervous matter, and giving rise to that intensity of vision which distinguishes the eagle, falcon, hawk, and similar animals."

These facts are, doubtless, sufficient to satisfy the reader that the principle of Phrenology,—that power of function is in proportion to the size of the organ,—so far from forming an exception to the known laws of nature, is in perfect harmony with them; and that, indeed, reasoning from the analogy of laws ascertained to govern organized matter generally, would have led to the opinion, that it is a principle which would hold good in the cerebral organs.

This principle applies both in comparing the brains of different individuals, and in comparing the developments, of the several regions and of the individual organs of the same brain.* We have here the representations of two heads.

*In making practical application of this law, several circumstances are to be attended to: first, the size of the whole brain; secondly, the comparative development of the several general regions; and lastly, the comparative development of individual organs. These points must be successively observed. To do this, the average size of the adult human brain, and the average relative developments of the general divisions of it, must be ascertained as a standard of comparison.



These two heads stand at the two extremes of human cerebral organization: the first presents the most noble and beautiful outline: the second is scarcely human in its form. The minds manifested through them were equally unlike: the first is the head of the great German Göthe: the other, that of an idiot.

The broad phrenological doctrine is, that a small brain CANNOT manifest a powerful capacious mind;* and that, individuals with brains of similar size, other things being equal, will be of equal mental capacity. By other things being equal is meant, similarity in temperament and healthfulness of brain. The influence of temperament is admitted; but this admission does not weaken the force of the principle. The influence, also, of education and exercise is great in rendering one mind more efficient than another, when the brains are in all respects alike; but this does not at all affect our position, which is, that two such brains are equal in capacity. No original vivacity of temperament can supply the absence of size in the brain; and no cultivation can of itself communicate power of function. Temperament may add activity to the mind, and education will increase its strength and facility of operation; but the effects of both are limited—the limit being original organization. When I say the effects of education are limited, I speak relatively: I compare art with nature. Education is an art, and one which, when skilfully practised, can produce great results; but the degree of its results is in all cases dependent upon the quality of the material it has to work upon. A sculptor can bring out of the coarsest block a speaking statue; but he requires fine

^{*}The word mind is always used to embrace both feeling and intellect.

grained marble to produce a Venus. A skilful education can make much of the worst subject. What do we not see discipline and training do on a dog with his few narrow capacities? how immeasurably greater may be the effect where that which is operated on is the vast and various capabilities of man. Education develops, it does not create: it works with given, finite materials: it is, in short, merely an art:—it is an art, too, which through Phrenology is destined to be perfected.

I will conclude what I have to say on this principle of Phrenology with one more illustration of it. It is this,—that, leaving out of the question all modifying influences, to which the brain like all else in nature is liable, we assert unconditionally, that all men of great and powerful minds—men

"who tower in the van Of all the congregated world,"

have large brains. We say that Washington, Cæsar, Bacon, Bonaparte, Franklin, Shakspeare, must have had large brains.

The principle applies in like manner and more unreservedly (as there is no modifying influence of temperament) to the power of function in the different
regions and organs of the same brain. No skill of
education or control of outward circumstances could
ever enlarge to excellence the intellectual capacity of
an individual with a brain like that of the New Hollander; nor depress to inferiority that of an individual
with one like Göthe. The same holds good with
single organs and faculties.

I will now enumerate the faculties of man as ascertained through the discovery of the connection between individual capacities of mind and separate por tions of the brain. Each one of the following enumerated faculties has been in this way disentangled, as it were, from the general mass of mind. Each one here asserted to exist as an independent, primitive, inborn, mental power, has been verified by a multitude of observations and experiments made by various persons. I therefore state results, not suppositions.*

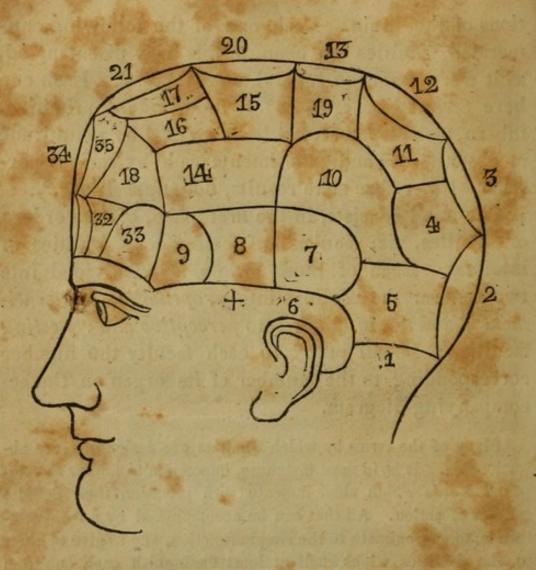
The mind consists, in the first place, of two orders of faculties, viz: faculties of feeling and faculties of intellect. Each of these orders is subdivided into two genera: the feelings into propensities and sentiments; and the intellect into perceptive and reflecting faculties. I shall prefix to each faculty the number corresponding to the number of its organ on the accompanying diagram.

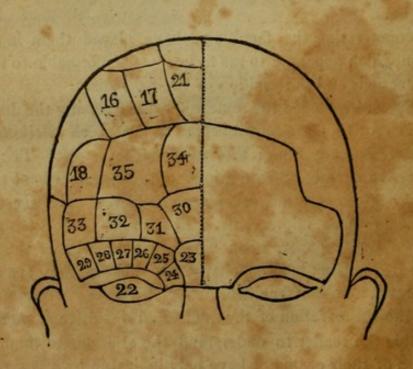
*Many of the terms by which faculties are designated are objectionable. It is, in most instances, impossible to find or to compound words which shall indicate with precision their definite spheres of action. All that can be accomplished by a nomenclature is, to approximate to the simple function, and to give epithets to the faculties which shall at least distinguish each one from the others.

In enumerating the faculties, I have placed them in that succession which appeared to me to be most conformable to their relative functions and the position of their organs.

I have not included the external senses among the intellectual faculties, for they are not, it seems to me, at all intellectual: they do not see into any thing: they do not form ideas. They are but the passive mirrors on which impressions from without are made: the internal senses, the perceptive intellectual faculties, take cognizance of these impressions. The external senses are like a sheet of white paper, upon which the objects of the external world are written; but the characters thus written are read and interpreted by other faculties.

As the enumeration of the individual faculties is merely made to enable the reader to understand the allusions to them and the position of their organs, I have only indicated by a few words the function of each.





ORDER I.

FEELINGS.

The general characteristics of the feelings or affective faculties are, in the language of Dr. Spurzheim, as follows: "They have their origin from within, and are not acquired by any external impressions or circumstances. They must be felt to be understood, for they cannot be taught: in themselves they are blind and without understanding: they do not know the objects of their satisfaction, and act without reflection."

GENUS I.

Propensities.

There are nine distinct Propensities, each having its specific nature and independent sphere of action: they are all common to man and animals.

- 1. Amativeness. The feeling of physical love.
- 2. Philoprogenitiveness. Love of offspring and children generally.
- 3. Concentrativeness. It gives the desire for permanence in place, and for permanence of emotions and ideas in the mind.
- 4. Adhesiveness. Attachment: friendship and fondness for social intercourse result from it.
- 5. Combativeness. Courage to meet danger, to overcome difficulties, and to resist attacks.
- 6. Destructiveness. Desire to destroy. It is very discernible in carniverous animals.
- 7. Secretiveness. It gives the disposition and the power to conceal. It disposes to be secret in thought word and deed.

- 8. Acquisitiveness. Desire to possess, to accumulate.
- 9. Constructiveness. Propensity to build, to construct: it gives dexterity in the use of tools in the mechanical arts, and of the brush and chisel in the arts of painting and sculpture.*

GENUS II.

Sentiments.

These feelings are accompanied by an emotion of a peculiar kind, and hence they are called sentiments to distinguish them from the mere propensities.

- 10. Cautiousness. This sentiment is the basis of fear: it is the chief ingredient in prudence.
- 11. Love of Approbation. Desire of the good opinion of others, of fame, of glory.
- 12. Self-Esteem. Self-interest; it gives a love of power.
 - 13. Firmness. Fortitude, perseverance.
- 14. Ideality. Love of the beautiful, desire of excellence; it is the basis of the poetical.
- 15. Hope. It produces a tendency to look forward to the future with confidence and reliance.
- 16. Wonder. This sentiment gives a desire of novelty; it delights in the marvellous.
- 17. Imitation. Gives a tendency to imitate; it is necessary to the actors particularly, and the artist.
- 18. Wit. This sentiment gives a tendency to view objects and events in a ludicrous light.
- *In the bust I have followed that in Mr. Combe's third edition, by marking thus + the position of a conjectured organ of appetite for food, a feeling considered, by Drs. Gall and Spurzheim and by Dr. Hoppe of Copenhagen, distinct from mere hunger.

- 19. Conscientiousness. The desire to act justly; the love of truth.
- 20. Veneration. This sentiment produces respect, and reverence for what is great and good.
- 21. Benevolence. Desire of the happiness of others; sympathy with all living creatures: it produces kind ness, charity.

ORDER II.

INTELLECTUAL FACULTIES.

The essential nature of these faculties is to know. By means of them we learn the existence, the qualities and the relations of external objects, and of our own minds. They are divided into two classes—the perceptive and the reflecting faculties.

GENUS I.

Perceptive faculties.

- 22. Language. Power of acquiring the artificial signs of things and ideas—words.
- 23. Individuality. Perceives* individual physical objects.
- 24. 25. 26. 27. These four faculties perceive the four physical qualities inseparable from every object, viz: Form, Size, Weight, Colour.
- 28. Order. Perceives the physical arrangement of objects.
- * I state only the simplest mode of activity of these faculties, which is perception. The other modes are memory and imagination. They retain and recall what they have perceived;—this is memory: and they form, out of the materials observed by perception, and stored up by memory, new combinations;—this is imagination.

- 29. Number. Power of counting and combining numbers.
 - 30. Eventuality. Perceives facts and events.
- 31. Locality. Perceives the relative position of places.
 - 32. Time. Perceives the passage of time.
- 33. Tune. Perceives musical sounds and their relations.

GENUS II.

Intellectual faculties.

- 34. Comparison. Power of discovering analogies and resemblances.
- 35. Causality. Traces the dependencies of phenomena, and the relation of cause and effect.

Such are the fundamental faculties which constitute the human mind, as they have been deduced from the discovery of the connexion between mental powers and cerebral organs. Such is a sketch of the system that has been evolved by the laborious cultivation of this great discovery—a system designated by the term Phrenology, formed from the two Greek words of mind, and hopos discourse. Let us take a rapid survey of the outline of the system whose parts have been thus put together. Let us (for a moment) dismiss from our thoughts the idea of the dependence asserted to have been discovered between man's mind and his material organization, and, considering the latter as merely an auxiliary scaffolding, direct our view to the edifice behind it, and note its proportions.

Its basis, observe, is formed of pure animal feelings. Scrutinize them, and you will find that each one is primarily essential to the existence of man: they con-

stitute him an animal and a social being: through them, he perpetuates his race, protects, preserves himself, and is bound to his fellow-creatures. are direct impulses acting on specific external objects:* their action is first necessary, before the rest of his being can be developed: they are the roots which fix him firmly in his allotted place. Such are the propensities. Ascending from them, the first faculties in the enumeration are those whose activity produces wariness and prudence; the desire to be well considered by his fellows; self-respect; and resolution.-Here is a wide enlargement of man's nature. These are feelings that imply-nay, that require, the pre-existence of others. Not so the propensities. Each propensity, (although its influence and aid are indirectly felt by other faculties,) could perform its individual function if there existed no other feeling: it acts right out, in a straight line, as it were, upon a specific class of external objects. These, on the contrary, are moved to activity in concurrence with other faculties, whose action they modify. To be cautious, for instance, implies powers already put in motion, whose movements caution is to affect. Love of children requires only an external object, to allow full scope to its impulse.-We find, then, the being of man enlarged and made complicated by these few additional feelings. Pursue the enumeration. How much more enlarged, and how elevated and refined is his nature by the presence of those which next present themselves:-susceptibility to the beautiful and a striving towards perfection; bright confidence in life; eager curiosity for and delight in the novel and striking;

^{*}Secretiveness is a partial exception to this, it being a general propensity to conceal.

power of imitating the beauties and contrivances in nature; joyous pleasure extracted even from ordinary events. And now, mark the nature and sphere of action of the three remaining feelings. The firstthe vigilant guide of all others, the never-sleeping watch on their seducing impulses, the unfailing detecter and unpardoning judge of their errings; the second—lifting man up to reverence for the great and good, purifying him with the spirit of obedience and submission; the last-imbuing him with universal love, ever prompting to take from himself and give to others, to judge no fellow creature, and to pity alike the most sinful and the most miserable; and all threeembracing with their benign power the multiplied relations of man's complex being-on his inmost motives a supreme tribunal, whose law is—be just, be humble, be merciful. These are the faculties of feeling. Review in the same cursory manner those of intellect. The first is the power of creating vocal signs to represent the sensations and ideas which any and all of the other mental powers may produce; then the faculties which take cognizance of individual objects in the physical world, and of their four essential physical qualities. Here is presented as the basis of the intellectual capacity of man a class of mental powers whose destination is, to give him knowledge of the outward world-to enable him to know the vast variety of physical existences with which he is placed in contact. The agency of these faculties is limited to this simple function: they furnish ideas of matter and its necessary qualities: they thus supply the material which is the foundation of all human knowledge. A higher process of intellection is that which obtains knowledge of relations. The simplest relations are those of the physical arrangement of objects, and their number, perceived by two special faculties. Eventuality is the next enumerated. Individuality takes cognizance of single physical objects; - Eventuality of single facts; and every fact can be resolved into a simple relationa relation either between two or more physical objects, or, between a mental power or powers and a physical object or objects, or, between the operations of the mental powers themselves. Individuality, for example, forms the idea of a man as a mere physical object: Eventuality notes that he was running, walking, talking, &c., all of which are facts, that is, things done, things that occurred: our feeling of Benevolence is excited by a man in distress-we relieve him;-Eventuality observes and stores up both the particular opetion of the feeling and the result; for both are distinct facts. I dwell somewhat upon this faculty, in order to make clear the gradual expansion of the intellectual power of man, and to present a picture of the scale of intellection. What an immense enlargement, through this one power, of the sphere and means of knowledge: it perceives and stores up all varieties of occurrences: it embraces all facts in history and science: all the other faculties furnish it with materials from without and from within: it is the central treasury of the mind. Next to it are the faculties which take note of specific classes of relations, viz: the relations of different places to one another; of different moments of time; and of musical sounds. Two faculties remain; those of reasoning. Eventuality perceives and stores up in memory all kinds of facts. This is an important step in knowledge, beyond that of the existence of physical objects. What is the next step to carry us still higher?-To classify these facts. This is the

office of the faculty called Comparison. It compares facts, finds out relations of resemblance, and forms classes according to these relations: it generalizes: it shapes the heterogeneous mass of materials collected by the perceptive faculties into harmonious divisions: until it acts, all is chaos: at its touch, order springs out of confusion. The perceptive faculties place before us the world with its countless contents and infinite relations, and by the action of this faculty we have them arranged in grand harmonious divisions, each of these subdivided into numerous classes, which are again distributed according to subordinate resemblances, so that of the vast multitude of details of which the universe of mind and matter is made up, each one is linked by some common harmony to others. Still, this bond, which thus unites in beautiful accord the parts of this wondrous whole, is superficial. It is but the bond formed by partial resemblance. The strongest link in the mental chain is yet wantingand that is the link which makes a union, not on account of relative likeness, but of necessary connexion, of absolute dependence—the union of effect and cause. To supply this link is the function of the last faculty. It takes no note of bodies, nor of facts, nor of resemblances; their mere existence is nought to it; it is the cause of their existence it concerns itself with: it questions them-not what are they, but, whence are they, why are they: it will know their origin and their purpose: it looks to what is, only to learn what has been, and what is to be: it searches the past for causes of the present, and with this knowledge con trols the future: it makes nature render to it the ante cedents of the actual, and then reaches forward to its consequents. Comparison is wide-seeing, comprehensive; Causality is far-seeing, penetrating. The sun, as he appears to us on our meridian, casting down the rays which reveal and make bright the beauties of the earth, may be taken as a type of the effect of Comparison: his position on our horizon, when we behold him flinging far back his clear beams and know that he is sending them equally far before him, conquering darkness on both sides, images the action of Causality. The two together constitute that high intellectual operation—REASONING, to which both are necessary, and in which they co-operate. Without them the mind would be like the earth without the sun—dark: they are its guiding light.

The reader will be able to obtain from this imperfect sketch a general idea of the system of mental philosophy as it had been deduced by Gall and Spurzheim, and their disciples.* Based upon authenticated facts, and constructed gradually in the severest spirit of induction, its truth can only be tested by experiment and diligent investigation. All that has been attempted to be effected by this introduction has been, to enable the reader to understand the principles of the system, and the illustrations of them that are con-

^{*}The reader is referred to Gall's work, "Sur les fonctions du Cerveau;" to the following works of Dr. Spurzheim, "The Anatomy of the Brain," "Phrenology," "Physiognomical System," "Philosophical principles of Phrenology," and his work on education; to Mr. George Combe's "System of Phrenology," a third edition of which has recently been published at Edinburg; and to the excellent Journal, (from which, with two exceptions, the selections in this volume are made,) published quarterly at Edinburg. A Phrenological Journal has also recently been established at Paris, one number of which, containing very able articles, has reached this country: its title is Journal de la Société Phrénologique de Paris.

tained in the following selections. If it shall have done this, or removed from the minds of any, false impressions in regard to Phrenology, it will have accomplished its purpose.

In conclusion, I will add a few words in anticipation of a remark, which some readers will probably be disposed to make: to most of them, doubtless, the bearings of the doctrine-its soundness being admittedwill stand self-evident. The remark is this.—"Suppose Phrenology to be true, I do not see what good is to come of it."-The Constitution of the human mind discovered, and no good to come of the discovery!-The problem, which has engaged, and puzzled, the profoundest minds of all ages, solved,-the mystery, against whose walls the waves of speculation have been vainly beating for thousands of years, laid open to general view,-and this, a mere bootless achievment of misdirected ingenuity! What but ultimate good has the knowledge of nature's laws ever produced? That every discovery of these laws is pregnant with benefit to man, is itself a law of nature. improvements of modern times in the sciences and useful arts are the result of such discoveries. physical comforts and refinements of life are but practical applications of the knowledge of natural laws. In the aggregate result which constitutes life, what are the contributions from all other sources in comparison with the affections, the desires, the capacities of the mind? Are these not the staple out of which our existence is daily spun? It is their activity which constitutes life. All pursuits and occupations involve the exercise of mind, and depend for their success upon the discriminating application of its capabilities. To know its laws, is to obtain the means of making

all other knowledge more valuable: it is, to get control over the source whence flow the various streams which move the thousand wheels of life's labours and pleasures; and thus, to possess the power of directing them, both to more efficient and to more harmonious action. To protect the tender susceptibilities of the young being awakening in a coarse and rough world,-to exercise its opening powers,-to give to the solicitations of warm impulses healthful gratification,-to control without impairing the innate vigour of young aspirations,-to shape without contracting the self-developing proportions of manhood, -in short, to perform the sacred duty of preparing the youth to be a man, there must be distinct knowledge of what are the original elements with which every individual human being is at birth endowed. How can the feelings be controlled, be safely indulged, be balanced one against the other-the intellectual powers cultivated, without precise ideas of the primitive nature of each and of their relative influences? Unprovided with this knowledge, in attempting to keep pure, you may corrupt the currents of growing life,-instead of developing, you may distort,-instead of educating, you mislead .- And when the human being is launched, a man, upon the world, to assume the responsibilities, to perform the duties of independent social existence-what is the most important knowledge he can possess? Is it not self-knowledge? The instrument with which he sets out to hew his way in the world and build up his fortune, is his mind. And is not the first requisite for the skilful use of this delicate, powerful, complicated instrument,-as of every subordinate one,-intimate acquaintance with its qualities and powers? Every word he speaks, every step he

takes, every act he does, is the result of its movement. The knowledge, then, of the internal springs upon whose force and nature this movement depends, is the greatest power he can hold-the completest equipment with which he can start on his career. Experience only, can make him wise; but this knowledge makes the lessons of experience significant and instructive. It is a pure medium through which the light of experience shines unrefracted and undimmed; and by the rays of this light he polishes and strengthens and disciplines—he educates himself. What, without this knowledge, is the legislator (the most important and responsible agent in society)?for ever a bungling empiric. What, without it, is a human being in any position or condition?—a halfman, -an unfinished creature, -the poor possessor of an unappreciated treasure. Is it then, asked-"What is the use of Phrenology if it be true?"-The question may be answered by another which embraces it;what is the use of MAN?

ARTICLE I.

[From the Edinburg Phrenological Journal, No. 32, 1832.]

LEBENSGESCHICHTE DER GIFT-MÖRDERIN GESCHE MARGARETHE GOTTFRIED, &c. Bremen, 1831.

THE LIFE OF GESCHE MARGARETHE GOTTFRIED, Murderer by Poison. Compiled by Dr. F. L. Voget, her Counsel, from her own Confessions and from Judicial Documents. Brep. cn, 1831.

GESCHE MARGARETHE GOTTFRIED, living in Bremen, was, in March 1828, accused of having caused the death of a number of persons by poison. Before this accusation, she had lived in apparently easy circumstances in the middle ranks of life; her house was elegantly furnished, and her dress and demeanour that of a lady; her reputation was untainted; and the frequent deaths which occurred in her house were ascribed to heavy and unaccountable visitations of God.

The development of her head, a cast of which was presented to the Phrenological Society by Dr. Hirschfeld of Bremen, is as follows:—

Amativeness, large.
Philoprogenitiveness, very large.
Concentrativeness, large.
Adhesiveness, rather large.
Combativeness, full.
Destructiveness, enormously large.
Constructiveness, moderate.
Acquisitiveness, large.

Secretiveness, very large.
Self-esteem, large.
Love of Approbation, large.
Cautiousness, rather large.
Benevolence, small.
Veneration, large.
Hope, large.
Ideality, moderate.
Wonder, full.

Conscientiousness, full. Order, full. Firmness, very large. Time, Individuality, Number, moderate. Eventuality, Tune, Form. full Language, Comparison, rather full. Size, Weight, Causality, moderate. Colouring, moderate. Wit, rather small. Locality, full. Imitation, rather small.



GESCHE MARGARETHE GOTTFRIED.

The head above the band, extending from the eyebrows to the top of the ear in the profile, and running between the two ears in the back view, was denuded of the integuments before the cast was taken, so that the figures represent the bare skull. The back view is a section through Destructiveness, Secretiveness, and the point at which Veneration and Firmness join. The position of the ears is lower than during life, from the integuments in the upper part of the head having been cut off. This also has increased the projection of the chin. The engraver has made the depression corresponding to Conscientiousness too great. The head is considerably more rounded at that part than is here represented. The figure, being cut in



wood, could not be rectified. In all other respects it is correct.

The skull measures from Destructiveness to Destructiveness exactly six inches, and from Secretiveness to Secretiveness the breadth is the same, both without the integuments; which is a full measurement for the male head, with the integuments. The distance from Individuality (over the muscles) to Philoprogenitiveness is 7 3-8 inches. Destructiveness, Secretiveness, and Firmness, are the most prominent organs; and, by taking a cursory view of this woman's life, we shall see how strong their influence over her was.

Her father was a tailor in Bremen; active and industrious, but stingy, selfish, and inclined to superstition. His religion was of a kind that influenced him, as long as its practice did not interfere with his own interests; and he attended church only when he had no work to do at home.

Gesche Margarethe, and her twin brother, were born in March 1783. These were the only children of their father, and, when about four years old, were both sent to school, where they remained till they were nearly twelve. The commencement of Gesche's career in sin may be dated from her seventh year, and was partly owing to the avarice of her parents. Being allowed no pocket-money, she was unable to appear on an equal footing with her school companions, and she began to steal from her mother small sums at first, but afterwards to a larger amount. This did not remain long concealed from her mother, who, however, ascribed it to the son, who was of a silent, bashful disposition, rather than to the daughter, whose manners were frank; and although the mother had

afterwards occasion to suspect her daughter, still she could not be certain, so artfully were the crimes concealed. Her father was accustomed to sing a hymn every morning before commencing work, and it frequently happened that his daughter was moved to tears by it. She was, however, of a very contradictory spirit, and her mother had frequent occasion to complain of her conduct. As she became older, she was sent to learn dancing, an accomplishment in which she greatly delighted. She also attended a French class, where another instance occurred of her Secretiveness and Love of Approbation: to appear the first in her class, she employed a young man, one of her acquaintances, to write her lessons for her, which she then copied and passed for her own.

Thus her life passed on with little variety till she was twenty years of age, although, when sixteen, she had already received three offers of marriage, which she, or rather her father, declined. She was beautiful, and almost every where beloved and well received.

When about twenty, she received an offer of marriage from a saddler of the name of Miltenberg, which she was induced to accept. This marriage proved far from happy. Miltenberg had formerly been married to a woman who rendered his house a scene of misery and discord, and to avoid her society he always took refuge in the taverns, and so acquired a propensity to liquor which he could never overcome. He was induced to marry again chiefly by his father, for he had been so thoroughly disgusted with marriage by his former experience, that he had little desire to enter into another contract, and frequent quarrels took place between him and his father on the subject. Gesche evinced no great love towards him, but the riches of

the suitor had a powerful influence over the mind of her father, who prevailed on her to accept of the offer.

Miltenberg, however, loved his wife, and the more he had been ashamed of his former wife, the more he seemed to doat upon this one; but he still frequented the taverns, and she was often left without his society or guidance.

They had been four months married when Gesche met Gottfried, her future husband, at a ball; and from that day all her wishes were directed towards him.— She now began to colour her cheeks with rouge; hours were spent before her glass, and from her toilet she hurried to her kitchen window, and remained there to see him pass to his counting room; but Gottfried took no notice of her.

It was about this period, namely in September 1807, that her first child was born. About the same time Miltenberg became acquainted with one Kassou, who used very frequently to visit him, and who soon conceived a liking for his wife, which Gesche did not leave unreturned. Their intimacy always continued to increase, and presents passed between them .-Gesche was desirous to present to Kassou a breastpin enclosing a lock of her hair, but did not well know how to express a note which she wished to send along with it. She, therefore, applied to Miltenberg, telling him that she wished to make a present to one of her female friends, and requesting him to write a note to be sent along with it, which he accordingly did .-This she copied and sent to Kassou along with the pin.

In 1808 she had a still-born child, and after her confinement began, on account of her thin appearance, to wear not fewer than thirteen pairs of stays, to im-

prove her form. This was not discovered till her arrestment. She now began to be tired of Miltenberg; calumniating him to her parents, and directing her passions sometimes to Gottfried and sometimes towards Kassou. She was obliged to sell several articles of household furniture to pay some of her secret debts, telling her husband she wanted the money to send to her brother, who was then a soldier in the army of Napoleon, and representing to her mother that her husband had sold them.

