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PROSPECTUS.

THE object of this work is to collect and diffuse information connected with two sciences—CEREBRAL PHYSIOLOGY and MESMERISM.

The science of CEREBRAL PHYSIOLOGY has made but little progress during the last fifteen years, notwithstanding its extensive diffusion as a popular study. How is this to be accounted for? By its having attained a state of completeness which leaves few facts to be discovered? Such a proposition cannot be entertained. We believe the cause will be found in the unwarranted notions of the perfection of their science generally prevalent amongst Cerebral Physiologists, in conjunction with that spirit of conservatism, the sworn foe to all progress and improvement, which is as apt to intrude itself into science as into politics, and with equally injurious results.

A generation has grown up since the first introduction of the science of Cerebral Physiology into this country. The promulgation of this new philosophy has cast upon the world of thought a flood of new ideas, new views, and new prospects. But, instead of testing their truth, men have been engaged in questioning their applicability to favourite doctrines and established ways. Too often those who should have defended them have adopted the equivocal and coward-like policy of endeavouring to trim and square them with the standard of opinion for the hour, thus pandering to ignorance and sacrificing truth at the shrine of a mistaken expediency; for vain and fruitless will ever be the attempt to amalgamate the facts and inductions of science with the dreams and chimeras of a

bygone, ill-informed age. It is not by mutilating truths that man can render them subservient to his use.

The leading facts and first principles of the science are easily acquired: and the majority remain satisfied with this amount of knowledge. But this is only the first step to the portico of the temple. The mere array of a few facts cannot give men the least idea of the power of the mighty engine they possess to push them onward in the race of human improvement. They have yet to *study* the science which will compel them *to study themselves*,—they have yet to become acquainted with its philosophy, with its regenerating powers, with its practical application to the affairs of man individually and collectively, in fact, to all that appertains to humanity.

A periodical devoted to these objects has long been a desideratum, and the Editors of this Journal will endeavour to furnish a medium for the freest expression of thought on questions of social, moral, and intellectual progress. In giving an opinion on important questions, they will not be influenced by external movements, either popular or the reverse. They claim perfect independence of thought, but will be guided in the expression of it by the unerring principles of their science. They aim to be truth-seekers, and they consider it to be their duty to promulgate the "truth of facts," impelled by the conviction that all truths are subservient to the happiness of mankind.

The discovery of a new truth gives to the philosopher intense delight. The science of MESMERISM is a new physiological truth of *incalculable* value and importance; and, though sneered at by the pseudo-philosophers of the day, there is not the less certainty that it presents the only avenue through which is discernible a ray of hope that the more intricate phenomena of the nervous system,—of Life,—will ever be revealed to man. Already has it established its claim to be considered a most potent remedy in the cure of disease; already enabled the knife of the operator to traverse and divide the living fibre unfelt by the patient. If such are the results of its infancy, what may not its maturity bring forth? Let us pause for a moment to survey our position. An acute susceptibility of pain has been diffused throughout the human body to warn man of injury, and hitherto it has been deemed a necessary consequence that suffering should follow the violation of its integrity. Behold, in a painless operation during the trance, the arrest of an important function at the will of man! and for the purposes of beneficence,—a result which a few years since it would have been considered madness to conjecture. Is not this a triumph justly deserving the name

of glorious, quickening the pulse in the bosom of philanthropy, and unfolding bright visions of the future to the gladdened eye of the well wisher of his race? Shall *an era occur in the progress of man*, and the tidings fall on the cold ear of apathy and indifference?

The extraordinary phenomena elicited during the excitation of the cerebral organs by means of Mesmerism, and establishing a connection between the two sciences, constitute another department demanding the most serious attention and investigation, and the ultimate results of which may transcend in value and utility all that man has yet dared to hope for from science. Let what many facts render probable be once established, viz., that this state of increased activity can be rendered permanent and carried into the natural state, and who does not catch a glance of a mighty engine for man's regeneration, vast in its power and unlimited in its application, rivalling in morals the effects of steam in mechanics.

Numerous experiments in this new and startling science are daily performed by individuals in different parts of the country, agreeing in result. A Journal seems required to chronicle the fruits of their labours; and all agree that the period has arrived when judicious combination may be productive of the best results.

The science of Cerebral Physiology experienced strong opposition before even its first principles were recognized, or the truth of its most obvious facts conceded. The science of Mesmerism has been destined to pass through the same ordeal. There is one curious and melancholy feature which deserves especial notice, and which proves how little Cerebral Physiologists have profited by the difficulties they encountered during the infancy of their own science. Men of science denounced Gall as an enthusiast and visionary, and proclaimed his facts to be fallacious. Men of science and even Cerebral Physiologists denounce him who is convinced by his senses of the truth of Mesmerism as an enthusiast and visionary, and proclaim the extraordinary phenomena which are developed in the trance to be gross impositions. Thus the very course which Cerebral Physiologists condemn in the opponents of their own views, many of them are the first to adopt on the proclamation of a new and startling truth; and this is the more extraordinary, because many of the phenomena illustrate in a most beautiful manner the excited action of the cerebral organs. How great the difference between theory and practice! They believe in a philosophy which teaches them an opposite course of conduct and yet feel not its influence!

However, those who are investigating nature and recording

facts know that in a short time opposition must cease, and they turn from the gloomy to the bright side of the picture and contemplate in the distance the results of their labours. They look for their reward in the plentiful harvests of the future, rather than in the reapings and gleanings of the present or the past. "Glorious, heroic, fruitful for his own Time and for all Time and all Eternity, is the constant speaker and doer of Truth." The assertor of truth may be crushed and we may breathe a sigh over the martyr as he passes from the field of his labours,—ignorance and prejudice may for a time reign triumphant, and the abettors of sloth and selfishness be considered the great, the good, and the wise,—but Time rolls on, and Reason will assert her dominion.

To hasten the arrival of this period will be the leading object with the Editors of this Journal. They will bestow great attention upon the practical department of the two sciences which they have undertaken to cultivate, but at the same time will not be regardless of their vivifying power. They will not forget that man, Eternal Man, is the theme; and, while they survey his past history and point out how his best interests have been neglected, they will indicate the manner in which these two sciences may be made subservient to the great end in view,—the progressive improvement and increasing happiness of the race.

The work, being equally devoted to Cerebral Physiology and Mesmerism, will contain original communications of facts and views in both sciences,—analyses of the best works upon them,—and the proceedings of those engaged in their cultivation and dissemination.

I. *Cerebral Physiology.*

A RETROSPECT of the progress of every science is instructive, but of the science of man pre-eminently so. If we trace the progress of Cerebral Physiology from the period when Gall first promulgated his discoveries in the capital of his native country, to its introduction into Great Britain, and from this to our own day, we shall find cause for joy in the rapid development of the machinery which is to work out man's emancipation, but cause for regret that its application should have been so limited as to produce such meagre results. How numerous the struggles of the last fifty years, and how different the feelings with which we survey them!

We look back upon the dawn of the philosophy which is to regenerate humanity, and we admire the attempts of the philosopher to instruct his countrymen: but, suddenly, the despot's mandate goes forth, and Gall and his truths are alike banished. It has been remarked, "When a great man dies, then has the time come for putting us in mind that he was alive." How true as regards the greatest of modern philosophers! His country spurned and banished him. The generation which witnessed this iniquitous procedure has passed away, and the next seeks from his disciples in a foreign land the knowledge their parents refused. In this there is nothing new. Superior brains give birth to new ideas, or prompt to the collection of neglected facts and the subsequent development of general laws. No sooner is this achieved than a system of persecution is commenced against the daring innovator. Weak attempts are made to controvert his facts, but the great object is to crush the man. Man ever injures his fellow when he presumes to wander from the beaten track, and attempts to instruct his compeers in the truths he has discovered. Hundreds suffered before Gall for daring to break their intellectual thraldom, and till the truths of Cerebral Physiology are universally embraced, hundreds will continue to suffer the same persecution. Even now the system is pursued, and the generation is refusing to investigate truths, which their children will embrace and turn to their advantage.

Germany banished the noblest brain she ever produced! The tyrant,—for he is a tyrant who checks the freest expression of thought and opinion,—retarded the development

of truths essential to the happiness of his species, and Gall, the German, the discoverer of a system of philosophy which will cause his name to descend to the remotest generations, sought refuge in the capital of a neighbouring nation.

But it may be asked, Why did he leave his country? The answer will present us with a beautiful moral lesson. He preferred freedom, to the controul of a despotic government, and the unrestrained investigation of important physiological truths, to intellectual fetters and a compulsory silence. The man who consents to suppress his thoughts at the command of another, voluntarily withdraws one of his most essential attributes—he has ceased to be free—he is no longer *a man*. Gall felt this, and for this reason he left his country. Without fortune and without friends, he abandoned the lucrative practice of his profession,—scorned all selfish considerations, and prompted by the true and noble feelings which *should guide all men* in the cause of truth, he entered upon a moral and intellectual crusade against error. Of all the contributions which the fertile eighteenth century added to the mighty stream of increasing knowledge, his was the most important. It was to give the power to solve the unworked problem of human rights and human duties. Relying on his facts—facts accumulated during a long and laborious investigation of nature, he went forth boldly to meet the advocates of an ideal philosophy, proclaiming as he went, with the calmness of a philosopher and the dignity of a man, the result of his studies, "This is truth, though opposed to the philosophy of ages."

We cannot have the least idea of the debt we owe to Gall till we become acquainted with the state of metaphysical science before his time. Read the ponderous tomes which crowd the shelves of our libraries. What crude indigestible masses of metaphysical speculation! What heaps of idle theories! What a display of learned ignorance! What a heterogeneous mixture of useless lumber! Every teacher advanced his peculiar views and his estimate of man's powers. But instead of searching for his peculiarities and the elements of his character, in his organism and in the world, he selected himself as the specimen best suited to his purpose, and thus endowed the race, with the strengths and weaknesses—the dreams and speculations—the follies and vanities which were most prominent in his own character.

But how fared it with Gall in his new abode? For a time scientific men embraced his views and Paris resounded with his praises. But another despot issued his mandate, and suddenly the intellectually-great Cuvier and his coadjutors

became hypocrites and cowards. No language can censure such conduct with sufficient force. Cuvier, the philosopher, uttered opinions which he did not entertain, at the command of a proud and selfish tyrant. The jealousy of a tyrant is developed in the exact proportion he has cause to fear free investigation. Napoleon feared this, and having expressed his opinion—the servile philosophers changed theirs. Ridicule took the seat of reason, and the imperial nod marked the limits and guided the course of scientific discussions. By such means was the progress of truth delayed and the advance of man proportionately retarded. Withdrawal from power produced no change in Napoleon's estimate of the new philosophy. Even from the rock of St. Helena,—the man who had devoted his life to the promotion of schemes for self-aggrandizement, and his energies to carry out plans of slaughter and annihilation,—the oppressor and destroyer of his race, and the ruthless invader of kingdoms and nations,—breathed forth the same spirit, and laughed at the philosophy which would rebuke him for his sins and render apparent the secret springs of his actions and thoughts.

Great Britain was destined to receive the visit of Gall's coadjutor Spurzheim. And how did her men of science welcome the new philosophy? In the land of *liberty* there could be no cause for neglecting its investigation—there was no tyrant whose interests it invaded—no institutions whose foundations it could immediately sap,—it was the very spot in this "Bedlam of the Universe" where we should have predicted the occurrence of a free, candid, and open discussion of its principles—it was the centre from which had emanated the great in science—it boasted of the most enlightened philanthropists, the greatest orators, the most powerful legislators,—an assemblage of men who ought to have been deeply interested in the progress of all questions appertaining to the welfare of humanity. But how different the result! What lamentable defalcations of moral courage! What breaches of conscientiousness! What struggles of perverted intellect! From all quarters what ignorant and cowardly attacks!

The literary records of these times will furnish a sad catalogue of despicable tergiversations. There was the same cry then which assails us now,—"Give us facts. Where are your facts?" Nature teemed with them. Facts the most palpable were declared to have no existence. The most beautiful specimens of an inductive philosophy were sneered at, and the philosopher who directed attention to them was called a juggler, a buffoon, and a German quack! Mur-

derers—moralists and philanthropists—the great—the good—the depraved and the imbecile, were all classed in the same category as possessing brains; but when the difference in quality and size, especially regional size, was adverted to, this was called a scientific quibble. Sage philosophers filled skulls with peas or millet seeds, and because the skulls of opposite characters contained an equal measure, it was argued that the size of the brain was no test of the character. It would be impossible and very unprofitable to enumerate a tithe of the absurdities. Even anatomical facts—the description of the arrangement of cerebral matter, was declared by an anatomical teacher to be an illusion, and when he was surrounded by friends who were unanimous in their expression of admiration at the beauty and clearness of Gall and Spurzheim's demonstrations, he still declared that he did not see the peculiar arrangement under consideration! It was not his interest to receive the evidence of his own senses,—it wounded his pride to be compelled to promulgate the discoveries of other men and retract an expressed opinion,—he could not rise above the selfish temptation of the moment—he therefore degraded himself. Misrepresentation and vituperation, the usual attendants on the advocates of a weak cause, were now turned to the best advantage. Folly put on her most alluring smiles, and ridicule became the barometer to mark the progress and record the struggles of the new philosophy. Gordon, Jeffrey, and Hamilton, and a host of smaller fry, whose obscurity we will not remove by recording their names in the page of history, fluttered through their little day, attacked and charged again and again, assisted by all the weapons they could command for the purpose of retarding the recognition and appreciation of natural truths.

It has been remarked that "the darkest hour is nearest the dawn," and truly these proceedings were the prelude to an important change. Reason slowly assumed her dominion. Disciples became advocates—societies were founded—a periodical was commenced, and Cerebral Physiologists have gradually increased in numbers, till now their science ranks amongst admitted truths, and the period has arrived when it becomes their duty to assume a commanding position and give effect to the philosophy which they have so zealously promulgated. But how is this to be accomplished? In our opinion the course is broad and clear if we avow the truth, but narrow and ambiguous if we continue in our present position.

In the political arena we behold two great classes of men, the representatives of two antagonistic powers—conservatism and innovation. The former the advocates of antiquated

measures, and surrounded by men who believe their duty to consist in supporting with their utmost power the usages, customs, institutions, and laws—the inventions and codes of former men. The latter the decided opponents of all this, and united with those who originate new views—proclaim the existence of abuses—remove impediments to progression, and believe that man is to work out his own reform and emancipation. In science as in politics there is precisely the same spirit of conservatism, the drag-chain to all improvement; and in our own science we have the same two divisions. One party has always adopted an equivocal and cowardlike policy, mixing the thoughts and dreams of bygone men with the facts and inductions of science, using an objectionable phraseology, insisting on the reception of an essence as a moving power, and thus presenting to the world the anomalous spectacle of inductive philosophers wearing the dress of mystagogues. The other, the assertors of truth regardless of the consequences—men, who would rather be the victims of a daring integrity than the abettors and upholders of a system of expediency; who, contend that the enlistment of an unknown cause of action is an unphilosophical proceeding—"that the belief in spiritualism fetters and ties down physiological investigation—that man's intellect is prostrated by the domination of metaphysical speculation—that we have no evidence of the existence of an essence—and that organised matter is all that is requisite to produce the multitudinous manifestations of human and brute cerebration."

An ancient philosopher said "it was his duty to make wonders plain, not plain things wonderful," and an acute writer has remarked, "there cannot be a sounder maxim of reasoning, than that which points out to us the error of admitting into our hypotheses unnecessary principles, or referring the phenomena that occur to remote and extraordinary sources, when they may with equal facility be referred to sources which obviously exist, and the results of which we daily observe." We may reap advantage by attending to this rule. Our first and most important effort should be to teach man the constitution of his nature. Here then on the very threshold we meet our first difficulty.

As long as man believes that his thoughts and actions are the promptings of a power external to himself, or, that the stimuli conveyed by his senses to his cerebral laboratory are modified by a certain commixture with an indescribable something external to himself,—so long we conceive will man be prevented from attaining his proper position, or from even possessing correct notions of his own capabilities. This fun-

damental error must be eradicated. To accomplish this, we must use a more accurate phraseology, and we feel confident that the important results which should flow from the practical application of our science cannot be attained without this most essential step. "Out of one foolish word may start one thousand daggers." What errors have been perpetuated—what time has been lost—and how stationary our science, because Cerebral Physiologists will continue to use the word "*mind.*" Cerebral Physiology is essentially an inductive science. To study it profitably we must apply the principles of inductive philosophy. This has been accomplished to a certain extent. The organology of Cerebral Physiology has arrived at its present state solely by the accumulation and comparison of innumerable examples. The result has been the development and recognition of a law; viz., that a certain portion of brain is for the purpose of evolving a certain species of thought—a peculiar feeling or passion. But this is only an example of a more general law; viz., that every portion of our organism has a particular function and a peculiar property.

To state the subject clearly; the grand question for solution is this. Does the brain act *per se* in consequence of its peculiar organism? or, does a something exterior to brain constantly compel certain portions of brain to exhibit peculiar properties? We never witness the evolution of thought—the manifestation of a benevolent feeling—or a destructive propensity, independent of brain. The instant we detect the property we are morally certain of the existence of the structure; and if the structure is healthy, the manifestation of the property is so likewise. The conclusion is thus forced upon us, that a peculiar organized matter is all that is necessary to produce the diversified manifestations of human and brute cerebration. To our view this is as clear as the working of an algebraic equation. "Is it consistent with any sound principles of philosophy, gratuitously to burden science with an imaginary being, the existence of which is not demanded for the explanation of a single phenomenon?" There is no proof whatever that cerebration results from the action of an essence, or, even from the combination of an essence with cerebral matter. The belief in the existence of an external essence is a proof of the non-recognition of the laws we have referred to,—is a remnant of the belief which existed when imagination, instead of inductive reasoning, dictated principles to philosophy. The peculiar property manifested, has been mistaken for an imaginary external power. *The belief in the existence of "mind" is an exemplifi-*

cation of the tendency in uncultivated man to personify all the actions of nature,—is a barbarous recognition of the manifestation of a property resulting from a peculiar molecular arrangement of matter, and which arrangement *necessitates* the exhibition of the property.

The savage witnessing the movements of a steam engine, in the depth of his ignorance concludes that the motive power is the Great Spirit. He does not see the steam—he is not acquainted with its enormous expansive power—neither can he be made to understand that this is perfectly under the controul of man, and that to obtain the movement he has merely to fulfil the requisite conditions. In what respect does the philosopher differ from the savage? The philosopher witnesses the phenomena of thought, and acknowledges that the brain is essential to its production,—but he is not satisfied with this knowledge, and because he cannot understand and see distinctly how these functions are produced, he, like the savage, has recourse to an external, unknown, invisible agent,—to a spirit. Can greater ignorance be manifested? The philosopher feels the difficulty, but instead of using his best endeavours to unravel the mystery, he cuts the knot, and enlists a power which he has not seen and cannot appreciate, for the purpose of explaining phenomena, for which as Cerebral Physiologists we contend there is already a sufficient cause.

There are many individuals who see the true bearing of this question, but who contend that there is no impropriety in continuing the use of the term *mind*, provided we clearly understand the meaning to be attached to it. But herein lies the difficulty. Shall we practise a system of delusion? Shall we continue to use the old phraseology when it manifestly prolongs the existence of a pernicious error? "To temporize with a known evil, announces either weakness, uncertainty, or collusion." It must be discarded, and we shall date the advent of a new era in Cerebral Physiology from the moment we cease to speculate concerning spirit, and confine ourselves to the investigation of organized matter. Let us speak in the language of truth—let us dare to utter our thoughts with philosophic resolution—let us use terms which will not require explanation—let us appeal to man's reason and not to his *imagination*—and most assuredly we shall reap the reward.

We have now seen that man's ignorance prompted him to personify the functional manifestation of his own brain; and his arrogance forthwith led him to conclude that he possessed a different constitution to the beings around him. Most

them? With their assistance why not test the present state of society—its unnatural institutions—its injurious laws—its selfish legislation—its low standard of morality? There is a faint heartedness, a cold calculating withering apathy in our leaders, which to the enthusiastic and sincere philanthropist is extremely distressing. Instead of stating these truths for truth's sake, and boldly avowing the deductions to which an unfettered intellect would lead—they have winked at error, and this for the most selfish of all objects, a contemptible and fleeting popularity. They have permitted popular fancies with their injurious results to reign paramount, instead of inducing by the purer light they possess more rational modes of thought, and indicating the position man should endeavour to occupy. The selfish man collects his riches and revels with unceasing pleasure over every addition to his golden store. He does not increase the happiness of his neighbour, neither does he add one iota to the stock of human enjoyments. We possess that which is far more valuable than gold, and shall we nevertheless follow this example, and whilst humanity sleeps, oppressed and confounded by the visions and speculations of an ideal philosophy—shall we stand by, overwhelmed at the sight, and cowardlike neglect to bestow one thought on the cause, or refuse to lend our aid and assistance towards the application of a remedy? Unfortunately, such has been our course, but forthwith let us wipe away the stigma. Cerebral Physiologists must be prepared to carry out the principles of their science—to push them to their ligitimate conclusions. There is one conclusion to which their science leads, and the reception of which must be insisted upon.

The actions of the human race necessarily result from their organic constitution, and the circumstances which surround them at any stated period.

The evolution of thought is a vital phenomenon, the necessary sequence of a certain combination of atoms assuming a certain form and arrangement and having received the requisite stimuli. Thus, then, the production of a thought, or, the manifestation of a feeling, by a brain: and the effect to be produced by any external cause on the same brain, are governed by invariable and immutable laws." "What is man, viewed philosophically by the aid of the doctrine of *necessity?* A mere link in the chain of causation, connected with innumerable links before his existence, and with the future chain ad infinitum, the consequences of his existence being endless; calling, probably, numberless beings into existence by the same necessary law by which he himself began to be. A

mere atom in the mass of sensitive creation, called into existence without any choice on his part, and moved by influences over which he has no more controul than an atom of matter over attraction or repulsion, or whatever other laws it may be constituted to obey. He, an atom of the great body of mankind, bearing the same relation to it as a single atom of the human body does to the whole; the atom is introduced into the system by the laws of nature; it passes through the several stages of assimilation, becomes capable of feeling, and again passes away; so does man from the great body of society, the eternal receptacle of 'youth, and beauty, and delight.'"

Man cannot resist the necessity which governs all his functions. If he is compelled to submit to a surgical operation, he has not the power to avoid the necessary result of the infliction of a wound—pain. He cannot prevent his spinal cord from performing its function, nor its branches from receiving and conveying external impressions. He cannot apportion the amount of stimulus to be transmitted, nor the intensity of the impression when it is communicated. As regards these laws he is obliged to continue such as nature from the first necessitated him. In precision and immutability—do the laws of thought differ from other laws? Is man free to think or not to think? To believe or disbelieve? To love or hate? To detest virtue and embrace vice? Has he the choice not to believe his dearest friend guilty of the basest crime, when a certain amount of evidence is produced? Has he the power to choose to be born of certain parents and in a particular country? Has he the power to avoid the result of impressions conveyed to him in his infancy by an injudicious and ignorant teacher? Can he prevent his brain from fulfilling its numerous functions, or with healthy external senses, has he the power to resist the thoughts which unceasingly result after the several stimuli have been conveyed by them? Man has no more immediate power over the function of cerebration, to be free to think or not to think, than he has power over the function of common sensation, to be free to feel or not to feel. By education and judicious training he can improve his cerebral organism and in this way improve the function, but he is not free to command healthy thought from diseased organism—mature thought from untrained brain—or, to resist thoughts which are the *necessary consequences* of cerebral movements.

We confess that this has always appeared so clear, so self-evident, and so completely a logical deduction from the facts and premises in our possession, that we are at a loss to account

for the noise, and bustle, and the hostile array with which the ranks of Cerebral Physiologists lately received the enunciation of this doctrine. To what cause can this opposition be attributed? Whence the rancour and ill feeling, the divisions and the vituperation? We are compelled to agree with Berkeley, who says:—"Two sorts of learned men there are: one, who candidly seeks truth by rational means; these are never averse to have their principles looked into, and examined by the test of reason. Another sort there is, who learn by *rote* a set of principles, and a way of thinking which happens to be in vogue; these betray themselves by their anger and surprize, whenever their principles are freely canvassed."

Cerebral Physiologists not necessitarians! Why the very fact that we have enrolled ourselves under the designation of Cerebral Physiologists, as cultivators and expounders of *a science,* proves that we consider that the thoughts, actions, and feelings of men, can be made a subject of scientific investigation,—demonstrates that we avow that there is a constant and unchanging series of effects, resulting from recognized and specific causes. What more is required to prove that we are assisting to promulgate the doctrine of necessity? Are we to do this in secret and disavow it in public? Are we to lay up materials for the benefit of future generations, and because the truth is unpalatable now, voluntarily decline the proffered good for our own? Or, are we quietly acting on this belief in our own intercourse with society, but leaving our neighbour to grope on in his ignorance? Whatever may be the causes which influence our conduct, whether ignorance or cowardice, hypocrisy or chicanery, or, whether we are adopting the course which many follow in religious questions, and profess an esoteric and exoteric religion—one belief for the closet and another for public avowal—all are equally bad, and can produce no permanent satisfaction to ourselves, but will assuredly promote the moral degradation of the beings around us.

To the prevalence of the two errors we have been combating, we refer the languid state of our science. Cerebral Physiologists are so impressed with the necessity of the belief in a mysterious and non-describable constituent in man's nature, and also in the presumed freedom of man's thoughts and actions, that a species of apathy has been engendered and cerebral analysis has made but little progress. Notwithstanding the repeated difficulties encountered, unwarranted notions of the perfection of the science are generally prevalent. Even with our present knowledge,—with the power to appreciate, to a great extent, the combinations of tempera-

ment, and thus the quality of cerebral fibre—with the ability to recognize the shape and size of the various portions of brain and their various active combinations—still, the predication of character by the most enlightened and successful amongst us, is in many instances far from satisfactory. In glancing at what is to be accomplished to perfect our science, we may almost venture the assertion, that cerebral analysis has yet to be commenced. The geography of Cerebral Physiology, except a few additions, was accomplished by Gall, but the exploration of the several cerebral divisions, that which we would designate cerebral analysis, must be carried out by ourselves.

The doctrine of necessity will stimulate us to make the required exertions. When the cause of every thought and every action is sought for in man's cerebral organism, then will be the commencement of a more strict and accurate investigation—then will man be convinced that he has the power to promote and carry out changes in the civilization of his race—then will he strive to remodel, combine and recombine the numerous organic elements at present existing in the great family of man. The astronomer calculates the return of a comet, and from repeated observations and the severest mathematical induction, he is correct in his prediction. But suppose he is wrong, suppose a few hours or a day elapses. Does he in despair give up his investigations? Does he conclude that the causes of his failure are beyond his reach? No! He recognizes unascertained causes in action, and is certain that more extended investigation, and a more rigid and careful calculation will unveil the mystery and render manifest the apparent anomaly. The history of astronomical science proves the truth of this statement. The chemist is not satisfied till he reduces a substance to its elementary constituents, and is able to declare with precision the quality and quantity of each portion. He adopts the most careful analyses, and what victories he has achieved! Let us follow the example. When we meet with difficulties let us not have recourse to existing dogmas—let us not cloak our ignorance by the assumption of an air of mystery and the parade of unintelligible theories. Let us not imagine an unexpected phenomenon to be the result of a species of effervescence between an essence and cerebral matter—in the language of Mr. Combe: the result "*of the compound existence of mind and body, which act constantly together*"—let us not rush for relief to the doctrine of free-will, to that administrator to man's pride—rather, let us recognize the existence of unascertained causes, of unappreciated organic

elements, which, when discovered, will perfect our machinery, and increase our power to scrutinize character.

But to take a more extended view, apart from the immediate consideration of our own science—what mischief has resulted from neglecting to embrace the doctrine of necessity. Even now it is imagined that man can believe what he pleases—nay, that by the imposition of pains and penalties, and the promulgation of anathemas, it is possible to make him believe that which is absolutely revolting to his reason. How many millions have been slaughtered because the stronger party entertaining certain notions, determined that the weaker should be compelled to embrace the same! How many victims have the torch and the faggot destroyed, because their opinions were not considered orthodox—because they did not square with a certain artificial standard! Peace, charity, and good-will, have been mere empty sounds, and even now their value and importance are lost sight of amid the insane struggles of one set of men, to compel others to adopt the same belief. The wealth of nations has been spent not to increase the happiness of their population, but too often to destroy their neighbours because they embraced an opposing faith. Is there any crime which has not resulted from this grievous error? It has poisoned all the institutions of our country—it disfigures our laws—it disgraces our criminal code, and renders absurd and irrational the opinions of our judges. When the source, from which the fountain of universal justice should spring forth, is rendered turbid, how can the stream, which is to flow through the length and breadth of the land, carry ought else but impurity?

Cerebral Physiologists! Teachers of youth! Instructors of the people! To you we direct our views, and entreat a careful and patient consideration. Remember! it is truth for which you are to seek, and when you have discovered it, you are morally obliged to state your conviction. There can be no excuse—it is always expedient to speak the truth. If, however, you are determined to support certain views—if you are cowards, slaves to the popular opinion, and traitors to your cause—then we say, give up philosophy—give up your task—resign your calling. But on the other hand, if you are influenced by that great moral force—that determination to assert what you believe to be truth, although you may be persecuted, "yet the sympathy and friendship of the few real lovers of truth, who are capable of appreciating your motives and views, and the internal consciousness arising from the activity of the highest feelings will more than repay you for

all that the world is capable of withholding. Though the friends of the man who dares to promulgate and support unpopular truths are necessarily few, yet they are more valuable, and are the source of more happiness than a host bound to him by the ordinary worldly ties, or than the stupid staring and loud huzzas of the multitude."

Man's perfect happiness must result from the supremacy of the moral faculties. These must be the monitors constantly dictating not only what is right and just in the actions of the individual, but also in prompting to the necessity of unceasing efforts to promote the happiness of the race. We see this supremacy occasionally manifested in the career of one—but where do we find it governing the actions of a nation or a community? Is there on this earth a race universally searching after truth—enacting laws to ensure justice to the many and to suppress the selfish views of the few—founding institutions for training their youth in intellectual and moral science, and discarding all principles and all practices having an irrational and therefore an unnatural tendency? Alas! such a race is nowhere to be found. Even amongst ourselves, comparatively the most civilized and enlightened community, does there exist a national yearning after truth? Do not our legislatorial halls reverberate nightly the cry of a pitiful expediency? Do not our rulers ward off by the most barefaced sophistry the measures calculated to alleviate the miseries of their suffering countrymen? Are they not now sacrificing national interests to party views, and the happiness of millions to their supposed individual welfare? Is not intellect employed in promoting schemes for self aggrandizement, and neglecting the great truth, that *real individual happiness* can only be obtained by increasing *the happiness of all?* Are not schemes for awakening national thought shorn of their power, grandeur, and utility by the selfish predilections of ignorant senators? In fact nowhere is this great moral truism carried out, *that it is the interest of man to concede justice.*

"In every clime this truth's confest, that man's worst foe is man."

We feel shame for our race while we record these enormities; but have we overcharged the recital? Let us as moral philosophers look forward to a period when the causes of human misery shall be removed, and the means of producing universal happiness made clear and attainable—but above all considerations, let us remember that we are the expounders of a system of philosophy which will do this. We have met with considerable opposition and this will continue. *The*

generation which is to appreciate our science is yet to be born. It would be as difficult for the old man to adopt the gymnasia of the youth, as for the existing generation schooled in the errors of the present system to directly embrace and practically apply the new philosophy.

Those who take a low estimate of humanity tell us that no such change as we desire can ever take place. They cry "Human nature, is human nature, and since self-preservation is a law of nature, you must expect men to look after *their own individual interests.*" It is needless for us to say that we disclaim connection and all sympathy with this party. These men speak of man's destiny as if the proceedings of the last thousand years were to be taken as a test of his moral and intellectual aptitudes. History cannot furnish us with information to work out this all important problem. "Ancient history traces the outlines of a mass of preponderating animalism. Modern history tracks out the course and records the struggle of intellect escaping from bondage." From such data only how is it possible to pourtray the destiny of man, or to frame a social system which will assist him to fulfil it? How is it possible by looking at the past, at the records of bloody wars and brutal devastations—at the scenes of carnage, oppression and woe—at the pride, animosity, and the riot of fierce and fiery passions, proofs of a barbarous age and mere animal excitement, to judge of the future—of a period when man's nature shall be universally understood—when his Reason shall have assumed its supremacy—when the moral revolution, the grandest of all revolutions shall have been achieved, and all shall be united in one bond, the bond of universal fellowship—of a period, when the rights of the weak and helpless will form the theme on which the more powerful will expatiate—when the gladiatorial displays in the senate will not be for the mere purpose of proving the party expediency of certain measures—mere additions to the long catalogue of selfish actions, but, all will assist in obtaining the enactment of just and equitable laws—will proclaim the utter abolition of all privileges and all distinctions, having for their object the aggrandizement of the few to the ruin and destitution of the many—the struggle will be one of concession, concession founded on the principles of moral right, and—

> "Man's age of endless peace,
> Which time is fast maturing,
> Will swiftly, surely come."

However, let it not be imagined that we are so sanguine as to suppose that any sudden amelioration of man's condition

will result from the adoption of a more rational system of education and legislation. Physical progression is the cause of progressive civilization. There must be an improved organism before we can expect a change in the inevitable results of organic action. Individuals influenced by the purest philanthropy may suggest plans—may improve external circumstances and endeavour to change the habits and thoughts of the mass—but disappointment will be the result. From the sowing of the seed, to the growth of the plant, and from this to seed time and harvest, there is a long interval. In like manner the habits, thoughts, feelings and actions of men cannot be changed or remodelled in a day. If we wish them to become more in accordance with the dictates of reason and virtue, we must use our best endeavours to promote, and wait patiently for the necessary organic change. How numerous the writers who describe the beauties and chronicle the wonders of our earth—but how few the real workers who endeavour to hasten the moral and intellectual perfection of its brightest ornament! The being which at its birth is the most helpless, is destined by the mere growth and judicious exercise of its organism, to become the mightiest amongst created beings. But can the greatest amongst us trace the gradual progress of his own thoughts upwards to the maturity of intellect, or describe the course he pursued by which the resulting accumulation was gained? Yet such progress has been made, such accumulation has taken place, and that too from the earliest period of infancy. May we not use the simile and compare the growth *of a man* from infancy to muturity, to the advance of *man* from a state of barbarism to perfect civilization.

If an organic change must precede every civilized movement, how pre-eminent are the services of the Cerebral Physiologist! In the name of science then we appeal to them! As philosophers, are you performing your duty if you are conscious of the efficacy of certain measures suggested by your science, and still make no onward movement? A heavy responsibility rests upon you, if you are certain of the result but cowardlike refuse to make the trial—if you are in possession of the power, but hesitate to use it—if you are convinced that man's nature may be improved, but fail to strike at the blighting, woe-producing dogma that man is irreclaimably depraved—if you promulgate facts which to unprejudiced and thinking men inevitably lead to certain conclusions, but still cling to old ideas and antique speculations. Speak not of your philosophy whilst you aim at no higher attainment than acceding to the opinions and belief of your own generation.

Boast not of your science, if its only application is to consist in the appreciation of individual character—if your only object is the collection of the skulls and casts of the great and the good, the infamous and the depraved—if your annual meetings are to continue such as they have been, and at which you reiterate the same thoughts and opinions year after year, but which your prejudices will not permit you to test by the philosophy of the science you are met together to promulgate. The investigation of individual character, the estimate of individual aptitudes, the mere organology of the science, has claimed considerable attention—but the philosophy, the estimate of national character—the application of it as a test to national institutions and laws, national virtues and vices—the ascertainment of the cause of the depraved state of the present generation, and the recognition of the means by which future generations are to be elevated—these are elementary studies requiring rigid investigation.

We ask not for a catalogue of the societies of Great Britain, of the number of disciples in each town, nor for the number of the world's great men enrolled amongst you; but we ask what have you done for humanity? You have in your possession the power to unfold man's destinies, to open up new views and new prospects, to lay bare primitive truths, truths pregnant with hope and joy, to call forth the noblest aspirations, to hasten the advent of human knowledge and human happiness, to enlighten legislators on man's nature and the causes of his actions—you possess the power to do all this, but how have you employed the talent entrusted to your care? When or where, as an assemblage of natural philosophers have you ventured to speak your opinions on any important topic? When or where, as a body have you dared to proclaim that which your science teaches, *that the actions of the human race necessarily result from their organic constitution?* When or where, as the philosophic expounders of man's nature have you asked for his greatest want—a rational and national education? True, you have advocated in your writings the supremacy of the moral feelings, and the pleasure arising from a cultivated and well trained brain; but there you have left the subject. You have organised no scheme; you have suggested no plan by which social improvement may be advanced, universal justice conceded, and the happiness of all increased. You have scattered the seed, but you have directed no attention to the culture. The tree has grown, but where is the fruit? It has not even blossomed!

To obtain a great end co-operation is necessary. We must combine to become the leaders of a great national movement.

We must unite to assert with power the moral and intellectual supremacy of man, and not only to assert, but to carry out the reformation so loudly demanded. Our philosophy is opposed to the principles and practices of all governments and almost all laws and institutions.

Glance at the state of our social system. It is torn into innumerable segments; wretchedness and misery meet us on every hand; injustice and oppression result from our erroneous system of laws, and we who know the cause of all this have made no united movement towards obtaining the removal of such a mass of evil. It is the fashion to boast of our progress in civilization, but let us test the advance. Have we increased the happiness of our countrymen? Our population and our wealth-producing powers have increased, but our population was never in such a deplorable and degraded position. In our daily walks what opposite and distressing scenes are presented to us! Luxurious refinement and the most squalid wretchedness;—intellectual advancement and the deepest ignorance;—profusion of nourishment and complete starvation;—in fact, "the coincidence of overflowing national wealth with the misery and destitution of millions!" And this amongst a people who have made the greatest advances in science; who have made the elements subservient to their wishes, and who have compelled inanimate matter to perform duties with which the most ingenious artificer cannot compete.

Surely no more lengthened detail is required to prove how little attention has been devoted to man. We are now speaking of masses of men, not of individuals. The passions are allowed to blindly seek their gratification;—the feelings are active and erroneously directed;—the intellectual faculties are weak and untrained;—this is the national characteristic. There are millions of brains producing impure fruit, or fruit of a negative quality, which under improved culture might manifest important powers. The exercise of the intellectual faculties will restrain the activity of the propensities, and if combined with judicious moral training during the first fifteen years, and followed out as a national scheme, would in the course of two generations completely remodel society. As an enthusiastic young friend exclaimed the other day, "Ah! if we could but teach the art of thinking, as well as that of singing to the million, how speedily might we change our pandemonium into a paradise."