In 1810 she had another child, and had no sooner recovered from her confinement, than, being short of money, she resolved to open her husband's desk.— To accomplish this she pretended to have lost one of her own keys, and sent for a smith to get the desk opened; she observed narrowly how he proceeded, and after he was gone went and opened it and abstracted ten dollars. Not content with this, she proceeded afterwards to open the desk of a gentlemen who lodged in her house, and took away ninety dollars. She remained, however, unsuspected, and a favourite with all her acquaintances; and was for some time cured of stealing by a fright which she got by a very narrow search being made on the desks being broken open.

Her passion for Gottfried increased more and more, and the habits and sickness of her husband gave them many opportunities of meeting. Her husband was intimate with Gottfried, and used to have him very often at his house. But her passion was not confined to Gottfried, it extended also to Kassou; and the necessity of keeping her love for the one concealed from the other brought her into many petty scrapes. Her fourth child was born in 1813.

Miltenberg was still in her way. She had never

loved him, and now that he crossed her path she began to wish him dead, that she might give free vent to her passion for Gottfried. Miltenberg's father had lately died, and she had observed nothing particularly fearful in death, so that by degrees she accustomed herself to the thought of Miltenberg dying. As he was always in bad health, she began to think that, as his life was only an incumbrance to himself, and an impediment to her, it would be no great sin to help him out of the world. In this state of mind she went to a fortune-teller, who prophesied that her whole family would die before her. She knew that her mother had some arsenic which she kept for poisoning mice. She accordingly went to her, and saying that she was troubled with mice in her house, asked if she knew of any means of destroying them, pretending that she knew nothing of poison. Her mother put some arsenic on bread, and placed it in the room said to be infested with mice, warning her daughter at the same time to keep the apartment locked for fear of mischief to the children. A day or two after this, Gesche went into the room and took away the poison, which she scratched from the bread as if the mice had taken it, with the intention of giving it to Miltenberg. Some time afterwards her mother said that she would go and see if the mice had taken the poison. "Oh yes!" exclaimed the daughter, "pray bring me some more;" which her mother did.

She was now in possession of the means of death, but could not for several weeks bring herself to the resolution of administering it to her husband.

At last she gave him some, one morning, to breakfast, and afterwards another dose in some water gruel.—
She could not, however, approach the bed of the sick

man; it appeared to her as if he knew that she was his murderer; but this was far from being the case, as he recommended her to Gottfried before he died.—
The corpse was dreadfully swollen, but no suspicion was excited.

After Miltenberg's death she received an offer of marriage; but her thoughts being directed to Gottfried, she refused it. Her parents suspecting this to be the cause of her refusal, told her that her marriage with Gottfried should never take place with their consent. Gottfried loved her, but did not wish to marry a person with children. She now again consulted a fortune teller, and received the same answer. Thus, although she had got quit of her husband, there still remained serious obstacles to her union with Gottfried; first her father and mother, and then her children.—She hoped also to get possession, by the death of her children, of a legacy of about 650 dollars left them by old Miltenberg.

In April 1815, her mother was rather unwell, and came to live in her house, when she (Gesche) happening to light upon the packet of arsenic, part of which she had saved and locked up, it immediately occurred to her to poison her mother. As her mother seemed likely to recover, she gave her the poison in her favourite beverage of lemonade; and while mixing it, she burst into loud laughter, so that she shuddered at herself; but it instantly occurred to her, that God made her laugh as a sign that her mother would soon be laughing in heaven. A witness afterwards said that she appeared happy at her mother's death.

Death now followed death with fearful rapidity.— The very first day after her mother's burial, Gesche was sitting in a room with her second youngest child on her knee; the thought of poisoning it occurred to her, and without hesitating a moment, she administered to the child some arsenic on a piece of the cake which had been presented at the burial of its grandmother. This was on the 10th of May, and on the 18th, without the least remorse, she poisoned her eldest child. In the agony of death it clasped its arms round the mother's neck, but Gesche remained unmoved. Two weeks afterwards, she poisoned her father. About ten weeks after these events, while her son was sitting on her knee, he asked her why God took away all her children? This pierced her to the heart, and she immediately resolved that he also should die.

Thus in the short interval between May and September, she murdered both her parents and her children. But the death of so many in so short a space of time, naturally excited some suspicion, and to silence this, she was advised by her friends to have the body of the child opened. This she readily consented to, and the child was declared to have died of inflammation of the bowels.

In this manner, as she thought, was every obstacle to her marriage with Gottfried removed, but Gottfried himself did not show any particular desire to marry her, although he liked her company; and so the winter of 1815-16 passed free from murder. It was on a Saturday in May, 1816, that her brother returned home a cripple and in rags, having lost the use of his feet in the Russian campaign. Here, then, might be another obstacle to her marriage; at all events, he must share her father's property with her. This was motive enough for his death. As already mentioned, he arrived on Saturday, or, as some say, on Friday

after a long absence; he was poisoned on Sunday, and, to avoid suspicion, she passed a great part of the time at his bedside. On every occasion, she had the precaution to employ a different physician. Seldom or never did any of them attend two of her patients.

Another obstacle, however, arose; Gottfried would not marry her. But this also she overcame, by the interest of some of his friends. His original refusal had hurt her, and she began to dislike him, and came to the resolution of poisoning him also. But she thought him rich, and therefore determined at all events, first to marry him, in order to be made his heir, and then to execute her purpose. One Monday morning, she and Gottfried had resolved to make a pleasure party to a little distance out of town; and she seized this opportunity of poisoning him, that his sickness might appear the more unexpected. While he was on his death-bed, she sent for a priest to marry them, so that she might make sure of the property.-Thus had she poisoned father, mother, brother, and children, in order to be put in possession of Gottfried, and at length we find him also in the list of her victims.

She seemed now to delight in murder, and the slightest cause was sufficient to decide upon the life or death of any of her relations. She was disappointed, however, as to Gottfried's riches, for, instead of wealth, he left her debt, and it required all her Secretiveness to conceal her disappointment.

Now that she was alone, she occasionally felt severely the loss of her children; often when she thought of them, she shut herself up in her garret, and wept bitterly. She carefully avoided schools, and every place where children were to be met; and

seemed to be particularly conscientious in paying off the debts of Gottfried. She loved money, not so much for its own sake, as because it afforded her the means of making a figure among her acquaintances, and so of gratifying her vanity.

Yet in spite of all these murders, she was not unhappy; she became acquainted with H-, (the name is not given,) and in his company forgot all her sins, and, in her own words, believed herself the happiest in the world. She rejoiced in her reputation, especially as, after the death of Gottfried, she again immediately received an offer of marriage, which she refused. She had one child by Gottfried, begotten before marriage. We find at this period another instance of her hypocrisy; some one requested from her the loan of sermons, which she delivered, with the request that great care of them should be taken, as they were the only means by which she was able to sustain so many judgments. She never read any of them. Whenever she attempted to read the Bible, she thought the perusal of it of no use, and immediately closed the book.

She was now often ill supplied with money, but always found means of borrowing; often obtaining it from one in order to pay another. After the death of Gottfried, she seems to have rested for some years from her murders, and during that time to have had little to occupy her mind except the care of preserving her reputation untainted. In 1822 she went to Stade to spend a few weeks with some friends. Here, before she was aware, her money failed her; she was too proud to own it, and could get none from home; she knew no person from whom she might borrow, and had recourse to falsehood. She broke the key of her

drawer in the lock, threw it way, and then raised an alarm that somebody had stolen her money out of the drawer. The drawer was forced open, and no money appeared, and nothing could be more obvious than that she had been robbed. Being obliged to take an oath before a magistrate that this was the case, she did not scruple to commit perjury; after which she got a supply of money from her friends.

From time to time she received offers of marriage, all of which she turned to good account, by extorting money from her admirers. She was reputed rich, and in this belief her admirers readily yielded to her requests.

One of them, named Zimmermann, was thus induced to advance her very considerable sums, which she repaid with a great shew of tenderness. She was betrothed to him, but he too was doomed to swell the list of her victims; after extracting all the booty in her power, she poisoned him by degrees, that she might have an opportunity of shewing her tenderness to him during his sickness, and thus lull suspicion. By his death she was free of the money due to him, which he had advanced on her word alone, without taking a legal obligation.

She now began to poison her acquaintances, without any visible motive:—a child came to congratulate her on her birth-day, and received a dose on a piece of biscuit: a friend called one forenoon, and also received a dose; and she tried the strength of her poison on another of her friends, on whose face it caused blotches to appear.

She gave a dose to one of her lodgers, that, during his sickness, she might plunder his pantry. Zimmermann had a cousin named Kleine, in Hanover, from whom she succeeded in borrowing 800 dollars, but he became impatient for repayment, and she had only 300 to give him. In this predicament she set out for Hanover, with the intention of poisoning Kleine, thinking by his death to gain delay. She accomplished her end, and after his death affirmed that she had given him a double Louis d'or the day before he died; but the whole story was a falsehood. She committed also several other murders for purely selfish ends, but the soul sickens in reporting them.

She was now often in want of money, and therefore could not keep up a large establishment, so that she was obliged to sell her house to a person named Rumpff, at the same time reserving a room or two for herself. Rumpff was fond of her, and used to call her aunt, but he had not been more than eight weeks in the house when his wife died, and he himself fell into bad health. He could do nothing but run about searching the whole house, from the garret to the cellar, for the cause of his trouble.

It chanced that he kept a pig; and wishing to have it killed, he sent for a butcher for that purpose. The butcher, with the view of pleasing him, brought to his room a choice bit of the pork, of which Rumpff partook, putting the remainder into his pantry. On the morrow he went to cut a slice from it, but he was surprised to find it in a different position from that in which he had left it the day before, and he perceived also that it was covered with a white powder. This excited his suspicions; he had the substance examined, and detected poison. Gesche's motive for this crime was to endeavour to regain possession of her house. She was arrested on suspicion.

The work before us, from which these particulars

have been derived, gives no account of the trial or execution, which, as we are informed, is reserved for a separate publication; but it mentions that, in prison, she was tormented by dreams, in which she saw her victims sitting in the churchyard beckoning to her; and she was often so much afraid, that, immediately on awakening, she could not remain longer in bed.

The following judgment was pronounced by the High Court of Bremen, on the 17th September, 1830:—

"The Court of Justice, in terms of the law, and after the inquiries have been conducted according to the decree of the 22d May last, find the widow of Michael Christopher Gottfried, Gesche Margarethe, formerly Timm, accused of poisoning, and of several other offences, to be guilty of the following crimes, as proven, besides several robberies, frauds, and perjuries, and attempted abortion of her offspring, viz.

- "1. To have poisoned both her parents, her three children, her first and second husbands, her suitor Paul Thomas Zimmermann, Anne Lucie Meyerholtz, Johann Mosees, the wife of Johann Rumpff otherwise Mentz, the wife of Frederic Schmidt otherwise Cornelius, and Frederick Kleine of Hanover; and also to have caused the death of Eliza, the daughter of the said Schmidt, by poison, although this is not proven to have been intentional.
- "2. Several times to have given poison to the said Johann Rumpff, with the intention of killing him, and thereby causing to him a severe illness.
- "3. To have given poison to several other individuals, without any proven intention, but which was more or less injurious to their health.

"The Court of Justice, therefore, according to the penal code, Art. 130, and taking into consideration the

milder principles of the present usages of the law, condemn the accused, the widow of Michael Christopher Gottfried, as her well merited punishment, and to serve as a warning to others, to death by the sword, and entrusts to the criminal court the execution and publication of the sentence, and also the adoption of all necessary measures: all the expenses caused by the inquiries, judgment and punishment, to be paid from the funds which she leaves, so far as they shall be sufficient."

Observations on the preceding Narrative.

The foregoing details are literally translated from the German work named in the title of this article, and are perfectly authentic. The first impression received from them is that of astonishment, almost bewilderment of judgment. We felt it difficult at first to believe in the existence of such a being as G. M. Gottfried. The facts to be accounted for are, how for twenty years she could display so many attractions as to procure her lover after lover; so much refinement and urbanity as to be received into the society of the middle ranks in Bremen, and treated with respect, and so much affection as to lull all suspicion of her having any hand in the numerous deaths which occurred in her family; and how, with all this exterior of morality, she could be internally a perfect Blue-Beard in relentless cruelty; or ten times worse than Blue-Beard, when it is considered that father, mother, brother, husband, children, and lover, all fell victims to her barbarity. Our first impression was, that she must have laboured under a diseased Destructiveness, or monomaniacal thirst for blood; but she murdered each victim deliberately for a purpose, and this excludes the

idea of disease. Besides, during twenty years, the propensity must have shewn itself ungovernable in other parts of her conduct, which it does not appear to have done. The combination of the organs, therefore, must explain the character; and after the mind is able coolly to survey the development and actions, it does so consistently and clearly. The first fact to be accounted for, is the existence of a very considerable outward morality, which deceived the world for so long a period, and averted suspicion of crime. Accordingly, we find large Philoprogenitiveness, Secretiveness, Love of Approbation, Veneration, with average Conscientiousness and Intellect. These faculties presented to the world that outward aspect of amiableness which deceived them for so long; but the next fact is the co-existence of these qualities, along with a deliberate savageness of disposition that spared neither age nor sex, when they stood in the way of her selfish enjoyments; and accordingly, the brain exhibits an enormously large organ of Destructiveness, with a very deficient Benevolence. This combination appears to have rendered its possessor almost a hyena or tiger in her dispositions. Gottfried lamented the death of her children, because her large Philopregenitiveness suffered under the bereavement of its objects; but she was gay and happy after the murder of her other Her Benevolence was so deficient, and her Destructiveness so large, that she seems to have felt a murder to be as much in harmony with her feelings, as a tiger does the death of a buffalo on which it means to feed. This is a case which we could not have conceived except by the aid of Phrenology. It appears to be an example of what might be called moral insanity, arising from excessive development of one organ, and great deficiency of another; and the observations of Dr. Crawford, on the case of E. S., recorded in Vol. vi. p. 147, of this Journal, appear remarkably applicable to it. They are as follows:

"I have a few remarks to make on the second of the lunatics, lettered E. S. You observe in your own notes, 'I am surprised he was not executed before he became insane.' This would lead to the supposition, that he had been afflicted with some form of insanity in addition to a naturally depraved character. Such, however, is by no means the case; he never was different from what he now is; he has never evinced the slightest mental incoherence on any one point, nor any kind of hallucination. It is one of those cases where there is great difficulty in drawing the line between extreme moral depravity and insanity, and in deciding at what point an individual should cease to be considered as a responsible moral agent, and amenable to the laws. The governors and medical gentlemen of the Asylum have often had doubts whether they were justified in keeping E. S. as a lunatic, thinking him a more fit object for a bridewell. He appears, however, so totally callous with regard to every moral principle and feeling-so thoroughly unconscious of ever having done any thing wrong-so completely destitute of all sense of shame or remorse when reproved for his vices or crime—and has proved himself so utterly incorrigible throughout life, that it is almost certain that any jury before whom he might be brought would satisfy their doubts by returning him insane, which in such a case is the most humane line to pursue. He was dismissed several times from the Asylum, and sent there the last time for attempting to poison his father, and it seems fit he should be kept there

for life as a moral lunatic; but there has never been the least symptom of diseased action of the brain, which is the general concomitant of what is usually understood as insanity. This I consider might with propriety be made the foundation for a division of lunatics into two great classes; those who were insane from original constitution, and never were otherwise, and those who had been insane at some period of life from diseased action of the brain, either permanent or intermittent."

ARTICLE II.

[From the Edinburg Phrenological Journal, No. 31, 1832.]

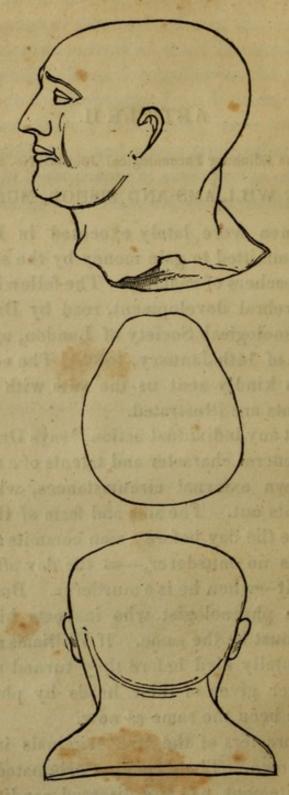
CASES OF WILLIAMS AND BISHOP, MURDERERS.

THESE men were lately executed in London for murder, committed to gain money by the sale of dead bodies to teachers of anatomy. The following account of their cerebral development, read by Dr. Elliotson to the Phrenological Society of London, appeared in the Lancet of 14th January, 1832. The editor of the Lancet has kindly sent us the cuts with which the

developments are illustrated.

"It is not any individual action," says Dr. Elliotson, "but the general character and talents of a man placed under known external circumstances, which Phrenology points out. The size and form of the cranium are the same the day before a man commits a murderwhen he is no murderer,—as the day after he has committed it-when he is a murderer. But the judgment of the phrenologist who inspects his head on both days must be the same. If Williams and Bishop had accidentally died before they turned murderers, the character given of their heads by phrenologists would have been the same as now.

"The characters of the two criminals in question are well known. Their conduct originated not from morbid excitement, nor any diseased condition of the brain. It arose, not from any momentary impulse, but was deliberate and settled. We have, therefore,



WILLIAMS.

a right to expect their organization to be in perfect harmony with their lives. And so it is.

The head of Williams is by far the worse. The intellectual portion is very small—exceedingly low; the moral portion is equally wretched—exceedingly low; while that devoted to the animal propensities—the lower-posterior and lower-lateral parts, especially Destructiveness, Acquisitiveness, Secretiveness,—is

immense.

"The relation of the developments of the organs to each other is as follows:—

Amativeness, very large.
Philoprogenitiveness, moderate.
Inhabitiveness, moderate.
Adhesiveness, large.
Combativeness, very large.
Constructiveness, small.
Acquisitiveness, very large.
Destructiveness, very large.
Secretiveness, very large.
Self-esteem, full.

Love of Approbation, large.
Cautiousness, very large.
Benevolence, very small.
Veneration, very small.
Hope, very small.
Conscientiousness, very small.
Ideality, small.
Firmness, small.
Knowing faculties, large.
Intellectual faculties, small.

With such a deficiency of moral sentiment, of Benevolence, Veneration, and Conscientiousness,—with such a deficiency of intellectual strength, and with such a deficiency of Ideality, or the sense of what is refined and exquisite in nature and art; and, on the other hand, with such a superabundance of desire, Covetiveness, Destructiveness, &c. there is no wonder that his whole life was low and villanous. We are informed, that so dissipated were his habits, that he left his occupation of a bricklayer, and associated with thieves and blackguards, and nearly ruined his mother; that he was frequently in custody on charges of felony; that he was sentenced to transportation

seven years ago for stealing; that he turned bodysnatcher, broke into houses to steal corpses, and at last, for mere expedition, without the persuasion of any one, did not hesitate to murder his fellow creatures, for the sake of selling their bodies.

"In Bishop, the forehead slopes considerably, and is narrow,—the intellectual portion is wretched; the superior portion—that dedicated to the moral sentiments, is low (lower than it appears, on account of the hair not having been shaved off there, like that of Williams, previously to taking the cast, and having become matted with the plaster,) and it is particularly narrow; while the lower-lateral portions are large, Covetiveness particularly so. Combativeness or courage is very small. The whole head is much smaller than that of Williams.

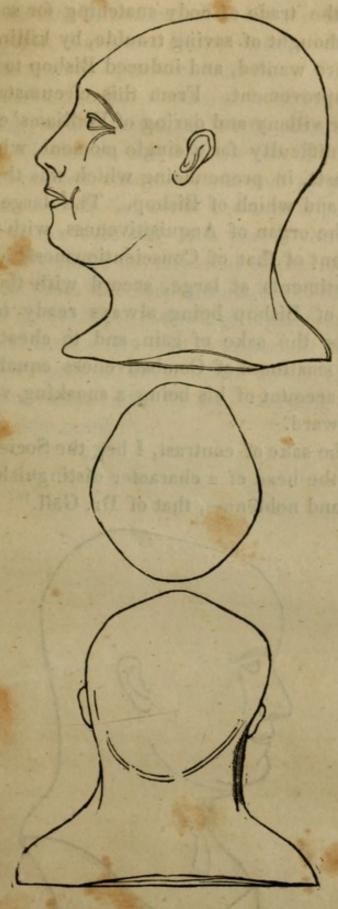
"The relative proportion of the organs stands thus:-

Amativeness, large.
Philoprogenitiveness, large.
Inhabitiveness, moderate.
Adhesiveness, moderate.
Combativeness, small.
Destructiveness, large.
Constructiveness, moderate.
Acquisitiveness, very large.
Secretiveness, large.
Self-esteem, large.

Love of Approbation, full.
Cautiousness, moderate.
Benevolence, small.
Veneration, moderate.
Hope, small.
Ideality, small.
Conscientiousness, very small.
Firmness, small.*
Knowing faculties, large.
Intellectual faculties, very small.

"The preponderance of the lower feelings over the superior, and over the intellect and Ideality, are likewise in accordance with Bishop's character. The smaller size of the head agrees with the fact, that Williams led Bishop into the course of crime which caused the forfeit of his life; for it is said that, after

^{*}This organ appears from the drawings to be large. - EDITOR.



BISHOP.

pursuing the trade of body-snatching for some time, Williams thought of saving trouble, by killing people as they were wanted, and induced Bishop to join him in this improvement. From this circumstance, and the greater villany and daring of Williams' character, I had no difficulty for a single moment, when I first saw the casts, in pronouncing which was the head of Williams and which of Bishop. The large development of the organ of Acquisitiveness, with the small development of that of Conscientiousness, and of the moral sentiments at large, accord with the account given us of Bishop being always ready to perjure himself for the sake of gain, and to cheat in every way; the smallness of Combativeness equally agrees with the account of his being a sneaking villain-an arrant coward.

"For the sake of contrast, I beg the Society to contemplate the head of a character distinguished for his intellect and nobleness, that of Dr. Gall."



Thus far Dr. Elliotson. We refer our readers to the account of Burk and Hare, executed at Edinburg for similar crimes-[see next article.] The striking similarity in development between them and Williams and Bishop, will be apparent to the most unpractised observer. In short, there is no fact in Phrenology better established, than the great and preponderating development of the organs of the animal propensities, situated in the base and back part of the brain, and the relatively small development of the moral organs in deliberate and atrocious criminals. This fact goes deep into questions of moral and legal responsibility; and it must necessarily lead to important practical results. The present cases afford apt illustrations of the doctrines expounded by Dr. Caldwell in the first article of this number.

ARTICLE III.

[From the Edinburg Phrenological Journal, No. 20, 1829.]

PHRENOLOGICAL OBSERVATIONS ON THE CEREBRAL DEVELOPMENT OF WILLIAM BURK, EXECUTED FOR MURDER AT EDINBURG, ON 28th JANUARY, 1829, AND ON THE DEVELOPMENT OF WILLIAM HARE, HIS ACCOMPLICE.

Read to the Phrenological Society, 5th February, 1829.

THE recollection of the horrors which used to harrow up our youthful minds in perusing the story of Blue-Beard, had waxed faint in most of us as we advanced in life, from the belief that they were pure fictions of imagination, which could never be realized in actual existence, when the murders of Burk and Hare suddenly exhibited to us cruelty surpassing that of the bloody hero of the fairy-tale, and a deliberate, calculating selfishness far exceeding even his imagined atrocities. The public mind was carried away by a whirlwind of astonishment and abhorrence. after day, and week after week, the press literally groaned under a weight of excited feeling; its industry was intense to collect details, and its eloquence fervid in giving expression to the emotions which they elicited. Burk appeared as a monster without prototype, and, we may hope, will long remain without a parallel. At length he has expiated his crimes on the scaffold; but still the emotions excited by his crimes and his punishment continue to rage like a tempest, which

we may hope has attained its maximum, but which has made little progress in abatement. Reason has scarcely yet returned sufficiently to the public mind to enable it to look calmly on the subject; and, accordingly, an eloquent declamation on the monstrous atrocities of this wretched criminal would be more palatable to the general taste than an account which should "nothing extenuate, nor set down aught in malice."

Phrenology, however, like every other system of natural truth, is an unbending science. It does not accommodate its responses to the varying prejudices of men, but gives them impartially, according to what it finds in the brain. After the whole facts of any particular case have become known, and the transactions have been tried at the bar of reason, its decisions have been acquiesced in as sound by intelligent and unbiassed inquirers, who sought only after truth. In the case of Thurtell, for instance, it was first asserted that Phrenology was overturned, because he had no Destructiveness. The publication of the cast refuted this objection by showing a large organ of Destructiveness. It was next objected that Phrenology was overturned because Thurtell had a large Benevolence. To this it was replied that Thurtell in his life had manifested great kindness and even generosity of disposition; bestowing, as one example, his last half-sovereign on an individual more wretched than himself; and that the correct statement was, that Thurtell's large Benevolence had not proved adequate to restrain his larger Destructiveness, excited as the latter was, and neutralized as the former was, by the swindling transactions at play which he conceived Weare to have practised upon him. This answer was not admitted by the public at the time as sufficient; they held that, unless Thurtell's head had been all composed of Destructiveness, and of nothing else, Phrenology was refuted. But this was the mere way-wardness of ignorant prejudice. At the present time, no sensible man, who peruses the unequivocal testimonies of Thurtell having manifested the kindlier feelings of our nature, as well as the fiercer traits of it, will say that Phrenology is refuted, because organs for both sets of feelings were found developed in his brain.

Time is doing its part with Phrenology as with every thing else. The public mind has now become more familiarized with it, and, from perceiving it steadily advancing and extending after countless predictions of its downfall, is disposed to view it with diminished aversion, and a larger portion of reason and impartiality is brought to the consideration of its evidence. After these preliminary observations, we enter on an examination of the character and development of Burk, without experiencing either difficulty or hesitation.

There are two classes of criminals,—those who are habitually violent, and those who are tolerably virtuous till excited by temptation. Bellingham was habitually fierce, passionate and unreasonable, and in his head Destructiveness is very large, and Benevolence and Intellect small. M'Kean, who murdered the Lanark carrier, was for a long time a tolerably respectable man,—a leading member of a dissenting congregation, and much attached to his wife. His head presents great Combativeness and Destructiveness, with considerable Benevolence. Tardy, the Spanish pirate, whose murders, for number, coolness,

and deliberation, approached somewhat near to Burk's, possessed a calm exterior, and had conducted himself with some degree of propriety during several years of his life; and the same combination of large Combativeness and Destructiveness, with some portion of Benevolence, occurs also in him. It is a principle of philosophy, which holds equally in mental as in physical science, that ex nihilo nihil fit, or that something never comes out of nothing. If, then, Burk was intensely selfish, a correct exposition of his character must exhibit the selfish principles strong in his nature; if he was atrociously murderous, the element of Destructiveness must appear; but if Burk actually manifested also some portion of attachment, of kindness, and of honesty, the elements of these better feelings must likewise have existed in his mind. To discover the real character of this extraordinary man, let us attend briefly to his history.

"William Burk," whose crimes have condemned him to an ignominious death on the scaffold, describes himself, in his judicial declaration, emitted before the Sheriff-substitute of Edinburgshire, in relation to

^{*} This account is taken from a history of Burk and his associates, published by Thomas Ireland, junior. It contains the following statement prefixed to the Life of Burk:—

[&]quot;We can pledge ourselves that every circumstance that is here narrated has been obtained from such sources as to leave no doubt of its authenticity. It will be seen, that, while this memoir is a great deal fuller than any one that has appeared, it is also dissimilar in many particulars to the disjointed fragments that have been from time to time published. How these have been obtained we cannot say; but we can aver, that this account has been received from sources which may be relied on, and much of it from the unhappy man himself; indeed, so much as to entitle us to say that it is almost his own account."

the cause for which he was tried, as being thirty-six years of age. He was born in the parish of Orrey, near Strabane, county of Tyrone, in Ireland, about the year 1792. His parents were poor, but industrious and respectable in their station, which was that of cottiers, occupying, like the most of the peasantry of Ireland, a small piece of ground. The Irish are remarkable for the avidity with which they seek education for their children, under circumstances in which it is not easily attainable. The parents of Burk seem to have been actuated by this laudable desire, as both William and his brother Constantine must have received the elements of what, in their condition, may be called a good education, and superior to what usually falls to the lot of children in their rank in Ireland .-He was educated in the Roman Catholic faith, which he has ever since nominally adhered to, though with little observance of its doctrines or ceremonies. He is by no means, however, a person of the brutal ignorance or stupid indifference that his callously continuing in a course of unparalleled wickedness, apparently without compunction, would betoken. He has sinned deeply, but it has not been altogether against knowledge, as he could at times put on a semblance of devotion; and during the fits of hypocrisy, or, it may be, starts of better feeling, before he became so miserably depraved, his conversation was that of a man by no means ignorant of the truths of Christianity, and such even as to lead some to imagine him seriously concerned about his eternal salvation. During one of these temporary ebullitions about five years ago, he became an attendant on a prayer-meeting held on the Sabbath evenings in the Grassmarket. He was for some time remarked as one of its most regular and

intelligent members. He never omitted one of its meetings, and expressed much regret when it was discontinued. As a Catholic, he was considered wonderfully free from prejudice, frankly entering into discussions upon the doctrines of his church, or those of other sects, with whose tenets he showed some acquaintance.

"He read the Scriptures, particularly the New Testament, and other religious books, and discussed their merits. On a Sabbath especially, though he never attended a place of worship, he was seldom to be seen without a Bible, or some book of devotion, in his hands."

When at school, he was distinguished as an apt scholar, a cleanly, active, good-looking boy; and though his parents were strict Catholics, he was taken into the service of a Presbyterian clergyman, in whose house he resided for a considerable time. He was recommended by the minister to a gentleman in Strabane, in whose employment he remained for several years.

Here, then, is evidence of Burk having in his youth possessed some intellectual acuteness, and having been active, cleanly, and well-behaved for a considerable numbers of years; or, in other words, at this period of his life he manifested intellect and moral sentiment.

He subsequently tried the trade of a baker, at which he continued only for five months. He thereafter became a linen-weaver; but soon got disgusted with the close application that was essential to earn a livelihood at that poorly-paid, irksome employment, and he enlisted in the Donegal militia. He was selected by an officer as his servant, and we are told that he demeaned himself with fidelity and propriety. While in the

army, he married a woman in Ballinha, in the county of Mayo; and after seven years' service, the regiment was disbanded, and he went home to his wife. He shortly afterwards obtained the situation of groom and body-servant to a gentleman in that vicinity, with whom he remained three years.

"Burk was remarked to be of a very social and agreeable disposition, with a great turn for raillery and jocularity, and what from his after-proceedings could scarcely have been supposed, was distinguished not only as a man of peculiarly quiet and inoffensive manners, but even as evincing a great degree of humanity."

"He states, that while in Ireland, his mind was under the influence of religious impressions, and that he was accustomed to read his catechism and his prayerbook, and to attend to his duties."

Again the observation presents itself, that Burk, during this period of his life, manifested dispositions decidedly superior to those which marked the close of his career with so dark a stain.

He subsequently came to work at the Union Canal in Scotland, and there formed an acquaintance with the woman M'Dougall, who became remarkably fond of him, deserted her parental roof for his society, and attached herself to him, partaking of his various fortunes during the last ten years of his life. It is mentioned that Burk treated her with kindness, and acknowledged her as his wife, and that she was passionately fond of him in return.

"During the work on the canal, he had been noted among the other labourers as of a particularly handy, active turn, and skilful in cobbling, in a rude way, his own and the shoes of his acquaintances."—Afterwards, "He lodged in the house of an Irishman named Michael, or more commonly Mikey Culzean, in the West Port, who kept a lodging-house for beggars and vagrants, similar to the one which Hare's crime has made so familiar to the public,—in the language of the classes who frequent them,—a beggars' hotel.

"Many will probably recollect of a fire happening in one of these abodes of wretchedness about six years ago, when incredible numbers emerged from the miserable hovels. In this conflagration Mikey's dwelling suffered, and Burk and M'Dougall escaped from the flames nearly naked, and with the loss of all the little property they possessed. Some charitable individuals contributed to procure clothes and necessaries for the sufferers, and they received some relief by the hands of the Rev. Dr. Dickson, one of the ministers of the parish. By this disaster he lost his library; and though it is somewhat surprising to hear at all of a collection of books under such circumstances, it is not the less so when the names of some of the works are mentioned. Among them were, Ambrose's Looking unto Jesus, Boston's Human Nature in its Fourfold State, the Pilgrim's Progress, and Booth's Reign of Grace. His landlord afterwards took a room in Brown's Close, Grassmarket, where Burk also again went as a lodger.

"It was at this time that he attended the religious meeting we have previously mentioned, which was held in the next apartment to the one in which he lodged. During his attendance he was always perfectly decorous in his deportment, and when engaged in worship had an air of great seriousness and devotion. The conductor and frequenters of it had formerly been subjected to much obloquy, and even vio-

lence, from the Catholics who abounded in that neighbourhood; and one evening, after Burk's attendance on it, his landlord, Mikey Culzean, attempted to create annoyance, by breaking through some sheets of paper which were used to cover up an old window, and crying out in a voice of derision, 'that the performance was just going to begin.' Burk expressed himself in indignant terms on the occasion, saying, that it was shameful and unworthy of a man to behave in such a manner.

"From the general aversion to the meeting so unequivocally manifested by the Catholics, and Burk being universally known to belong to that persuasion, his frequent attendance on it, and reverential behaviour, excited the more notice. It was usual for him to remain conversing with the individual in whose house they assembled after the others had dispersed; and on these occasions the subjects that had occupied their attention during the service naturally were often talked over. His conversation was generally such as to show that he had been attentive to what was passing, and comprehended the topics brought under his notice.

"During his residence in this neighbourhood, he gave no indications of any thing that would lead people to anticipate his future enormities. He was industrious and serviceable, inoffensive and playful in his manner, and was never observed to drink to excess. He was very fond of music and singing, in which he excelled, and during his melancholy moods was most frequently found chanting some favourite plaintive air. All these qualifications, and his obliging manner, joined to a particularly jocular quizzical

character, with an interminable fund of low humour and drollery, rendered him a general favourite."

Being reduced to much wretchedness and poverty, Burk and M'Dougall lodged for a few nights in Hare's house, and during his stay, a fellow-lodger died, whose body was sold by Hare and Burk for dissection. At this point his career of atrocious villany commenced. The price of the body being expended, Burk decoyed a woman into Hare's den, murdered her, and sold her body. He and Hare repeated similar tragedies sixteen times during the course of a year, till at last they were detected.

Nothing can exceed the intense selfishness, coldblooded cruelty, and calculating villany of these transactions; and if the organs of Selfishness and Destructiveness be not found in Burk, it would be as anomalous as if no organs were found for the better qualities which he had previously displayed.

Phrenology is the only science of mind which contains elements and principles capable of accounting for such a character as that before us, and it does so in a striking manner.

The drawings on the next page are made by Mr. Joseph, with the camera lucida, from accurate casts taken without the hair. The cast of the Rev. Mr. M. represents the development generally found when the dispositions are naturally virtuous. His history is given in the Phrenological Transactions, p. 310; [inserted in this volume;] and the profile is presented as a contrast to those of Burk and Hare.*

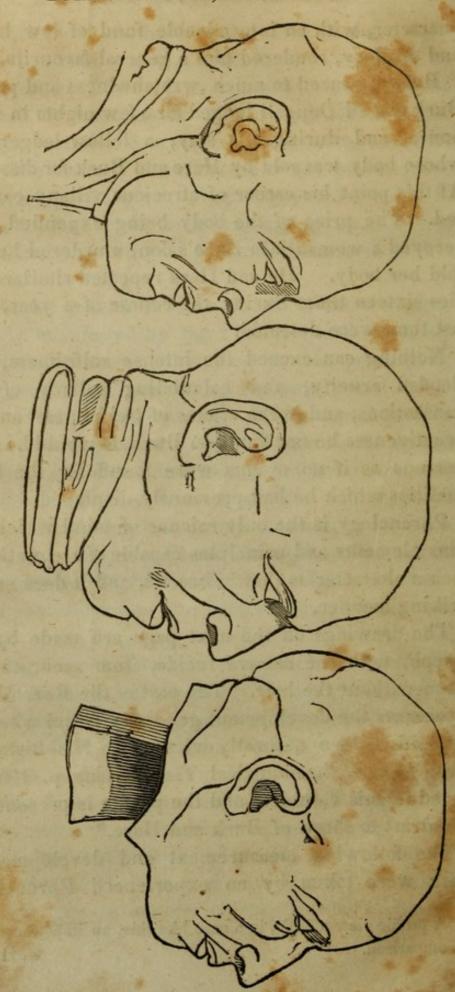
The following measurement and development of Burk were taken by an experienced Phrenologist

^{*} A profile view affords, in a case like this, an imperfect means of comparison.

G. H. C.

PROFILE OF BURK.

PROFILE OF REV. MR. M.



PROFILE OF HARE.

from the living head,* and compared with an accurate cast taken without the hair by Mr. Joseph after the execution. We have also received a report from a medical gentleman who saw the brain dissected. The measurements and development are as follows:—

MEASUREMENTS.

	Inches.
Spine to Individuality,	. 8
Concentrativeness to Comparison,	7 3-8
Ear to Occipital Spine,	. 4 4-8
— to Individuality,	5 2-8
— to Firmness,	. 5 7-8
Destructiveness to Destructiveness,	6 3-8
Secretiveness to Secretiveness,	. 6 2-8
Ideality to Ideality,	4 6-8
Constructiveness to Constructiveness,	. 5 2-8
Cautiousness to Cautiousness,	5 6-8

Note.—Burk was muscular; and in the cast with the hair shaven, taken after death, the measurement at Destructiveness, owing to the swelling of the integuments, is two-eighths of an inch larger than the measurement taken during life. The necessary abatement has been made in stating the development.

DEVELOPMENT.

Amativeness, large. Concentrativeness, rather full.

Philoprogenitiveness, rather large. Combativeness, full.

* A measurement and development self-styled "Phrenological," differing from ours, was published in the Edinburg newspapers, and copied into other journals. We understand that Mr. Stone is the author of it; and we notice it only to remark, that it ought to have been called an antiphrenological development; for it was obviously published for the purpose of opposition, and it is inaccurate, like the other antiphrenological evidences of that gentleman. In antiphrenological reports measurements are founded on as if they afforded evidence of the development of particular organs. We give them merely as indicative of the general size of the head. See Combe's System of Phrenology, p. 41, and Elements, 3d Edition, p. 151.

Destructiveness, very large. Constructiveness, full. Acquisitiveness, rather large. Secretiveness, very large. Self-esteem, very large. Love of Approbation, full. Cautiousness, large. Benevolence, full. Veneration, full. Hope, on one side, small; on other, full. Ideality, small. Conscientiousness, full. Firmness, large. Individuality, full. Eventuality, rather full.

Form, rather large. Size, rather large. Weight, ditto. Colouring, moderate. Locality, full. Order, large. Time, rather small. Number, moderate. Tune, full on one side; moderate on other. Language, full. Comparison, rather full. Causality, rather full. Wit, small. Imitation, full. Wonder, small.

Burk's head is rather above the middle size. The posterior lobe of the brain is large, and the middle lobe, in which are situate the organs of Destructiveness, Secretiveness, and Acquisitiveness, is very large; at Destructiveness in particular the skull presented a distinct swell. The anterior lobe, or that of intellect, although small in proportion to the hind and middle lobes, is still fairly developed, especially in the lower region connected with the perceptive faculties. Self-esteem is prominent, and has indented its form distinctly on the skull.

The general result of this development is, that the animal feelings are very strong; the moral feelings are proportionately feebler, but not wanting; while observing intellect is present in a considerable degree, but reflecting intellect much less. Let us attend, however, to the organs a little in detail.

The cerebellum, or organ of Amativeness, was large; and Burk stated that in some respect his ruin was to be attributed to the abuses of this propensity, because it had led him into habits which terminated in his greatest crimes.

Philoprogenitiveness is considerably developed; and it is a well-known fact, which was mentioned on his trial, that Burk was fond of children, and that they liked him in return. He stated himself that he used to carry "sweeties" in his pocket, which he gave them; and the children who lived in the neighbourhood of his house were ready at all times to run errands for him, or serve him. He, nevertheless, confesses to having assisted Hare in murdering one child of twelve years of age; so that he must have overcome this feeling, as he did his Benevolence in murdering adults.

His Adhesiveness is not so large as Philoprogenitiveness, but it is full. He was constant to M'Dougall, and did not betray Hare; but the greater attachment seems to have been on the part of M'Dougall towards him.

Combativeness is considerably inferior to Destructiveness in size, and Cautiousness is large. These, acting in combination with great Firmness and Secretiveness, would give him command of temper; and accordingly, it is mentioned, that he was by no means of a quarrelsome disposition; but when once roused into a passion, he became altogether ungovernable, deaf to reason, and utterly reckless; he raged like a fury, and to tame him was no easy task; that is to say, when his large Destructiveness was excited to such a degree that it broke through the restraints of his other faculties, his passion approached to madness.

It is mentioned in the phrenological works, that Selfesteem and Acquisitiveness are the grand elements of selfishness. Both of these organs are largely developed in Burk, as are also Destructiveness, Secretiveness, and Firmness. Here, then, are organs all large, whose abuses lead to selfishness, cunning, determination, and cruelty; and nothing could more completely accord with the character of Burk,

It may naturally be asked, what became of these organs when Burk was yet a man of ordinary respectability of character? Did they all lie dormant, and show their existence for the first time only when he began to murder? No: His own statement, that, when roused to anger, he was exceedingly violent, shows that at all times Destructiveness was ready to come forth when excited, for anger is one of its manifestations. We are not acquainted with the minute particulars of his previous life; but that he would show selfishness, hardness of feeling, and also duplicity, as ingredients in his character, we cannot doubt. These qualities apparently did not break the limits of law; but the organs would not be dormant when they were possessed to such an extent.

That the feeling of Destructiveness was as powerfully present in Burk's mind as its cerebral organ was prominent in his brain, is established not only by his murders, but by other unequivocal indications. In alluding to his deeds, he occasionally entered into the spirit in which they had been perpetrated, and then a fiendish but involuntary expression of pleasure appeared in his manner. On one occasion in particular, when asked if it were true that he had hurried the corpse of one victim to the dissecting-room with her hand still convulsively grasping some money, he laughed with a truly diabolical mixture of glee and contempt at the idea, that they whose sole object was money should be thought so destitute of sense as to allow any sum, however small, to escape their grasp. This, too,

be it observed, occurred at a time when his habitual state was that of apparently sincere contrition, accompanied by a wish to do every thing in his power to atone for his enormities.

Constructiveness is fully developed, and the organs of Size, Weight, and Form are large. He stated that he was fond of making little mechanical articles for himself, and of seeing machinery; and as he expressed it, "he took a conceit in looking at threshing-mills" when in the country.

Cautiousness is large; and when asked whether he was as heedless in getting into squabbles as many of his countrymen? he replied with a shake of the head, that he took good care of that, as he was cautious of his personal safety, and that it required a good deal to rouse him. He was asked also, how, with his general great regard to his own safety, he had acted so carelessly as to leave the body of Docherty uncovered in the room? He replied, that at first he had been exceedingly careful to prevent any thing appearing to excite suspicion; but that repeated success had made him less watchful. "Besides," he added, "I did not suspect that these people would have taken the liberty of going through the house in my absence. Was not I feeding the Grays and giving them money out of my own pocket? I did not think that they would have informed against me, even if they had known." He declared also, that he had great facility in keeping a secret, and that if it had not been his closeness in that respect, Hare would have been in his place at that moment.

His great Self-esteem, Firmness, Cautiousness, and Secretiveness, produced that self-command and unshaken composure which never forsook him during his trial and execution. Many examples of this are given:-"At seven in the morning, immediately previous to execution, Burk walked with a firm step into the keeper's room, followed by his confessor; and at this moment no appearance of agitation or dismay was discernible in his countenance or manner. The miserable wretch, who looked thinner and more ghastly than at his trial, walked with a steady step to the apparatus of death, between his confessor, the Reverend Mr. Reid, and the Reverend Mr. Stewart, accompanied by the Reverend Mr. Marshall, and seemed to us perfectly cool and self-possessed; so much so, that in crossing from the Lock-up-house to the postern entrance into Libberton's Wynd, where the path-way was wet from the rain and thaw of the morning, we observed him picking his steps with the greatest care."*

Love of Approbation is also considerably developed, and we are informed, that "he seemed to have a great regard for his character in his native place, and where his wife resided. At one time he wished she should be sought out, and the parish priest written to; but after farther reflection, he remarked, 'It is a pity, for I always bore a good character in the place, and the knowledge of my crimes and unhappy fate would only bring disgrace on my relatives, particularly my poor father.' "

His Self-esteem and Love of Approbation would cause him to feel intensely the execrations heaped on him by the mob at his execution; and accordingly, it is remarkable, that although he was able to conceal every other feeling that rankled in his bosom at his execution, he was not capable of suppressing the outward

^{*} The following extracts are taken from the Edingburg newspapers.

manifestation of the emotions which that treatment excited. "Arrived on the platform of the scaffold," it is said, "he was apparently somewhat blenched by the appalling shouts and yells of execration with which he was assailed, and cast a look of fierce and even desperate defiance at the spectators, who reiterated their cries, intermingled with maledictions." One of the attendants at his execution, having treated him with disrespect, roused his Self-esteem and Destructiveness, which again broke loose from restraint. It is said "one of the persons who assisted him to ascend he platform, having rather roughly pushed him to a side in order to place him exactly on the drop, he looked round at the man with a withering scowl which defies all description."

Farther, looking at the coronal surface of the brain, the seat of the moral sentiments, we find it narrow in the anterior portion, but tolerably well elevated; that is to say, the organ of Benevolence, although not in a favourable proportion to the organs of the animal propensities before mentioned, is fairly developed. Veneration and Conscientiousness are full, but hope is less in size. Love of Approbation also is full. In these faculties we find the elements of the morality which he manifested in the early part of his life, and also an explanation of the fact remarked by all who saw him, that he possessed a mildness of aspect and suavity of manner, which seemed in inexplicable contradiction with his cold-blooded ferocity. If there had been no kindness in all Burk's nature, this expression would have been an effect without a cause. The Courant of 22d January says,-"It is remarked by some of those who have access to see Burk, that his face has an agreeable and often pleasant expression, and by no means

any indication corresponding to the tragic crimes of which he has been guilty." The Evening Post of 31st January observes,—"We have already stated, that the conduct of Burk since his condemnation was quite civil and mild in his demeanour to every person, insomuch that some who have seen and had frequent intercourse with him cannot sufficiently wonder that such hardness of heart should be concealed under so plausible an exterior." What is this but saying, that human feeling actually beamed from the countenance of Burk? and I would ask, how could it appear there if it was utterly unknown to his mind?

It is by reconciling such anomalies as these that Phrenology shows its correspondence to nature. The ferocious feelings were strong in Burk, but the kindlier affections also were present, and his aspect would express the one or the other according as it was elicited by his external situation. How exactly this explanation corresponds with the fact is proved by another observation of the Evening Post:- "A person who had some intercourse with Burk immediately previous to his trial, and again the day before his execution, stated that he observed a very marked difference in his general appearance. On the first occasion, he was bold, daring, and forward, (Self-esteem, Combativeness, and Destructiveness, predominant:) and, on the latter, he appeared quiet, subdued, and meek:" (Benevolence, Veneration and Hope had attained the ascendency.)

The organ of Imitation is well developed; and it is mentioned in the phrenological works, that Secretiveness, (which in him is likewise large,) in combination with Imitation, produces the power of acting or simulation. It is curious to observe, that Burk possessed this talent to a considerable extent. He stated that he

was fond of the theatre, and occasionally represented again the acting which he had seen. He also, and not Hare, was the decoyer, who, by pretended kindness, fawning, and flattery, or by acting the semblance of a friend, inveigled the victims into the den. This quality enabled him also to act a part in his interviews with the various individuals who visited him in jail. He showed considerable tact in adapting himself to the person who addressed him: and, from the same cause, it was difficult to discover when he was serious and when only feigning. These faculties seem also to have been the chief sources of his Humour.

One of the most striking tests of the degree in which the moral sentiments are possessed by a criminal, is the impression which his crimes make upon his own conscience after the deeds have been committed. In Bellingham, who murdered Mr. Perceval, the organ of Destructiveness is very large, while that of Benevolence is exceedingly deficient; and he could never be brought to perceive the cruelty and atrocity of the murder. Burk, in whom Benevolence is better developed, stated, that "for a long time after he had murdered his first victim, he found it utterly impossible to banish, for a single hour, the recollection of the fatal struggle,-the screams of distress and despair,the agonizing groans,-and all the realities of the dreadful deed. At night, the bloody tragedy, accompanied by frightful visions of supernatural beings, tormented him in his dreams. For a long time he shuddered at the thought of being alone in the dark, and during the night he kept a light constantly burning by his bedside." Even to the last he could not entirely overcome the repugnance of his moral nature to murder, but mentioned, that he found it necessary to

deaden his sensibilities with whiskey, leaving only so faint a glimmering of sense as to be conscious of what he was doing. He positively asserted, that he could not have committed murder when perfectly sober.

Unequivocal testimony is borne to his repentance. "In the course of these devout and pious admonitions, Mr. Reid used the words, 'You must trust in the mercy of God;' upon which the unhappy wretch heaved a long deep-drawn suspiration, or rather suppressed groan, which too plainly betrayed the anguish and despair that lurked in his heart."—"The clergyman afterwards prayed with him, and sung a portion of the 25th Psalm, in which the following lines occur:

Now, for thine own name's sake,
O Lord, I thee entreat
To pardon mine iniquity:
For it is very great.'

Burk was observed, particularly, to mark with his nail the two last lines."

The smallest organs are Ideality, Wonder, and Wit, faculties which give refinement and elevation to the character,—in which qualities he was deficient.

His intellectual powers remain to be adverted to.—
The lower range, or perceptive organs, are well developed; and it was mentioned by himself, that he had some talent for mechanical construction, and was also orderly and cleanly when he could command the means. He read and wrote with facility. He mentioned, that at one time he used to attend church, and read books on controversial divinity, and debated over the opinions in his own mind. He was tolerably well conversant with Scripture. This is in perfect accordance with his possessing full Veneration. His conversation was pertinent and easy; and he showed

readiness and shrewdness of intellect, but not much

depth or extent of reflecting power.

It is worthy of observation, that Sir Walter Scott, in drawing the character of Charles II., presents a portrait, which, allowing for the difference of external situation, is amazingly applicable to Burk. Sir Walter's words are, - "Charles, unfortunately, was very fond of pleasure, and in his zeal to pursue it he habitually neglected the interests of his kingdom. He was very selfish, too, like all whose own gratification is their sole pursuit; and he seems to have cared little what became of friends or enemies, providing he could maintain himself on the throne, get money to supply the expenses of a luxurious and dissolute court, and enjoy a life of easy and dishonourable pleasure. was good-natured in general; but any apprehension of his own safety Easily induced him to be se-VERE AND EVEN CRUEL; for his love of self predominated above both his sense of justice and his natural clemency of temper." — (Tales of a Grandfather, 2d series, 2d vol. p. 170.)

It is singular, indeed, with what a trifling change of expression every word of this may be applied to Burk as well as to Charles II. We may read,—"Unfortunately Burk was very fond of pleasure, and in his zeal to pursue it he habitually neglected the interest of others. He was very selfish too, like all those whose own gratification is their sole pursuit; and he seems to have cared little what became of friends or enemies, providing he could maintain himself in idleness, get money to supply the expenses of his dissolute life, and enjoy ease and dishonourable pleasure He was good-natured in general; but the approach of want easily induced him to be severe and even cruel;

for his love of self predominated above both his sense of justice and his natural clemency of temper."

The effect of external circumstances in exciting particular propensities is admirably elucidated by Dr. Blair, in his 12th Sermon, on the Character of Hazael; the text is,—"And Hazael said, Why weepeth my lord? And he answered, Because I know the evil that thou wilt do unto the children of Israel: their strongholds wilt thou set on fire, and their young men wilt thou slay with the sword, and wilt dash their children, and rip up their women with child. And Hazael said, But what! is thy servant a dog, that he should do this great thing?"

Dr. Blair, in commenting on this text, observes,—
"We here behold a man who, in one state of life, could
not look upon certain crimes without surprise and horror; who knew so little of himself as to believe it impossible for him ever to be concerned in committing
them; that same man, by a change of condition, transformed in all his sentiments, and as he rose in greatness, rising also in guilt, till at last he completed that
whole character of iniquity which he once detested."

"In such cases," continues he, "as I have described, what has become of those sentiments of abhorrence at guilt which were once felt so strongly? Are they totally erased? or, if in any degree they remain, how do such persons contrive to satisfy themselves in acting a part which their minds condemn?" He answers this question as follows:—"Though our native sentiments of abhorrence at guilt may be so borne down, or so deluded, as to lose their influence on conduct, yet those sentiments, belonging originally to our frame, and being never totally eradicated from the soul, will

still retain so much authority, as if not to reform, at least, on some occasions, to chasten the sinner."