Teach the million to think! Thrilling and stupendous sound! Science has given us the steam engine, and its untiring arm can call forth thought from millions, who without this aid would have dragged through a constant and unvaried

blank. With such a power in action, who will place limits to human thought, or map the boundary line which is to impede man's onward progress? Some there are who say the belief in this progression is a fancy and an idle dream. What! Is there no proof of progression? Alas! How much is there still lying in man to be developed? Think ye, that if the ignorance of man has forged chains by which he is held in bondage, that reason cannot unshackle them? Call ye, universal education;—the complete toleration and liberty of thought, and the inculcation of an amount and species of knowledge unparalleled in the past history of our race; measures of no importance not destined to work mighty results? Let the people once obtain all this as a national and natural right, and we will talk no more of probabilities, of possibilities, but of realities. There is a slow upheaving power at work which will shake the whole fabric of the social system, but if guided by Cerebral Physiology, will shape a philosophy of definite proportions and practical utility.

But we must conclude. As regards our own exertions, we know our difficulties and we are prepared to meet them; we expect opposition, and we can predict the quarter from which it will come. But we are influenced by motives which will enable us to bear all this. We estimate our exertions not by the approval of men, but by their accordance with the dictates of Conscientiousness guided by Reason. The opinions of those interested in the continuance of error shall not influence us, neither shall we be frightened from our path by the exclamations of the vulgar and unrefined. "There are few things more disgusting to an enlightened mind than to see a number of men, a mob, whether learned or illiterate, who have never scrutinized the foundation of their opinions, assailing with contumely an individual, who, after the labour of research and reflection, has adopted different sentiments from theirs, and pluming themselves on the notion of superior virtue, because their understandings have been tenacious of prejudice." We look for no reward. The reward we have for our labours is the conviction that we are assisting to disseminate correct principles, and although we may not live to see the consummation of our aspirations, we are morally certain that we shall promote the happiness and freedom of future generations.

In conclusion. We say to Cerebral Physiologists grapple with nature, cease speculating on the unseen, the unknown, the unfelt, the chimerical. Limit yourselves to the consideration of practical questions and apply the knowledge you accumulate. Separate the conjectural and the plausible from that which is established truth, embrace the latter and defend

your position regardless of the consequences. Be Philosophers. Cease drawling forth *misereres* over the fading remnants of spiritual theories; the offspring of infant brains; the vestiges of an intellectual chaos, a period of ignorance and superstition; and rejoice at the approaching indications of man's emancipation from the incubus of error. Discard authority, if authority come forth unsupported by the companionship of facts. Attach yourselves to no party except the party of truth seekers. Do this, and ye will present the grandest characteristics of humanity: ye will stand forth men. Do this boldly, with strength, activity, and unity of purpose, and ye will hasten onwards the progress of your race, and will place on the topmost seat in the halls of science the Professors and Teachers of Cerebral Physiology.

L. E. G. E.

II. *On Reporting Development.* By T. S. Prideaux, Esq., Southampton.

Considering how much the progress of the science of Cerebral Physiology is dependent upon its cultivators being able to impart to each other with accuracy and facility, the features of those cases which fall within the sphere of observation of each,—to determine the best mode of noting development, must certainly be admitted to be an object of paramount importance, and one deserving much more attention than has hitherto been bestowed on it. The great benefit which would accrue to the science, from one system of notation being universally employed by those engaged in its study, (in the same way as the musicians of all civilized nations make use of the gamut of Guido,) can scarcely be overrated; and the only way in which so desirable a result is likely to be achieved, is, by the evolution of a plan for noting development of undoubted superiority to any existing system. Let such a plan once appear, and receive the sanction of any influential body of Cerebral Physiologists, and its progress to universal adoption would probably be rapid. I would suggest to the Phrenological Association the appointment of a committee to investigate the subject, and draw up a report of its labours to be read at the ensuing session, and adopted by the body, if thought deserving.

In laying (as I am about to do,) the mode of noting development employed by myself before the public, I do not, for a moment, suppose that it possesses any claim to ge-

neral adoption; if, in submitting it, I should furnish a hint for the foundation of a better, or if it should only have the effect of directing the attention of some more competent individual to such a task, I shall be satisfied with the result of my labours. The method which will eventually become permanent, will doubtless be the offspring of a period when our knowledge of the practical department of Cerebral Physiology is much more advanced than at present, and will be constructed after a minute comparison and experience of different systems; but if, in the meantime, we can take a step in advance of our present position, let us do so.

The opinions of Cerebral Physiologists, whose organisation varies considerably, will doubtless not correspond as to the extent of the scale advisable to be adopted. Those who unite a large order, and number, to a good endowment of the faculties which appreciate the development of the organ, will, no doubt, be in favour of a more minute system of notation, than those oppositely organised. Mutual concession is necessary, though it is not too much to say, that the latter class must, in some measure, be contented to receive the law, from those best adapted by nature for giving it. That it is desirable that the method of notation employed should be as minute as is consistent with practical convenience, is a position which every one will admit; the only question is, where does this limit commence,—and wherever the sub-divisions of a scale are extended so far, that considerable disparity would exist between the places assigned to the individual organs by competent observers, then we conceive a practical inconvenience arises. Now, I believe, if two Cerebral Physiologists of ability and experience, were each required to write out the development of a head according to the Edinburgh scale, of 20 degrees, not only would more than half the organs be characterised by different numbers, but a difference of as much as two, or even three degrees, would be found between several of them, and for this reason it appears to me, that a scale, with a range less extensive, would be more useful.

Considering the different shades of meaning attached by different persons to the same word, and the difficulty, or rather, impossibility, of obtaining an assortment of adjectives whose value shall increase, or diminish, by regular and equal gradations, I think, that though the use of adjectives may be useful to afford some indication of the value of the scale at certain points, or boundaries, the employment of numerals is far preferable to denote the intermediate stages. The scale we are in the habit of employing for our private memoranda, distinguishes 11 degrees or gradations of development, and is in-

tended to include all the different shades which occur, between deprivation or idiocy on the one hand, and monstrosity on the other. Cases of this description occur but seldom, and when they do, merit a particular description. I assume an average point, and reckon 5 degrees above, and 5 below average, which we express on paper, by means of the first five digits, and the positive and negative signs, thus, —5, —4, —3, —2, —1, *a*, +1, +2, +3, +4, +5. Three above average, and three below average, answer to my ideas of large and small, respectively, and the division of the scale into *above*, and *below*, average, together with the method of notation employed, appear to me to tend much to simplify the subject, and to keep the exact degree of development in view. The extreme points of the scale —5, and +5, are but very rarely required to be employed, and the greater number of heads should be described without exceeding the range from —3, to +3. Should a case occur in which it would be desirable to indicate an intermediate shade of development, such, for instance, as an organ being a trifle fuller on one side than the other, it may be very simply effected by the use of a decimal, thus, +1·5, would indicate a gradation halfway between +1, and +2.

Whatever scale of reporting development be however adopted, a most valuable aid in ensuring accuracy and uniformity, would be a set of standard casts, exhibiting each organ in every gradation of development recognised by the scale. With a scale of 11 gradations this object might be effected by a set of 11 casts; and, independently of the precision which such a guide would impart to the value of each gradation of the scale, it would afford most important assistance to Cerebral Physiologists of limited experience, or mediocre capacity for appreciating development. From the infinite variety of the outline of heads, the accuracy of reports of cerebral development, must always depend, to a certain extent, on the judgment of the individual observer; but, it is scarcely too much to say, that the adoption of the scheme proposed, would narrow the chances of error to the smallest possible limit which the nature of the subject renders practicable, and much contribute to facilitate and extend the practice of the science.

With regard to describing the size of the brain as a whole, Cerebral Physiologists ought not to be content to acquire their information on a point so clearly within the reach of the application of a definite system of measurement, from the arbitrary notions of individuals as to what constitutes large, small, or moderate. A system of measurement may unquestionably be invented which will indicate the area of the skull within a very near approximation to the truth; and the result of some ex-

periments I have made on the subject is, that I have found that the sum of six of the most descriptive and comprehensive measurement of the skull gives its area in cubic inches, to a very great nicety. In a skull, the area of which I ascertained by filling it to be 81 inches,—the circumference was 20 in.,+ the length from the occipital spine to the root of the nose over the head in the mesial line, 12·5 in.,+ the length from the occipital spine to the root of the nose over the top of Caution, Ideality, and outer edge of Causality. 12 in.,+ the length from ear to ear over the centre, 12·6in.,+ the length from ear to ear over Selfesteem, 13 in.,+ length from ear to ear over the top of Comparison, 11·1 in. = 81·2 in. This mode of considering the size of the skull, viz., as containing so many cubic inches, appears to me an interesting and attractive one, equally precise and convenient, and worthy of general adoption till some better be suggested. When the measurements are taken from a head instead of a skull, a deduction of about eight inches should be made, to allow for the thickness of the integuments.

In reporting the development of a head it would also be very desirable, that the solid bulk of the following different masses of brain (ascertained by some approved system of measurement) should be stated. First portion of brain before a line drawn from the anterior margin of benevolence to the termination of the frontal suture, about an inch behind the orbit, (this line will bisect Constructiveness at about the distance of two-thirds of its diameter from its anterior edge). Second portion above the points where ossification commences in the frontal, and parietal bones, not included in the first division. Third, the portion below the plane of the same points not included in the first division,—and, lastly, the Cerebellum; and the information thus obtained, might be rendered still more precise, if the relative proportions between the inferior and superior parts of the first division, and between the anterior and posterior parts of the second and third divisions, were likewise stated.

I conceive, the arbitrary opinions of individuals should only be resorted to as evidence, on those points to which the application of measurement is not practicable; and, unfortunately, this must always to a great extent remain the case, with regard to the development of a large portion of the individual organs. This circumstance should, however, render Cerebral Physiologists the more anxious to avail themselves of the accuracy ensured by measurement, whenever its employment is possible. The practice of estimating development by measure seems very much fallen into disrepute; and, perhaps, this is scarcely to be wondered at, when it is recol-

lected, that at the time when the Craniometer was invented and it was proposed to introduce a precise system of measurement, the size of an organ was considered, in a great degree, to depend upon the distance from its surface to the ear. The futility of such a mode of ascertaining development was soon discovered, and the practice of estimating size by measurement, undeservedly came in for a portion of the discredit, which the fallacious system with which it was first associated, merited and received, and was at once, to a great extent, abandoned, without that attention being bestowed on the question, as to whether it might not be possible to introduce a really useful system of measurement, which the importance of the subject demanded. Now, however, Cerebral Physiologists are familiar with the fact, that height may be imparted to the head, and length from the ear to the forehead, by the lateral expansion of the middle lobe of the brain, without the intellectual and moral organs being necessarily well developed; now they are in possession of other landmarks besides the ear, to assist them in forming their conclusions; why should they not attempt to avail themselves of the accuracy which the employment of the rule offers, by inventing a system of measurement adapted to the clearer and more precise ideas of cerebral development, which they now possess. I am aware that it is very common to see it stated, that the hand or eye is the best judge; and, unquestionably, many Cerebral Physiologists are fully able to form a very accurate opinion of the development of the head by these means alone, and they may be quite sufficient to satisfy the mind of the individual manipulator; but, ought such a method to be deemed satisfactory by Cerebral Physiologists as a body, in receiving a report drawn up by an individual, of whose qualifications they are ignorant

Let it constantly be borne in mind, that in stating measurements we record facts; whilst, in stating, that certain parts of the head are large, small, or moderate, we record merely opinions, and from cases that have fallen under our own observation; we are afraid it too frequently happens, that Cerebral Physiologists suffer their judgment to be biased by their preconceived ideas, and are apt to see in heads just that degree of development, which the character of the individual according to their notions requires; and thus, many useful cases of partial, or modified exceptions, which, if investigated, might serve to increase the precision of our knowledge on many points, are buried in oblivion.

There are two points, to which, in reporting cases, it would be useful to direct attention, as nothing definite is at present known respecting them. First, as to the effect on character

of an organ being developed in very different degrees in the two hemispheres; and, secondly, what modifications take place in manifestation of function, according as the size of an organ is principally dependent upon length, or breadth.

When the size of an organ varies greatly on opposite sides of the head, are we to expect to find the character in accordance with the greater or less development, intermediate between the two, or influenced by each, alternately. I have never yet been able to satisfy myself on these points, though I am rather inclined to the belief, that the character will, in general, be most nearly in accordance with the larger development.

With regard to the influence of length and breadth in modifying manifestation, Dr. Spurzheim has stated it to be his opinion, that length of fibre conduces to frequency of action, and thickness to intensity. His opinion, on any point, is entitled to great weight, and may be correct in the present instance, but I am not aware that there is any published evidence in its support, and conjectural views (whatever the talent of their author,) must always be deemed unsatisfactory.

Another subject to which, in reporting cases, it would also be desirable to pay much greater attention than has hitherto been done, is—Temperament. When the temperament is mixed, which will be the case in the great majority of the instances, the presumed proportionals of each of the primitive temperaments which are combined in the individual should be stated, together with the grounds on which the opinion of the observer is formed, comprising a general description of the person and gait of the subject examined. Amongst the points deserving to be particularised, are, the colour and texture of the hair,—ditto of the skin, and whether hairy or otherwise. Colour and size of the eyes,—outline of the nose, mouth, and chin,—degree of prominence of the cheek bones,—make of the ears, hands, and feet,—stature,—development of the osseous and muscular systems, of the thorax, and abdomen,—the character of the pulse,—state of the cellular tissue,—tone of the voice,—and general character of the motions. The practice of recording these particulars, may be the means, at some future period, of affording data to decide the interesting question: to what extent it may be possible, notwithstanding the apparent infinite diversity of individuals, to specify certain general features of development, as in some measure characteristic of particular races, and to assign to each its concomitant external peculiarity of person.

Before quitting the subject of reporting development, I have one more suggestion to offer, the adoption of which would,

we are convinced, be attended with great practical advantage, and be productive of the happiest effects, in promoting the progress of our science. It is, that as often as possible, each report of the development of a head should be accompanied by certain measurements, of such a nature as to enable any one, though ignorant of drawing, mechanically to delineate the profile of the head, and also the outline of two or three of such lateral sections of it, as shall be deemed the most important; and, in the next number, I hope to give the details of a system of measurement for effecting this object, illustrated by a plate, exhibiting its application, and containing the outline of some well-known head delineated by its agency, as a proof at once of its accuracy and practicability.

I shall conclude these remarks by expressing a hope, that the present race of Cerebral Physiologists will fulfil their duty to posterity, by omitting no opportunity of noting the actions, and collecting the busts, of the most remarkable of their contemporaries. Correct busts of extraordinary characters, accompanied with authentic details of their actual conduct and capacities, will, at all times, possess an *intrinsic* value, and may afford materials to future Cerebral Physiologists, for determining the functions of organs, the very existence of which has not yet been even surmised. Nature is not lavish of extraordinary cases of development, and an individual observer to whose mind any new views may have suggested themselves, might pass his lifetime without meeting with so numerous, and such decisive cases, either confirmatory or contradictory of them, as would be placed at once before his eyes, in an extensive and well arranged collection of casts; and hence the importance of such collection cannot be too much insisted on. Many are the disputed points in the history of by-gone ages, on which great light might be thrown, did we possess casts of the heads of the parties most deeply concerned in them. The head of every public character ought to be deemed the property of the public, and the time will come when the crania of the principal actors on the great stage of the world will be considered an indispensable adjunct to the history of their age. Indeed, every Cerebral Physiologist will be of opinion, that the information to be collected from this source, would enable posterity to appreciate the motives of an individual much more correctly, than a perusal of the conflicting opinions of historians of opposite factions.

III. *On Temperament.* By Thomas Symes Prideaux, Esq. Southampton.

Our present mode of estimating temperament must be considered as vague and empirical, rather than founded on that scientific basis which alone can ensure its efficiency.

Notwithstanding the importance of the subject, it appears to me that an accurate analysis and philosophic classification of those conditions, which independently of absolute size influence the process of Cerebration, has never yet been made, and although fully sensible that our present want of positive knowledge as to the *causes* of these conditions, must preclude the possibility of a perfect arrangement being effected, I have yet concluded that many important, and some permanent distinctions might be drawn, which would not only impart greater precision to our existing knowledge, but at the same time contribute to accelerate its progress, by indicating the points most requiring elucidation, and thus suggesting definite paths of inquiry, to many whose ideas on the subject would otherwise remain too general to allow of their prosecuting such investigations with advantage.

Little difference of opinion I believe exists, as to the unsatisfactory state of the subject at present, indeed the reception which Dr. Thomas's theory has met with from Phrenologists,—welcomed, but not adopted,—is a convincing proof not only of the opinion generally entertained of the faultiness of the existing system, but also that the new has been found equally defective.

That the relative proportion of the head, chest and abdomen, exerts a most important influence on Cerebral manifestation, and constitutes no inconsiderable portion of the individuality of an animal, is most indisputable; but that a classification founded on this basis *alone*, comprehends all that was previously included in the designation Temperament, is an assumption totally at variance with facts, and under these circumstances the application of the term—Temperament—by Dr. Thomas to his system, must be regarded as both injudicious and unwarrantable. It is in fact a specimen of the too common error, of attributing a sort of substantial existence to a mental abstraction;—temperament is regarded as a specific entity, and in the same way as we are enlightened as to the component parts of some well-known mineral, or vegetable substance, we are told that *it* consists of something different from what we have supposed, when in reality, except as a sound, it has no existence, but as the representation of

those ideas, which common consent has appended to it. Had Dr. Thomas shown that all the bodily characteristics usually comprehended under the term temperament, arose from variations in the relative size of the three great cavities, his adoption of the designation would have been allowable; or, had he broadly asserted the existing classification to be based on distinctions too worthless to deserve preservation, and stated that he availed himself of the term temperament, as a word set at liberty from the ideas previously attached to it having become obsolete, whatever difference of opinion might have existed as to the correctness of his views, his conduct would have been pronounced intelligible; but without any such plea to take possession of a word long employed, and well understood in a definite acceptation, and employ it to indicate ideas totally different, is quite indefensible.

With regard to the views advanced by that able and original writer on Phrenology, Mr. Sidney Smith, that the constitution of the body is dependent upon the predominance of certain Cerebral organs, viz., the bilious on the development of Firmness, the sanguine on Hope, and the nervous on Cautiousness. I must observe that my own experience hitherto, impresses me with the belief that they are unfounded. I have met with many striking agreements in the course of my observations, but not so invariably as to lead me to believe in any connection of dependency existing between them. I admit that I should expect to see an impersonification of Hope, depicted with blue eyes and golden locks; but an important distinction must be drawn between phenomena merely associated together as coincidences, and those coexistences which are bound together by the tie of Causation. Supposing an island peopled by the descendants of two individuals, one of whom had possessed a large cerebellum and wide cheek bones, the other a small cerebellum and narrow cheek bones, it is not only possible, but probable, that a relation between the development of the cerebellum and the width of the cheek bones, would exist in the majority of the inhabitants. Supposing then a relation to exist between the development of hope and the sanguine temperament, in a large proportion of the Anglo-Saxon race, *seeing that the relation is not invariable*, is not the fact more rationally explained by supposing a large hope and sanguine temperament to have been *fortuitously* conjoined in their Saxon progenitors, than by supposing the relation of cause and effect to subsist between them.

An attempt has lately been made by some Phrenologists, to revive in a somewhat modified form, the deservedly exploded doctrine, that the character may to a certain and far from

inconsiderable extent, be predicated from the temperament; thus inconstancy and levity, are said to be the characteristics of the sanguine temperament, whilst the lymphatic is pronounced favourable to the activity of Cautiousness and Secretiveness. If temperament signifies general constitution of the body, its effect whether stimulating or repressing, should be equally participated in by all the cerebral organs, and I do not hesitate to say, that facts show the contrary opinion to be a crude unsupported hypothesis. The idea that the lymphatic temperament is favourable to the display of Secretiveness and Cautiousness, is preposterous, and equivalent to indentifying apathy with activity. When it can be shown that general listlessness and inactivity, rather than exertions to conceal and secure, are manifestations of these faculties; then, and not before, this notion will deserve serious consideration.

It is scarcely necessary to state, that every well founded distinction increases the accuracy of our knowledge, and that ideas in proportion as they become less general, become more precise. The great defect in our present mode of appreciating temperament and one which vitiates the whole system, is the mixing together in one estimate; the conditions of texture, and relative size of organs; thus basing our classification upon general ideas made up of the undefined compounds of two essentially distinct qualities. That the present system possesses great practical utility and suffices to convey in a great majority of cases, tolerably correct information of the appearance and conformation of the individual, I readily admit, but still deem it wanting in that capability of universal application, which a more analytical, and therefore more philosophic classification would possess. To give an example—an individual with moderate, or even rather small sized head, small bones and muscles, fine soft skin, fine soft light brown hair, ruddy complexion, and blue eyes expressive of vivacity, would be denominated "Nervous Sanguine," and if I mistake not, the totally different appearance and conformation, of one with large bones, blue eyes, the same ruddy skin and light hair, but rather coarse than fine in texture, with a head greatly predominating in size over the thorax, abdomen, and the muscular system, would be designated by the same terms; the term nervous being prefixed to the first, in consequence of the fine quality of the tissues of the body, and notwithstanding the moderate proportionate size of the head; and being prefixed to the temperament of the second, in consequence of the predominating size of the head, and notwithstanding the comparative coarse quality of the tissues of the body; and if

this supposition of mine be correct, as I believe it to be, it is clear that we employ the word nervous to designate two very different conditions, viz., those of fine quality of bodily tissue, and large relative size of cerebrum.

Convinced from observation that great variations occur in the texture of the tissues of the body, with similar proportions of the head, chest, and abdomen, and vice versâ, I altogether repudiate the idea of their mutual dependence, and whilst admitting the necessity of attending to the *relative* size of these organs, in estimating cerebral manifestation, maintain, that this condition must be considered as an adjunct, and as an adjunct only, to an infinitely more influential one, viz., that of texture.

Most unquestionably the materials for a philosophic classification of the temperaments have yet to be collected, and I anticipate that the adoption of the improved methods of physiological research, and more particularly the microscope, will afford us much valuable information as to the ultimate cause of the varieties of bodily texture. Among those points, the investigation of which may be expected to be productive of valuable results, may be particularized the specific gravity and diameter of the ultimate fibrils of the nervous and muscular systems, together with their chemical composition. The composition of the blood and its degree of vitality, or time it takes in dying after abstraction from the system, (probably an important characteristic of temperament, and one well worthy elucidation by the prosecution of a series of experiments on the blood of individuals in a state of health who vary greatly in the quality of their organization). The difference in *kind* of manifestation, between two brains of the same extent of surface, but in one of which the sulci are much deeper than in the other and the mass of medullary matter in consequence smaller. The relative quantity of grey and white neurine in the brain and other portions of the nervous system, a question which leads to the important inquiry, whether its three great divisions, the spinal, cerebral, and ganglionic, participate in one common nature, the texture of one division affording a criterion for estimating that of another, or not. Perhaps future researches may demonstrate the relative size of these three systems to each other, and the proportion of white and grey neurine contained in each, to lie at the very root of the question of temperament.

I anticipate that the quality we term Nervous will be found to bear a relation to the smallness of the diameter of the ultimate fibres of which the primitive tissues of the body are composed, and that termed Bilious, to their specific gravity,

whilst the Sanguine *may* be discovered (though I regard this as more doubtful) to be greatly dependent upon the profusion of red globules in the blood, and the Lymphatic, to be produced by the deficiency of the characteristics of the Bilious and Sanguine.

Although we must wait till the labours of the chemist and the physiologist have enlightened us, as to the ultimate cause of the varieties of bodily organization, before we can sit down to the task of systematising on the subject of temperament, with the confidence that we are erecting a permanent edifice, in the mean time, and whilst labouring for the accomplishment of this object, it may be advantageous to endeavour to introduce such slight modifications in our present system as a clear perception of its errors enables us to suggest. The most important of these I have before stated to be the blending together in one estimate the two distinct and independent conditions of texture and relative size, a proceeding so calculated to introduce vagueness and obscurity into our ideas of the *distinctions* on which our classification is based, that I regard its discontinuance as an indispensable preliminary to any advance being made in the subject, for let it be remembered, that it is not two conditions producing the same result we associate, but two conditions producing results essentially different. Texture determines the *capacity for rapidity of action*, and texture and absolute size conjoined determine *power*, whereas relative size has no influence on these capacities, except mediately, through the modifications it tends to produce in texture. The immediate influence of relative size is in the tendency to act frequently, or for a long period of time, an attribute which should carefully be distinguished from *capacity for rapid action*, though too often confounded with it, under the single designation activity. Let us once more review these distinctions. *Power* is dependent upon ABSOLUTE SIZE and TEXTURE, *capacity for rapid action* upon texture, and *tendency to frequency of action* upon the RELATIVE ENERGY of an organ, compared with the other organs of the body, which condition is determined by RELATIVE SIZE and TEXTURE conjoined.

Beyond insisting upon the necessity of giving a *separate* estimate of the 'texture' of the bodily fabric, in which no considerations of 'relative size' shall be allowed to enter, and making this latter condition the subject of a special description, the modifications in our existing system I wish at present to submit to the consideration of cerebral physiologists are but slight. I propose adopting for the ground work of our classification the three states of the body, known as Bilious,

Sanguine, and Lymphatic, as indicating certain unknown, but peculiar, and easily recognisable conditions, and in this, their eligibility for forming the basis of divisions consists.

The attribute designated by the appellation high or nervous, I regard rather as a quality, always present in a greater or less degree in the bodily fabric, than as a variety of texture subsisting by itself, and propose invariably appending to the three divisions before specified an adjectional term indicating the degree in which this quality may be supposed to be present.

Believing the characteristics designated Sanguine, Bilious, and Lymphatic, may exist in equal purity in textures of very various degrees of fineness, I regard the notification of this point as important, and so close do I believe to be the relation that subsists between fineness of texture and the attribute termed *nervous*, that though far from asserting their identity, or that increased knowledge may not demand their separation, for the present, I purpose to assume fineness of texture to be the measure of this unknown but important quality, the plentiful presence of which is indicated by high sensibility both in man and animals, and obtains for those highly endowed with it amongst the latter the appellation "thorough bred." To describe the measure of this quality supposed to be present, I propose to employ a scale of seven gradations, denoted by the words,—*very fine, fine, rather fine, medium, rather coarse, coarse, very coarse;* but the precise limits of the scale to be employed, together with the appellation of its divisions, is of course a mere question of detail, to be decided by convenience.

I am far from denying that varieties in the texture of different parts of the body may exist, and that the brain in consequence may be more or less highly organised than the appearance of other parts would lead us to expect; but till some criterion for estimating this difference be discovered, we must be content with that near approximation to the truth, which in the great majority of cases, the texture of other parts unquestionably affords. The general characteristics of the Sanguine, Bilious, and Lymphatic conditions of body are so well understood, that I think it unnecessary to enumerate them. I will however observe that as a general rule, the less we rely upon colour in our distinctions the better, this criterion being only applicable to the caucasian variety of the human race, whereas there is every reason to suppose that the peculiarities of constitution on which our classification is based are common to the species.

Did I think the attempt likely to meet with success, I

should be inclined to substitute the designation *Fibrous* for *Bilious*, and *Serous* or *Flaccid* for *Lymphatic*.

In illustration of the proposed alteration in the method of noticing development which it has been the object of the preceding remarks to unfold, I now subjoin a description of the temperament of the two individuals before alluded to, as being both likely, though very dissimilar, to be designated by the same terms (Nervous Sanguine), according to the present system.

The Temperament of the first (see page 34) would be as follows:

Fabric—Sanguine; quality—fine; head, chest, abdomen, and osseous, and muscular systems—proportionate.

That of the second:

Fabric—Sanguine; quality—rather coarse; head greatly predominating over chest, abdomen, and muscular system, but less so over the osseous.

To those who may be inclined to demur to the greater length of description attendant upon the proposed alteration, I have only to observe, that no subject can be treated with greater *simplicity* than its nature admits of, consistently with the preservation of *accuracy*, certainly the more important consideration of the two.

IV. *To the Editor of the Zoist.*

Gentlemen,—I think the following case may be considered sufficiently interesting, to deserve publication in your periodical. E. M., æt. 64, an inmate of this institution, and for some time past the subject of chronic rheumatic disease, &c., expired on the 6th of December, 1842. The examination of the body revealed the brain and membranes apparently healthy, with the exception of old and inseparable adhesions between the surface of the convolutions, indicating the organs of Veneration, and the membranous structures naturally in contact only. So firmly adherent were the membranes to each other, and to the surface of the brain, on either hemisphere, that in my efforts to disunite them the dura mater was torn. To render the case more complete I had better, perhaps, add, that the only other morbid appearance discovered was in one of the mucous membranes.

Since the autopsy I have seen a nephew and neice of the deceased, who have told me that about nine or ten years since,

when the old lady became insane, her friends were first made conscious of her disease by an extraordinary penchant she evinced for theological dispute, and, which eventually became so excessive, that she has been known, when attending divine service, to call the minister to order for, as she said, attempting to promulgate opinions on religious matters, at variance with all propriety and truth. She subsequently regarded herself as an apostle, and used to declare she was an instrument in the hands of the Almighty, with which it was His intention to effect some extraordinary and great good. Such then is the early history of E. M.; and which, when considered in connexion with the post mortem appearances, is of much value.

My personal knowledge of the patient has been limited to the last two years of her life; during which I have only observed that she has been a little strange and irritable, and that when displeased, she has applied the epithet: "wicked," to whoever happened to offend her, and has conjectured his or her probable condition in the next world.

I should add, also, that the effects of sacred music was somewhat extraordinary. It appeared to send her into a kind of ecstacy, the excitement was temporary, and only indicated by the gesticulations and voice, the latter becoming shrill and tremulous. Paroxysms would oftentimes recur during the service performed at the Asylum Chapel. It was sometimes considered necessary to forbid her attendance.

The above constituted a case of excessive action of small organs. An examination of the *cranium* would have induced any Cerebral Physiologist to declare:—"*Veneration small.*" The skull was not thinner in this particular region than elsewhere.

Your obedient Servant,

James George Davey, M.D.

Hanwell Asylum, Middlesex,
March 16th, 1843.

As an appendix to this interesting case forwarded to us by Dr. Davey, we extract, but in a very condensed form, the following case from the Provincial Medical and Surgical Journal for March 4th, 1843.

A clergyman, after prolonged study, and a total neglect of all measures calculated to preserve his health, presented some premonitory symptoms, and after a few weeks exhibited the most positive evidence of disease of the brain. Mr. Millar, the gentleman who records the case, gives the following history of the immediate exciting cause:—

"He had that morning called on a notorious drunkard of the village to read him a sermon on his besetting sin, but his parishioner received his ministerial offices so contemptuously as to resolutely order the reverend curate out of his house. This conduct had such an effect on his already-excited feelings, that he rushed into the square of W——, holding his Bible in the air, and knelt down praying God to subdue the obduracy of the sinner's heart, and rising up, began most vociferously to exhort people to repentance, for sin had darkened the land, and the judgments of God were coming upon the earth. After much difficulty he was compelled to go home, when he ran up into his bedroom, stripping and washing himself by dashing basins of cold water over his body, and praying most earnestly "that the waters of life he was now washing in would cleanse his soul from all sin." This process he had repeated thrice, and such was the intensity of his convictions respecting his own impurities, that each time he determinedly refused to be dressed in the same clothes, because they were unclean.

He lived twelve days, and the following is the account of the inspection of the brain:—

"The vessels of the dura mater were tinged with blood, looking blue and prominent, and so adherent was this membrane to the cranium that it was impossible to separate it entire; the sinuses were loaded with blood; the arachnoid membrane was firm and opaque, having a fluid yellow fibrinous secretion between it and the pia mater—this was particularly manifest over the convolutions along the mesial line of each hemisphere and on the left especially; pia mater gorged with blood," &c. &c.

Mr. Millar remarks, "the character of the insanity is, I believe sufficiently well accounted for by the nature of his studies—religion and the serious responsibilities of his professional avocation—and I am free to confess *that the portions of brain to which phrenologists ascribe the functions of Veneration were precisely the seat of the greatest vascular excitement, the most decided opacity and firmness of the arachnoid coat, and the most effusion between that membrane and the pia mater—a most striking evidence of damaged function in connection with organic disease.*"

Many may not be aware that the pia mater is the nutrient membrane of the brain. It is excessively vascular, dips down between every convolution, and distributes multitudes of vessels to the grey substance. Here, then, we have the most conclusive evidence that a certain abnormal functional manifestation was accompanied by a certain organic change in the

membranes, that one of the membranes supplies the vessels for the purpose of nourishing the convolutions, and that the inflammation was more acute in the portions covering the convolutions which Cerebral Physiologists have proved to be the organs for the evolution of a particular faculty—Veneration.

V. *Phrenological Society.*

The Phrenological Society was founded in London by Dr. Elliotson, in 1824; and has regularly held its meetings, at eight o'clock, on the first and third evenings of each month, during a session lasting the greater part of the year, ever since:—what can be said of no other Phrenological Society. The Edinburgh society, which began so well, ceased at length to meet, so that, when a great legacy was left it by Dr. Roberton, of Paris, Dr. Verity, of the same city, disputed the bequest on the ground of its non-existence. This is a wretched state of things, when we consider that the good phrenologists of Edinburgh made it their boast that Dr. Spurzheim had predicted that Edinburgh would be the place in which phrenology would first take root in the British Isles, and whence it would extend. Even the Phrenological Journal left Edinburgh for the banks of the Thames; and, though it has now returned for change of air, having nearly perished by marsh miasmata, it is very sickly and kept alive by nourishment conveyed to it from a distance.

The London society has always been too much neglected as well as the Edinburgh, by those who should have supported it,—the medical profession, and now the majority of its members are not medical men. But from the greater size of London than of Edinburgh, and the perseverance of some of its members in spite of all neglect, it has existed on: and for the last two or three years, its meetings have been very interesting and instructive, and a large number of less desirable members have dropped from it, so that it never was really so flourishing as at present, though its numbers are small. Ladies are now admitted to its alternate meetings, and since the adoption of this regulation, its room at Exeter Hall has been crowded on those nights. We shall always put our readers in possession of its proceedings.

First half of the Session, 1842—3.

November 7th. Dr. ELLIOTSON, President, in the Chair.

Mr. Wood begged to direct the attention of the members to the two casts before him. He had recently been at York, and, on visiting the Castle there, two heads had been pointed out to him as those of murderers of their own wives. On examination he found the forms of their heads so different from each other, and both so different from the heads of the general run of murderers, that he thought they would be interesting to the society, and immediately applied for casts of them; and, after considerable difficulty, owing principally to the respectability of the family of one of them, he succeeded in obtaining copies.

It was too often imagined, by those who did not reflect upon the various incentives to crime, that in every case of murder there must necessarily be an immense development of the organs of destructiveness; and, when this did not happen, they would hold the instance up in triumph as disproving phrenology: forgetting, or not being aware, that although some monsters may be impelled solely by an innate love of cruelty, and although, under the operation of our criminal laws, all those convicted of murder are classed together, as if equally guilty, and all alike consigned to the tender mercies of the hangman; yet the vast majority are urged by mixed impulses, some fatally impelled by adverse circumstances, and that many might, under different example and opportunities, have become useful members of society. A good illustration of this would be found in the present instances.

The first man, Jonathan Taylor, aged 60, formerly rented a farm of above 200 acres, under Lord Wenlock, at Escrick, a few miles from York. It appeared, from the evidence adduced on his trial, that he had lived peaceably with his wife and six or seven children, all grown up, until a few years ago. It has since been discovered that he had been carrying on a secret intercourse with another female. Three or four years before his crime he formed an acquaintance also with another woman, who was of dissolute character, and he left his home to reside with her at Hull, where they took a pot-house of the lowest description, frequented by rogues and abandoned women. Some of his family visited him there, endeavouring in vain to induce him to return home; but he consented to transfer his right in the farm to his wife and sons, and the landlord transferred the lease to them. A year or two after-

terwards he returned to his wife, but again left after a few days; and repeatedly afterwards paid her similar visits, always returning to Hull after a day or two, until about 18 months before his crime, when he went to reside permanently with his family, but was not allowed to take any part in the management of the farm, still less to receive any money, a few shillings only being occasionally given him for pocket money. Things remained in this state till October, 1841, on 26th of which month all the family, except his wife and himself, had to go to a field, at a distance from the house, to dig potatoes. He left the house at half-past six, saying he was going to Selby, a distance of four miles; at quarter-past nine the last of the sons went out, leaving the mother alone. At 12 the family returned to dinner, and found their mother lying extended, with her head on the hearth and quite dead; some of the lower part of her dress still burning, but her cap and neckerchief entire. She appeared to have been dead some hours; and the surgeon discovered evident marks of strangulation. The keys of all her drawers, which she usually carried in her pocket, lay by her side. On examining that in which she usually kept her money, it was ascertained that a small sum, which was safe there in the morning, had been abstracted, evidently by means of the keys, as the lock was not forced. The deceased had been seen by her husband to deposit £70 in it some days previously; but she had afterwards, without his knowledge, entrusted it to her eldest son. Various papers had been similarly abstracted from drawers in other rooms, and articles of plate in the same drawers left untouched. It was afterwards found that a miller had called at the house at half-past 9 and seen Taylor, who told him that all the family were at the potatoe field; the miller asked, Where is the mistress? and Taylor, who appeared most anxious to get him away, replied that she was gone there too. At half-past 10 Taylor was seen in a bye path leading to Selby, where he arrived about half-past 11. A bottle of rum, taken from the house, was afterwards picked up in this track. He stayed at Selby, where he had no business, till past two. On his way back, he was told of his wife's death and that she was supposed to have fallen into the fire in a fit; he replied, "Yes she has had a headache some days past." This was not true. Taylor afterwards denied that he had been home since he left at half-past 6; but subsequently acknowledged it, giving a frivolous excuse for his return. That was also proved to be false. Other circumstances brought the murder clearly home to him; and he was convicted and executed accordingly; but denied his guilt to the last.

The peculiar features of this case, therefore, consisted in the cool premeditation and the cunning attempt at concealment in disposing of the body, so as to make it appear that the woman had dropped down in a fit, or otherwise been burnt to death, rather than in any inordinate cruelty in the mode of committing the crime. There is no evidence of any previous violence of character. Indeed the family appear to have been desirous of having him amongst them, though evidently distrusting his honesty. Yet he showed no great love of property, since he voluntarily assigned to them his interest in the farm. The strongest point in his character was that of debauchery. All this is admirably borne out on his head.