It is unnecessary to point out the application of these remarks to the case of Burk, as it is self-evident.

Dr. Blair continues,-"The seeds of various qualities, good and bad, lie in all our hearts; but until proper occasions ripen and bring them forward, they lie there inactive and dead. They are covered up and concealed within the recesses of our nature; or, if they spring up at all, it is under such an appearance as is frequently mistaken even by ourselves. Pride, for instance, in certain situations, has no opportunity of displaying itself, but as magnanimity, or sense of honour. Avarice appears as necessary and laudable economy. What in one station of life would discover itself to be cowardice and baseness of mind, passes in another for prudent circumspection. What in the fulness of power would prove to be cruelty and oppression, is reputed, in a subordinate rank, no more than the exercise of proper discipline. For a while the man is known neither by the world nor by himself to be what he truly is. But bring him into a new situation of life, which accords with his predominant dispositions, which strikes on certain latent qualities of his soul, and awakens them into action; and as the leaves of a flower gradually unfold to the sun, so shall all his true character open full to view.

"This may in one light be accounted not so much an alteration of character produced by a change of circumstances as a discovery brought forth of the real character, which formerly lay concealed. Yet, at the same time, it is true that the man himself undergoes a change. For the opportunity being given for certain dispositions which had been dormant, to exert them-

selves without restraint, they of course gather strength. By means of the ascendency which they gain, other parts of the temper are borne down, and thus an alteration is made in the whole structure and system of the soul."

There is great acuteness and truth in these remarks, especially in the latter, in which Dr. Blair observes, that difference of circumstances brings forth a discovery of the real character, rather than operates a radical alteration of it; while, at the same time, there is a change, in so far as one set of feelings gain the ascendency in the new situation which were subordinate in the old. In Burk, poverty, habits of vicious pleasure, intoxication, and the example of Hare gave an ascendency to Destructiveness which in happier circumstances it did not possess.

This case is highly instructive to the Phrenologist, and shows the effect of external circumstances in bringing into predominance different elements of the mind. We have never taught, that a man cannot commit murder who has an organ of Benevolence, for every individual has all the organs; but that a man cannot commit cool murder without possessing Destructiveness largely developed, and here Destructiveness is very large. If it had been small, this case would have afforded a strong objection against that organ, because the propensity would have been manifested strongly without a corresponding development of the organ. It is true that Phrenologists have hazarded the conjecture as probable, that if the moral organs possess a sufficient predominance in size over Destructiveness and Combativeness, the individual will not be capable of committing a deliberate murder while sane; but they have made no pretensions to tell

the exact proportion of moral power which in given circumstances will be sufficient to restrain a given development of the animal organs from abuse. The present case is pregnant with instruction on this point. We perceive that a considerable degree of moral feeling has been as dust in the balance when weighed against the excitement of the animal powers of Burk, stimulated by the external temptations offered to them.

Having laid before our readers a phrenological sketch of the character of Burk, as compared with his cerebral development, we beg now to add a few remarks on the indications presented by that of his infamous accomplice and companion, Hare. We were allowed to examine the head, and our estimate was afterwards corrected by a comparison with a very faithful cast taken by Mr. Joseph, with the hair so closely cropped as completely to present the appearance of a cast moulded on the shaven scalp, except along a marginal line in front, where Hare would not allow the hair to be cut away; but even there it is so thin as to present no obstacle.

At a glance, the proportion of brain in the lower and back part, where the organs of the inferior propensities are situated, is perceived to be very great, compared with the top of the head, or region of the organs of the moral sentiments, which is low and flat, indicating a preponderance of the selfish and grovelling over the higher faculties of his mind. The organ of Acquisitiveness, which lies in the temples, and which gives the love of gain, is very large, and stands broadly out, much surpassing the same part even in Burk, in whom it was very considerable. The temporal muscle lies over it, and throws some difficulty in

the way; but, making every allowance for its thickness, (which is generally moderate so high up,) the organ is unquestionably very large. The prominence which it occasions is so remarkable that an inexperienced or superficial observer might easily confound it with the organ of Ideality, which is far from being large in Hare, and indeed not more than moderate.-Next to Acquisitiveness, the organs of Destructiveness, Combativeness, and Self-esteem are the most remarkable, forming altogether a combination of the lowest of the propensities, which, unguided as it was in Hare by any considerable endowment of moral sentiment, was abundantly strong to fit him for the scenes in which he acted so brutal a part. The hope of gain, would be an inducement too strong for his powers of resistance, no matter what the means were by which the end was to be obtained. The organ of Benevolence is decidedly smaller in Hare than in Burk; and it is well known that he was the more brutal and disgusting of the two. Burk in his confessions mentions, that Hare could sleep soundly after a murder, but that he could not; which indicates less of the moral feelings in the former than in the latter. Hare's Combativeness is also larger, and his Cautiousness rather smaller than Burk's,-giving greater warmth of temper, hastiness, and proneness to fighting; and in proof of this having been his character, his head, on being cropped for casting, presented no fewer than six distinct scars, the remains of wounds sustained in his numerous squabbles and fights, chiefly in the Cowgate. The anterior lobe of the brain, containing the organs of intellect, is much shorter and smaller than that of Burk, although when viewed in front it presents a more perpendicular aspect, and may seem to be well

developed. It presents no indication of the acuteness and readiness by which Burk was distinguished even to the last. In short, the development of Hare turns out to be as complete a key to his mental character as that of Burk has been shown to be to his, and harmonizes in every respect with what is known of his manifestations.

This history strongly suggests the indispensable necessity of making arrangements to withdraw the temptations which stimulated the baser principles of these men's nature to such unprecedented excesses .-A Phrenologist would say, that there are still Burks and Hares in society,-that is, individuals who, while preserved from temptation, may pass through the world without great crimes, but in whom the capability exists of similar atrocities, if similar facilities are afforded them. In short, the case before us is instructive, in showing what a particular combination of human qualities is capable of performing in certain circumstances; and society ought to take the lesson to itself, that it is its duty, by means of education and rational institutions, to remove excitement to crime from such wretches to the greatest possible extent .-The wild cry of indignation, and the amazement of horror manifested by the public, are mere ebullitions of feeling, which lead to nothing. It is a cheap and easy way of being virtuous to express strong detestation of vice; but the true lesson to be learned from this dreadful and disgusting tragedy is to inquire into and remove the causes which gave it rise. This is active practical goodness; the other is mere indulgence of excited feelings, fleeting as the day on which they arise, and leaving no trace behind after time has caused them to subside.

ARTICLE IV.

[From the Edinburg Phrenological Journal, No. 12, 1926.]
SPURZHEIM ON PHYSIOGNOMY.*



OF Pope Alexander VI. Dr. Spurzheim says, "This cerebral organization is despicable in the eyes of a Phrenologist. The animal organs compose by far its greatest portion. Such a brain is no more adequate to the manifesta-

tion of Christian virtues than the brain of an idiot from birth to the exhibition of the intellect of a Leibnitz or a Bacon. The cervical and whole basilar region of the head are particularly developed; the organs of the perceptive faculties are pretty large, but the sincipital region is exceedingly low, particularly at the organs of Benevolence, Veneration, and Conscientiousness. Such a head is unfit for any employment of a superior kind, and never gives birth to sentiments of humanity. The sphere of its activity does not extend beyond those enjoyments which minister to the animal portion of human nature.

*I have not this interesting work of Dr. Spurzheim, and take the following short extract from it from the Journal. "Alexander VI. was in truth a scandal to the papal chair; from the earliest age he was disorderly and artful, and his life to the last was infamous.

"He is said to have bought the tiara by bribing a certain number of cardinals, or rather by making large promises, which he never fulfilled. It is well known that, when he became pope, he had a family of five children,-four boys and one daughter. He made a regular practice of selling bishoprics and other ecclesiastical benefices to enrich himself and his family. Though profane and various religious writers do not all agree in their judgment concerning the disorderly conduct of this man, many atrocities committed by him are well-ascertained facts. History will always accuse him of the crimes of poisoning, simony, and falseswearing,-of reckless debauchery,-nay, of incest with his own daughter. In political matters he formed alliances with all the princes of his time, but his ambition and perfidy never failed to find him a pretext for breaking his word and disturbing the peace. He engaged Charles VIII. of France to enter Italy in order to conquer the kingdom of Naples; and as soon as that prince had succeeded in the enterprise, he entered into a league with the Venetians and the Emperor Maximilian to rob him of his conquest. He sent a nuncio to the Sultan Bajazet to entreat his assistance against Charles, promising him perpetual friendship in case of compliance; but, after the receipt of a large remittance from the Turks, he treacherously delivered Zizim, the brother of Bajazet, then at the court of Rome, into the hands of Charles. As a singular example of Alexander's arrogance, his bull may be mentioned by which he took upon him to divide the new world between the kings of Spain and

Portugal, granting to the former all the territory on the west of an imaginary line passing from north to south, at one hundred leagues distance from the Cape de Verd Islands. Alexander possessed eloquence and address; but a total lack of noble sentiments rendered him altogether unfit for his sacred station. Poisoned wine, which had been prepared for certain cardinals whose riches tempted the cupidity of his holiness, was given him by mistake, and ended his profligate career. Some writers have questioned the truth of this account of Alexander's death, but there is nothing in the relation inconsistent with the acknowledged character of this pontiff. Lowness of feelings and lowness of brain are seen together."



The head of Philip Melancthon, from a portrait by Alb. Durer.—"It is very narrow," says Dr. S. "above and behind the ears, and the whole basilar region is very small; almost the whole of the brain, indeed, lies in the forehead and sincipital regions, both of which are exceedingly large. It is the brain of an extraordinary man. The organs of the moral and

religious feelings predominate greatly, and will disap prove of all violence, irreverence, and injustice. The forehead betokens a vast and comprehensive understanding. The *ensemble*, a mind the noblest, the most amiable, and the most intellectual that can be conceived. If there be any thing to regret, it is, that the organs of the animal powers should have been so small in comparison with those proper to man. Such a head may be called chosen; its only cause of unhappiness is in contemplating the injustice of mankind, and its too eager wishes for their better condition.

"Melancthon was born at Bretten, in the Palatinate, in 1495. He received the rudiments of education in his native place, went to the college of Pforzheim, and two years afterwards to Heidelberg, where he made such rapid progress in literature, that, before he had completed his fourteenth year, he was intrusted with the tuition of the sons of a noble family. He was still very young when Erasmus wrote of him,—'Good God! what hopes may we not entertain of Philip Melancthon, who, though as yet very young and a boy, is equally to be admired for his knowledge in both languages? What quickness of invention! what purity of diction! what powers of memory! what variety of reading! what modesty and gracefulness of behaviour?' "

"He soon contracted a close intimacy and friendship with Luther; and though he approved Luther's design of delivering theology from the darkness of scholastic jargon, his mildness of temper made him extremely averse to disputation of every description. He, however, rendered great services to the cause of reformation by his admirable abilities and his great moderation. He was even forced to sustain a conspicuous part in all the principal religious transactions and ecclesiastical regulations of that period. For the sake of peace and union, he was naturally inclined to yield where essentials were not concerned, and always anxious to soften the acrimony of religious controversy.

It is said that his mother having asked him what she was to believe amidst the disputes which divided the world, he replied. 'Continue to believe and pray as you have hitherto done.' He was humane, gentle, and readily won upon by mild and generous treatment; but when his adversaries made use of imperious and menacing language, he rose superior to his general meekness of disposition, and showed a spirit of ardour, independence,—nay, of intrepidity, looking down with contempt upon the threats of power, and the prospect even of death.'

"Never was any man more civil and obliging, and more free from jealousy, dissimulation, and envy, than Melancthon; he was humble, modest, disinterested in the extreme; in a word, he possessed wonderful talents and most noble dispositions. His greatest enemies have been forced to acknowledge that the annals of antiquity exhibit very few worthies who may be compared with him, whether extent of knowledge in things human and divine, or quickness of comprehension, and fertility of genius, be regarded. cause of true Christianity derived more signal advantages and more effectual support from Melancthon than it received from any of the other doctors of the age. His mildness and charity perhaps carried him too far at times, and led him occasionally to make concessions that might be styled imprudent. He was the sincere worshipper of truth, but he was diffident of himself and sometimes timorous without any sufficient reason. On the other hand, his fortitude in defending the right was great. His opinions were so universally respected, that scarcely any one among the Lutheran doctors ventured to oppose them. He was inferior to Luther in courage and intrepidity, but his

equal in piety, and much his superior in learning, judgment, meekness, and humanity. He latterly grew tired of his life, and was particularly disgusted with the rage for religious controversies, which prevailed universally."

ARTICLE V.

[From the Transactions of the Phrenological Society of Edinburg.]

REMARKS ON THE CEREBRAL DEVELOPMENT OF KING ROBERT BRUCE, COMPARED WITH HIS CHARACTER AS APPEARING FROM HISTORY.

By MR. WILLIAM SCOTT.

At the time when Phrenology was first beginning to attract attention in this country, it must certainly be regarded as a piece of extraordinary good fortune, that the discovery of the tomb of Robert Bruce, authenticated beyond the possibility of doubt,* should

*King Robert was the last sovereign of Scotland, whose remains are recorded to have been interred at Dunfermline. He was, according to Fordun, "Sepultus apud monasterium de Dunfermlyn in medio chori, debito cum honore." His heart having been taken out, to be carried to the Holy Land by Sir James Douglas, was, on the death of that knight in Andalusia, conveyed back to Scotland by Sir William Keith, and afterwards buried at Melrose.

The church of Dunfermline, which occupied the nave of the ancient cathedral, having become ruinous, it was resolved, in 1817, to erect a new building, extending over and including the space occupied by the Royal Tombs. In the course of these operations, the workmen came, by accident, upon a vault in a line with the centre of the ancient choir, which was covered by two large flat stones. This having been opened, at first only so far as to ascertain its being a royal vault, was immediately closed again, and remained so, until the 5th of November, 1819, when it was laid fully open, and its contents carefully examined in the presence of the King's Remembrancer, and of several of the Barons of Ex-

furnish us with the cerebral development of one of the most renowned monarchs, and one of the most justly celebrated men, whom this country, or whom the world, has ever produced. The opportunity thus afforded of illustrating the new science, and, at the

chequer. It then appeared, without a doubt, to have been the tomb of King ROBERT BRUCE.

The vault or grave was about seven feet long, of regular built masonry, situated within a larger vault. It contained a human skeleton, wrapped up in two separate coverings of lead. At the time the grave was first opened, there was at the top-of this lead covering, something which had the appearance of a rude crown. Under this lead was a covering of linen cloth, interwoven with gold-thread, but which, on the second opening, was found in a state of great decay. The whole being removed from over the body, the skull was taken up, and found in a most perfect state. The os hyoides was entire, and several cartilages of the larynx were visible, from having, it is supposed, been ossified. The whole teeth in the under jaw were entire, and in their places; but there were four or five in the upper jaw wanting, with a fracture of the jawbone in front, probably occasioned by a blow which the King had received in one of his military adventures.

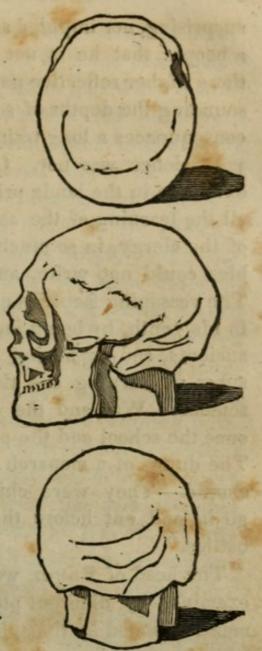
The most remarkable circumstance observed regarding the skeleton, was the state of the sternum, which was found to have been sawed asunder, from the top to the bottom. This was considered to afford additional evidence that the skeleton was that of Bruce, as this operation would be necessary to get at the heart, which, as already mentioned, was taken out, to be carried to the Holy Land.

The workmen, in the course of their operations a few days afterwards, found, among the rubbish of the vault, a plate of copper, which had escaped notice at the previous examination, having engraved upon it a cross bearing the inscription "Robertus Scotorum Rex." Above the inscription is the figure of a crown; and, beneath it, a crosslet, with four stars or mullets inserted in the angles. The letters of the inscription resemble those on the coins of Bruce. Upon the whole, there cannot be conceived more satisfactory evidence of any fact of the kind, than that the skeleton thus discovered, was that of King Robert Bruce.

same time, of exhibiting the true elements which formed the character of the great deliverer of Scotland, could not fail to be of the highest importance: and although, upon the first announcement of the cerebral development of BRUCE, and without a sufficient attention being paid to his real history and character, some may have thought that it did not correspond with the exalted ideas they had entertained of his merit, I will venture, without much risk of contradiction, to affirm, that no cause exists for any feeling of disappointment on this account. I think it will appear, on a minute examination of the circumstances of BRUCE's life, and of the times in which he lived, that the character indicated by the development, is not only borne out by the history in the closest manner,-but that, had that development been in any material respect different from what we find it, it would not have agreed with the history, and would have furnished grounds for impugning either the authenticity of the head, or the correctness of the principles laid down in the science.

The first point on which an objection has been stated, is the apparent deficiency in Bruce in the organs of the intellectual powers, as compared with those of some of the feelings, and particularly the animal propensities; and it has been asked, is it possible that there could have been any intellectual deficiency in so great a man? But here it is fit that we make proper distinctions. In Phrenology, two kinds of intellectual faculties are recognised; the first communicating the perceptive powers, the second the reflective. In Bruce's head, the organs of the first class are amply developed, and only the second are comparatively small. It is proper, therefore, that we consider what

was the kind of intellectual power which BRUCE exhibited, or which was necessary for enabling him to perform what he did. We must consider, in the first place, that BRUCE did not live in an intellectual age. He was the head and ruler of a rude people, just emerging, for we cannot say that in his time they were actually emerged, from barbarism. Not to mention the evidence of our own historians, which is sufficiently explicit upon this point, we may only allude to the testimony of FROISSART, a contemporary chronicler, and one whom there is no cause to accuse of unfairness. The account he gives of the Scots in BRUCE's reign, of their manner of making war,



of their mode of encampment, of their living upon flesh in a half raw state, merely sodden in skins, and of their wearing shoes or buskins of untanned leather, is such as to wear the stamp of truth, while it mortifies us not a little at the low state of civilization in our ancestors of the fourteenth century. They seem to have been in a state little, if at all, superior to the Cossack tribes of the present day. This was the people whom Bruce commanded, among whom and of whom he was born; and it surely cannot be thought

surprising, nor imputed as a defect in the chief of such a people, that he is not found to be endowed with those higher reflective powers which are necessary for sounding the depths of science, or for pursuing to its consequences a long train of inductive reasoning. As yet Science was not. Colleges and schools had no existence in the land; printing was not invented; and all the learning of the age was monopolized by a few of the clergy, in so much that many distinguished nobles could not write, and probably could not read. The reasoning faculties of Bruce were not exercised in his youth, by being imbued with the wisdom of the ancients, and by having opened to his view the treasures of learning and the inexhaustible wonders of science. War and the chase formed in his time at once the school and the pastime of the noblest spirits. The duties of a monarch were in those days few and simple. They were chiefly, if not exclusively, "to go in and out before the people, and to fight their battles."

The head of Bruce was, soon after its discovery, examined by different phrenologists, and its development, as stated by them, has long been before the public. It certainly appears to me that they have, at least, not erred on the favourable side in this case; and, instead of bending the development to suit preconceived notions, and to raise the monarch in the scale of intellect, I rather think, with submission to them, they may have somewhat under-rated the reflecting powers of Bruce. He is admitted to have a large Individuality; and, I may add, (if we are right in holding that there are two organs included in this,) that they are both largely developed in Bruce. It is laid down in the Outlines, and, indeed, all the systems of Phreno-

logy, that these organs give the talent of quick observation and tenacious memory for facts and occurrences presented to the senses; and, when joined to a favourable combination of the propensities and sentiments, they give that kind of judgment which is known by the name of sagacity, or common sense: for it must never be forgotten, that practical judgment is held, in Phrenology, to depend fully more on the power of feeling correctly, than of reasoning deeply. We have known many persons in whom we have observed these organs to be well marked, who, with a very moderate, or rather a small portion of what are called the reflecting faculties, possess a quick intuitive judgment in common affairs, are prompt to decide and to execute, and are hence better fitted for the ordinary business of life, than those whose high reflective faculties are far superior, but who enjoy less of these lower powers. Now, this was exactly the sort of talent which was required and exhibited by BRUCE. There is nothing in his history which leads us to suppose, that, in point of intellect, he rose at all higher than good shrewd sense. There are many such men, who, though they want that comprehensiveness and subtlety of mind which can pursue long trains of reasoning, and cannot even state the reasons of their conduct in a luminous and distinct discourse, yet never fail in discerning, as it were, by an intuitive tact, their own true interest, even in a view of the most complex affairs, and at once decide upon that course of conduct which is fittest for obtaining their ends. The talents for shining in reasoning and discourse, and those necessary for wise and decisive action, thus appear perfectly different. And if, on the one hand, we were to place the reflective and reasoning powers of BURKE

or of BACON, -which are given only by a large development of the higher intellectual organs; and, on the other, that rapid and accurate perception, which is given by Individuality, with that tact of sagacious feeling, prompt decision, and energy of action, which are the results of a good combination of the propensities and sentiments; -and we were asked which of these kinds of talent was most likely to shine in the age of BRUCE, we would most assuredly answer, the latter. I have only to add on this subject, that, although what are called the higher intellectual organs, Comparison, Causality, and Wit, are by no means fully developed in BRUCE, as contrasted with the other parts of the head, this is more relatively than absolutely the case. The head is a very large one, and these organs appear small only in comparison with those of the feelings, which in him are very large; and when compared with the corresponding organs in a head of ordinary size, they will be found really not deficient. They are not actually smaller than are to be found in many persons of good sense and shrewd understanding at the present day: and we may be satisfied that, even in respect of these, Bruce stood rather above than below the average of intellect among his countrymen in his own time. The head of BRUCE is altogether one of the largest which has come under our observation; and it will be recollected, that, in perfect and healthy conformation, great size in the brain is held to indicate great power in the mind; the kind of power corresponding to the region of the brain which is most enlarged.

The next thing to be noticed is, the deficiency which has been remarked in the sentiments of Benevolence and Conscientiousness. It is true, that both of them

particularly small. But this affords no objection. There is nothing in the history of Bruce which leads us to suppose that he possessed either of these sentiments in great vigour. There is no instance recorded in which he shewed any great regard for the happiness, or regret for the sufferings of others; and certainly none in which he made any great sacrifice, or suffered himself to be stopped in any of his plans, from a merely benevolent or conscientious motive.

But passing these topics, which really afford no objection either to the authenticity of the head or its correspondence with the character, we shall state the development as we find it, and afterwards add a few observations on the character and history of the illustrious person to whom it belonged.

Amativeness, full. Philoprogenitiveness, large. Concentrativeness, rather full. Adhesiveness, large. Combativeness, large. Destructiveness, large. Constructiveness, rather small. Acquisitiveness, moderate. Secretiveness, very large. Self-esteem, rather large. Love of Approbation, large. Cautiousness, large. Benevolence, rather small. Veneration, large. Hope, large. Ideality, moderate. Conscientiousness, small. Firmness, very large.

Individuality, lower, large.

——— upper, full.

Form, large.
Size, large.
Weight, uncertain.
Colouring, moderate.
Locality, rather large.
Order, moderate.
Time, uncertain.
Number, uncertain.
Tune, moderate.
Language, uncertain.
Comparison, moderate.
Causality, moderate.
Wit, rather small.
Imitation, moderate.
Wonder, moderate.

The size of the head will be seen from the following measurements, taken from the middle of the surface of each organ, as indicated on the skull.

(A) 1 1800 (2011-1839) (B) 181 (B)	INCHES.
From Philoprogenitiveness to lower Individuality,	. 8
Concentrativeness to Comparison,	6 5-8
Meatus auditorius externus (right side,) to the	junc-
tion of the occipital spine, with Philopre	ogeni-
tiveness,	45-8
Do. to lower Individuality,	5
Do. to Firmness,	5 5-8
Destructiveness to Destructiveness,	5 7-8
Secretiveness to Secretiveness,	6
Cautiousness to Cautiousness,	5 5-8
Ideality to Ideality,	46-8

It will be obvious, to every phrenologist, on looking at this development, that the character which it indicates, is one (either for good or for evil,) of great energy and power. From the full endowment of Amativeness, and the large Philoprogenitiveness and Adhesiveness, we would conclude, (what we know to be the case from his history,) that he was a kind husband and father, attentive to the interests of his family, and disposed to enjoy the pleasures of private friendship and domestic society. His large Combativeness and Destructiveness were abundantly shewn by his prowess in battle, and also by that warmth of temper, of which many instances occur, and which might lead us to apply to him, what has been said of his country in general,

"Whoe'er shall provoke thee, th' encounter shall rue."

His Cautiousness and Secretiveness were shewn, not merely in the mode in which he generally attacked his enemies, which was oftener by stratagem and surprise than in the open field, and by the general prudence of all his measures; but also in his power of dissembling, when he chose, his secret feelings, which we frequently find him doing, both with the English

monarch, in whose court he at one time resided; and in his intercourse with his own nobles, when in the height of his power. His full endowment of Self-esteem, and the large love of Approbation, (the latter of which inspires with Ambition,) joined to some portion of Ideality, account for that high spirit of chivalry, and ardent love of glory, which he manifested in so great a degree, and these joined to his Combativeness, Destructiveness and Adhesiveness, and the feeling of greatness, arising from the consciousness of his royal descent, sufficiently account for his long and vigorous exertions on behalf of his suffering and much injured country. This combination also, joined to the great power communicated to the mind, by the large size of the brain, would give him a noble and commanding aspect, a princely bearing and carriage, although not a profoundly intellectual look. His Firmness and Hope, which were both large, are sufficiently shewn, by his persevering in his exertions; his patience, under every distress and privation, and his constant expectation of ultimate success, which appeared so remarkable to BOECE, that he thinks it can only have "cumin be miracle and grace of God. Howbeit his friendis war neir all uterly destroyit, he ceissit nevir to have ferme esperance sum tyme to recover his realme, and liberte of his pepil."

Owing to his moderate Acquisitiveness, we no where find him guilty of any mean or sordid action. It was ever the glory and the power annexed to a crown, and not the possessions attached to it, which he seems to have desired. His moderation in this respect, appears from what we are told by Buchanan, that for some years before his death, he had given up the splendors of royalty, and lived at Cardross near to

Dunbarton, more like a private person than a king. Of his great Veneration he gave many unquestionable proofs, in the regard which he paid to the religion, and even the superstitions of his time; and a very remarkable one appears in the very last act of his life, his ordering his heart to be conveyed to the Holy Land.

I shall now examine more minutely, some of the more prominent passages of Bruce's History; and I think it will appear that they correspond with the development in a way equally exact and surprising.

The first acts which are recorded of him are unfortunately not such as to afford any omens of his future greatness. In his youth he was wavering and unsettled; and his character unfolded itself afterwards, as events afforded opportunity. After an end had been put to the short and unfortunate reign (if reign it can be called) of JOHN BALLIOL, EDWARD of England (1296,) who now hoped to annex the crown of Scotland to his own, held a Parliament at Berwick, and there received the fealty of the clergy and nobles of that country. Among those who concurred in this disgraceful national submission, was "Robert Bruce the younger, Earl of Carrick." The year following (1297,) when WALLACE had just begun his great and heroic exertions for the liberation of his country from the English yoke, BRUCE, whose great possessions, as well as his pretensions to the crown, rendered him suspected, was summoned to Carlisle, by the Wardens of the West Marches, for the purpose of renewing his oath of allegiance. "He obeyed," says HAILES, "and swore on the consecrated host, and on the sword of BECKET, to be faithful and vigilant in the cause of EDWARD. To prove his sincerity, he invaded the estate of SIR WILLIAM DOUGLAS, with fire and sword, and carried off his wife and children. He instantly repented of what he had done. I trust, said he, that the Pope will absolve me from an extorted oath. He abandoned EDWARD, and joined the Scottish army." (See HAILES' Annals.)

In all this, we see the deficiency of the conscientious principle, and the dexterity of self-delusion, by which his failure in this respect is reconciled to his religious feelings. Oaths are taken and broken without scruple, trusting to obtaining an absolution from the Pope. But we are not yet done with these acts of tergiversation. Some of the Scottish leaders, and BRUCE among others, afterwards consented to treat with the English; but the known inconstancy of BRUCE required something more than acknowledgments of submission, and oaths of fealty. The Bishop of Glasgow, the Stewart, and ALEXANDER de LINDE-SAY, became sureties for his loyalty and good behaviour, until he should deliver his daughter Marjory as a hostage. This curious instrument is dated 9th July, 1297.

Some time after the successful issue of the battle of Stirling; (but probably not until the spring of 1298,) the young Earl of Carrick again acceded to the cause of his country, now apparently triumphant. At the time of the disastrous battle of Falkirk, he was in arms on the side of the Scots; but instead of being present in the main army, he guarded the Castle of Ayr, which preserved the communication with Galloway and the West Highlands. This authentic circumstance completely refutes the absurdtale of Bruce having fought on the side of the English at Falkirk, and of a conference between him and Wallace, im-

mediately after that battle, on opposite banks of the Carron.

Some time after the unfortunate issue of that engagement, we find BRUCE not merely acting once more with the English party, but, what may seem most extraordinary, we find him apparently high in the confidence and favour of the English monarch. At this time a Scots Regency was formed in the name of the absent John Balliol, who can now be considered nothing else than a mere puppet in the hands of Ep-WARD. The members of this regency, besides BRUCE, were the Bishop of St. Andrew's, and JOHN COMYN, younger of Badenoch. It is understood, that COMYN took the chief direction of affairs under this regency; and that BRUCE was never very cordial or sincere, either in acknowledging Balliol, or supporting Comyn, may be presumed, from the feeble and versatile conduct which he always evinced, until circumstances induced or compelled him to urge his own pretensions. (Kerr's History of Robert the Bruce.)

After this we hear little of Bruce for some years, during which he appears to have lived at peace, and even in favour with Edward, and to have occasionally resided at his court. His large secretiveness and caution, and also that quick observation and tact given by his large individuality, would fit him to play the courtier, and to conceal his real designs under a veil of ease and carelessness. This seems to have continued, until the discovery of the intrigues between him and Comyn, and the slaughter of the Comyn, by Bruce and his associates, in the church of the Minorites at Dumfries, made it no longer possible for him to preserve terms with Edward. I mean not to inquire whether this homicide was justifiable or not.

It is only necessary here to examine, whether it is such an act, as BRUCE, from what we know of his development, and consequent temper, was likely to commit upon provocation given. On looking at the development, we perceive combativeness and destructiveness both large; and in the works on Phrenology, these are uniformly mentioned, as conducing to rage, or that impetuous passion which boils over in a momentary fury; and hence we may confidently say, that, on the principles of Phrenology, the slaughter of COMYN was such an act, as a person with this development was likely to commit. The circumstances alleged by the Scottish historians, for palliating or justifying the deed, may or may not be true, but the undoubted facts are quite sufficient. It will be remembered, that BRUCE and COMYN were the chiefs of two discordant factions; both had claims to the crown; and at a meeting, for the discussion of mutual injuries between men of such high and irreconcilable pretensions, it is not wonderful that such matter of provocation should occur, as to cause a man of the impetuous temper of BRUCE to have recourse to his sword.

That Bruce's part in the murder proceeded from sudden impulse, and not from premeditated intention, seems obvious from this, that he did not effectually perpetrate the act. No sooner had he given the blow, than his anger seems to have yielded to his constitutional cautiousness; and his veneration, which was great, occasioned, if not remorse, a sudden horror at the crime he had been guilty of, the most heinous circumstance of which would probably appear to him to

be, that it was committed in a church.* Impressed with these feelings, he rushed out, hardly knowing what he did, exclaiming to his friends without, "I doubt I have slain the COMYN." They, with more coolness, and instantly seeing the danger of leaving so powerful a rival alive, against whom such an attempt had been made, determined to secure the matter beyond a doubt, and going in, stabbed him to the heart. Such a deed, at the present day, strikes us with horror; but in those times it was probably regarded differently. As a proof of this, we may refer to the circumstance of KIRKPATRICK, the chief of those who assisted in the murder, assuming a bloody dagger for his crest, and for the motto, the words "I mak sickar;" plainly alluding to this very deed, which he thus seems to have regarded as redounding to his honour, rather than as being a subject of reproach.

It is probable, from Bruce's large cautiousness and secretiveness, that if he had at this time entertained any designs for obtaining the Crown of Scotland, he would have concealed them for some time longer, and delayed taking any active measures till a favourable opportunity occurred, had not this homicide made farther temporising impossible, and rendered an open avowal of his pretensions a measure of prudence, and even of necessity.

Down to this period, we have seen nothing of

*"BRUCE," says Sir Walter Scott, "uniformly professed, and probably felt compunction for having violated the sanctuary of the Church, by the slaughter of Comyn; and, finally, in his last hours, in testimony of his faith, penitence, and zeal, he requested James, Lord Douglas, to carry his heart to Jerusalem, to be there deposited in the Holy Sepulchre."

Lord of the Isles. Note 17. Canto II.

BRUCE but one continued course of fickleness and tergiversation, giving rise to crimes to which, unless we make large allowances for the difficult circumstances in which he stood, and the feelings of the age in which he lived, we can give no other names than those of perjury and murder. But we are now approaching a different scene, where the powers and propensities with which he was endowed, were all gratified with legitimate indulgence and the fullest exercise, in a manner which redounded not more to his own individual advantage and glory, than to the advantage, the interest, and the glory of his country. From the moment that he touches the last sad point of his degradation, and is driven to the measure of openly claiming the Crown of Scotland, BRUCE appears to rise before us a new man. This is quite easily accounted for by the new direction afforded to his faculties by the circumstances in which he is placed, without any change in his natural character. His former misconduct arose from the opposition which existed between his love of country and his own ambitious views on the one hand, and his fear of offending King EDWARD on the other. But the murder of Comyn having placed him in a state of irreconcilable enmity with the English monarch, his whole powers are now directed, without any division or distraction, upon one exclusive object, fair and honourable in itself,-the recovering to himself the throne of his ancestors, and to Scotland, freedom from an odious foreign voke. Besides, the new situation in which he is placed, impressing him more fully with a sense of his own importance, would call into activity feelings which had previously no opportunity of displaying themselves. His selfesteem, and hope, thus excited, would lead him to consider himself the anointed of Heaven, the destined deliverer of his people. His love of approbation, would
add to this the desire of glory, and an anxiety to avoid
whatever might tarnish the honour of a true knight,
and of a lawful monarch. His veneration, joined to
all these, would cherish a peculiar sentiment of selfrespect, founded upon the long line of a hundred kings,
through which the chronicles of his country taught
him to believe the sceptre which he now aspired to
had been transmitted. And the whole united, would
fill his mind with that inborn feeling of dignity, which
no degree of merit, without the adjunct of hereditary
exalted rank, is ever known to inspire, and make him
feel, and be felt by others to be, "every inch a King."*

From this time forth, the life of Bruce, as related by our artless chroniclers, resembles the events of an epic poem. It is needless to relate, minutely, the hardships he endured on his first entering upon the arduous task of rescuing his country from the English

* The following passage, in Scott's "Lord of the Isles," descriptive of the mien and demeanour of Bruce, was pointed out to the author after the above was written. Its coincidence with what is stated in the text, derived from Phrenology, is striking, and affords an instance among a thousand which might be produced, how characters drawn from the life, or with just notions and views of human nature, will be found to correspond minutely with those views which Phrenology presents to us.

"Proud was his tone but calm, his eye
Had that compelling dignity,
His mien that bearing haught and high,
Which common spirits fear;
Needed nor word nor signal, mere
Nod, wink, and laughter, all were o'er;
Upon each other back they bore,
And gazed like startled deer."

Lord of the Isles. Canto I.

yoke. We find him, even in these hopeless circumstances, manifesting his veneration for established customs, and the established religion, by going to be erowned at Scone, and sending to Rome for a pardon for the crime of the murder. His first attempts after this were singularly unfortunate. Twice he was defeated by the partisans of EDWARD, and all his followers dispersed. Two of his brothers, who were bringing him reinforcements, were defeated and taken prisoners, and cruelly slain by the English. His wife and daughter were also taken, and remained captives in the hands of his enemies. We find him wandering, deserted, and an outcast in his own kingdom, subsisting on roots, and hiding himself among mountains and in caves, reminding us of the evils endured by DAVID when he fled before the face of the furious SAUL. We need not follow him in the gradual steps-the fortunate accidents steadily improved, which led to his final success, and the expulsion of the hated Southron from the Scottish soil. The qualities which were here exhibited by BRUCE, both in exertion and suffering, have been already, in some measure, pointed out and explained. But it may be proper to contemplate, for a moment, the means which he pursued to accomplish his purpose, as illustrative at once of his own character, and of the circumstances in which he was called upon to act. He did not take a profound and comprehensive survey of the situation of his kingdom, measure its strength with the strength of England, combine his means in one great effort; and either by a general rising in every district of the country, or by a collected mass of soldiers, attempt to deliver Scotland from her chains. Such a mode of proceeding would have indicated those higher powers of reflection and combination which his development shews that he did not possess. But he resorted to no such measures.—
He obeyed the impulses of an instinctive bravery and ambition. He collected a few hundred followers, and took the field with them as at once their King, their commander, and their fellow soldier. A powerful arm was then held in higher estimation than a highly gifted understanding; and while Bruce's prowess in personal combat is the theme of deserved eulogy, no trace is to be found of the display of those penetrating and comprehensive powers which depend exclusively on a great intellectual development.

The following are instances of the kind of exploits performed by BRUCE, by which he sometimes extricated himself from difficulties which would probably have overwhelmed any other man. On the occasion of his being defeated, with his small party, by the superior forces of LORN, in Glendochart, he retreated with his men up a narrow and difficult pass, "he himself bringing up the rear, and repeatedly turning and driving back the more venturous assailants." Three of Lorn's stoutest followers resolved to make a dash at him. "They watched their opportunity (says Sir W. Scott,) until Bruce's party had entered a pass between a lake and a precipice, when the King, who was the last of the party, had scarce room to manage his steed. Here his three foes sprung upon him at once. One seized his bridle, but received a wound which hewed off his arm. A second grasped BRUCE by the stirrup and leg, and endeavoured to dismount him; but the King putting spurs to his horse, threw nim down, still holding by the stirrup. The third taking advantage of an acclivity, sprung up behind him upon his horse. BRUCE, however, whose perthat of most men, extricated himself from his grasp, threw him to the ground, and cleft his skull with his sword. By similar exertions, he drew the stirrup from his grasp whom he had overthrown, and killed him also with his sword, as he lay among the horse's feet." It is added, that the King's bravery, on this occasion, drew, even from his foes, expressions of the warmest admiration; and Macnaughton, one of Lorn's followers, declared "he had never heard of one, who, by his knightly feats, had extricated himself from such dangers as had this day surrounded Bruce."

A similar exploit is recorded of BRUCE, when in still more desperate circumstances. It occurred in Ayrshire, after the dispersing of his friends, on his first landing in that country. He and a small band who still adhered to him, were pursued by a party who brought with them a sleugh dog, or blood-hound, which, it is said, "had been once a favourite of BRUCE himself; and, therefore, was not likely to lose the trace." BRUCE divided his force once and again, but still found that his pursuers, guided by the bloodhound, directed all their force in pursuit of the division in which he remained, paying no attention to the others; at last the King was left with a single attendant, his foster-brother, when five of the most active of his pursuers were detached to follow him and interrupt his flight. "What aid wilt thou make?" said Bruce to his adherent, when he saw the five men gain ground upon him. "The best I can," was "he answer. "Then," said BRUCE, "here I make my stand." The five pursuers came up fast. The King took three to himself, leaving the other two to his foster-brother. He slew the first who encountered him; but observing his foster-brother hard pressed, he sprung to his assistance, and dispatched one of his assailants. Leaving him to deal with the survivor, he returned upon the other two, both of whom he slew before his foster-brother had dispatched his single antagonist. When this hard encounter was over, with a courtesy which every where marks Bruce's character, he thanked his foster-brother for his aid. "It likes you to say so," answered his follower, "but you yourself slew four of the five." The above story is quoted from Barbour, by Sir Walter Scott, in his notes to "The Lord of the Isles."

I now wish to state, somewhat in detail, the events of the celebrated battle of Bannockburn; events which display more of the spirit of chivalry than almost any of the fictions of romance; and which, so far as Bruce is concerned, receive no little illustration from the inquiry we are now pursuing. The circumstances which led to this famous action, are well known.—Bruce having made himself master of most of the fortified places in the kingdom, had left his brother Edward to besiege Stirling, one of the few strengths still occupied by the English. Philip de Mowbray the Governor, offered to surrender, if he was not relieved on the feast of St. John the Baptist (24th June,) the following year. To this offer, Edward Bruce, without consulting his brother, agreed.

The King of Scots was highly displeased at this rash treaty. By it the military operations were interrupted, and a long interval allowed to the English for resembling their utmost force; while, at the same time, the Scots were reduced to the necessity either of raising the siege with dishonour, or hazarding the king-

dom on the event of a single battle. But Bruce was not now the inconstant youth, who had made and broken covenants and oaths, as will or interest directed. He had now to support the dignity of his Crown, and of a name already great in arms. The word of a prince, of his own brother, had been given to the English knight; and the manners of the age made it impossible to forfeit that word, without an indelible stain upon his honour. He was constrained, therefore, to observe it, through the influence of love of approbation, if not from the dictates of conscientiousness. He, therefore, consented, however reluctantly, to the treaty, and resolved to meet the English on the appointed day.

BRUCE must, no doubt, have seen with anxiety and alarm, the mighty preparations made by the King of England, for the approaching struggle; preparations which, as that monarch imagined, were not only to wipe away all his former disgraces in Scotland, but to finish at one blow the liberties and the hopes of that unfortunate country. And certainly, if victories - were to be disposed of by numbers, and if trust was to be put "in chariots and in horses," there seemed then little hope for Scotland, or for her defenders .-While England, rich and unexhausted, sent, as we are told, 100,000 warriors to the combat, with such a multitude of followers, as overspread the land, and seemed as if they came to take possession of an easy prey, rather than to fight a dubious battle; -BRUCE, with all his exertions, was unable to raise from his impoverished country, broken with continued oppressions and spoils, more than 30,000 men; and these, as may be supposed, poorly armed and accoutred, in comparison with the array of sturdy yeomen and gaily caparisoned men-at-arms from wealthier England.

We have said, that BRUCE possessed the faculties which impart quickness in perception, and prudence in conduct. The skill and sagacity shewn by him in his choice of the ground where he was to meet the enemy; and his stratagem of digging pits for entangling the English horse, illustrate well those features of his character depending on individuality, cautiousness and secretiveness. It has been remarked, however, that by the disposition he made he exposed his left flank to the garrison of Stirling. But MOWBRAY, the Governor, had consented to a truce; and if he had assailed the Scotch before the fate of the castle was determined by battle, he would have been deemed a false knight. In those days, we are told, the point of honour was the only tie which bound men: for dispensations and absolutions had effaced the reverence of oaths.

The following circumstance deserves to be noticed, as highly characteristic of Bruce. Eight hundred horsemen, commanded by Sir Robert Clifford, were detached from the English army; they made a circuit by the low grounds to the east, and approached the castle. Bruce, whose vigilance nothing could escape, (his large individuality is conspicuous here,) rode hastily up to Randolph, his nephew, who commanded the left-wing, and said to him angrily, that "a rose was fallen from his chaplet;* for where he was

*This expression is obscure. If really used by Bruce, it shews some comparison and ideality. It may have been a common or proverbial expression at the time. The words of Barbour are,

For the King had said him rudely,
That a rose of his chapilet
Was fallen; for where he was set
To keep the way, those men were past.

set to keep the way, he had allowed the enemy to pass." RANDOLPH hastened to repair his fault or perish. As he advanced, the English cavalry wheeled to attack him. RANDOLPH drew up his troops in a circular form, with their spears resting on the ground, and protruded on every side. The enemy far superior in numbers, pressed him hard. Douglas saw him in jeopardy, and asked the King's permission to go and succour him. "You shall not move from your ground," cried the King, "RANDOLPH must extricate himself as he best may. I will not alter my order of battle, and lose the advantage of my position." (Cautiousness, firmness, and the small development of benevolence, here display themselves.) Douglas afterwards obtained his tardy permission to succour his friend; but the aid was unnecessary. RANDOLPH had repulsed the enemy; and Douglas, with a truly chivalrous feeling, forbore to join him, lest he should diminish the honour of his success.

The King's exploit on the evening before the battle, when he clove with his battle-axe the helmeted head of Henry de Bohun, an English knight, who had attacked him as he rode carelessly along his line, is sufficiently indicative of his great personal strength and address (another word for the rapid perception conferred by individuality) as well as of his large endowment of combativeness and destructiveness.

His veneration appears conspicuous, in the acts of piety which were performed in the morning of the battle. The Abbot of Inchaffray, we are told, said mass upon a rising ground in sight of the whole army, and afterwards carried barefooted, a crucifix along the line, encouraging the soldiers to fight. The Scots kneeleddown. "They yield!" cried Edward, "see they im-

UMFRAVILLE, "but not from you! On that field they will be victorious or die!" DE UMFRAVILLE was right. When veneration is excited in the degree it appears here, along with a powerful firmness, and a sufficient endowment of the combative and destructive powers, there is no thought of yielding or of flight. Men so excited, fear death far less than submission; or rather, they do not fear it at all. Fighting in a cause which they deem holy as well as just, there is something of the zeal of the martyr superadded to the courage of the hero; and death even appears a consummation to be desired, as at once the most glorious termination of their earthly toils, and as offering an immediate passport to heaven.

It has been said by some, that the English were seized with a panic, on observing what they thought a new army appearing on the heights, which were no other than the wagoners and sumpter boys, dressed out as such with penons and standards. But by the . most authentic accounts, the English appear to have fought bravely; and the victory, though complete, was neither easy nor bloodless. It would rather appear, that the victory was decided by BRUCE's ordering Sir ROBERT KEITH to charge the English archers in flank, while he himself came up with the reserve. Now, BRUCE's development is exactly such, as would enable him to preserve coolness and complete presence of mind, and give distinct orders in the midst of such a scene of carnage and confusion. His large combativeness and destructiveness are kept in check, and balanced by his caution and firmness, leaving full scope for that quick observation of passing events, and that intuitive judgment and rapid decision, given by his

large individuality. In the shock of an engagement, there is no time for subtle and refined combinations. The movements must be simple, obvious and easy; but above all they must be prompt and sudden. The intellectual powers which belonged to Bruce, and which he possessed in full perfection, were perfectly competent to this; and the genius of a Shakspeare or a Bacon could not have performed the office so well.

We must not omit to mention the courteous behaviour of Bruce after the battle, and the generosity shewn by him in his treatment of the prisoners who were allotted to him. He set at liberty Ralph de Monthermer, and Sir Marmaduke Twenge, without ransom. (Here we see his moderate acquisitiveness makes him regardless of sordid and mercenary considerations.) By humane and courteous offices, it is said he alleviated the misfortunes of the captives, won their affections, and shewed the English how they ought to have improved their victories.

That this courtesy and humanity did not proceed entirely from benevolence, appears from the small regard which Bruce shewed on other occasions for the sufferings of the people, in the destructive inroads which he made into England, when his course was tracked by smoking villages, and every kind of destruction and rapine; and in the ravages of a similar kind, which his brother and he afterwards committed in Ireland. But this was the age of chivalry, and, next to valour, courtesy, and particularly courtesy to the weak and the helpless,—to women and to prisoners, was the virtue most prized in a true knight. The courtesy and kindness here shewn by Bruce to his captives, proceeded, therefore, most probably, from

his love of approbation, which we have seen to be great. This is not a solitary instance; it was the fashion of the day. It was exhibited, perhaps, with somewhat more of ostentation and theatrical effect, by the Black Prince and his father, in their behaviour to King John, of France, after the battle of Poictiers. Perhaps, also, in so politic a prince as Bruce, there might be some regard here to his interest as well as to his glory. Hardly yet secured upon his throne, it might have appeared an object of consequence even to the Scottish monarch, to obtain the friendship and good will of some of the rich and powerful nobles of England. Cautiousness and secretiveness may, therefore, have had a share in producing King Robert's kind treatment of his captives.*

The only occasion on which Bruce's caution seems to have deserted him, was in his listening so easily to the offer made to his family of the Crown of Ireland. Even here his caution prevailed so far, as to prevent him from accepting that crown for himself; but in permitting his brother Edward to accept it, he must have seen, at least he had reason to fear, that he was engaging in an enterprise beyond his means. But his ambition and love of glory had for once overcome his original cautious temper; and these, we may suppose, were excited, in no small degree, by the prosperous state of his affairs at home, and particularly by his wonderful success at Bannockburn; which action, it is said, for a time raised the confidence of the Scots,

^{*&}quot;There might be policy in this," says Sir Walter Scott, "as Bruce would naturally wish to acquire the good opinion of the English barons, who were at this time at great variance with their king. But it also well accords with his high chivalrous character."—Lord of the Isles. Notes to Canto VI. p. 491.

and dispirited the English to such a degree, that no superiority of numbers would induce the latter to meet the former in battle. The power which is, perhaps, most liable to this kind of excitement from external causes, is hope, which we have seen in Bruce was large: and this will sufficiently account for a step, which, in point of strict prudence, he ought not to have taken.

The behaviour of BRUCE in what has been called his Black Parliament,-his dexterity in first drawing within his grasp,—and his promptness and severity in seizing, condemning and executing so many of his barons, convicted of treasonable practices, -shew in a strong light almost all his characteristic peculiarities,-cautiousness, secretiveness, firmness, self-esteem and destructiveness. Had any one of these been wanting, Bruce could hardly have done what he did upon that occasion. Either he would have failed in taking some of the necessary precautions, or he would have let out his design before he was ready to execute it; or he would have failed, for want of the requisite proof; or he would have faltered in the execution, and extended to some of the offenders (some of them were his own near connections) the royal mercy. But nothing of all this happened. The first who suffered was DAVID ABERNETHY, the King's sister's son. Boece relates, that "the King wald fain that he had been saifit; nochtheless he was sa rigorous on the laif, that it might not be esaly done. And becaus na man labourit for him, he was heidit, with great lament of pepil: for he was haldin the flower of chivalry, and had fochtin mony yeris afore, with great honour and victory, aganis the Turkis. On the morrow, all the remanent conspiratoris war heidit, in the samen manner, but ony mercy." This is all quite conformable to the character indicated by the development before us; and, indeed, we need only look at this to be assured, that, however he might at times appear the courteous knight, or the kind father of his people, it must have been a fearful thing to have incurred the anger of The Bruce.

The secretiveness of BRUCE is no where better displayed than in his sarcastic reply to the messengers of the Pope, when he returned his Holiness' letters unopened, because they were not addressed to him as King,-and when, although he must have been highly displeased at being denied this title, he dissembled his displeasure, and addressed the messengers, as is said, "with a mild and pleasant countenance." The negociations which afterwards took place to induce his Holiness to yield this punctilio, and to address him by the title of King, are no less indicative of this quality. RANDOLPH, who acted as the ambassador of BRUCE on this occasion, proved himself to be a consummate politician, unless, as is likely, he acted by the directions and according to the instructions given him by BRUCE himself. The mode in which the business was opened, under the pretence of asking leave for RANDOLPH himself to repair to the Holy Land,—the dexterity with which, when this first and principal request of RANDOLPH was refused, other matters were brought forward and discussed touching the reconciliation between England and Scotland,-leaving this, which was really the chief object of his mission, to be brought in at the end, as a matter by the bye, and of no consequence, shews a degree of diplomatic art, or, shall we call it cunning? which has rarely been excelled, even in the annals of Papal intrigue.

The ambassador of the northern prince proved himself on this occasion an overmatch both for the Reverend Pontiff and the King of England.

BRUCE had been obliged at Bannockburn to risk the fate of himself and his kingdom upon a single battle; but he did so, as we have already said, against his will; and notwithstanding all the glory he obtained on that memorable day, he never would repeat so hazardous an experiment. In his future wars with England, his constant practice was to annoy his enemy by sudden and destructive inroads, and to retreat before a sufficient force could be brought to oppose him. And when the English invaded Scotland in return, he commanded the country to be laid waste, and all the cattle to be driven away before them, so that they could neither find an enemy to fight, nor food to subsist on. On one occasion, we are told, this had been done so effectually, that, after overrunning all the country south of the Forth, the English could meet with no other spoil than a lame bull, which had been left at Tranent; and, on its being brought to him, the English General asked if that was all they had got; and being told that it was, he declared "he never had seen so dear a beast." Here cautiousness seems to be carried even to a degree of excess, and, it must also be confessed, somewhat at the expense of benevolence. But BRUCE is not singular in considering it the duty of a monarch, in making war, to take the most effectual means of annoying his enemy, without regarding the sufferings to which he exposes that enemy, or his own unoffending subjects.