We find a most inordinate development of the organ of sexual love; large cautiousness, and very large cunning. The organ of sense of property,—acquisitiveness, is moderate; and the organ predisposing to violence,—destructiveness, though relatively large, is by no means strikingly developed. The intellectual region is tolerably good; but the whole coronal region slopes off at the sides, shewing a very moderate development of the moral region.

In the other case, there was clearly a degree of insanity. *Robert Nall*, about 30 years of age, had been married between seven and eight years; during which period he and his wife had been separated six or seven times. They had been living apart for eight or nine months previously to the 27th Nov. last; and the woman is said to have cohabited, at one time, with a man named Hibbard. Yet he seems to have been much attached to her; and, during their separation, he had often called upon her and threatened her with violence because she would not live with him. He had even repeatedly threatened her life. On the 27th November, Nall and his wife went together to a beer shop, where they slept and remained till the following afternoon. He then treated her very affectionately, and appeared happy in the thought of again living with her. They left together at 5 p. m. on 28th, after drinking several pints of beer; and they then went about to different gin shops, drinking ale and spirits together till 8 p. m., when they went to the house of Nall's sister and were permitted to sleep there. Both were at the time intoxicated, but Nall the worst, and they still seemed very friendly together. About 9 the sister went out, leaving them both in bed. She returned at 12, and saw Nall standing by the fire place. In reply to her question, "what he was doing there," he moaned and said he wanted to go away, that he had been ill using his wife, and feared he had killed her. She told him to stay there while she went for her brother. He said he

would, and she went out and returned in two hours with her brother and a watchman. Nall had thrown himself on the dead body of his wife and was then weeping and kissing it. He immediately confessed his guilt, and took from his pocket the clasp knife, with which he had committed the murder. On his way to prison, he said he should be hanged for her, but she would never again desert him for another. He told the superintendent of police, that, after his sister had left the house, a quarrel ensued between them, the wife threatening to leave him again and return to her paramour. He at first tried to sooth her; but she was abusive, and he sprung from the bed in a passion, took the knife from his pocket, and stabbed her. She exclaimed, "Oh Bob! thou hast killed me! Kiss me!" He was immediately stung with remorse, stabbed himself with the same knife, and afterwards hanged himself with a handkerchief, but it broke. It was given in evidence that Nall had received several wounds in the head; that, about a fortnight before the murder, his skull had been laid bare by a blow from a crane; and that he was "flighty" when provoked, and always extremely irritable and violent.

The following is the Judge's (Baron Parke) address to him after his conviction, as reported in the *Yorkshireman*. *(The jury had recommended him to mercy.)*

"Robert Nall, you have been convicted of the crime of wilful murder, and although the learned counsel in his address in your favour has endeavoured to impress upon the jury the belief that you were not at the time altogether a reasonable being, yet I found it to be my duty to tell them, and I feel it my duty to tell you now, that the state of mind you were in was not such as legally to extenuate your crime; but that you were responsible for your acts, and for the interests of society you must suffer for them. *Whether or not* there may be circumstances which may in a moral point of view *necessarily extenuate*, if not in some measure *justify*, your conduct, is *beyond my province to determine:* but I should be acting in a manner *not such* as the country has a *right* to demand from me, and such as my *duty to you* requires, were I not to tell you that, in spite of the recommendation of the jury, *I can see nothing whatever* to justify my holding out any prospect that the sentence of the law will not be carried into effect," &c. &c.

The head presents anything but the development characteristic of a murderer. The moral and intellectual regions are both very fairly developed, while the disposition to violence, though large, is by no means preponderatingly so. Perhaps the largest organ in the head is that of attachment;

and there can be little doubt that the crime was committed in a fit of jealousy, while the poor wretch was under the influence of liquor, acting upon a brain rendered morbidly irritable by previous mechanical injuries.

Nov. 21*st*, 1842. *Ladies' night.*

Dr. Elliotson delivered an address upon the character and cerebral development of Cooper, the murderer, executed at Newgate last summer.

A policeman, named Moss, saw a gentleman walking near Hornsey wood, followed by a young man, answering the description of a foot-pad who had latterly committed several highway robberies, heavily armed: Moss pursued him, and, when within a few yards of him, the man turned round and shot Moss with a pistol in the arm. Millet, another policeman, and a baker, named Mott, pursued him. When Mott was within a few yards of him, the man drew another pistol and shot Millet in the shoulder. The baker pursued him into some fields, and the man got into a lane with no outlet; and, having run two miles, was met by Daly, another policeman, whom he shot dead, through the heart; having been observed to reload his pistols. He had first drawn the pistols and presented them, and said he would shoot the first man who molested him, and then fired both pistols at once at Daly and the baker. The baker seized him, and he exclaimed, "I'm done, now I give myself up;" and, on being desired to deliver up his pistols, he did. He denied having anything more about him, but was found to have a dagger a foot long, sharpened at the point and both sides, in his fob pocket.

He gave his name as Thomas Cooper, resident at No. 1, Rawstone Street, Clerkenwell; and said he was twenty-three years old, and a bricklayer. He treated what he had done with the greatest indifference: and repeated several times that he had served the men right for having come near him. The pistols were heavy cavalry pistols. Only four pence were found in his pockets. He had no shoes nor stockings. When brought out to have the charge read against him for the murder of Daly, he became deadly pale, and exclaimed, "what, is he dead?" He then asked for a pillow, and some coffee and bread and butter.

He afterwards said that, while he was pursued, he took poison, which he carried about with him.

During his imprisonment he was often very violent, and for some time expressed only regret that he had been unable to inflict mischief upon and even to murder the other policeman and other witnesses who had appeared against him. He

declared he would murder the surgeon, if he could, for not supporting the plea that he was insane.

It was asserted on the trial that he attempted to hang himself five years ago: and to poison himself with laudanum and arsenic some months before his capture: that he frequently had expressed himself tired of life: that he took a silver watch to pieces and sold it for five shillings: that he would sometimes spend all the money he had in tarts, and had many strange and childish ways; that he once threatened his brother's life without any provocation: that once he said he was a child of God and converted: that on another occasion he stuck up two cards and declared that they were his castles and that he would defend them: that once when ill, he fancied the devil was coming for him; and a woman deposed that she would not have allowed him to be at large, had she been his mother. On these grounds a plea of insanity was attempted; but *two ladies, whom he had stopped and robbed, declared they did not think him mad,* and the surgeon and others who saw him frequently in prison alleged that they discovered no signs of insanity in him.

He had been so affected at the death of his father as to have fainted for several minutes. He had actively exerted himself in rescuing several persons from the house in which a stack of chimneys had fallen and killed a young lady during the storm in April, and his conduct had called forth the commendations of the coroner and several witnesses at the inquest.

After his committal he was very talkative, and was often violent; boasted much of himself in many points of cleverness and skill and said he could have shot any one; and, before his committal, had declared he would shoot himself if he could have a pistol, and was very impatient of the public gaze, leaning forward and covering his face with his hands; shewed no signs of penitence or religious feeling to the last; and, on his mother speaking seriously to him, said, "Don't bother: I have had preaching enough already."

During the judge's address he shook his fist at the policeman. The papers reported that "his poor heart-broken mother attended him nearly daily in his cell, *and he exhibiting a very strong affection for her. She seemed to have considerable influence over him.*"

He at length became subdued in prison, and his conduct was quiet and decent at his execution; but certainly no contrition was manifest.

He had been very fond of reading, but chiefly the *Weekly Dispatch* and similar prints. He was pale, thin, and sickly looking: and walked with difficulty to the place of execution,

on account of the effects of the arsenic on his feet. He mentioned in prison that he had always robbed alone; never trusting any one with his plans; that he could snuff a candle at a considerable distance with a pistol; that he never sold his booty to pawnbrokers, but to jews, to avoid the risk of detection; and that he never desired to commit violence upon any one. He certainly murdered the policeman only in self-defence.

The measurements of his head were as follows:—

Circumference over the eyes,	21⅝
Line from ear to ear do.	10⅝
——— backwards.	10⅞
——— over the head	12
From the meatus to Firmness	5½
——— Veneration	5⅝
——— Benevolence	5½
——— Sense of things	4⅜
——— Comparison	4½
——— Pride	5
——— Parental love	3¾
——— Inhabitiveness	4
Breadth at the outer extremity of the orbits	4⅜
——— disposition to violence	6⅛
——— centre of Causality	1⅞
——— Sense of Property	5½
——— Cunning	6¼
——— Courage	4½
——— Sexual love	2⅝
——— Circumspection	6
——— Ideality	4⅛
——— Attachment	2⅝

The head was of ordinary size. The intellectual region narrow; but otherwise fairly developed, especially at the lower part. The moral region sloped off at the sides, especially in its anterior half. The sides grew broader and broader, above and below, from the intellectual region to the parts above the ears, so that the organs of the sense of property (Acquisitiveness,) disposition to violence (Destructiveness,) cunning (Secretiveness,) and Cautiousness, all greatly preponderated over the intellectual portion; as also did those of Firmness and Self-esteem. They were all very large. The organs of courage (Combativeness,) love of applause, and sexual love were large, that of friendly love (Attachment) still larger: Benevolence was very high, though there was a great and immediate sloping off from its highest portion. Had all the head been on the scale of the intellectual and moral regions, it would have been very small.

Its size depended upon the very great relative breadth of its sides, and the height of its posterior-superior parts, and of its posterior. Such a head would naturally be most occupied with depraved and violent pursuits. The intellectual and moral portions of the brain being greatly overpowered by the size of the rest, the being would have had no hesitation to steal on account of the large size of the organ of Acquisitiveness and the poverty of the moral region; and would have been cunning in the extreme; subject to desperate violence on all occasions; and, on account of the great size of the organ of self-esteem, as well as that of the organ of the disposition to violence, would have been most revengeful; but very kind when not provoked, and would not have done violence without provocation. From the evidence, there probably was a dash of insanity in his brain, though too little for acquittal on the plea of insanity. Still his cerebral development prevented him from being a law to himself. Society, indeed, would not have been safe while he was at large, and its security demanded his confinement for life. But, continued Dr. Elliotson, he ought not to have been hanged, if hanging is intended as a judgment—a retribution; for his organisation rendered him an object of pity. However, urged the speaker, punishment should not be regarded as retribution, —as the infliction of something deserved; but as the administration of additional motives in default of the efficiency of commendable motives,—to supply the motive of fear to the culprit and to others. He expressed his decided horror of capital punishment, and his persuasion of its superfluousness. He objected that, however bad a man may be, he had still, in almost every instance, something good in him. The executed Cooper was warmly attached to his mother, fainted at the death of his father, and had nobly exerted himself but a short time before to save the lives of several fellow creatures. At Troyes, a man named Pattevoie, was lately guillotined for attempting to murder another, and had led a dissolute life; but while in prison he tamed a pigeon and a sparrow, and was tenderly attached to them. "Some persons," says Charles Dickens, (pardon me the vanity of saying *my friend* Charles Dickens,) in Oliver Twist, "have expected to see his crimes written in the face of the murderer, and have been disappointed because they did not, as if this impeached the distinction between virtue and vice. Not at all. The circumstances only showed that the man was other things, and had other feelings besides those of a murderer. If he had nothing else,—if he had fed on nothing else,—if he had dreamt of nothing else but schemes of murder, his features would have

expressed nothing else: but this perfection in vice is not to be expected from the contradictory and mixed nature of our motives. Humanity is to be met with in a den of robbers; nay, modesty in a brothel. Even among the most abandoned of the other sex, there is not unfrequently found to exist (contrary to all that is generally supposed) one strong and individual attachment, which remains unshaken to the last. Virtue may be said to steal, like a guilty thing, into the secret haunts of vice and infamy; it clings to their devoted victim, and will not be driven quite away. Nothing can destroy the human heart."

The punishment of death hardens the heart and smooths the way to crime. If the destruction of life is sanctioned and approved in any single case, the ill-disposed regard it with far less repugnance, and are led to think it justifiable in others, and so men more easily become murderers. About two years and a half ago, a little boy ten years of age who had been taken *for the second time* by his father to see a public execution, was detailing all the particulars to his schoolfellows, some of whom were terrified, and one little girl asked him if he "was not afraid when he saw the woman hanged." "Afraid!" he replied; "not the least, Woman! *I could have pulled the rope.*" A large number of those who read of, and still more of those who witness, an execution, feel more or less of a savage pleasure, and are injured in their moral feelings. The scene of an execution is one of disgust and dismay. Jokes, ribaldry, obscenity, drunkenness, and thefts go on; and the female portion are equally bad with the other sex. This is not peculiar to England. Two men convicted of arson, robbery and murder, were executed not long ago at a small town in France called Berus. From twelve thousand to fifteen thousand persons collected. Booths were erected, tables spread, tuns of cider broached, and games set up; and the magistrates with gensd'armes and troops had difficulty in preventing "still more scandalous proceedings." The young priest "with much force, but mildness, endeavoured to bring the crowd to a state more suited to the scene."

The deadening effect upon the moral feelings of the executioner must be very great. His heart must indeed become hard; and the ruin of his benevolence must tend towards the ruin of more of his moral feelings. Have we a right to injure the nature of a fellow creature by making him an executioner? He also becomes disliked in society, and is sure to be pointed at as Jack Ketch, though glad to receive the pay of his odious occupation. In Switzerland the privilege of officiating as executioner resides in

certain families, who are looked rather coolly upon by the rest of the community and usually marry among themselves.

It is unnecessary. In former days, though Christianity was supposed to thrive throughout Europe and was the law of every land, torture of all descriptions, cutting to pieces, stretching and tearing, burning, *slow* burning like that ordered by the *Christian!* Calvin for Servetus who differed in opinion with him on a theological point, disembowelling, and screwing, and repetitions of all the modes of causing excruciating agony that fiends could suggest, were considered, like innumerable absurdities among which we now live, as matters of course, perfectly consistent with morality, and so consistent with religion, that the most dreadful were ordained for differences of speculative opinions and for disapprobation of the vices and tyranny of priests, and all were pronounced as absolutely necessary to maintain the order of society. Those who travel on the continent of Europe are shewn horrid dungeons and instuments of torture without end. But there are remains enough in our own land. I lately read the following passage from the *Inverness Courier*.

INVERNESS.—ANCIENT HIGHLAND DUNGEON.—The road over the stone bridge here is at present undergoing repair, and on Saturday last the workmen threw open the vault built in one of the arches, which was formerly used as a gaol, and afterwards as a cell for *maniacs*. It was truly "a double dungeon," made by "wall and wave." About a foot below the surface of the road they came upon a small iron door, from which a flight of stone steps led down to the damp and miserable chamber. An iron grating or air-hole lighted the place, which was found to be about twelve feet long, nine feet wide, and six feet high. There were no indications of a fire place; a hole in the floor was used for letting down a pitcher for water; and it is scarcely possible to conceive a more wretched or horrid receptacle for human beings. The situation of the captives, with the river rolling below them, and the sound of horses and vehicles passing over the roof of the cell, is strongly calculated to impress the imagination. In winter when the river is in flood, or during a storm, a sort of wild and fearful *sublimity* must have been added to the scene. The last inmate of the cell was *half devoured by rats!* Thank God, we have in some things improved upon "the wisdom of our ancestors."

But they have disappeared in succession; and, with their decline, cruelty and violence have declined: and we find they were unnecessary. So will it be with capital punishment. Perpetual imprisonment, properly regulated, will be found to answer as well. The prospect of it is more terrific than that of death, for to this we must all come sooner or later; but perpetual imprisonment—exclusion from the sight of nature and the haunts of men—is indeed terrible to contemplate, and ever will be terrible to contemplate, although its severity must be gradually less felt by the prisoner. Nature accommodates us to almost all situations. Milton represents the fallen angels as comforting themselves with the hope that their

nature would at length become assimilated to the "burning marl" on which they trod.

> "Our purer essence then will overcome
> Their noxious vapour; or, inured, not feel;
> Or changed at length, and to the place conform'd
> In temper and in nature, will receive
> Familiar the fierce heat, and void of pain;
> This horror will grow mild, this darkness light."

Yet, just as we know that a man who has been well off becomes at length so accustomed to filth and the most disgusting food as to feel its inferiority no more than those who have been born to and brought up in it, and notwithstanding we know this we could not bring ourselves to look without horror at living in filth and eating such food, so the prospect of perpetual confinement will never lose its terrors because we are satisfied that we should at last grow accustomed to it. And here let me suggest that every one condemned to solitary or silent confinement should, besides the means of improvement by books for his intellectual and moral feelings, and muscular occupation, be allowed an animal, a bird at least, for his comfort. He could not contaminate it, nor it him. Besides alleviating his unhappiness, it would improve him by gratifying a social, benevolent feeling; and, as madmen are allowed to cultivate those talents which are unimpaired, so ought criminals to have every practicable encouragement for the welfare of their moral feelings. Society has a right to protection; and therefore the perpetual, or at least very, very long protraction, till the fiery days of passion are all past, of imprisonment is justifiable and necessary.

In the Netherlands there are no executions; and yet murders and other great crimes are not more frequent than here and in France, if so frequent. I have walked in the prison of Ghent, among prisoners hard at work and looking well, who had committed crimes of all descriptions. I read the following paragraph in a newspaper last year.

> Died, May 3rd, in the prison of Ghent, aged 80, Pierre Joseph Soete, after a captivity of 63 years! At the age of 17 he was condemned, for the murder of a young girl, to be broken on the wheel; but the Empress Maria Theresa, at the solicitation of the *Société de Saint George*, at Ghent, commuted his punishment to that of perpetual imprisonment. In 1814, after 36 years spent in prison, Count Bichaloff, hetman of the Cossacks, then quartered at Ghent, released Soete; but finding himself without kindred, friends, or the means of living, he begged to return to confinement, and in the dreary asylum of the *Rasp-Huis* (prison) he passed 27 years more, till death released him.

In speaking of imprisonment, let me for one moment raise my voice against the inhuman brutalities and horrors which are every now and then reported of some of our own; and against

the frightful arrangements which I have seen in the Bicêtre of Paris—arrangements as if devised to make the wicked ten times more wicked than before.

The prisoner need be no tax to the community; what he earns will more than keep himself, even should he live to be past labour. No religious person can defend capital punishment; for when is he able to say that the culprit is prepared for heaven? The apparent contrition of criminals at their execution is generally an absurdity, as the whole affair is for the most part a mockery. If they are sincere, when do we know that it is more than the sincerity of terror. Conversion from depravity must continue long and gradually pervade the man, and become as it were a new nature to him, to be real and worth anything.

Often the wrong person has been executed, often a madman has been executed, often a madman is now executed; and who that is executed is not an object of pity,—has not done only what we should have done, but for greater advantages, of which we never think, as if we were of ourselves just what we are? If all criminals are objects of pity, let us feel it our duty to ameliorate their character and not strangle them. Let us most seriously remember that they are criminals, if through a vicious nature, also through disadvantageous external circumstances. Let us act upon the truth that it is a duty to strive earnestly to improve the faulty condition of society; to give every one, not a sectarian, but a rational, a manly, a noble, a virtuous education, fit for all men, in whatever strange creed and religious speculations they may unfortunately have been brought up. Let us remember that it appears that the size of cerebral organs are affected by culture and neglect of the faculties, and that therefore, within certain limits, a man's cerebral development may be changed. I say within certain limits; for no external circumstances would make a Newton of an ordinary man,—or all the wranglers of Cambridge would be Newtons;—nor a Howard of a Henry the Eighth, any more than exercise, good air and nourishment, would make Patagonians of a short family. But the fact cannot be too carefully remembered, that we produce alteration in the offspring by acting on the parent; that even among brutes things taught to the parent are far more readily taught to the offspring than they were to the parent; nay, that the offspring frequently requires no instruction. Of this I have given very many illustrations in my Physiology. The influence of good institutions is therefore greater than is generally imagined. But besides this, all should remember that it is our duty to marry only those with good organizations. When the

science of the head shall be duly appreciated, a sensible man or woman will think it madness to marry a person with a bad organization.*

December 5th, 1842.

William Kingdom, Esq., Thomas Uwins, Esq., R.A., William Topham, Esq., Barrister-at-law, having been duly proposed and severally ballotted for, were elected *ordinary* members of the society.

Dr. Engledue of Southsea, and Dr. Debout of Paris, having been duly proposed and severally ballotted for, were elected *corresponding* members of the society.

The cast of the head of the murderer Cooper, having been lectured upon at the preceding meeting, was examined by the members. The president laid before the society the cast of the female patient whose case is alluded to by him in his letter, published with Dr. Engledue's address, as being a beautiful example of the excitement of distinct cerebral organs by mesmerism. The development was exceedingly good: especially in the situation of all the highest moral feelings.

A copy of a small work, entitled *Neurology; or, an Account of some Experiments in Cerebral Physiology*, by Dr. Buchanan, and published here by Mr. Robert Dale Owen, was pointed out to the meeting as asserting the claims of Dr. Buchanan to be the discoverer of the possibility of affecting individual cerebral organs by mesmerism.

The president then read the following documents from Captain Daniell of the Coldstream Guards, just returned from Canada, given him for the purpose of shewing what were Dr. Collyer's claims to the same discovery.

"Regarding the priority of discovery of the new science entitled Phreno-Mesmerism, I saw a letter addressed to Dr. Collyer by the Rev. Mr. Dodds of Massachussets, in answer to one addressed to him by Dr. Collyer, asking him if he had any recollection of the date when he first communicated this discovery to Mr. Dodds. The following is the substance of Mr. Dodds' reply, dated August, 1842: 'I well remember it was early in May, 1841, you explained to a gentleman in my hearing, your views regarding the extraordinary phenomena of being able during what you termed mesmeric sleep to excite various organs of the head.'

* The American census for the year 1840, proves the population of the United States to be 17,063,353, and the number of idiots to be 17,434. This gives about 1 to every 979 of the population! Surely some effort is required to educate a people in sound physiological knowledge, which will make clear to them the numerous causes producing such a frightful state.

"In April, 1841, Harrington the proprietor of the Lyceum-room, Boston, engaged to pay Dr. Collyer so much nightly for delivering a series of lectures on the new discovery. His letter asserting he did so, I have seen, and it bears date August, 1841.

"Mr. P. Shattock, proprietor of the Mercantile Reading-room, Boston, writes stating he considers it a simple act of justice to affirm he witnessed Dr. Collyer, amongst other experiments, excite in a subject the organ of Benevolence whilst under the influence of mesmeric slumber. Dr. Buchanan till very recently scouted the idea of Phreno-Magnetism, but supported a system called by him galvanoid, based on very different principles. The foregoing is to substantiate Dr. Collyer's claim to the discovery of Phreno-Magnetism in April and May, 1841, antecedently to which date it was never heard of.

"Signed, H. DANIELL."

December 19th, 1842. *(Ladies' Meeting.)*

Mr. Symes delivered an address upon the correspondence between the character and cerebral development of Daniel Good the murderer.

January 2. (Holiday.)

January 16th, 1843. *(Ladies' Meeting.)*

A case was read illustrative of the effects of mesmerism upon various phrenological organs, by Thomas Uwins, Esq. R.A. The subject was a married female, about 30, without children. She had originally been mesmerised for indigestion, water-brash, &c., with very considerable benefit to her health; but Mr. Uwins, having heard of results obtained from patients in the sleep-waking state, confirmatory of phrenological facts, determined to test the truth of them. Mr. Joseph, the eminent sculptor and a profound phrenologist, was present at the first experiment. To prevent the possibility of deception, Mr. Joseph wrote on paper the organs he wished to have acted upon in succession. We began, said the author, with *Ideality* and *Wonder:* exclamations of admiration accompanied by the most expressive and appropriate actions immediately followed the application of my fingers to those portions of the brain. "How beautiful!" "What a delicious place!" "It is like the happy valley in Rasselas!" "Where are the people going?" I said, "What is it you see?" "Oh look, look!" She repeated, "There, there, look! How finely they are dressed! They are going to dance: I'll have a jig with

them." And she began beating time as if she were about starting off in a dance, when suddenly she said, "Oh no, I'll go in that boat. Oh, what a beautiful lake!" I now put my finger on Cautiousness: she instantly drew back with the most marked expression of fear, and seizing me by the arm, said in an under tone, "Come away, come away." "What are you afraid of?" I said. "Do you not see," she replied still in a lower tone, "they are following us? They will do us some mischief." "Don't fear," I said, "I'll fight them off." "No, no, no," she still held my arm and whispered in my ear, "do not strike them, they will hire somebody to murder you for five shillings. Come away, come away." Mr. Joseph's course now led to my removing the finger from Cautiousness to Self-esteem, still keeping the thumb as before on Ideality. I had scarcely touched this organ when she drew herself up, (she was before crouching under the influence of fear), raised her head very high, and said in an under and reserved tone, though with an expression of cunning satisfaction, "They are actually bowing to me, they think me a person of consequence, and indeed I think myself quite as good as any of them!" She then stood up and made some formal patronizing curtseys to the right and left, varying her assumed and stately demeanour till I broke the charm by removing my fingers from the organs, which left her as usual stretching out her hands in darkness and vacancy. Mr. Joseph's next instructions were Philoprogenitiveness. The patient immediately put on the most winning smiles, and seemed by her actions to be courting children to come to her. "Oh the dear little creatures," she exclaimed, "come, come." At length she seemed to have caught one in her arms, which she hugged with the most extatic delight, "Look," she said, "what a dear little angel." I asked if it was her own, but repented the question as soon as it had escaped my lips. She sank back in her chair and said with a deep sigh, "No, my home is never to be so blessed." I shall never forget the scene, Mr. Joseph appeared affected almost to tears. As I still kept my fingers on the organ, she soon resumed her pleasurable feelings and seemed again to be fondling a baby in her arms. Mr. Joseph now wished me to carry my thumbs on both sides of the head to the organs of Destructiveness. Instantly she threw the child away, and began tearing and raving with a fiend-like fury. I said, "Surely you are not going to kill the child?" She replied, "I could kill it,—a little ugly devil." "I could tear it in pieces," she continued, using the utmost violence with her hands as if she would destroy every thing within her reach.

I went now to Benevolence. The change was delightful. She smiled and seemed by her action to be surrounded by objects agreeable to her. I asked what it was that gave her so much pleasure. "Don't you see," she said, "Here are all my kind friends:" "it is indeed a pleasure to be surrounded by so many kind friends." She continued her smiles of recognition from one side to the other, and named some persons from whom I knew she had received kindness. At Mr. Joseph's request I now touched on Combativeness. She instantly began squaring with her fists like a boxer. I said, "Surely you are not going to fight?" She replied, "I do not know what I may do with provocation." "Oh nonsense," I said. "Not such nonsense neither," she replied, "I can strike a hard blow; I do not think you would like to take as many blows as I could give you;" she still kept her hostile action of defiance. From Combativeness I went to Conscientiousness. She instantly dropped her hands and assumed an expression of self-accusation; she did not speak or move but seemed absorbed in reflection. By Mr. Joseph's desire, I moved my fingers to Veneration, when her face assumed a sainted expression of devotion, and bending her body a little forwards, she clasped her hands in the attitude of prayer. Music was the last organ touched. She began beating time as if listening to some instrument or voice. I said, "What is it?" "Do you not hear? Listen: it is my favourite tune, 'Woodman spare that Tree.' My husband plays it. Be still: listen." All this was accompanied by gestures indicative of the pleasure the music gave her.

On a subsequent occasion the experiments were less successful, which the operator attributed to a moral cause acting upon himself. The author soon found another opportunity to carry out the experiments, previously to which, he and Mr. Joseph satisfied themselves that the patient did not know either the name or situation of a single organ. On the third trial, experiments, similar to the foregoing, were made with invariable success upon the organs of Wit, Benevolence, Acquisitiveness, Hope, Music, Colour, Number, Size, and Order. When Eventuality was touched, she fell back in her chair. Language could not be excited, and some other unsuccessful attempts concluded the sitting. The last trial was made in the presence of two ladies, who handed to Mr. Uwins on paper the names of one or more of the organs in turn accordingly as they wished one or more to be brought into activity, and the effects immediately ensued with the following exceptions. Individuality and what has been called Eventuality produced nothing: Language nothing: Imitation

little that was satisfactory; and Hope, which I thought before ascertained, now became Despair, &c. &c.

A paper was afterwards read by H. G. Atkinson, Esq., upon Mesmeric Phrenology, pointing out the importance of mesmerism in phrenological investigations, and the mutual bearing of the two sciences upon each other.

VI. *Mesmerism.*

MESMERISM IS ESTABLISHED.· Mesmerism has always been true. Dimly known for thousands of years in barbarous and semi-barbarous countries, known as to some of its high results in many of the great nations of antiquity, though the knowledge was confined to the chosen, it is only now beginning to be seen in its various aspects and ramifications, and to assume the character of a science,—a science of the deepest interest and importance, inasmuch as the phenomena of life transcend those of all inanimate matter, and the faculties of the brain—the mind—are the highest objects in the universe that man can study; and inasmuch as its power over the faculties of the body at large, and especially over the brain and whole nervous system, is immense, and therefore capable of application to prevent and remove suffering, and to cure disease, far beyond the means hitherto possessed by the art of medicine.

"*Animal Magnetism is true,*"—was the opening sentence of a series of five papers published by Mr. Chenevix on the subject in 1829, in the *London Medical and Physical Journal.**

The second sentence was the following:—"In the whole domain of human acquirements, no art or science rests upon experiments more numerous, more positive, or more easily ascertained."

If this was the case then, how much more is it not the case now? Within these very few years, thousands of persons have made successful experiments upon the subject; and, although as far as mesmerism has for ages been proved, it has been in one sense established,—*established as a* TRUTH, the multitude of positive facts, and the multitude of persons cog-

* *On Mesmerism, improperly denominated Animal Magnetism.* By Richard Chenevix, Esq., F.R.S. London and Edinburgh M. R. I. A. LONDON MEDICAL AND PHYSICAL JOURNAL, 1829, March, June, August, September, and October.

nisant of these facts, are at this moment such, that it is beyond all shadow of doubt *established as a* POSSESSION by mankind, which can never be demolished, never be neglected, or lost.

Accident determines the knowledge, the opinions, and the pursuits, both of most individuals and of most nations. Where any cerebral organ, or group of organs, preponderates over the others, it will impel the individual, with little reference to the influence of surrounding circumstances, or even in spite of them; but the generality of men are without such preponderance, and take the kind of knowledge which is offered them, imbibe the opinions of those around them, and fall into the habits and pursuits of their countrymen. The knowledge, the opinions, and pursuits of a nation, must necessarily depend much upon natural cerebral development, but very greatly also upon accident; upon the physical circumstances which surround them, rendering one mode of life and action absolutely inevitable, or at least more suitable than another; upon accidental impediments to one or another kind of knowledge, opinion, or pursuit; upon the accidental impartment to them, by individuals of remarkable cerebral organization among themselves or by other nations, of one or another kind of knowledge, or upon a similar accidental influence upon their opinions and pursuits. When a subject does not require a peculiar organization for excellence, as music or colouring does,—is but merely a good development of the group of superior intellectual faculties, chance chiefly directs whether it shall be known and cultivated by a nation. Consequently nations, at an equal point of civilization and most different in their intellectual organization, differ greatly in their knowledge and opinions. Mr. Priault, in his learned *Quæstiones Mosaicæ*,* asks, "Who can assert *a priori* the particular direction which civilization shall take? The Greeks were long without any true knowledge of the year, and yet Mexico at its discovery had a year of three hundred and sixty monthly, and five intercalary days. The Otaheitans too, built curiously carved canoes, and wove cloth and mats, and were, nevertheless, ignorant that water could be made to boil. And the Peruvians, similarly, had constructed roads throughout their dominions, and had established posts of communication between the several parts of their country and their capital; they had learned also to card and weave wool, and could work silver into vessels and tools, and would even, occasionally, mould it into images, which prettily imitated nature;

* *Quæstiones Mosaicæ, or the Book of Genesis, compared with remains of ancient religion.* By Osmond De Beauvoir Priault. p. 212. Bohn, 17, Henrietta Street, Covent Garden, 1842.

and yet the iron that was at their feet they had never observed, and knew not how to turn to account. When, therefore, we compare that which the early nations are said, at any given time, to have known with what they remained in ignorance of, we may often be surprised as well at the *subtilty and ingenuity of their discoveries*, as at the *stupidity of their ignorance:* but we cannot from this ground argue against their inventions. Neither can we, on the other hand, infer the untruth of alleged science or the inefficiency of art, because in a country of much science and art it is unknown and disregarded, or even despised."

The greatest events in history have been determined very much by accident. There is, indeed, a general working, or influence of general causes, which renders an accidental circumstance availing or unavailing, so that what appears accidental may not be so altogether, nay, perhaps in but small part. But, nevertheless, fortuitous circumstances, that is to say circumstances not in a natural sequence of occurrence, and arising from other and independent causes, do most materially influence events, both for their production and their prevention.

Thus it has been with Mesmerism. One would suppose that a thing so easily practised by every one would long ago have been known universally in Europe. But the subtle Greeks had no true knowledge of the year, the carving and weaving Otaheitan never boiled water, nor did the sagacious Peruvian use the iron he possessed. The time and trouble demanded for its practice; the disinclination of persons to permit such powerful effects to be produced over the whole frame of their friends without immediate evident good; and the brutally ignorant prejudices of the superstitious, who unquestionably form the mass of mankind in every country, in referring the natural phenomena of mesmerism to imaginary beings and agencies, have probably been sufficient to deter men from its investigation. But the longer time rolls on, the greater and more numerous the opportunities for favourable chances to turn up and exert their influences; and thus, at last, is caught hold of and fixed what might have been in our possession ages back, had attention been directed towards it, and impediments manfully opposed; and its constant cultivation for the future is secure. Mesmerism has at length had its happy chances, and as certainly as civilization itself is now secure, through the art of printing and some other modern inventions, so certainly may mesmerism henceforth defy oblivion or neglect.

Till the present moment mesmerism never attracted more

than a very partial and temporary notice in this country. Maxwell wrote respecting it in 1679, laying down all the very propositions afterwards advanced by Mesmer, just as before him in the beginning of the seventeenth century Van Helmont, a Belgian physician, had written of it in the language which a disciple of Mesmer would have employed. In the middle of the seventeenth century an Irish Protestant gentleman named Greatrakes, of spotless character, receiving no recompence, writing in the purest spirit of piety and benevolence, and not pretending to explain how he did it, "stroked" thousands of the sick with his own hands, and, though he did not pretend to cure all, is said to have cured large numbers, and two celebrated men, Boyle and Cudworth, put themselves under his care, which we presume they would not have done, if the great doctors of the day had not failed to cure them. The Lord Bishop of Derry declared that he himself had seen "dimness cleared and deafness cured," pain "drawn out at some distant part," "grievous sores of many months date, in a few days healed, obstructions disappear, and stoppages removed, and cancerous knots in the breast dissolved," by his manipulations. The Royal Society published some of his cures, and accounted for them "by a sanative contagion in Mr. Greatrakes's body, which had an antipathy to some particular diseases, and not to others." A gardener, named Leveret, did the same, and used to say that so much virtue went out of him that he was more exhausted by touching thirty or forty people than by digging eight roods of ground.

Dr. Elliotson mentions in the chapter on mesmerism in his *Human Physiology*, p. 563, that a lady named Prescot, who died at an advanced age a few years back, in Bloomsbury Square, practised mesmerism there during the greater part of her life; and that he recollects that, now about thirty years ago, a woman mesmerised for a time at Kennington.

The establishment of mesmerism in England sprung from the visit of an Irish gentleman, named Chenevix, who had fixed his residence for several years in Paris, to London in 1828. His visit was short, but during it he solicited and prevailed upon several persons to see him make trials of mesmerism: and afterwards prevailed upon the editors of the *London Medical and Physical Journal* to publish the report of all that took place.

Notwithstanding the sentence of the Royal Commission appointed in France to pronounce upon the truth of animal magnetism in 1754, when Mesmer had drawn it from oblivion and discredit, and proved its truth and power, the facts had taken firm root in France and some other parts of the con-

tinent, and several clever and estimable persons had always practised and cultivated it. Indeed it could not be otherwise, for the Commission, like all the adversaries of mesmerism in every country and at every period, whether a body of men or private individuals, behaved most unfairly. Whenever a person resolves to oppose mesmerism he seems to forget himself entirely, to part with common sense, common morality, and common propriety. This Commission would not examine it with Mesmer, but with one of his pupils, named d'Eslon; Mesmer himself being not only more capable of demonstrating it, but one of the most powerful mesmerisers that ever existed. Mesmer protested in vain to Franklin, and to the Baron de Breteuil, *who did not even condescend to reply to his letter*. Their examination was immediately shewn to be most incomplete and superficial, by a host of writers.* The members were careless in their attendance and did not all regularly assemble, but went casually, and as each or two or three felt inclined. They asked no questions of the patients, took no trouble to observe. They took up the subject prejudiced against it; and in their experiments omitted the conditions which they were expressly told were indispensable.—" *Point de questions aux personnes soumises aux épreuves,—pas le soin d'observer,—pas assidus aux séances—allant de temps en temps. Nous les voyons dans une disposition peu bienveillante; nous les voyons malgré toutes les représentations qui leur sont faites, faire des essais, tenter des expériences dans lesquelles ils omettent les conditions morales exigées et annoncées comme indispensables aux succès*. These are the words of Drs. Adelon, Pariset, Marc, Burdin, sen. and Husson, appointed by the Royal Academy of Medicine of Paris, in 1825, to report upon the propriety of examining the subject again.

Franklin gave himself very little trouble about the matter. One, however, a truly celebrated man, the illustrious botanist Jussieu, paid the utmost attention; and what was the result? Why, that he refused to put his signature to the report of the rest, notwithstanding the pressing solicitation of his colleagues and the menaces of the minister—Baron de Breteuil; but drew up a report of his own, in which he declared that the facts which he had witnessed depended upon an external agent independent of the imagination.

Mesmer found a large number of pupils who resolutely took up the subject among them. The Marquis de Puységur, a truly virtuous man and a soldier, produced somnambulism

* *Rapport et Discussions de l' Académie Royale de Médecine sur le Magnétisme Animal*. Par M. P. Foissac, Paris, 1833. p. 225. Every body interested in the history of mesmerism should read this book.

by the process, though unprepared for it by Mesmer, who however was conversant with the fact; and he published at the end of 1784 and in 1785. He had not been converted by a course of lectures by Mesmer, though he attended diligently; but subsequently by mesmerising in the way of joke the daughter of his steward, and the next day the wife of his game-keeper. The shortest mode of ascertaining the truth of the matter, is thus to make experiments for one's self. His third patient was a peasant, who fell into a quiet sleep, and into somnambulism, in a quarter of an hour. In this state she talked aloud of her affairs. He awoke her, and left her in an hour. She slept the whole of the night; and a severe cold, for which he had mesmerised her, was sensibly better the next morning.