Quite akin to this, were the advices which Bruce is said to have given on his death-bed, for the guidance of his successors. These were three in number:

First, Never to make one person Lord of the Isles: Second, Never to engage against England with the whole forces of the kingdom at once: and, Thirdly, Never to remain longer at peace with England than three or four years at the most. The reason of the first advice obviously was, that the islands were too great and extensive to be safely put under any one subject, for, if he choose to cast off his allegiance, it might be a hard matter, from their difficulty of access, to reduce him to obedience. For the second, the reason assigned was, that, in case of a defeat, the whole kingdom might not be laid at the mercy of the enemy, but that there might still be some force left to cope with him. And, for the third, that a long peace might make the people indolent and averse to war; and that so the English, whose troops were kept in constant exercise by the perpetual wars with France, might acquire such a superiority in military affairs, as to be able to conquer the kingdom. These directions are remarkable for that plain practical sense which seems to have characterised the understanding of Bruce, and do not import a degree of thinking beyond what we have seen indicated by his frontal development. They correspond also entirely, and in every point, with his endowment of the propensities and sentiments.

The last act of his life, in directing his heart to be carried to Palestine, there to be deposited in the Holy Sepulchre, is not only accordant with his large veneration and hope,—the creed of these times inducing a belief that this service, or rather the performance of this vow, would be acceptable to God, and serve as an atonement for the sins of his life; but it would also gratify his adhesiveness, to think that this service

would be performed by his friend, Sir James Douglas, the greatest and most favoured of all his subjects, who had adhered to him through every extremity of good and evil fortune. It would also be highly agreeable to his self-esteem and love of approbation, as he would consider that such a disposal of the heart of so redoubted a monarch could not fail to add to his glory and renown.

We have now considered most of the remarkable events of Bruce's life, and have seen that his behaviour in all of them corresponds most remarkably and minutely with his cerebral development. Not only is this the case, but we may even go the length of saying, that were the development in any respect different from what it is, it would not have corresponded with the character of BRUCE, as exhibited in his actions. Had the benevolence been very large, this, to be sure, might have been consistent with his kindness to his prisoners at Bannockburn; but it would have been contrary to almost every other action of his life; -his want of concern for the lives and sufferings of others, whenever these stood in the way of his interest or his ambition; while his courteous behaviour on the occasion alluded to, is sufficiently explained, and by authors not phrenologists, by reference to other feelings. Had conscientiousness been large, it would have accounted, no doubt, for his observance of the agreement made with DE MOWBRAY regarding Stirling: but how would this be reconciled with his light observance of treaties and oaths upon other occasions? It will also be sufficiently gathered from what has been already observed, that had any of the propensities and sentiments which we have seen to have been predominant in BRUCE, been found in a state of less

energy than they actually were, his conduct could not have been what it was on many, or almost on any important crisis of his life. Had it not been for his combativeness and destructiveness, self-esteem, firmness, secretiveness, cautiousness, and love of approbation, all in large measure, and all co-operating to one end, Bruce could never have succeeded, in what certainly constitutes his greatest glory, the Restoration of the Scottish monarchy. Had any one of these been wanting, he would probably have failed. His brother EDWARD was equally brave, but EDWARD BRUCE could not have been the deliverer of his country, from his want of prudence and foresight, (Cautiousness and Secretiveness.) Had he been more scrupulous and just, more benevolent and compassionate than he was, he would also probably have failed, or rather, it is more likely, that he would never have made the attempt. It thus appears that BRUCE was fitted for accomplishing the great business which was given him to do, not only by the qualities he did possess, but negatively by the very want of others, which he did not possess. BRUCE, at one time after the battle of Methyen, was reduced to perfect desperation. If he had possessed a great reflecting head, and seen the relation of cause and effect clearly, he probably never would have attempted the liberation of his country. Bonaparte gave up in far less desperate circumstances. But BRUCE instinctively felt courage that could not be shaken by adversity, ambition that could not be quenched by disappointment, and energy that was fit for every effort; and, acting instinctively under these, without comprehensive views, he succeeded, when, with greater reflection, he would not have made the attempt.

There seem to be, on some occasions, men who are raised up by Providence, as instruments for accomplishing certain great events or revolutions; and just such an instrument Bruce may be considered to have been.

While, however, I cannot help considering the coincidence between BRUCE's development and the events of his life, as most remarkable and striking, I think it proper to observe, by way of caution, (what cannot be too often impressed both on Phrenologists and on the public) that without a previous knowledge of these events, of the situation which he held, or of the actions he performed, no one, from merely examining the development, could take upon him to say what these actions were, or even what they were likely to be. Dr. Spurz-HEIM declares, in the commencement of his Physiognomical System, that he cannot speak of actions, and this declaration should never be forgotten by those who study Phrenology. No one could tell on examining this head, whether it was the head of a great and a valiant chief of a rude or semi-barbarous people, or of a common traitor or murderer. We see that the character, as formerly observed, is one of great power, and we know the nature of the power; but it is impossible to predicate whether it is to seek its gratification in a legitimate or illegitimate sphere of action. That depends upon circumstances which cannot be discovered from the development. Thus, one of the sentiments upon which the character of BRUCE mainly hinges, is his love of approbation. But it is obvious, that the direction which this was to take, and the effect it was to have upon his character and conduct, depended, in a great degree, upon the opinions, the modes of thinking and acting, which prevailed in

his day, and the conduct which was then in vogue; or, in other words, which was generally approved .-His conscientiousness, comparison, and causality, are not so large as to render him a rule to himself, independently of the character of the age in which he lived. Bruce happened to be born when the ideas of chivalry prevailed, and when the highest meed of praise was reserved for the fearless valour, the punctilious honour, and the generous courtesy of knighthood; and hence the corresponding effects which this sentiment had upon his behaviour. BRUCE would have possessed a large self-esteem, although he had not happened to be born in an exalted station, and the heir of a crown. But who does not see that this circum stance, though merely external, gives a direction to the propensity which otherwise it could never have received? Had BRUCE been a man of ordinary rank, he might have continued a gay gallant at the court of EDWARD, and sought to distinguish himself, by outshining his compeers at feasts and tournaments, and by courting the favours of the fair; or engaged in the holy wars, and sought renown by fighting with the Infidels in Palestine. Had his birth and station been low, he might have been induced, by discontent, to engage in plots and conspiracies and had he done so, we might say of him,

"Here was a man

Fit to disturb the peace of all the world."

Like Alcibiades, he might have outdone the Spartans in abstemiousness, and the Persians in splendour and profusion. In short, it depended in a great degree upon the situation in which he might be cast, what his conduct should be, and whether his life should be a blessing to his country, or the reverse.

Fortunately for him, and for Scotland, it so happened that he was placed, I might say forced, into a situation which called forth all his powers in their most favourable modes of action; and hence his name has come down to us as the greatest and wisest of our kings, the brave defender of Scotland's liberty, and the great vindicator of Scotland's independence; nor while we continue to enjoy the blessings of freedom, and the administration of equal laws, can we ever cease to remember with veneration and gratitude the name of Robert Bruce.

ARTICLE VI.

[From the Transactions of the Phrenological Society of Edinburg.]

CASE IN WHICH THE NATURAL TALENTS AND DIS-POSITIONS OF THE REVEREND MR. M. WERE IN-FERRED FROM THE DEVELOPMENT OF HIS BRAIN.

Communicated by Mr. BRIAN DONKIN.

In March, 1821, I transmitted to Mr. GEORGE COMBE, in Edinburg, a cast of the head of a gentleman, stating that the individual in question had received a good education, and moved in enlightened society, but without mentioning the name, or any circumstances of his life or profession; and I requested that he would give a sketch of the natural talents and dispositions which the development appeared to indicate. In a letter dated 31st March in that year, he sent me the following remarks.



"The cerebral development of the gentleman whose cast you sent, appears to have been as follows.*

* The Committee beg to remark, that, at the time this development was stated, the Society had not fixed on specific terms to be used in denoting the relative size of the organs; so that some ex-

Amativeness, rather small. Philoprogenitiveness, large. Concentrativeness, moderate. Adhesiveness, moderate. Combativeness, small. Destructiveness, pretty full. Constructiveness, moderate. Acquisitiveness, rather full. Secretiveness, rather full. Self-esteem, large. Love of Approbation, very large. Cautiousness, very large. Benevolence, large.

Veneration, very large. Hope, large. Ideality, not large. Conscientiousness, very large. Firmness, large. Individuality, small. Form, moderate. Locality, large. Tune, rather full. Comparison, full. Causality, full. Wit, moderate. Imitation, full. Wonder, not large.

"The individual would be decidedly moral and intellectual, and little prone to animal indulgence.

pressions occur here, which are not now generally used. Their meaning, however, is so obvious, that no change or explanation appears necessary. They increase in the order "small, moderate, large." The practice of measurement also, was not then resorted to; but they subjoin the dimensions taken from the cast in possession of the Society, Bust 26., the integuments being included. The only correction which the measurement suggests on the development, as above noted, is to state Destructiveness "large," and Cautiousness "rather large," in place of "pretty full," and "very large," shades of difference which do not affect any of the points in the sketch.

From junction of occipital spine with Philoprogenitiveness to Lower Individuality, 8 2-8 Concentrativeness to Comparison, . . . 7 6-8 Meatus auditorius externus to occipital spine, 4 3-8 Ditto to Lower Individuality, . . . Ditto to Benevolence, Ditto to Firmness, . . -Destructiveness to Destructiveness, 6 4-8 Secretiveness to Secretiveness, Cautiousness to Cautiousness, 6 6-8 Constructiveness to Constructiveness, :

would be scrupulous and honourable in the extreme, with a great aversion to debt; ambitious of distinction, or desirous to please, but exceedingly modest, and most esteemed by those who knew him best. His justice, though great, would not be severe, but would be softened by benevolence, and elevated by veneration. The intellect would be penetrating, but would have a greater tendency to speculate on moral than on physical causes. He would shine more in the private circle than in public. His understanding would be slow, but sound in its conclusions; and he would be much troubled with doubts and difficulties in his decisions. The individual would not worship wealth, but he would have a prudent regard for property, and would calculate his expenses and his income, so as to keep the former considerably within the latter. He would be alive to music. He would be religious, and a sincere worshipper of God."

Mr. Combe's letter was shewn to the surgeon, from whom I obtained an account of the case, and who attended the patient during his illness: had known him for many years, and opened the head after death. He requested to have a copy of that part of the letter pointing out the development of the organs, and the phrenological deductions. He returned it with a note, merely saying, "I have marked with a line underneath those parts of the estimate which are correct." (To save repetition, the words so marked are printed in italics in the foregoing copy.) By a strict injunction from the medical gentleman, who is of the highest respectability, and my own promise given to him, I am bound not to commit his name to paper; nor did he even tell me the name of his late patient, the subject in question; but, in describing the case afterwards to

a mird person, a Mr. P. of Charing-Cross, he informed me it must of necessity be that of Mr. M., upwards of thirty years minister of a Baptist congregation, of which he himself was a member. I do not, therefore, think that I commit any breach of confidence in stating thus far. It appears that Mr. M. was first brought up to the trade of watch-making, but which he soon abandoned for pursuits more congenial to his taste and inclinations. By great application he became a scholar and a man of considerable learning. Besides what I learned from his medical friend, Mr. P. spoke of him in terms of the highest respect, as a minister esteemed by all his congregation; as a man of most exemplary conduct, and of the strictest integrity; he also agrees as to his care and economy in the management of his own affairs.

The anatomical description of the brain, as given by the gentleman who opened the head, I cannot send to the Society at present, as I find the copy I have too imperfect. He concludes, however, by saying, "It appears that the parts of the brain which had become pulpy, were those in which Gall places the organs of Prudence and Circumspection (Cautiousness) for which this gentleman had been remarkable prior to his illness, which lasted six years, but which he rapidly lost after its commencement. He became at length perfectly foolish; his mind retaining no distinct ideas, except on theological subjects, on which he always gave consistent answers."

ANALYSIS OF THE PRECEDING SKETCH.

By Mr. George Combe.

It will be observed, that Mr. Donkin communicated the information that the individual whose cast he sent, "had received a good education, and moved in enlightened society." I was thus made acquainted with the causes which tended to modify the direction of the natural dispositions; but, besides, the head stands in one of the extremes formerly mentioned, in which nature controls rather than is modified by external circumstances.

The first observation is, "that the individual would be decidedly moral and intellectual, and little prone to animal indulgence." This inference is founded on the great preponderance of the organs of the moral sentiments and intellectual faculties, over those of the animal propensities. It is necessary only to glance at the cast or engraving of the head to perceive, that there is very little brain at the base behind the ear; that the coronal surface, the seat of the moral sentiments, is not only broad, but elevated, and that the portion of brain extending from the ear to the forehead, including the organs of the intellectual powers, is also large. The next observation is, "that he would be scrupulous and honourable in the extreme, with a great aversion to debt." The organs of conscientiousness, veneration, and love of approbation, are all large, so that the natural sentiment of justice,—the dictates of religion, and regard to the opinion of society,-would concur in prompting the individual to virtuous conduct. several instances in real life, in which a large development of conscientiousness was joined with self-esteem

and love of approbation large, I have observed, that the individual was as anxious to keep out of debt, as a person of opposite dispositions was ready to get into it; and, on this observation, the above inference is founded.

"Ambitious of distinction or desirous to please." This characteristic depends on the love of approbation. If the individual move in the public eye, this sentiment will prompt him to desire distinction; if in a private sphere, only to please those with whom he associates.

"Exceedingly modest, and most esteemed by those who knew him best." Modesty arises from a great endowment of love of approbation, cautiousness and conscientiousness, generally joined with a considerable self-esteem, and sometimes with moderate or defective combativeness; and this combination occurs in the individual in question. Being modest, necessarily implies that he would be most esteemed by those who knew him best.

"His justice, though great, would not be severe; but would be softened by benevolence, and elevated by veneration." This remark explains itself, because the three organs mentioned in it are all large. A large conscientiousness, joined with much firmness and destructiveness, and little benevolence, produces extreme rigidness, and even severity of disposition. The individual will be disposed to perform justice up to the very letter of his obligation; but he will have a tendency to exact it with equal inflexibility, however incapable the person who owes it may be to satisfy thus amply his demands. The sentiment of conscientiousness, when combined with veneration and benevolence,

produces dispositions, charitable, long-suffering, and humane, as well as scrupulously just.

"The intellect would be penetrating, but would have a greater tendency to speculate on moral than on physical causes."-The intellect takes its direction from the predominating propensities or sentiments with which it is combined. When joined with much acquisitiveness, for example, it will be directed towards procuring wealth. When combined with great love of approbation and ideality, it will be turned towards acquiring fame. In the individual in question, constructiveness, and the knowing organs in general, which give the tendency to mechanical and physical pursuits, are moderate in size; whereas the organs of the moral sentiments, which furnish the mind with those feelings on which ethics are founded, and the reflecting faculties which take cognizance of these, are possessed to a considerable extent. Hence the direction of his intellect towards moral speculations was inferred.

"He would shine more in the private circle than in public."—This arises from natural modesty of disposition, the elements of which have already been explained. "His understanding would be slow, but sound in its conclusions; but he would be much troubled with doubts and difficulties in his decisions." I have observed, in actual life, that when the endowment of cautiousness and conscientiousness preponderates over the degree of intellect possessed; and, in particular, where combativeness, which gives courage, is small, slowness of decision, and extreme hesitation are never-failing results. Conscientiousness produces an extreme desire of arriving at absolute truth, and cautiousness inspires with the fear of not having reached it; and, unless the intellect be naturally so

penetrating and comprehensive, as to present a clear perception of the whole bearing and relations of a case, at one glance, so as to satisfy these sentiments, no alternative remains, but for the understanding to employ repeated efforts to accomplish that which it cannot effect by one exertion of its powers; with such a combination of feelings, clear intellectual perceptions must be obtained, before the mind can feel satisfied that all is right. Mr. Donkin's correspondent does not speak of the correctness of this inference in the individual in question, which I regret, as the point is of importance. He does not, however, say that it is erroneous; and, from numerous observations in real life, I am inclined to think, that if he had possessed sufficiently close opportunities of observation, he would have recognised its truth.

"The individual would not worship wealth, but he would have a prudent regard for property, and would calculate his expenses, and his income, so as to keep the former considerably within the latter."-Acquisitiveness gives the desire to obtain property; and selfesteem produces that regard to self-interest which prompts one to hold it when acquired; and both of these are well developed in the subject of the present case. When to these faculties are added, as in him, a powerful conscientiousness, cautiousness, and love of approbation, there is superadded to the selfish feelings, a great desire of acquiring wealth, as the means of doing justice, of averting want, and of obtaining the respect of the world; so that, in the person in question, every motive calculated to produce the effect mentioned in the sketch was combined.

"He would be alive to music."—This evidently depends upon the development of the organ of tune. It is not spoken to in the remarks of Mr. Donkin's friend. "He would be religious, and a sincere worshipper of God." This inference is founded on the possession of the faculties of veneration, hope, and conscientiousness, joined with a respectable endowment of intellect.

The present application of Phrenology is highly important, because, on its practicability will depend, in a great degree, the utility of the science. If cerebral development indicates natural talents and dispositions, then the science will afford some aid in enabling parents to dedicate their children to those pursuits in which they are most fitted to excel, and will also be useful in enabling mankind in general, to judge of the qualifications of individuals with whom they may require to be connected in life. I have repeated experiments similar to that now detailed, in ten or twelve instances, and have seen at least ten cases more, by other phrenologists; and, in all, there was a great measure of success. At the same time, it is proper to state, that difficulties occasionally presented themselves, and inferences were sometimes drawn, which did not correspond with the dispositions in nature, but, in every such case, it turned out, that an unusual combination of faculties had presented itself, the effect of which the phrenologist had not had an opportunity of ascertaining, by actual observations in nature. For example, on one occasion, I met with a combination of large secretiveness, which gives the desire to conceal, and, when ill directed, leads to finesse; with large love of approbation, which gives the desire of publicity and ostentation; a full conscientiousness, which produces the sentiment of explicit

truth, joined with imitation, which is one ingredient in a talent for personation, -all in one individual; and, being then unenlightened by observation concerning the precise result of the whole acting together, I felt great embarrassment. A conjecture which was hazarded, turned out to be, in some points, erroneous. When, however, the effects of this combination were explained, a step in advance in the science was gained. Nature is constant; and, as similar causes produce similar effects, on meeting with the same combination in another individual (and several instances have since occurred,) it was easy to predicate correctly the tendencies which it would produce. Thus an intimate acquaintance with the cerebral development of numerous individuals, and ample opportunities of observing the dispositions and talents connected with each, are indispensably necessary to qualify any person for the practice of this branch of the science. Such a degree of reflective power also, as gives perception of motives, is necessary to the observer; for it is a fact, revealed by Phrenology, that persons in whom the reflecting faculties are exceedingly defective, do not perceive causation either in morals or in physic. Such persons see actions only as occurrences, and are blind to the motives which produce them. They are the loudest scoffers at Phrenology, and are excusable, in every respect, for being so.

ARTICLE VII.

[From the Edinburg Phrenological Journal, No. 21, 1829.]
REPORT OF MR. COMBE'S VISIT TO DUBLIN.

Letter from Mr. Combe to the Editor of the Phrenological Journal.

Edinburg, 10th June, 1829.

SIR,—At the request of the Council of the Phrenological Society, I read to an extraordinary meeting of the Society, held on 14th May, a Report of several Phrenological Observations made during my late visit to Dublin. The Society took so much interest in the details that I am induced to present them to you for publication. Allow me, through the medium of your Journal, to return my best thanks to the gentlemen whose names are mentioned in the following reports, for the very kind attention which they showed me when visiting their institutions, and for the trouble they have since undertaken to enable me to bring out the reports in an authentic form. They and every other individual in Dublin to whom I had occasion to prefer any request in regard to phrenological observation received my applications in the most liberal, candid, and philosophic spirit; and I cannot forbear remarking, that, if the same superiority to prejudice and enlightened desire to afford facility to investigation existed in other cities, Phrenology would speedily be recognized as an undoubted truth. I am, &c.

GEO. COMBE.

1. CASE OF BRIDGET SMITH.

Mercer's Hospital, Dublin, 15th April, 1829.

Present,—Surgeon Auchinleck, and about twenty medical students.

A woman was presented to Mr. Combe as a convalescent patient, and he was requested to examine her head, and say, if there was any thing remarkable in the development of the organs. Mr. Combe requested one of the young gentlemen to write down the development, which he dictated as follows:—

Amativeness, large.

Philoprogenitiveness, large.

Combativeness, large.

Destructiveness, large.

Secretiveness, large.

Love of Approbation, large.

Cautiousness, large.

Constructiveness, rather large.

Acquisitiveness, large.

Ideality, deficient on one side.

Benevolence, pretty well developed.

Veneration, considerable, though not large.

Hope, deficient.

Conscientiousness, deficient.

Perceptive organs, rather above the average.

Reflective do. average:

Temperament, lymphatic.

The gentlemen present then retired with Mr. Combe to another apartment, when Mr. Combe remarked, that he understood the woman was not insane, (Mr. Auchinleck said she was not.) Mr. Combe added, "it is impossible to speak of actions; all that I can do is to indicate dispositions or tendencies. I shall mark the organs from which the characteristic traits of her conduct will most probably have proceeded." He then prefixed a mark to the organs, which we have printed in italics, viz. large Amativeness, Philoprogenitiveness, Combativeness, Destructiveness, Cautiousness, and Love of Approbation, with deficient Hope and Conscientiousness.

Mr. Auchinleck asked what combination gives the tendency to suicide? Mr. Combe answered, that in his System of Phrenology, under the head of Cautiousness, it is stated, that "Dr. A. Combe examined a considerable number of suicides in the Morgue at Paris, and found in them Hope generally small, with Cautiousness and Destructiveness large."

The gentlemen present remarked, that these organs were marked by Mr. Combe; the first, Hope, as deficient, and Cautiousness and Destructiveness as large. Mr. Auchinleck then stated, that the woman's name was Bridget Smith, and that she had twice attempted suicide, and was now a patient in consequence of her second attempt,

Mr. Combe asked what was the cause of her attempt? The gentlemen present had not been informed of the cause; and Mr. Combe said, "I feel considerable anxiety to learn this, and have a strong anticipation that you will find it connected with the domestic affections, or Amativeness, Philoprogenitiveness, and Love of Approbation.

Mr. Auchinleck requested one of the young gentlemen to proceed to the nurse of the ward in which Bridget Smith was received, and to inquire what was known about her history.

He returned in a few minutes, and stated that her history was well known in the ward; that she had been married seven years, had no children, that her husband had not lived with her for fifteen months; and that jealousy was the cause of her attempt at suicide both times. She herself stated, that "she wished to die before her husband's eyes, and that she loves the very ground he walks on."

One of the young gentlemen present remarked, that

previously he had conceived that she had children, as he had seen her frequently with one on her knee; but, on inquiry just now, he was informed that the child belonged to one of the other patients.

2. CASE OF MR. OLDHAM.

On 15th April, 1829, Mr. Combe was taken by Mr. Carr, one of the directors of the Bank of Ireland, to see that establishment. In one of the apartments Mr. Carr presented to Mr. Combe a respectable looking gentleman, above the middle period of life, telling him that he was an extraordinary character, and requesting him to say for what qualities he was distinguished. Mr. Combe had not the slightest idea who the gentleman was. After examining the head, he dictated the following remarks on his development to Mr. Carr, who wrote it down:—

"Anterior lobe, connected with the intellectual faculties, uncommonly large; perceptive and reflective organs nearly equal, and both large; Individuality, Size, and Weight, predominant; Tune and Number, large; Language, large; Benevolence and Veneration, large; Imitation, large.

"The head indicates a general capacity for painting and the imitative arts; and, in general, the mind, if turned to mechanics or any other similar pursuit, is so constituted as to excel."

Mr Carr then mentioned, that the gentleman's name was Mr. Oldham, and proceeded to show Mr. Combe his works. He was taken to a separate building, where a steam-engine was in motion, which had been constructed from Mr. Oldham's drawings and projection.

Up stairs he found the engine printing bank-notes, and registering the paper given out and the printed notes This is done by machinery all under a locked cover, so that the workmen apply at an opening left in the cover, and on laying down, say 100 notes, the machine instantly withdraws them, and gives out 100 slips of paper for another printing, registers both numbers, and tells in detail, from 1 up to 20,000 the number of impressions thrown off. Farther, it damps the paper, then in five minutes expresses the surplus moisture, and presents it ready for printing. This machinery was contrived and executed by Mr. He constructed likewise another machine, which prints the dates and numbers on the notes, registers and throws up the numbers from unity apparently to an indefinite extent, so that the printer just puts on the ink and turns the lever, and all the rest is performed by the machinery. Mr. Oldham also showed Mr. Combe two very pretty profiles in watercolours, painted by himself, and told him that he had constructed an organ with a vox humana pipe, which delivers syllables in a manner resembling human articulation. Finally, Mr. Oldham described all these things with a fluency which, as Mr. Combe remarked afterwards, manifested a great organ of language. Mr. Oldham was originally a miniature painter, but by good fortune the Bank Directors took him into their employment, and he has been a treasure to them. Pointing to the operative persons occupied in printing the notes, he said to Mr. Combe, "All these are your countrymen,-all Scotch. Their superior steadiness. has been their recommendation."

3. RICHMOND LUNATIC ASYLUM, DUBLIN.

This Asylum was founded about 14 years ago, for the reception of pauper lunatics. It contains at present above 300 patients. None are admitted without a medical certificate of insanity, and an affidavit of poverty. Dr. Jackson is the physician, and Mr. Johnston the surgeon. Dr. Crawford acts at present as Dr. Jackson's temporary substitute.

Mr. Combe visited this institution on 20th April, 1829, in presence of Dr. Crawford,—Mr. Grace, the Moral Governor,—Major Edgeworth, Governor of House of Industry,—Dr. Cumming, Assistant Physician to ditto, and Dr. Mollan.

Dr. Crawford stated that he had written down the characteristic features of several cases of insanity, and proposed that Mr. Combe should examine the heads of the patients, and deliver his opinion on them, and thereafter that the written notes and Mr. Combe's remarks should be compared.

Mr. Combe observed, that he had no objection to make the experiment for the sake of gaining information; that a small organ may become diseased as well as a large one, and in these instances the head would not indicate the features of the alienation; however, that disproportionate development of particular organs is itself one cause of insanity; and, besides, when any organs are particularly large, the feelings connected with them generally show themselves strongly in the manifestations, even although they should not be the seat of diseased affections; that, therefore, in the majority of cases, the form of the brain ought to present indications of the mental condition of the patients,

and that with these explanations he was ready to pro-Mr. C. added, that although he had on other occasions examined the heads of a number of insane patients, he had not before attempted to predicate the features of the insanity from the heads, and therefore this was to himself an experiment; that he did not know how far he might succeed, but it was interesting to ascertain what effect the mere form of the brain produced in insanity; that his inexperience threw obstacles in the way of his success, but that in science experience was to be obtained only by practice. He said that he would point out and write down the organs that were prominently developed or very deficient in each case, and then make his remarks; after which he would be glad to see the notes prepared before his arrival.