He was the first who accurately described this state, and pointed out the intuitive knowledge possessed in it by some patients with reference to their own complaints and those of others. Puységur relinquished the road to certain power and fortune in order to devote himself both on his estate and in Paris to cultivate and establish mesmerism. "All those who had the honor of knowing him," says Foissac, "knew that the love of benefitting others was his religion, and that he undeviatingly pursued, to the last day of his existence, the course which Providence had pointed out to him. Like his ancestors, M. de Puységur, placed on the high road to honours and fortune, might have attained the highest dignities; but he sacrificed all to the more tranquil and true happiness of comforting, assisting, and enlightening his fellow-men. Indeed he often said that his mission on earth was to place mesmerism in the hands of physicians. This mission he fulfilled with incomparable zeal and complete success: for soon after his death, in 1824, the Royal Academy of Medicine appointed a committee, which admitted all the phenomena of mesmerism and somnambulism.*

M. Deleuze, originally destined like Puységur for the army, but afterwards devoted to literature and science, and established in an appointment in the Jardin des Plantes, heard in 1785, when thirty-two years of age, and, at his native place Sisteron, of the cures effected by Puységur on his estate, and thought the whole must be nonsense. A physician, however, at Aix, converted him, and he wrote admirably and extensively upon mesmerism till 1825, and cultivated it assiduously in Paris. *He avoided all speculation, all mystery, and shewed that the phenomena of mesmerism were in harmony*

* Foissac, p. 244.

with the laws of nature. He shewed that the adversaries of mesmerism, precisely like the adversaries at the present day, "*are ignorant of mesmerism, and imagine absurdities to be held by its partisans which they do not hold,—pass over in silence the most convincing proofs,—refute statements that nobody makes,*—and when obliged to confess incontestable facts, ascribe them to insufficient causes." In 1828, he was appointed librarian of the Museum of Natural History. He has always been spoken of in the most respectful and honorable terms. "His rare qualities," says M. Foissac, "his kind and instructive intercourse, gained for him many friends among the most celebrated learned men—Levaillant, Duperrou, Cuvier, de Humboldt, &c.; the unanimous opinion of his cotemporaries concedes to him and M. le Marquis de Puységur, the honour of having preserved, defended, and propagated one of the most beautiful discoveries of modern times."

Many other men of less prominence in mesmerism, kept up the subject both in France and Germany, and even Russia, and it found its way temporarily into some German universities and hospitals. In 1818, the Academy of Sciences at Berlin offered a prize of 3340 francs for the best treatise on mesmerism; it was practised in Russia, in 1815, when a committee, appointed by the emperor, declared it to be a most important agent; in Denmark, in 1816; in Prussia, in 1817, where the practice of mesmerism was by law ordered to be confined to physicians. But its head was held above the surface of the waters with difficulty.

At the instance of Dr. Foissac, in 1825, a committee was appointed by the Royal Academy of Medicine of Paris, to determine whether a commission should be appointed to investigate mesmerism. The committee reported in the affirmative. A long discussion took place, in which as much nonsense was talked by the opponents as could be desired by its most malicious supporter;—and to this the Committee drew up a powerful, and in every respect admirable answer, which settled the matter; and a commission was appointed in 1826. One difficulty however after another occurred. The conduct of Dr. Magendie, one of the commission, was shuffling and contemptible in the extreme. He wrote to Dr. Foissac, that the secretary of the committee took careful notes and drew them up, when it had been resolved that none should be drawn up. He made an appointment at his own house with Dr. Foissac for the latter to be present at a meeting for experiment, kept Dr. Foissac waiting from four till six,—never saw him,—and had him let out by a back door. When one of the committee—Dr. Husson—wrote a very polite letter to in-

form him that permission was obtained for epileptic patients at his hospital to be mesmerised for experiment, and begged him, as a physician of the hospital and one of the committee of the enquiry, to be present,—he, in apish imitation of the Baron de Breteuil forty years before, did not condescend to notice the invitation! "*M. Magendie ne repondit pas.*" All this may be seen in Dr. Foissac's book. The business languished, and no report was heard of for five years,—until 1831, when indeed a most favourable report was given, acknowledging the truth of mesmerism, and its most wonderful facts; and displaying earnestness, labour, candour, and a truly philosophical spirit. But in the mean time (and indeed afterwards, for this report was not allowed to be printed or lithographed, but was put in a box and thought no more of by the academy) mesmerism had little prospect, for miserable obstacles were thrown in the way, and particularly by Dr. Magendie who, it is said, not only violated truth and acted, as he knows so well how, with vulgar unpoliteness, but ceased as well as Dr. Double (who with Magendie had no singleness of purpose) to attend the experiments, and consequently could not sign the report.

The learned and important, and those in authority, would not condescend to notice mesmerism; the superficial herd of time-serving practitioners, vulgar medical journalists, and all kinds of ephemeral medical writers, railed at it and all who upheld it, so that it was a poor outcast, neither legitimate nor respectable. Still, being the offspring of an eternal and vigorous parent—Truth, it was sturdy, and lived on, without being indebted for food, lodging, clothes, or countenance to the flourishing and respectable members of learned or fashionable society.

"In France," says Mr. Chenevix, and his article in the *Edinburgh Review*, 1819, on France and England, shews that his long residence in Paris had made him perfectly acquainted with the French character and habits, "where words and jargon are more valuable than facts, it has been treated as a matter of opinion, not of experiment:" "it has been believed, and reviled, and believed again, and has followed all the vicissitudes of fashion." "Though all the phenomena have been produced over and over again, yet, as these phenomena are not phrases, the academy of medicine thinks it can argue down somnambulism, and talk lucidity out of existence."

The influence of the opinions of those around him had their full weight upon Mr. Chenevix,—

"Whenever animal magnetism was mentioned I joined," he says, "the general tribe of scoffers, and so much was I *convinced (!)* of its absurdity, that, being at Rotterdam in 1797, I laughed to scorn a proposal made to me by an English resident there to witness some experiments in which he was then engaged." "*The respectability and general understanding of this person left no mode of accounting for so extraordinary an illusion, but to suppose him labouring under a monomania.*"

In 1803 and 1804, while travelling in Germany, he continues—

"I heard many very enlightened men of the universities talk of animal magnetism, nearly with the same certainty as mineral magnetism; but their credulity I set down to the account of German mysticity." "*I remained an unbeliever.*"

At length, after nineteen years, Mr. Chenevix condescended to witness mesmerism in the person of a young lady in Paris. "*I went to laugh,*" says he, "*I came away convinced.*"

"To *suspect* any thing like a trick in the parties concerned was *impossible.* They were of the highest respectability and distinction, and some of them I had known for many years. The magnetiser was, indeed, in the frivolous French metropolis, called a charlatan, which made me suppose he was not so; and the event proved that I was right. He was, indeed, poor; he exercised his art for money; he gave public lectures at three francs a ticket. Many young physicians have as fair a claim to the title as he had. But from the hour above alluded to till the period of his death, I remained acquainted with the Abbé Faria, and never knew a man to whom the epithet impostor was less applicable.

"No sooner had the Abbé Faria begun to operate than the countenance of the lady changed, and in two seconds she was fast asleep, having manifested symptoms which could not be counterfeited. The sitting lasted about two hours, and produced results which, though I still remained a sceptic upon some of the most wonderful phenomena, entirely convinced me of the existence of a mesmeric influence, and of an extraordinary agency which one person, can by his will, exercise upon another. The Abbé Faria offered every means to dispel my remaining doubts, and gave me all necessary instructions to obtain total conviction from experiments of my own. I most zealously attended his labours, public and private, and derived complete satisfaction upon every point relating to mesmerism; even upon those which appeared supernatural. Many of the experiments I repeated, not only upon persons whom I met at his house, but upon others totally unacquainted with him or with his studies, and was ultimately compelled to adopt the absolute and unqualified conclusion announced above;—*Mesmerism is true.*"

And what then was his conduct? Did he content himself with saying, "It 's very wonderful, certainly," "I dont understand it," and then think no more about it, turn to something by which he was making money, or which was pretty or popular? Did he content himself with saying, "I should like to know the use of it? as though the sight of any of nature's wonders were not in itself use,—a high, an invigorating, a noble, intellectual, and truly delicious and improving occupation, far beyond the occupation, however necessary, of procuring food and raiment and property, the administration of which to the more humble wants of our

nature constitute the only view possessed by many of utility, —as though every fact of nature were not a part of the mighty, the universal whole;—as though a knowledge of any fact in nature could fail directly or indirectly, sooner or later, to give power to good. Did he content himself with saying, "It cannot be doubted; but it is a dangerous power and may be turned to mischievous purposes!"—as though whatever is a power is not a power to evil as well as to good, and greater power to evil in the very same degree in which it is a greater to good; as though heat, without which we die, without high degrees of which the arts administering most to our advantage and comfort and prosperity of all kinds cannot be practised, is not converted to the most destructive purposes by the ill-disposed and a source also of incalculable unintentional accidental mischief;—as though the steel instruments always on our eating tables, and in our hands, and in all parts of our dwellings, might not in one moment be made implements of injury and death;—as though half our medicines in hourly use may not be made instruments of death. Did he content himself with saying, "Well, I am sure the medical profession will see its truth and importance, and I shall leave it to them?" as though any revolution in science or institutions had ever come from those in whose hands the subject was placed; and had not always been forced upon them, and forced upon them with toil and anguish and persecution to those who effected it. He had read that Christ, for his efforts to substitute, in the room of long public prayers and sanctimonious scrupulousness about indifferent things, and the pomp and ceremony and mechanism of worship, and nicety of doctrines, and priestly assumption,—to substitute humility, disinterestedness, and universal benevolence, "saying, "It was said of *old time*; but *I* say unto you," was vilified by all the Jewish establishment and the so-called *respectable* Jews, and then nailed on high in the open air to two crossed pieces of wood. He knew that the discoveries of Newton were long excluded from the University of which he was a member, and were introduced through stratagem only by Dr. Samuel Clarke explaining them in notes, without any appearance of argument or controversy, to the book of Descartes used as a text book by all the tutors, though, like these notable fellows, now forgotten and in the dust, unseen and unremembered; and that the exploded and unfounded system of Descartes kept its ground for *more than thirty years* after the publication of Newton's discoveries. He knew that the medical profession laughed Harvey to scorn and made the public think him too great a fool and visionary to be fit to physic them, when he taught

the circulation of the blood, and were so perversely obstinate that not one doctor who had arrived at years of discretion,—had attained his fortieth year,—when the discovery was announced, ever relented, or admitted the truth of the circulation, or allowed himself to the day of his death to be the wiser for Harvey's discovery, but lived on perversely and piggishly boasting of error; though probably many noisy professors of unbelief did, like a host of noisy living doctors who declare their unbelief at this moment in mesmerism and, like gentlemen of a dark hue in the basement story, "*believe and tremble.*" Mr. Chenevix knew that beneficial changes in bodies of men, united as an institution or corporation, or even in a profession or occupation, and standing up for their vested rights of ignorance, unimprovability, and undisturbed motionlessness, required always heavy blows and pressure from without before these bodies bestir themselves and think of moving onwards. Did he think a truth less important because neglected and despised? No. Mr. Chenevix,

"Surprised at the pusillanimity of the French academy, which could not deny and yet had not the manliness to avow the facts which one half of its members declared they had witnessed, resolved, with all due humility, yet without shrinking from the task, to devote some time to the collection of facts, and to offer the result to a much more enlightened public than that to which the art is compelled to appeal in France."

We really think the last remark, however national, to be well founded, when we compare the slight hold that mesmerism has taken of the Parisians, who are more struck with its marvels than its scientific bearings and practical applications, who derive a sensation from it rather than an enlightenment, with the deep root it has now taken all over England and the intense earnestness with which so many of both sexes study and cultivate it, now that they have recovered from the stupor into which the ignorant misrepresentations and misconceptions and the bold falsehoods of journalists, medical and literary, and the clamour of the medical profession, the lucky leading practitioners all vociferating and the little ones in due imitation snarling and making the best little noises they could, had thrown them.

Mr. Chenevix had no opportunity of renewing his trials of mesmerism till "May, 1828, when, happening to be on a visit in *Ireland*, he enquired for some patient among the *peasantry*, no matter what the disorder." He soon obtained one, a woman aged thirty-four, who had laboured six years under severe epilepsy and had lately in a fit fallen into the fire "and most dreadfully burnt her leg." She also "had a strong tendency to paralysis of the left leg and thigh; was subject,

almost daily, to spasmodic contraction of her hands and feet, accompanied by racking pain, and which sometimes lasted twelve hours or more; had occasional absences of mind and loss of memory, never slept more than a couple of hours at a time, and that but rarely; was constantly thirsty, her appetite was bad. She was eight months advanced in her sixth pregnancy, and it was after her first confinement that she had her first attack.

1st day.—He mesmerised her for five and forty minutes, and produced only *a little drowsiness*; but that night she *slept better than usual, and had no spasms.*

2nd day.—Mesmerised her for five and forty minutes, with the effect of drowsiness only, but she *continued drowsy till the next day.*

3rd day.—Mesmerised her five and forty minutes; but no sleep.

4th day.—Not mesmerised.

5th day.—She fell asleep after having been mesmerised *nine minutes,* and *felt stronger and better* than before the treatment was begun. The spasms have returned, but *lasted a shorter time* than usual.

6th day.—Not mesmerised; and she had had no spasms, but *in one foot only,* and for *a few minutes only.*

7th day.—Sleep in *three minutes*; but she awoke on being spoken to. Now all this in the ignorant peasant was so beautifully conformable to the daily experience of Mesmerisers, that the truth is recognised as clearly as in the course of an attack of small pox which has its regular periods. *Had she shammed, she would not have awakened as soon as spoken to; and her health would not have improved.*

8th day.—Mesmerised.

9th day.—Not mesmerised.

10th and 11th days.—*Fell into complete mesmeric sleep in two minutes. Her health was improving rapidly.*

12th and 13th days.—Not mesmerised.

14th day.—Put to sleep in *six minutes by the will alone, without any* visible manifestation of it.

15th day.—Not mesmerised.

16th day.—Mesmerised *through the door, at the distance of fifteen feet; she not knowing that he was acting on her, but supposing he was absent; and in fourteen minutes she was in complete mesmeric sleep.*

17th day.—Not mesmerised, and in this interval of two days without mesmerism, she had a severe attack of spasms in her left leg and thigh, for six hours, followed by coldness and numbness.

18th day.—Sleep in *half a minute*. He mesmerised the left limbs: in forty minutes he awoke her: *when the pain was absolutely gone, and the parts had recovered their usual strength and heat.*

"This was the last return of these symptoms. By this time she had completely recovered her sleep, not only at night, but was frequently obliged to lie down in the day. She now slept ten or twelve hours in the twenty-four, and one day sixteen hours. She continued rapidly to improve in health, *and her appearance was so much changed that her neighbours, who knew nothing of the treatment, were struck at the alteration.* The operations were continued until June 20th, when her pregnancy made her unable to come out; and on June 28th she was delivered.

"July 6th, Mr. Chenevix called upon her and found her up and well, except rheumatic pains in her left shoulder, for which he mesmerised her. *She soon felt them descending to her elbow, and thence to her wrist, and in less than ten minutes was perfectly relieved.*"

"July 17th, she went to thank Mr. Chenevix for her recovery; *and neither then nor afterwards was he able to affect her again.* At the end of nine months, when he published the account in the London Medical and Physical Journal, the fits had not returned.

"From the very first day she was mesmerised, the symptoms were alleviated and decreased regularly as the treatment advanced. In less than a week, thirst, sleeplessness, shiverings, and pains, to which she had been subject for six years, ceased; the paralytic tendency diminished, and the spasmodic contractions were entirely removed after the twelfth day of mesmerising." "Although none of the extraordinary symptoms of lucidity occurred, although this patient awoke the instant she was spoken to, her cure is interesting, as being completed so rapidly. Twenty-one sittings sufficed." "Even at the period when she used to be most affected, the touch of my finger, so slight as to be almost imperceptible to myself, roused her from her state of mesmerism, and with a sensation which she described as like the prick of a pin. I have known some educated person who experienced a similar sensation, compare it to an electrical spark."

Here was an Irish peasant, fourteen years ago, who had never heard of mesmerism, and, if disposed to sham, would have no more known what to do than the pig in her cabin. Here were the gradual increase and succession of effects just as mesmerists observe them: yet none of the more dazzling phenomena, and nothing dazzling at all.

Had the remarkable cure been effected by some new drug, or some striking variation of an old mode of treating, we cannot say, curing, the disease, though disgusting medicine would have had to be taken, annoyance or even pain to be submitted to by the patient, we will venture to say that the plan would have been tried in other cases, and we should have heard of similar trials again and again. But, as it was, without physic, surgery, issues, setons, cupping, burning, any thing complicated, expensive, or annoying, not a single trial of the simple plan of making passes appeared in any of the British journals as far as we discover. Not a doctor, surgeon, or apothecary, thought it worth his while to deviate from his old ways of uncertain and unsatisfactory treatment, all which

fails in nineteen cases out of twenty, and are generally, to say the least, troublesome and very long. The impressive history—together with the statement which follows it—that he had treated thirteen cases of the disease in the same manner, completely succeeded in three, procured immense relief in eight still under treatment, and had failed but in two, might as well have been published among the finny tribes in the depths of the Atlantic ocean.

Between May 23rd, 1828, and January 20th, 1829, Mr. Chenevix "Mesmerised upon 164 persons: of whom 98 manifested undeniable effects, some in one minute, some not till the operation had been repeated several times. There was hardly one instance where disease existed that relief was not procured; and many of the patients offered phenomena as extraordinary as any recounted in Germany or France." "While prosecuting his experiments, he had the good fortune to meet with many benevolent and zealous persons, *not of the faculty*, who made trial of the art with entire success, having hardly ever failed to procure relief for their fellow-creatures, at the same time that they produced phenomena which highly surprised and gratified them." He counted fifty who had become both converts and practitioners. However three physicians of public establishments in the neighbourhood of the place where his experiments were made, attended to him. Drs. M'Kay, Peacock, and Cotter, the first of whom "kindly lent his assistance upon all occasions," and testified the truth of the wonders he saw to every body. We, however, have not heard of these gentlemen having prosecuted the object or stood up for it, even when it was experiencing the furious hostility and roguery of some Irish journalists and medical men. At any rate had they profited, and felt it their duty to see that their profession profited by what Mr. Chenevix taught them, mesmerism would now have been perfectly established in Ireland. Dr. Cotter yielded to evidence more slowly than the other two gentlemen, and though he saw two epileptic patients sent to sleep in about half a minute,—a fit of one instantly arrested,—one struck motionless by Mr. Chenevix's will only while walking across the room, and set at liberty by the same power as instantaneously,—a suspicion of connivance still lurked in his mind, and he was therefore requested to take five patients of his own to Mr. Chenevix for experiment, never before seen or heard of by Mr. Chenevix. He accordingly took a female whom he had been treating *four years* for indigestion, costiveness, and headache. Her usual aperient was ten grains of calomel and thirty of jalap. She had no idea of what was to be done to her, and was suffering at the time under violent headache. After being mesmerised for *three* minutes her headache was better, and in *five* minutes was gone: in eight minutes she was in the soundest mesmeric sleep Mr. Chenevix ever witnessed, and continued sleeping for thirty-five minutes, when he awoke her. During her sleep Mr. Chenevix was informed by Dr. Cotter, in *Latin*, that her bowels were at that moment particularly bound. He therefore directed his attention to procuring an evacuation, passing his hands before the abdomen, without however touching it or approaching nearer to it than three or four inches. In less than an hour after she had left the house she had three evacuations, and for some days her head was considerably relieved. The treatment was unfortunately not continued, or we have no doubt, from abundant experience in such cases, that both her head and bowels would have been completely restored to health. Dr. Cotter now practised himself in a similar case of a young lady aged fourteen. The pain here was in the left side instead of the head, and for a length of time Dr. Cotter had given her medicine without permanent benefit, so that he was desirous she should relinquish "so injurious a habit."