The hair of the patients was in general worn short, and the facilities of observation were thus increased.

We print the observations of Mr. Combe and the notes of Dr. Crawford in separate columns, in the order in which the patients were introduced. Mr. Combe underlined the organs on which he considered the insanity to depend, and these are printed in italics.

In every instance Mr. Combe pointed out the development to all the gentlemen present. He made them feel it, and contrast it with the heads of other individuals in the room; and requested them to judge for themselves, and not to look on him as performing a stage-trick, or doing any thing which they could not learn to do as well as he, or far better, as their opportunities were superior.

Patient's name, Lynch.

Largest. Self-esteem

organs, Wonder

Causality Language

Combativeness

Also large Amativeness

Philoprogenitiveness

Concentrativeness

Acquisitiveness

Love of Approbation

Firmness

Full Veneration

Deficient Conscientiousness.

Mr. Combe said, that he considered Wonder, which, when diseased, gives notions of supernatural agency and inspiration, and Self-esteem, as probably the leading sources of alienation in this case; that Causality and Language should also be conspicuously manifested.

Patient's name, E. S.*

Large Amativeness

Philoprogenitiveness

Very large Destructiveness

Combativeness

Large Se

Self-esteem

Cautiousness

Moral or-

gans, de-

ficient,

particu-

larly Veneration and Hope

Dr. Crawford's Remarks.

Patrick Lynch, aged 42, a cooper. Two and a half years ill. Married, and has children.

Monomania. Religious pride, with vivid imagination and the highest degree of excitement, requiring restraint; fancies himself inspired and endowed with omnipotence; frequent hallucinations; visits from heaven, &c. great flow of language in a style quite superior to his rank in life; drinking the cause of his illness; second attack.

Note.—"Dr. Gall remarked ed in the first fanatic who fell under his observation, a large development of the part of the brain now marked 'Wonder,' and subsequently met with many similar instances."—See Combe's System, p. 226.—Editor.

Patient E. S., aged 34. Ten years since first admission.

Total want of moral feeling and principle, great depravity of character, leading to the indulgence of every vice, and to the commission even of crime. Considerable intelligence, ingenuity, and plausibility; a scourge to his family from childhood; turned out of the army as an incorrigible villain; attempted the life of

^{*} Where the names are not published the patients have relations, out of delicacy to whom they are withheld.

Moderate Conscientiousness
Of the mor- Benevolence is rathalorgans er well developed
Intellectual Rather well develorgans oped

The patient was withdrawn, and Mr. Combe added: This is the worst head I ever saw. The combination is worse than Hare's —Combativeness and Destructiveness are fearfully large, and the moral organs altogether very deficient. Benevolence is the best developed of them, but it is miserably small compared with the organs of Combativeness and Destructiveness. I am surprised that that man was not executed before he became insane.

Patient's name, Dowling. Enormous-

ly large, Self-esteem

Ditto Firmness

Large Amativeness

Combativeness

Rather

large Destructiveness

Adhesiveness

Benevolence

Full Acquisitiveness Pretty good Intellect

Deficient Cautiousness

The organs in great excess are Self-esteem and Firmness.

Patient's name, Bayly. Enormous-

ly large, Destructiveness
Ditto Secretiveness

Dr. Crawford's Remarks.

a soldier; repeatedly flogged; has since attempted to poison his father. (See letter from Dr. Crawford about this patient, Article XV. of this Number.— EDITOR.)

Joseph Dowling, silk-weaver, aged 29. Two years ill. Unmarried.

Monomania. High pride. An emperor. Very overbearing, quarrelsome, and dangerous, but is easily tamed.

Note.—"When the organ of Self-esteem becomes excited by disease, the individual imagines himself to be a king, an emperor, a transcendent genius, or even the Supreme Being."—Combe's System, p. 164.—Editor.

George Bayly, clerk, aged 39; nine years since last attack. Relapsed twice.

Mania. Intermittent. Very

Enormous-

ly large, Acquisitiveness

Large

Self-esteem

Ditto

Amativeness

Deficient Moral organs, parti-

Very defi-

cient Benevolence, but

Larger Veneration

Moderate Reflecting organs Pretty large Knowing organs.

The combination is here very bad, the animal organs greatly preponderate; Destructiveness is the largest.

Patient's name, Edmundson. Very large Destructiveness

I have a difficulty as grate to these organs, as they are irregular in development

Large

Hope very large
Wonder, back part of
it considerable
Ideality, back part of
it large

Love of Approbation

Amativeness
Adhesiveness
Combativeness
Cautiousness

Moderate Veneration Deficient Benevolence

--- Conscientiousness

Moderate Knowing intellect.

It is difficult to point out the leading features of this case. The organs of Hope, Wonder, and Ideality, present an unusual appearance, corresponding to malconformation.

Dr. Crawford's Remarks.

violent, pugnacious and destructive; sullen and morose. An incorrigible drunkard and immoral character.

Christopher Edmundson, clerk to a merchant, aged 47. Twelve years ill. Unmarried.

Monomania, religious. Fancied himself Jesus Christ, and attempted to walk on the sea, and fast for forty days. Imagines now that his body is inhabited by the spirit of another person; was a clerk and methodist, and gave up his employment to go about preaching and working miracles. At times irritable and violent.

Patient's name, Brady.
Deficient Combativeness

Ditto Hope

Ditto Veneration

Very Defi-

cient Ideality

Ditto Tune

Ditto Wit

Large Self-esteem

Ditto Firmness

R. large Benevolence

Ditto Conscientiousness

Considera-

ble Cautiousness

Large Individuality

Ditto Eventuality.

The deficient Combativeness, Hope, Veneration, and Ideality, and Wit, large Cautiousness and Conscientiousness, will predispose to melancholy.

Patient's name, Mulligan.

Large Philoprogenitiveness

Ditto Secretiveness
Ditto Cautiousness

R. large Acquisitiveness

Deficient Hope

This is another case of melancholy.

Patient's name, Petit.

Very large Self-esteem

Large Combativeness

Love of Approbation

Hope Ideality

R. large Wit

Large Philoprogenitiveness

Dr. Crawford's Remarks.

George Brady, servant, aged 37. Twelve years since first attack. Has relapsed. Unmarried.

Melancholy. Great timidity of disposition. Fancies he was accused of theft, and has constant apprehension of punishment, either human or divine. A variety of hallucinations on this subject. Gentle and kind. His master, to whom he was buttler, was robbed, and although the thief was discovered, this occasioned his mental derangement.

Matthew Mulligan, aged 39, cabinet-maker. One and a half years ill.

Melancholy. Religious despondency. Very silent; uncommunicative; suspicious and morose. Is married, and has a family; for the fate of whom he shows great anxiety.

James Petit, shopkeeper, aged 32. One year ill. Married. Has one child.

Mania, intermittent. Very violent, combative, and brutal. A high opinion of himself. Fancies he has great riches, and was giving away all his property

Adhesiveness
Firmness
Locality
Comparison

Full Conscientiousness

Deficient Secretiveness

I feel a difficulty in pointing out particular organs in this case, but have marked (in italics) those that seem most likely to determine the character.

Patient's name, Fogharty.

Large Destructiveness

Ditto Love of Approbation

Ditto Cautiousness

Ditto Wonder, particularly

on one side.

Ditto Imitation

Deficient Hope

Ditto Veneration

Well de-

veloped Intellect

The leading organs in this case are Wonder and Destructiveness.

Patient's name, Duff.

Very large Self-esteem

Ditto Firmness

Ditto Secretiveness

Large Destructiveness

Ditto Cautiousness

Deficient Hope Small Ideality Dr. Crawford's Remarks.

to the ruin of his family. Has a good deal of humour, by the excitement of which his violence is easily subdued.

Thomas Fogharty, a marine and tailor, aged 39. Ten years ill.

Monomania, with the singular delusion of his being the Almighty. Says he had no beginning and is never to die; that he can bestow immortality on whom he chooses; is very irascible, and threatens those who offend him with hell-fire and brimstone. An extraordinary combination of servility and humility with these exalted notions. Very mean in his appearance; works as a tailor, and is an importunate beggar. Illness brought on by excessive drinking.

Bryan Duff, collector of minerals, aged 31. Three years ill.

Melancholy. Deepest dejection. Silent, morose, inactive. Attempted suicide and to destroy his own child. After disappointment in his business took to drinking; was seized with mani-

Small Wit

Ditto Philoprogenitiveness

Moderate Veneration.

The combination here is that which is described in the works on Phrenology as leading to melancholy and suicide.

Patient's name, M'Evoy.

Mr. Combe pointed out that this head was regularly developed, that he could not fix upon any organs as excessive either in largeness or deficiency. He wrote down the organs which were most developed as follows:—

Large Destructiveness

Secretiveness

Love of Approbation

R. large Acquisitiveness

Cautiousness

Full Constructiveness

Moderate Hope

R. small Self-esteem

Consider-

able Wonder

Large Knowing Intellect

Full Reflecting do.

Patient's name, R. J. C. Very large Combativeness

Destructiveness

Large Amativeness

Self-esteem

Veneration

Firmness

Cautiousness

Full Ideality

Rather full Philoprogenitiveness

Dr. Crawford's Remarks.

acal delirium, which has sunk in to permanent melancholy.

Michael M'Evoy, aged 28. Ill nearly one year.

Melancholy. Very silent; disinclined to exercise, and the air of being absorbed in thought. No one prominent delusion Is gradually recovering.

Patient's name, R. J. C. aged 34. Four years ill.

Mania, intermittent. During the paroxysms he conceives himself to be Jesus Christ, and is the most furious, treacherous, and dangerous patient in the institution. Is very athletic and muscular, and not easily restrained. The violence of the pa-

Mr. Combe's Remarks.

Deficient Conscientiousness

FEMALES.

April 21, 1829.

Patient's name, Hall.

Very large Self-esteem

Large Concentrativeness

Ditto Destructiveness

Ditto Hope

Ditto Veneration

Full Wonder

Fairly-de-

veloped Intellect

The organ of Self-esteem is here by far the most predominant.

Patient's name, C. C. Enormous-

ly large Love of Approbation
Large Benevolence

Ditto Imitation

Considera-

able Wonder

Moderate Self-esteem

Ditto Veneration Good Intellect

The Love of Approbation is here out of all ordinary proportion to the other organs.

Patient's name, Dunn.
Very large Destructiveness
Ditto Secretiveness

Dr. Crawford's Remarks.

roxysms lasts only a few days. During the intervals he is free from mental aberration, quiet and inoffensive; was addicted to drinking.

FEMALES.

Jane Hall, aged 48. Ill 8 vears.

Monomania. Pride. Queen of France. Hallucinations about rebels surrounding the house. Fancies she has rats inside her forehead. Generally cheerful and quiet. Illness occasioned by fright during disturbances in her country.

Patient's name, C.C. aged 30. Ill 3 years.

Monomania. An air of great self-importance. Fancies herself entitled to a fortune withheld from her by her father. Conceived a conspiracy to be formed in the country against her life, and wished to give information on the subject to government. Is very vain of her person. Her mind appears constantly engaged in great plans. Her connexions are very re-She was domineerspectable. ing in her family, and quarrelled with her step-mother.

Eliza Dunn, aged 56, nine years ill.

Monomania. Pride. Fancying

Large Amativeness

Ditto Philoprogenitiveness

Ditto Combativeness

Ditto Self-esteem

Moderate Love of Approbation

R.deficient Veneration

Ditto Hope

Fairly-developed intellectual organs.

After Dr. Crawford's remarks were read, Mr. Combe observed, that in this case the development had not afforded an index to the leading features of the insanity; and that, as formerly mentioned, diseased affection of particular organs may exist which is not indicated by external signs.

Patient's name, Nelson.

Large Philoprogenitiveness

Ditto Adhesiveness on one side, and small on

the other

Ditto Cautiousness

Ditto Love of Approbation

Ditto Conscientiousness

Deficient Hope
Ditto Ideality
Small Intellect

Mr. Combe remarked, that this combination indicated melancholy.

Patient's name, J. H.

Large Adhesiveness
Ditto Destructiveness
Ditto Secretiveness

Dr. Crawford's Remarks.

herself at one time a queen, at another Ali Pacha, the Dey of Algiers, or the Grand Turk. Calls the attendants about her uncle Paul, or by the name of some great lord or lady. Very lively and loquacious, but not violent.

Eliza Nelson, aged 40. Ill ten months.

Melancholy after the death of her husband.

Patient's name, J. H., aged 41. Ill three years.

Monomania, with pride. Occasional high excitement. At-

Large Cautiousness
Ditto Self-esteem

Ditto Love of Approbation

Deficient Hope

Fairly-de-

veloped Intellect

Mr. Combe stated, that he had underlined the organs by which the insanity would be characterized.

Patient's name, Gallaher.

Mr. Combe stated, that this head was irregularly formed, and he had great difficulty in stating what the development of the different organs was. He then wrote as follows,—

Large Amativeness
Adhesiveness
Combativeness
Destructiveness

Self-esteem

Love of Approbation

Cautiousness

Uncertain on one side, probably large, Wonder

Deficient Hope on one side

Uncertain Ideality

Not so large Secretiveness as

Cautiousness

Doubtful Acquisitiveness, but, I think, large

Patient's name, Mooney.

R. large Amativeness Ditto Self-esteem

Large Love of Approbation

Dr. Crawford's Remarks.

tempted her husband's life with a knife from jealousy, and also threatened to destroy her children. Is of low birth, and without education, and married a dissenting clergyman.

Susan Gallaher, aged 23. Six months ill.

Monomania. High religious excitement, with pride. Imagines that the welfare of the people of her country depends upon her; that she has received revelations from Heaven, informing her of a conspiracy against their lives and property. Has seen a bright light in her room, from which a voice proceeded. Very excited and destructive, requiring coercion. Very importunate to be sent home.

Alicia Mooney, aged 30 years! Five years ill.

Monomania, and occasional maniacal paroxysms. Fancies

Secretiveness Destructiveness

Wonder on one side

Deficient Cautiousness
Moderate Combativeness
Full Ideality

Patient's name, M'Aveeny.

Large Philoprogenitiveness
Love of Approbation

Very large Firmness

Indifferently-formed head, but nothing very remarkable.

Patient's name Kelly.

Verylarge Love of Approbation

Large Secretiveness

Self-esteem

Destructiveness Ideality

Imitation

Constructiveness

Large Destructiveness

Firmness

Full Benevolence

Veneration

Part of the brain, supposed to be Wonder, large, or it may be Hope. Hope moderately developed, unless as before.

The characteristic organs in this head are Self-esteem and Love of Approbation, as one combination, and Constructiveness, Imitation, and Ideality, as another.

Patient's name, Thomas.

Very large Amativeness

Large Philoprogenitiveness

Dr. Crawford's Remarks.

she has plenty of money, and is exceedingly importunate to be allowed to return home.

Ellen M'Aveeny, aged 28. Four months ill.

Puerperal mania. Cheerful and humorous, but restless and destructive, and very positive, requiring coercion.

Ann Kelly, aged 37. Two years ill.

Monomania. Pride. Imagines she is Napoleon. Very irascible, but easily calmed by a little praise. Dresses partly as a man. Speaks of herself as a man, and in the third person. Has made herself trowsers, and a highly-ornamented cloak with simple threads. Will never wear a cap.

Aurelia Thomas, aged 34 years. Five years ill.

Monomania. Great anxiety

on one side, and full on the other

Very large Self-esteem

Love of Approbation

Large Firmness

Destructiveness

Veneration

Full Cautiousness

The leading organs in this case are Amativeness, Self-esteem, and Love of Approbation. Philoprogenitiveness is unequally developed.

Patient's name, O'Neill.

Largest organ is Destructiveness. None others very remarkable.

Dr. Crawford's Remarks.

after her children. Fancied they were starving outside the house, and that she heard their cries, and insisted constantly upon her food being taken to them. Occasionally very violent and outrageous. Disappointment after seduction the supposed cause of her illness. Has ceased now to inquire after her children, saying, that a voice from heaven had informed her that they were dead, and in heaven.

Mary A. O'Neill, aged 35. Nine years ill.

Mania; high excitement, and very destructive; requires constant restraint; very abusive, and passionate; no appearance of moral or intellectual feeling; rather fatuous.

4. VISIT TO THE PENITENTIARY,

Dublin, 29th April, 1829.

Mr. Combe visited the Penitentiary, in presence of the Governor, the Chaplain, Dr. Crawford, Dr. Cuming, Dr. Mollan, Mr. Grace, Major Edgeworth, Dr. Duncan, &c. After looking at the arrangements of the house, which seemed excellent, and seeing the prisoners at work, Mr. C. requested that any ten or twelve convicts who were nearest the apartment in which he then was might be introduced. This was accordingly done. Mr. Combe placed the convicts on a form, and requested any of the visitors to sit down on the same seat, with several on each side. Dr.—

did so, and Mr. Combe pointed out that the organs of the animal propensities lying at the base of the brain were larger, and those of the moral sentiments, lying on the top of the head, relatively smaller in the heads of the convicts generally, than in that of Dr. — and the other visitors present. The gentlemen in the room examined the heads, and recognized this difference as an obvious characteristic.

Mr. Combe then examined more minutely the heads of these convicts. He noted down in pencil the particular organs which were remarkable for great size or deficiency relatively to the others, and also the general qualities which he inferred from the combination of the whole organs in each head. This course was followed first with several male, and thereafter with several female convicts. Mr. C. pointed out the appearances of the heads to the gentlemen present, but no observations on the characters which they indicated were made in presence of the prisoners. The party retired to the Governor's house. Mr. C. then read aloud his remarks, on which the Governor and Chaplain delivered an instantaneous opinion. Mr. Combe subsequently transcribed his notes, and sent them through Dr. Crawford to the Governor, who very kindly returned them with a written report, and the following letter:-

HILL W. ROWAN, Esq. TO GEO. COMBE, Esq.

Richmond General Penitentiary, Dublin, 28th May, 1829.

DEAR SIR,—Dr. Crawford has favoured me with the perusal of your observations respecting the dispocitions and propensities of the individuals whose heads you examined in this institution, with a view to phrenological inquiry. I have given to that gentleman a short statement of my opinions respecting the same persons, formed from close observation of their dispositions and conduct for several years; and it will probably be satisfactory to those who are impressed with your opinions on the subject of Phrenology, to find that my experience corroborates, in almost every instance, what it appears Phrenology would predicate of the individuals in question.

It may be right to add, that I wrote the substance of my observations respecting the great majority of the persons whose heads you examined before having read your paper. Indeed, Dr. Crawford concurred with me in opinion, that such would be the most satisfactory course to pursue.

The Penitentiary, respecting which you desire to have some information, is a national government establishment, on the principle of the Millbank General Penitentiary in London. I am, &c.

HILL W. ROWAN, Governor.

The following are Mr. Combe's remarks, and Mr. Rowan's report:—

Mr. Combe's Remarks.—Boy, No. 1, G. K.—This individual has large Acquisitiveness and Secretiveness. He probably has been a thief; but the development of the moral organs is considerable: he may be much improved by moral and religious education.

Governor's Report.—No. 1, G. K.—This boy's conduct has been almost invariably correct since his confinement. He was convicted, along with his brother, of the crime with which he was charged; and I have no doubt was led into it by his brother's conduct and importunities. He is lively, thoughtless, and

obliging—hasty in his temper, but peaceable—with very good intellectual powers—argumentative, and a little cunning. Convicted of larceny.

Mr. Combe's Remarks.—No. 2, J. K.—In this individual there are large organs of Cautiousness, Secretiveness, and Acquisitiveness; good Intellect; a deficient Combativeness; not large Destructiveness, with very small Conscientiousness, and deficiency of the moral organs in general. He has the dispositions of a thief, but he will scarcely have the courage to steal in his own person.

Governor's Report.-No. 2, J. K.-This young man's conduct has been generally correct since his confinement; but I apprehend that this is occasioned as much by cautiousness of disposition, good looking to, and fear of correction, as from any good qualities he may possess. I have learned from another prisoner now in confinement, that his influence led his brother (No 1,) into the perpetration of several small felonies. His habit was to commit small thefts, and having deposited the stolen goods with other persons, by cunning and ingenuity to throw on them the imputation of the theft. He is intelligent, and apt to learn. He was once very anxious to be sent to Botany Bay, from a conviction, as he stated, that, when discharged from hence, he would be guilty of fresh crimes. He was convicted of larceny.

Mr. Combe's Remarks.—No. 3, P. K.—This boy has large Acquisitiveness and Secretiveness, and large organs of Intellect and Imitation; but he is very deficient in Conscientiousness. He closely resembles the boy John Gibson, (who is mentioned in the phrenological works, and a cast of whose head Mr. C. had ex-

hibited at a lecture two days before.) He has the talents and dispositions of an expert swindler.*

Governor's Report.—No. 3, P. K.—This is in almost all respects a very bad boy; he is addicted to swearing, lying, gambling, and every kind of meanness and duplicity. He has very considerable intellectual powers, and exercises them only to do wrong, whenever he can do so with impunity. He was convicted of sheep-stealing.

Mr. Combe's Remarks.—No. 4, E. A.—This individual possesses a very large development of the organs of the propensities, particularly of Combativeness, Destructiveness, Secretiveness, and Acquisitiveness, with decidedly deficient moral organs. The base of the brain is broad, and the coronal surface narrow. He is a bad subject; his dispositions are to cruelty and falsehood, and it will be extremely difficult to amend him.

Governor's Report.—No. 4, E. A.—This man has been confined for about four years, and for the greater part of that time has conducted himself quietly, and with apparent correctness; yet I am persuaded he is a very worthless character. He has tolerably good intellectual powers with respect to matters of fact, but slow at his books. He is mean and treacherous—will betray any of his fellow-prisoners to serve himself.—He is an ill-looking fellow, but very amorous, and has frequently been detected in holding amorous correspondence with the female prisoners. I have not

^{*} We repeat, that Mr. Combe, in drawing his inferences, considered the whole development of the head in each case, and did not found on the particular organs alone which he noted as predominant. He explained this to the gentlemen accompanying him.

the least hopes of his reform—on the contrary, am persuaded that he is incorrigible. His crime was larceny.

Mr. Combe's Remarks.—No. 5, A. M.—Enormous Destructiveness, Secretiveness, and Acquisitiveness: deficient moral organs: he would be a fearful thief, and cruel.

Governor's Report.—No. 5, A. M.—This boy came to me with a very bad character, which he has fully justified. His intellectual powers are of a high order, and he exerts them to the utmost to do all the mischief in his power. He is without truth or probity, or good feeling of any kind, possesses great ingenuity, and is capable of framing a most consistent story with reference to acts in which he has been engaged, not one of which ever in reality happened. I think when he becomes a man, he will be a most dangerous character, and yet I fear he must be soon thrown back on society, as he is an orphan from Scotland, without a single friend to look after him. His crime was larceny.

Mr. Combe's Remarks.—No. 6, M. M.—This woman has Cautiousness, Secretiveness, and Acquisitiveness, very large, with deficient Conscientiousness.

Governor's Report.—No. 6, M. M.—This woman is, in my opinion, worthless, and not likely ever to be reclaimed. She is mild and gentle in her manners with her superiors, and rather prepossessing in her appearance, but apt to quarrel with her fellow-prisoners. She is utterly destitute of truth, and abounds in low craftiness and cunning. She was convicted of larceny, and will probably pursue a course of theft.

Mr. Combe's Remarks.—No. 7, M. G.—Destruc-

tiveness, Secretiveness, and Acquisitiveness very large: Conscientiousness deficient.*

Governor's Report.—No. 7, M. G.—This girl is prepossessing in her appearance, gentle in her manner, and engaging in conversation; but I fear is, notwithstanding, very deficient in moral character. She was for a considerable time looked upon as superior to most of her fellow-prisoners, and treated accordingly; but was discovered, on being placed in trust-worthy situations, apt to betray her trust, and to show a disposition to pilfer, to aid others in pilfering, and to justify herself by false statements of facts. She was committed for larceny, and will, unless attended to by her friends, probably take to courses of impurity.

Mr. Combe's Remarks.—No. 8, M. C.—This woman has large Acquisitiveness, Secretiveness, Wonder, and Imitation; but she has also the largest development of the moral organs of any whom I have examined. My impression is, that she would not commit crime in ordinary circumstances, and that there is diseased or irregular action of the brain.

Governor's Report.—No. 8, M. C.—This woman, for a long period after her confinement, was coarse, brutish, selfish, passionate, quarrelsome, and in all respects unamiable;—for the last year or two her conduct has been much better, and the violence of her passions much restrained, if not subdued. She has very considerable talent, and a strong mind, with powerful feelings, but has never turned either to any

^{*} Quietness in prison, where temptation is removed and powerful restraints are imposed, may often appear where Combativeness and Destructiveness are large, if there be also good Secretiveness, Cautiousness, and Firmness to restrain them.

good account that I am aware of. I have always considered her as a very dangerous woman, and not at all likely to be reclaimed; but have always had a suspicion that the violence of her temper and frequent outrageous conduct were occasioned by bodily disease. For a long time after her confinement she complained of acute pains in her head, and showed evident symptoms of determination of blood to it. It is remarkable that the abatement of these pains, and the apparent subjugation of her passions, have nearly corresponded in time. I was much struck by Mr. Combe's observations respecting this woman, as he guessed at once that which I had long known to be her bodily malady. She was convicted of larceny.

In addition to these remarks, the Governor in his letter states,—

"In the case of M. C. No. 8, it appears to me you have judged too favourably. This woman has been confined here for more than four years, and for a very considerable portion of that time her character was marked by violence, maliciousness, and brutality, and, when under the influence of high excitement, she was perfectly ferocious. I have frequently suspected that this ferocity of character was at least aggravated by a determination of blood to the head; and have been strengthened in that belief by finding that her violence of disposition became mitigated concomitantly with the abatement of very bad headaches with which she was for a time afflicted. I have been much struck by the fact of your suspecting organic disease in this woman, as coinciding with the result of my own experience, and I believe I may venture to state, with the opinion of our most respectable and intelligent medical attendant, Dr. Charles Orpen."

In this woman Mr. C. found the organs of the animal propensities largely developed, which, when excited by diseased action, would render her ferocious as described; but the distinguishing characteristic of her head was the superior moral development, which, but for disease, would have sufficed to restrain and direct the propensities; so that the case forms no exception to Phrenology, but the reverse.

Mr. Combe's Remarks.—No. 9, A. B.—This woman has very large Destructiveness, Secretiveness, and Acquisitiveness, with deficient Conscientiousness.— She is a bad subject, and will with difficulty be amended.

Governor's Report.—No. 9, A. B.—This young woman has generally conducted herself well, though there have been some very flagrant exceptions. These exceptions appear to have been occasioned by temper, as she is highly irritable, and is, when excited, frightfully furious and vindictive. She is perhaps the cleverest (intellectually) female prisoner in the institution, and, although quiet, gentle, and correct in her ordinary demeanour, I fear she is not to be reclaimed. The crime of which she was convicted was grand larceny.

Mr. Combe's Remarks.—No. 10, B. L.—This is a better subject than the last. She is milder and less coarse. She would probably swindle. By education she will be greatly improved.

Governor's Report.—No. 10, B. L.—This girl has been unusually well conducted, is prepossessing in her manner and appearance, docile, and anxious to receive instruction. I was very anxious to learn Mr. Combe's opinion of her, and much gratified to find

that it exactly coincided with that I had previously formed. She was convicted of stealing bank-notes.

Mr. Combe's Remarks.—No. 11, P. T.—This is a tolerably good subject, and something may be made of him.

Governor's Report.—No. 11, P. T.—This young man's conduct since his admission has been generally correct. He does not appear to have strong passions of any kind, neither is his intellectual capacity great. His dispositions appear to be of a mild character, and I should be surprised to hear that he ever committed any flagrant crime; though from a general meanness of character I think he will, unless well attended to for some years, be guilty of petty thefts. I do not consider him to have strong moral feelings, and I know he was at one time addicted to lying. His crime was larceny.

ARTICLE VIII.

[From the Edinburg Phrenological Journal, No. 10, 1826.]

DR. GALL'S VISIT TO THE PRISONS OF BERLIN AND SPANDAU.

The sixth and last volume of Dr. Gall's admirable and imperishable work, "Sur les Fonctions du Cerveau," has just reached us, and we cannot resist the temptation of making a few extracts from its pages. Let any one read the following passage taken from Dr. Gall's conclusion, and then say if he is a reckless theorist, a visionary, or a quack:—

"I could have wished," says Dr. Gall, "to have deferred this publication still longer, in order to mature more fully the fruits of my researches; but the last term approaches, and I must resign myself to leave this first sketch of physiology of the brain much less perfect than it will be fifty years hence." "Whoever is not impelled by an innate instinct of observation, whoever finds the abnegation of his own opinions, and of his own learning, acquired in his earlier studies, too difficult to accomplish,-whoever is more bent upon the improvement of his fortune, than upon unfolding the treasures of nature, -whoever is not possessed of an imperturbable patience against the interpretations of envy, jealousy, hypocrisy, ignorance, apathy, and indifference, -whoever has too high an idea of the force and justness of his own reasoning, to believe himself obliged to submit it to the test of experience, a thousand and a thousand times repeated,—will never advance the physiology of the brain; and yet these are the only means by which my discoveries can be verified, corrected, or refuted. The reader will therefore pardon me if, independently of all the proofs adduced under the head of each individual organ, I still bring forward some experiments made in the presence of a great number of persons who accompanied us to the prisons, &c. I wish to neglect nothing that may encourage philosophers to study the functions of the different parts of the brain."

The following is a translation of an authentic notice of this visit, which first appeared in the 97th and 98th Nos. of the *Freymüthige*, in May, 1805, and which we have copied almost literally from the pages of Dr. Gall:

Dr. Gall having expressed a desire to inspect the prisons of Berlin, with the view of making himself acquainted with their arrangements and construction, as well as of observing the heads of the prisoners, it was proposed to him that he should visit not only the prisons of that city, but the house of correction, and the fortress of Spandau.

Accordingly, on 17th April, 1805, Dr. Gall began with those of Berlin, in presence of the directing commissaries, the superior officers of the establishment, the inquisitors of the criminal deputation, the counsellor Thürnagel and Schmidt, the assessors Mühlberg and Wunder, the superior counsellor of the medical inspection, Welper, Dr. Flemming, Professor Wildenow, and several other gentlemen.

As soon as Dr. Gall had satisfied himself in regard to the regulations and general management of the establishment, the party went to the criminal prisons, and to the salles de travail, where they found about 200 prisoners, whom Dr. Gall was allowed to examine without a word being said to him either of their crimes or their characters.

It may here be remarked, that the great proportion of those detained in the criminal prisons are robbers or thieves; and, therefore, it was to be expected, that if Dr. Gall's doctrine were true, the organ of Acquisitiveness should, as a general rule, be found to predominate in these individuals. This accordingly soon appeared to be the case. The heads of all the thieves resembled each other more or less in shape. All of them presented a width and prominence at that part of the temple where the organ is situated, with a depression above the eyebrows, a retreating forehead, and the skull flattened towards the top. These peculiarities were perceptible at a single glance; but the touch rendered still more striking the difference between the form of the skulls of robbers and that of the skulls of those who were detained for other causes. The peculiar shape of the head, generally characteristic of thieves, astonished the party still more, when several prisoners were ranged in a line; but it was never so strikingly borne out and illustrated as when, at the request of Dr. Gall, all the youths from 12 to 15 years of age, who were confined for theft, were collected together; their heads presented so very nearly the same configuration, that they might easily have passed for the offspring of the same stock.

It was with great ease that Dr. Gall distinguished confirmed thieves from those who were less dangerous; and in every instance his opinion was found to agree with the result of the legal interrogatories. The heads in which Acquisitiveness was most predominant were that of Columbus, and, among the children

that of the little H., whom Gall recommended to keep in confinement for life, as utterly incorrigible. Judging from the judicial proceedings, both had manifested an extraordinary disposition for thieving.

In entering one of the prisons, where all the women presented a predominance of the same organ, except one, (then busy at the same employment, and in precisely the same dress as the offenders,) Dr. Gall asked, as soon as he perceived her, why that person was there, seeing that her head presented no appearance indicative of any propensity to steal. He was then told that she was not a criminal, but the inspectress of works. In the same way he distinguished other individuals confined from different causes than theft.

Several opportunities of seeing Acquisitiveness, combined with other largely-developed organs, presented themselves. In one prisoner it was joined with Benevolence and Veneration, the latter particularly large. This individual was put to the proof, and in all his discourses shewed great horror at thefts accompanied by violence, and manifested much respect for religion. He was asked which he thought the worse action, to ruin a poor labourer by taking his all, or to steal from a church without harming any one? He replied, that it was too revolting to rob a church, and that he could never summon resolution enough to do it.

Dr. Gall was requested to examine particularly the heads of the prisoners implicated in the murder of a Jewess, which had taken place the preceding year. In the principal murderer, Marcus Hirsch, he found a head which, besides indicating very depraved dispositions, presented nothing remarkable, except a very great development of the organ of Perseverance.

His accomplice, Jeannette Marcus, had an extremely vicious conformation of brain, the organ which leads to theft being greatly developed as well as that of Destructiveness. He found in the female servants, Benkendorf and Babette, great want of circumspection; and in the wife of Marcus Hirsch, a form of head altogether insignificant. All this was found to be in strict accordance with the respective characters of the prisoners, as ascertained by the legal proceedings.

The prisoner Fritze, suspected of having killed his wife, and apparently guilty of that crime, although he still stoutly denied it, was next shewn to Dr. Gall. The latter found the organs of Secretiveness and Firmness highly developed,—qualities which his interrogator had found him manifest in the very highest degree.

In the tailor Maschke, arrested for counterfeiting the legal coin, and whose genius for the mechanical arts was apparent in the execution of his crime, Gall found, without knowing for what he was confined, the organ of Constructiveness much developed, and a head so well organized, that he lamented several times the fate of that man. The truth is, that this Maschke was well known to possess great mechanical skill, and at the same time much kindness of heart.

Scarcely had Dr. Gall advanced a few steps into another prison, when he perceived the organ of Constructiveness equally developed in a man named Troppe, a shoemaker, who, without any teaching, applied himself to the making of watches and other objects, by which he now lives. In examining him more nearly, Gall found also the organ of Imitation, generally remarkable in comedians, considerably developed;—a

just observation, since the crime of Troppe was that of having extorted a considerable sum of money under the feigned character of an officer of police. Gall observed to him, that he must assuredly have been fond of playing tricks in his youth, which he acknowledged. When Gall said to those about him, "If that man had fallen in the way of comedians, he would have become an actor," Troppe, astonished at the exactness and precision with which Gall unveiled his dispositions, told them that he had in fact been some time (six months) a member of a strolling company,—a circumstance which had not till then been discovered.

In the head of the unhappy Heisig, who, in a state of intoxication, had stabbed his friend, Gall found a generally good conformation, with the exception of a very deficient Cautiousness, or great rashness. He remarked in several other prisoners the organs of Language, Colour, and Number, in perfect accordance with the manifestations; some of the first spoke several languages; those with large Colour were fond of shewy clothes, flowers, paintings, &c.; and those with Number large, calculated easily from memory.

On Saturday, 20th April, the party went to Spandau. Among those who accompanied Dr. Gall were the privy counsellor Hufeland; the counsellor of the chamber of justice, Albrecht; the privy counsellor Kols; the professor Reich, Dr. Meyer, and some others. Observations were made at the house of correction upon 270 heads, and at the fortress upon 200. Most of them were thieves and robbers, who presented more or less exactly the same form of head of which the prisons of Berlin had exhibited a model. Including the whole, the prisons of Berlin and of Spandau

had thus subjected to the examination of Dr. Gall, a total of about five hundred thieves, most of them guilty of repeated offences; and in all it was easy to verify the form of brain indicated by Gall as denoting this unhappy tendency, and to obtain the conviction, from the discourse of most of them, that they felt no remorse for their crimes, but, on the contrary, spoke of them with a sort of internal satisfaction.

The morning was spent in examining the house of correction and its inmates; the most remarkable of whom were submitted, in the hall of conference, to the particular observation of Dr. Gall, sometimes one by one, and sometimes several. The combination of other organs with that of Acquisitiveness was also noticed.

In Kunisch, an infamous thief and robber, who had established himself as a master-carpenter at Berlin, and who, in concert with several accomplices, had committed a great number of thefts with "effraction" (burglary,) for which he had been shut up till he should be pardoned, Gall found, at the first glance, the organs of Number and of Constructiveness, with a good form of head in other respects, except that the organ of Acquisitiveness was exceedingly developed. Gall said on seeing him, "Here is an artist, a mathematician, and a good head; it is a pity he should be here,"-an observation remarkable for its accuracy, as Kunisch had shewn so much talent for mechanics, that he was appointed inspector of the spinning machinery, the repairing of which was confided to him. Gall asked him if he knew arithmetic, to which he answered with a smile, "How could I invent or construct a piece of work without having previously calculated all the details?"

The head of an old woman, who was in prison for the second time for theft, presented a great development of the organs of Acquisitiveness, Veneration, and Philoprogenitiveness, especially the last. Upon being asked the cause of her detention, she answered, that she had stolen, but that she fell upon her knees every day to thank her Creator for the favour she had received in being brought to this house; that she saw in this dispensation one of the clearest proofs of the wonderful ways of Providence, for she had nothing so much at heart as her children, whom it was impossible for her to educate properly; that since her imprisonment they had been taken into the Orphan Hospital, where they were now receiving that education which she had not had the means of giving them.

Deficiency of Cautiousness was often joined to a great endowment of Acquisitiveness. This was particularly the case in the woman Muller, née Sulzberg, whose head presented also a very remarkable development of the organ of ambition (Love of Approbation,) which, according to Gall, degenerates into vanity in narrow-minded and ignorant persons. She was unwilling to acknowledge that she was fond of dress, thinking that this was not in harmony with her present situation; but her companions insisted that she had much vanity, and was careful about nothing but her dress.

In the prisoner Albert, the organ of Self-esteem was joined with that of Acquisitiveness. "Is it not the case," said Gall to him, "that you were always desirous of being the first, and of distinguishing yourself, as you used to do, when still a little boy? I am sure that, in all your sports, you then put yourself at the head." Albert confessed that it was so; and it is

true that he still distinguishes himself by the command which he assumes over the other prisoners, and by his insubordination, to the degree that, when a soldier, he could not be constrained but by the severest punishments; and even now he generally escapes one punishment only to fall into another.

Here, as at Berlin, Gall distinguished at a glance such prisoners as were not thieves. Among others brought before him was Rêgine Dæring, an infanticide, imprisoned for life. This woman, different from the other infanticides, shewed no repentance and no remorse for her crime, so that she entered the room with a tranquil and serene air. Gall immediately drew the attention of Dr. Spurzheim to this woman, in asking him if she had not exactly the same form of head, and the same disposition to violence, as his gardener of Vienna, Mariandel, whose chief pleasure consisted in killing animals, and whose skull now serves in his lectures as an example of the organ of Destructiveness. This organ was found to be very largely developed in Regine Dæring, and the posterior part of the head in the situation of Philoprogenitiveness was absolutely flattened. This was in exact accordance with the character of the culprit, in so far as her examination bore upon it; for not only has she had several children, of whom she has always secretly got rid, but she lately exposed and murdered one of them, already four years old, which would have led her to the scaffold if the proofs had not been in some respects vague and incomplete, and her judges had not on that account preferred sentencing her to imprisonment for life.

One of the gentlemen present on this occasion was a distinguished musician, upon whom Gall had inci-

dentally pointed out one of the forms of development of the organ of Tune, which consists in a projection above the external angle of the eye. As soon as the prisoner, Kunow, appeared before him, "Hold," said Gall; "here is the other form in which the organ of Music shews itself; it is here, as in the head of Mozart, of a pyramidal shape, pointed upwards." Kunow immediately acknowledged that he was passionately fond of music, that he had acquired it with facility; and the production of the jail register shewed that it was as an amateur that he had spent his fortune, and that latterly he had had in view to give lessons in music at Berlin. Gall asked what was his crime. It appeared that he had spent his youth in debauchery, and had been condemned to imprisonment for an unnatural crime. Gall having examined his head, and found the organ of Amativeness in enormous development, immediately exclaimed, "C'est sa nuque qui l' a perdu;" then, carrying his hand upwards towards Cautiousness, which was exceedingly deficient, he added, "Maudite légèretè."

After dinner the party went to the fortress. Major de Beckendorf, the commandant, had the politeness to cause all the prisoners to be drawn up in line to be presented to Dr. Gall. Here the organs of Secretiveness and Acquisitiveness predominated, as in the other prisons. They were sometimes so strikingly apparent, that at a glance the thief might be distinguished from the other criminals. Raps, in whom the organ of Acquisitiveness was very conspicuous, attracted among others the notice of Gall, who discovered at the same time large organs of Destructiveness and Benevolence. What makes the justness of these observations very remarkable is, that Raps strangled a

woman whom he had robbed, and that in going away he untied the cord from compassion, and thus saved the poor woman's life after stealing her property. He then examined the young Brunnert, in whom he found the organs of Acquisitiveness, Locality, Constructiveness, and Self-esteem, which were curiously verified in his history; for Brunnert had committed several robberies; had been confined in various prisons, from which he had escaped; fixed himself no where; deserted as a soldier; underwent several castigations for insubordination; and, having again rebelled against his superiors, was once more waiting his sentence. He was, besides, skilful in the mechanical arts, and shewed some exquisitely finished works in pasteboard, which he had executed in a prison very unfavorable to such talents.

The organ of Number was largely developed in some; and in each case the power of calculation was found to correspond.

Two peasants, father and son, mixed with the thieves, attracted notice from having quite different forms of head. Gall having examined them found an enormous development of Self-esteem, and said,— "These two have not wished to be ruled, but to rule themselves, and to withdraw from any thing like sub-ordination." It was discovered that the cause of their confinement was insolence to superiors.

An old soldier, who was among the prisoners, had a very large organ of Acquisitiveness. It was, however for insubordination, and not for theft, that he was confined in the fortress; but on farther research it appeared that he had been punished several times in the regiment for having stolen.

ARTICLE IX.

[From the Edinburg Phrenological Journal, No. 15, 1827.]

RESULT OF AN EXAMINATION, BY MR. JAMES DE VILLE, OF THE HEADS OF 148 CONVICTS ON BOARD THE CONVICT SHIP ENGLAND, WHEN ABOUT TO SAIL FOR NEW SOUTH WALES IN THE SPRING OF 1826.

SEEING that no pretension of Phrenology has been more derided than its direct application to the affairs of life, without which it would be a barren and useless discovery, we cannot do more good to the cause than by publishing examples of its practical application. When the male convicts, 148 in number, were assembled for transportation on board the ship England in spring 1826, under the charge of Dr. Thomson, a navy surgeon,* Mr. De Ville was induced to go on board, and examine the whole gang overhead. The experiment was suggested by Mr. Wardrop of London, whom we are pleased to see adding a manly avowal of the new science to his other claims to professional distinction. Dr. Thomson was not previously acquainted with the subject. Mr. De Ville furnished him with a distinct memorandum of the inferred character of each individual convict, and pointed out the manner in which the dispositions of each would probably

^{*} This charge, for the sake of economy, is committed to navy surgeons who will undertake it; and it embraces the entire management as well as the medical treatment of convicts on the voyage.

appear in his general conduct on the passage. The desperadoes were all specifically noted, and a mode of treatment to prevent mischief suggested. One man in particular was noted as very dangerous, from his energy, ferocity, and talent for plots and profound dissimulation. His name was Robert Hughes.

The history of the voyage is minutely detailed in Dr. Thomson's Journal, deposited in the Victualling-Office; and by the politeness of Dr. Weir of that office, we were, in compliance with our request, not only immediately presented with the Journal, but permitted to take extracts and publish them. From different parts of a Log of above four months, we extracted all that concerned the conduct of the convicts, as follows:—

Log and Proceedings of the Male Convict Ship England, during a Voyage to New South Wales in 1826.

148 Convicts on board.

9th May. Convicts disposed to be disorderly; read to them my authority to punish; and threatened to act upon it, if they did not conduct themselves in a more orderly manner.

16th —. Same complaint,—and difficulty to get them to keep their births and clothes clean.

20th —. Punishment by flogging for plundering and violently assaulting each other.

30th —. Symptoms of mutiny among the convicts.

31st—. Received a letter from W. E. Taylor, requesting me to send for him as soon as possible, as he had something to communicate to me privately of the utmost importance. I immediately sent for him, when he informed me, that John George Munns had that morning come to him at the hospital very early, before he or the other convicts were out of bed, and told him

privately that there was a conspiracy formed to murder him (W. E. T.) to prevent his giving any alarm, and then to murder me, and all who would not assist them to secure the ship, and run her into South America. That ROBERT HUGHES and Thomas Jones were at the head of it, and it was their intention to carry it into effect the first time the ship was in a squall. In consequence of this information, the following memorandum was given by me to W. E. T. in the form of a protection, to be shown to such men as he could trust. As two-thirds of the convicts are the most depraved and desperate of characters, and robust athletic men, in order to prevent their taking any alarm, and assassinating in the prison during the night, as they had threatened to do, or at any future period, however distant, those convicts who should divulge their wicked intentions, every necessary precaution was privately taken, until the ringleaders could all be discovered, and safely secured without violence. Mem. "Dr. Thomson will thank W. E. Taylor and other well-disposed men to be on their guard, and, if possible, to get such evidence as will enable Dr. T. to act against the malcontents. Dr. T. promises protection, and his best services with the governor of New South Wales, to such men as may appear to him to deserve it." Some of the soldiers had heard in prison what induced them to expect soon to be employed against the convicts. This they reported to Dr. Thomson.

1st June. Hughes, for assaulting Daniel Dean, was secured and double-ironed on deck under a sentry. Munns applied for protection from being strangled or assassinated as was threatened. He gave the names of those principally concerned; Robert Hughes, (always the first,) Thomas Jones, William Brown, James

Hawkes, and James Norman. Jones gave himself up, observing, he was not the first bullock that had been sold, and hoped he would have a fair trial. He was double-ironed and handcuffed. Brown, Hawkes, and Norman, were all handcuffed, and placed under the sentries. Other arrangements followed for safety. Crew armed with cutlasses, &c.

29th September. Landed at Sidney. Court of inquiry on 24; Robert Hughes, Thomas Jones, &c.

We have not seen the evidence on the trial, but are informed that the facts of the conspiracy, and the shocking depravity of the mode of the intended murders, were proved beyond all doubt, and that the share each person had in the matter was in very close accordance with the notandum of character affixed to each name by Mr. De Ville. Hughes was especially marked by him as a person capable of ruthless murder and deep-laid plots. We have not seen Mr. De Ville's memorandum, but subjoin with great pleasure Dr. Thomson's letter to Mr. Wardrop.

Extract from a Letter of G. Thomson, Esq., Surgeon of the Ship England, to James Wardrop, Esq.

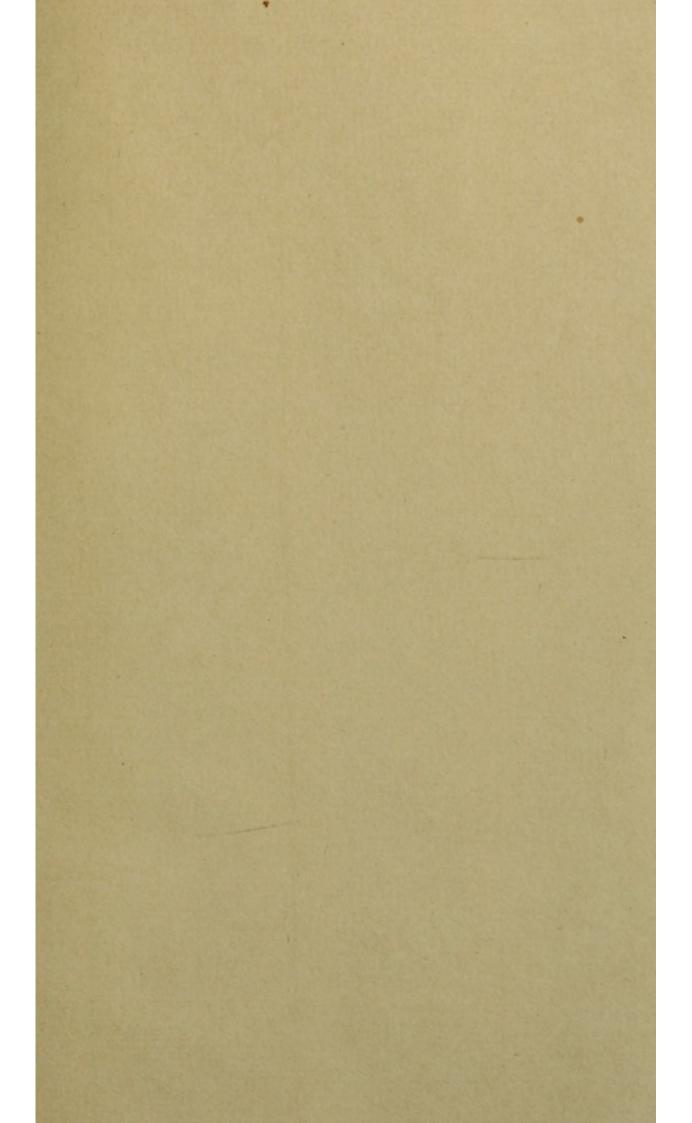
Sydney, October 9, 1826.

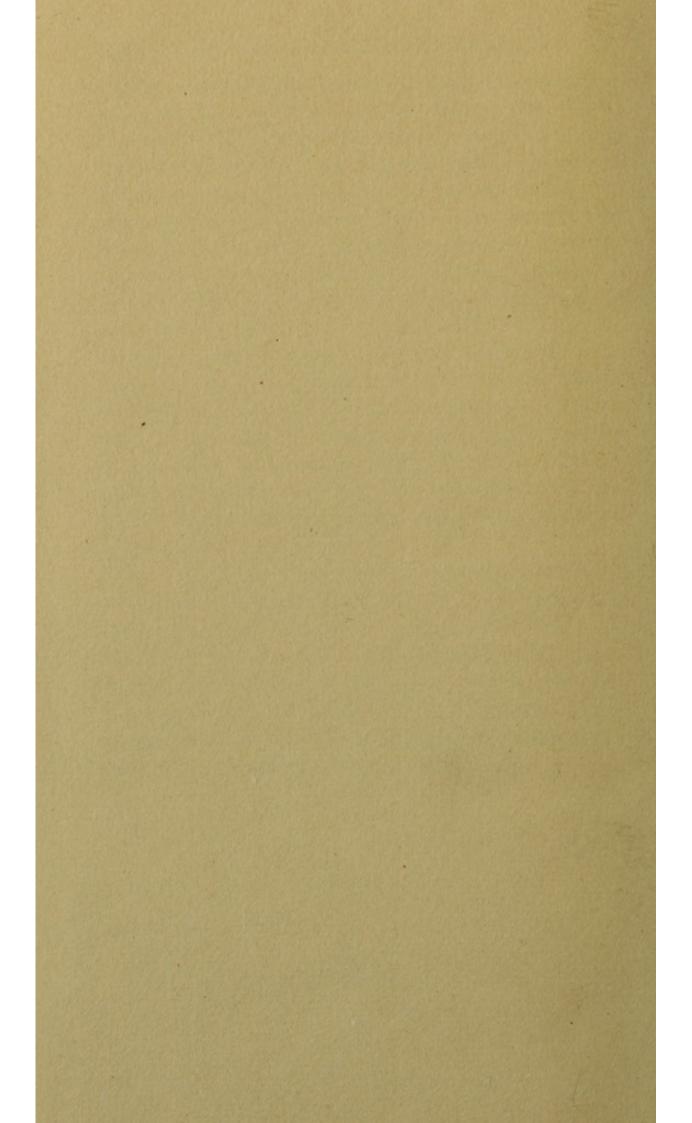
"I have to thank you for your introduction to De Ville and Phrenology, which I am now convinced has a foundation in truth, and beg you will be kind enough to call on Dr. Burnett, whom I have requested to show you my journal, at the end of which is Mr. De Ville's report, and my report of conduct during the voyage; and likewise to the depositions against some of the convicts, who you, with your usual tactus eruditus, discovered would give me some trouble during the

voyage, and I think the perusal of them will make you laugh, as they were going to rip up the poor doctor like a pig. De Ville is right in every case except one, Thomas Jones; but this man can neither read nor write, and, being a sailor, he was induced to join the conspiracy to rise and seize the ship, and carry her to South America, being informed by Hughes, the ringleader, that he would then get his liberty. Observe how De Ville has hit the real character of Hughes, and I will be grateful to De Ville all my life; for his report enabled me to shut up in close custody the malcontents, and arrive here not a head minus, which, without the report, it is more than probable I would All the authorities here have become have been. Phrenologists, and I cannot get my journals out of their offices until they have perused and re-perused De Ville's report, and will not be in time, I am afraid, to send them by the Fairfield."

We cannot conclude without bestowing a well-deserved encomium on Mr. De Ville, for so cheerfully undertaking and so skilfully performing a task from which all but a zealous Phrenologist would have shrunk with a mingled feeling of disgust and fear. We regret that the details in the Log-book are so meagre, and that Dr. Thomson has not sent home extracts from the evidence on the trials.

THE END.





Accession no.

Egypert, beorge

Illustrations of
Call no.

19th BF 870

CONT 1832 C