She had no idea what he was trying when he mesmerised

her, but in four minutes she was completely asleep. He mesmerised her only three times, yet she had no return of the pain, and no longer required aperients, "for which, previously, there was a continual necessity." It is a common effect of mesmerism to render the bowels regular, although aperients have before been habitually required.

He relates an instance to prove that belief is not requisite to the effect. A robust lady was a sceptic. He proposed that she should select any one of three patients who were waiting for him, and whom he had never seen before. She selected the most unhealthy.

"In two minutes the patient's head dropped, but she started up immediately; in less than five minutes, however, she was fast asleep. Here neither the mesmerised nor the mesmeriser had the slightest conviction upon the subject, yet the experiment succeeded as completely as with the most habituated professor."

We know a still more striking illustration. A gentleman, well known in Yorkshire, was a sceptic, and laughed heartily at mesmerism as folly. A lady equalled him in all this; and they agreed to play some mesmeriser a trick in the house in which they were. He was to propose to mesmerise her, and a thread was attached to her foot and his which he was to pull when he wished her to sham mesmeric effects. He began,—but, behold, in a short time she fell back *without the signal;* and he fancied she was shamming, but had mistaken and gone off too soon. The truth, however, presently appeared: *she was mesmerised and in the true coma.* He became at once a convert, and is now one of the most strenuous advocates of the cause, honestly and nobly telling every body the story of his conversion.

Dr. Cotter had for some time attended a poor man, named Michael Donolly, and pronounced him *"far advanced in a rapid consumption."* Mr. Chenevix found him in bed, *exceedingly weak, and his voice scarcely audible.* "He was taking small but repeated doses of tartar emetic and digitalis," as though he was not sinking fast enough without these debilitating drugs. All medicine was left off, and Mr. Chenevix mesmerised him on February 11. The only sensible effect at the time was profuse perspiration, but he afterwards slept about an hour, and on waking found his cough and breathing easier.

Feb. 12. He was mesmerised again with the same results.

Feb. 13. His voice was stronger, and he seemed more alive than Mr. Chenevix had yet seen him. Mr. Chenevix mesmerised him to-day; but left him to be mesmerised from this time by his wife for thirty minutes night and morning.

Feb. 27. Mr. Chenevix called and found him *up and dressed.* "He received Mr. Chenevix at the door of his cottage, spoke with a *strong, firm voice, looked healthy,* and said he was nearly recovered."

March 16. *He went to see* Mr. Chenevix, "*and looked quite well.*" Mr. Chenevix "mesmerised him" for a few minutes: he slept, and even shewed some interesting phenomena. Mr. Chenevix urged his wife to continue the treatment for some time longer; *for mesmerism, when persevered in after the cure is effected, is never dangerous.* "This case," Mr. Chenevix adds, "can be attested by at least twenty witnesses of the first respectability." When he informed Dr. Cotter that he had undertaken this desperate case, that physician's reply was, "If the poor man is saved, I will substitute the pronoun *you* for *we.*"

Mr. Chenevix cured *seven* cases of *worms* by mesmerism, and furnishes a case described by one of his Irish medical converts, Mr. Levinge, of a girl eleven years of age, afflicted with cough, loss of appetite, and general feelings of illness, and who had passed several worms. She was mesmerised daily for half an hour.

"After the first *four* days she *passed many worms,* and felt *much better;* her *cough* began also to diminish gradually. At the end of a fortnight the quantity of worms which she had voided was very great, and the relief which she experienced was as remarkable. She also drank magnetised water."

She was mesmerised by Mr. Levinge regularly for three weeks; and recovered permanently. "The patient did not sleep more than ten minutes at a time; and, as soon as she opened her eyes, she seemed as completely awake as if she had not slept at all."

Mr. Chenevix made some slight and disadvantageous trials upon some patients at the Wakefield Lunatic Asylum, and with a certain degree of effect; and Sir William Ellis himself was affected and avowed his conviction of the truth.

He next procured the permission of Dr. Whymper, Surgeon-major, and Mr. Smith, Surgeon, to the Coldstream regiment of Guards, to make some trials on the men; and these gentlemen called into the room for this purpose any men they thought proper on their sick-list.

The first was not affected in twenty minutes.

The second, Richard Ireland, went to sleep in six minutes, his eyes having begun to water, his left nostril to run, and his eyelids to tremble, at the end of the first ten minutes. His arm was raised nearly as high as his head and then let suddenly to fall; and yet he slept on. After he had slept

five and twenty minutes, transverse passes did not awake him; but *he awoke as soon as he was called by his name.*

In two days, another trial was made, and he was asleep in five minutes, and continued asleep for thirty minutes, at the end of which time *he awoke as before upon being called by name*, and told Dr. Whymper that he had slept soundly.

To prove to the parties that he possessed only a power diffused as equally as any other power over the whole species, not confined to a few, "*quos equus amavit Jupiter*," he shewed a serjeant how to operate, and "Serjeant Bradbury" sent the man into a profound sleep in six minutes. The arm was raised and let fall; and transverse passes were made in vain. "*His name was then called and he awoke.* Questioned by Dr. Whymper, he said he was not aware that his arm had been raised or touched; that he had slept soundly, but had not been in the chair more than ten minutes."

Dr. Marshall Hall would have exclaimed, "what Physiologist could believe such an absurdity?" The man's arm to be raised and let drop, and he not be roused, and yet always to wake and answer to his name when he was called! Preposterous nonsense! The man was not a physiologist! and Sir Benjamin Brodie would have coincided with Dr. Marshall Hall: and the Royal Medical and Chirurgical Society, would have resolved by a large, an overwhelming majority, that the man was an impostor, like the man whose leg was amputated at the Wellow Hospital, and that both ought to have been sent to the treadmill for—being subject to the laws of nature and speaking the truth.

On one occasion when a person who had not mesmerised him raised and let drop his arm, he awoke. The contact of any other than the mesmeriser sometimes excites considerably, and that might be the reason of this occurrence. At any rate, had there been deception the man would not have awakened from his arm being raised and dropped on this occasion any more than he had on others when the mesmeriser raised and let drop his arm.

A bystander one day begged him to resist to the utmost his inclination to sleep. "He did so and succeeded; but his eyes and nose watered much, and the inclination to sleep was very great. He said that, had he shut his eyes one moment he must have slept."

A trial was made upon one of the band, Garrand. After he had been mesmerised for thirty minutes with no *sensible* effect, Mr. Chenevix, having apprised the two surgeons of his intention to communicate to the man's hand a sensation of heat or cold according to his will, without giving him any

intimation of that will, touched his hand with a silver pencil case with that intention:

"The results of the first six experiments were perfectly correct; that is to say, he felt the pencil-case cold, when I (Mr. Chenevix) willed that he should feel it cold, and hot when I willed that he should feel it hot, without committing a single mistake; but, when the experiment was often repeated, he began to err, and his sensation ceased to be according to my (Mr. Chenevix) will."

There could be no deception in experiments of this kind. The man never slept, and if he had shammed anything it must have been sleep, for as Mr. Chenevix remarks, this is the only effect he could have heard of. This experiment Mr. Chenevix made upon at least eighty patients, with more or less success; and always found, when he repeated them too frequently at the same sitting, that the tact of the patient, however accurate in the first trials, became as it were bewildered and no longer distinguished the sensation according to his will.

"These anomalies," says Mr. Chenevix, "have been observed by every practical mesmeriser, and are still more striking in the class of phenomena which I have designated psychological. How to account for them, *or for any of the effects* of mesmerism, *I know not*: but such deviations from regularity are *not uncommon in physiology*. When we take successively into our mouths two known liquors, of different flavours, we immediately recognise them; when we repeat the trial too often they are no longer distinguishable."

This remark cannot be too strongly impressed. Not only experiments which concern sensation, but others, and the more so the more delicate the effect, generally fail when very frequently repeated at one sitting. We shall recur, in a future number, to this when we come to the *investigations* of Mr. Wakley. 'Such a deviation' remarks Mr. Chenevix, 'is in perfect harmony with all the laws of physiology. "The galvanic excitability of the dead frog is exhausted by repetition."

The following experiment was now performed. Garrand's eyes were most strictly blinded; he was desired to raise both his arms, and, being asked whether he felt anything in either of them, he said 'no.' A piece of paper, weighing perhaps from one to two grains, was placed upon his right sleeve, in such a manner that it was impossible for him to feel it. He was then desired to raise both his arms, and was asked, "Do you feel any thing?' 'Yes.' 'What?' 'A stiffness and weight in my right arm.' This was exactly what Mr. Chenevix had willed. The same experiment was tried upon his feet, and with similar success, until too often repeated."

Dr. Whymper tried the experiment himself of willing sensations of temperature with the pencil case, and succeeded with the man as Mr. Chenevix had once the day before.

On another day, Mr. North, a surgeon, and the editor of the journal, was present as well as the two regimental surgeons. The experiments of making the limbs stiff and heavy, by the will, and restoring them again at pleasure, were repeated, and

"The general result was acknowledged to be very extraordinary. Mr. Chenevix asked Mr. North, 'Do you think these effects real?' 'Yes.' 'Do you think they proceed from my action in this man?' '*I can see no other cause*'!"

Mr. North saw endless wonders in the Okeys, and was evidently much interested, and owned repeatedly that as to hysteria he had seen enough of it, but never any thing similar to what he saw in them. But Mr. North has never followed up the subject. In the Medical Society he did not offer a word in favour of mesmerism, when the members revelled in their absurdities; and they say that he talks of the effects of common hysteria, and pretends, (if he does, it can be but pretence,) not to believe in mesmerism. We know the editor of a literary weekly journal, who believes in mesmerism, but ridiculed it one day at dinner. After the ladies were gone, he was asked how he could talk so when he believed in it. "Oh," said he, "do you think I was going to say I believed it before the women."

On another occasion, when the experiments with the paper had failed after having been repeated very frequently the day before, Mr. Chenevix—

"Said to the gentlemen present, of course without a possibility of being heard by the patient, 'I will try to fix this man in his chair.' I mesmerised him with that intention for about three minutes, and then said, in my usual tone of voice, 'That will do for to day; you may go.' He rose from his chair, like a man labouring under severe lumbago, and with considerable difficulty. Questioned by Dr. Whymper as to what prevented him from rising from his chair, he said, "My back and thighs are so stiff.' I then demesmerised him for about one minute, and he said, 'the pains are gone;' he added, 'I felt as if a weight had been pulling me down.'"

On another patient he shewed the following experiment:

"A patient being in complete sleep, the mesmeriser, without his knowledge, goes behind him, and then, at a given moment, makes transverse passes with an intention to awaken him. In such circumstances there can be no collusion between the operator and the operatee; neither can the imagination of the latter be anywise suspected of producing the result. It is an experiment which I have repeated upon a great number of subjects, and very frequently, but which succeeds only upon persons endowed with great mesmeric susceptibility. In the present case the experiment was thus made. Having announced my intention to Dr. Whymper and Mr. Smith, without the possibility of Gould's being apprized of it, I took my station behind his chair. I then waited a couple of minutes, when I began to operate. *At the very first pass* his eyelids fluttered, and in about one minute he sat up erect in his chair. He soon became entirely awake, and in the same state as that in which he had been put by the previous operation."

On another patient taking a grain and a half of opium daily for chronic dysentery, Mr. Chenevix produced no sleep; but the man "sat constantly with his eyes closed, and when desired to open them, he was full two minutes before he could do so. When asked, 'What prevented you from opening your eyes?' 'I could not; they were fast closed: there was no strength in my eyelids. I never felt so before in all my life.'"

This is a fact often observed by mesmerists:—that the eyes close and for a time cannot be opened though no other result ensue.

Mr. Chenevix, being in Dublin in March, 1829, made trials upon seven patients in the Hospital of Incurables, by the permission and in the presence of Dr. Croker. On six no effects observable to a person inexperienced in mesmerism were produced. The seventh patient laboured under severe vomiting from an injury, and was obliged to have the assistance of the nurse and a crutch in going down stairs, but could just walk from her bed to the fire with the crutch only. For two months she had suffered excruciating pain in her left arm, and Dr. Croker feared palsy. After being mesmerised without any conversation for thirty minutes,

"She then, *of her own accord*, said that she thought herself better, and believed she could walk. *She did so.* I made her sit down again, and in fifteen minutes more she had clignotements of her eyelids, complained that she was too warm, and got up again to walk. This time she used no crutch, and declared (what indeed was notorious in the hospital) that for two months she had not been able to do so much. She was mesmerised again immediately, and, after about sixty minutes, got up again and walked quite well. The nurse and attendants, when called into the room, expressed the utmost astonishment at seeing her pace along without the least uneveness in her gait; and she went up stairs to her ward without any assistance whatever, leaving even her crutch in the room where she had been mesmerised. She slept better that night than she had done a long time; and walked perfectly well that day and the next." Mr. Chenevix did not see her again, as he went off to London.

Here he obtained two sisters to mesmerise, who were both epileptic and born of an epileptic father. They were soon sent into mesmeric coma, and were shewn to different persons on different occasions. Dr. Milligan and Captain Bagnold were satisfied of the reality of the sleep, and Dr. Milligan in regard to one declared his opinion,

"That the somnolency was the effect of a peculiar influence exercised by Mr. Chenevix, and that, on account of its suddenness, it could not be the result of any of the usual modes that produce sleep. Mr. Smith (Surgeon of the Guards) coincided in this opinion."

Once Sir (then Mr.) Benjamin Brodie was present, and the following conversation took place between Mr. Chenevix and him:

"Let me ask you two questions; but beware of your answers, for it is fair to tell you that I wish to have them for the express purpose of publication. Do you think this girl really and truly slept?"

"*I do, and very soundly too.*"

"Do you think she went to sleep herself, out of fatigue or ennui, or, in short, by means of what you saw me do?"

"Certainly, by means of what you did."

Then follows a note from Sir B. Brodie to the same effect, with this addition. "With such information, however, as I at this moment possess, I see no reason to believe that this girl's sleep may not be explained on principles already known, and I should think that it may be compared to the giddiness which may be produced by turning round, or still better to the sleep produced by rocking a child."

Mr. North, the editor of this journal, to this appends a foot note, stating that in his review of Dupau on Animal Magnetism, Nov. 1826, he had given the same explanation of mesmerism, and is, "*of course!* confirmed in our opinion by finding it supported by Mr. Brodie." "In speaking of this phenomenon, we observed, there is here no mystery; the effect might be anticipated." "Upon the same principle a child is lulled to rest by fatiguing its senses with some nursery lullaby or some gentle and oft repeated motion."

Sir B. Brodie came to his conclusion in *May*, 1829, "with such information as he *at that moment* possessed." Why has he not obtained more since, when ample information was within his reach; why did he never condescend to ascertain whether his explanation of a *fact*, which he admitted, was correct, and visit University College Hospital or Dr. Elliotson who resides in the next street to him. At any rate, this was his duty, *his positive duty*, before he ventured, as he is always said to do, to speak of mesmerism as a worthless imposition. In *those* days he was modest or cautious enough to qualify his doubts with a reference to the "information he at that moment possessed;" he *now* hesitates not to speak positively on the matter, never having added to the information he at that moment possessed and obstinately refusing to receive information. But let him report illiberally and contemptuously on mesmerism, his pride will not be sufficient to enable him to hold on much longer, however backed by his obsequious tenth-rate crumb seekers.

Dr. Prout also saw these patients, and *had no doubt* that the same sister really went to sleep. He differed, however, from Mr. Brodie, who had *no doubt* that she slept in consequence of the means employed by Mr. Chenevix, for he was not convinced that the action of Mr. Chenevix had caused the sleep, "though he did not immediately see to what other agency it could be ascribed." Mr. Brodie had *no doubt* that Mr. Chenevix caused it. Dr. Prout was by *no means convinced* of this! and yet could discover *no other cause!* In a letter to

Mr. Chenevix he declares he "must see much more before he could be satisfied." Has he seen much more? No. Has he not been as proud and obstinate as Sir B. Brodie; and do they not encourage each other to continue obstinate. He has firmly refused even to attend to the subject again. We happen to know that, being an old friend of Dr. Elliotson's, he was requested more than once to go and see his experiments, but never once went, and sent *a boy*, an absolute boy not in the medical profession, his son, instead, who made a report to the father which quite satisfied him that it was all nonsense; and Dr. Prout goes on, as in days past, talking against phrenology and mesmerism, in perfect ignorance of both, and thinking that he knows sufficient of both to give an opinion; and a prey to the strength of the unworthy passion or weakness, in familiar tongue called obstinacy, he remains, destined involuntarily, though fancying himself to act most freely, and without the tyranny of feeling, to descend the hill of life without beholding beauties of nature, to see which he has only to turn his head a little in a certain direction. And Dr. Prout is a writer of a Bridgewater Treatise, setting forth the power and goodness of God! Why, no wonders in nature can come up to the wonders of the powers of the human brain! It is the most wonderful of all material objects; and the phenomena of mesmerism as far surpass those of mechanics and mere chemistry as life must surpass inanimate phenomena: and then thus to write not only upon the power, but also upon the goodness, of God, and fling back in his face, or at least reject with scorn, the incalculable benefits which are placed within our reach by mesmerism! Out upon such inconsistency and perverseness!

Mr. Faraday differed from Dr. Prout and Mr. Brodie. While they had *no doubt* of the reality of the sleep, he thought he saw nothing which a paid actor could not play. His doubt arose from the girl coughing and putting her hand to her mouth at the time. This was from his ignorance, pardonable in him as not a medical man, but unpardonable now in all medical men, though evinced lately by nearly all the medical and surgical speakers of the medical society, that the mesmeric coma is not common sleep. "It is a great error," properly remarks Mr. Chenevix, with reference to Mr. Faraday's doubt, "to confound mesmeric sleep with common; for in the former many appearances are assumed which are incompatible with the latter. The second person I ever saw in this state of artificial somnambulism walked about the house and performed many domestic functions while in that state. In natural somnambulism the fact

has long been acknowledged." Dr. Hargood *believed both sisters to be fast asleep;* but ascribed all to imagination. However, he and *Mr. Faraday,* both of the Royal Institution, considered these experiments *as well worthy of investigation,* and expressed their *wish that the subject might meet with fair and candid enquiry.*

Dr. Henry Holland, of Brook-street, saw one of the girls. She was asleep in *five* minutes, and on raising her eyelid the eye appeared fixed and glossy. This disturbance did not awake her. Mr. Chenevix awoke her at the end of ten minutes, and asked him whether he thought she had been asleep, telling him at the same time that his answer would be published. Dr. Henry Holland replied, "I do. Certainly I think that without your means she would not have slept;" but he did not admit the necessity of any new agency. Lord Lansdowne was present also, and gave the same replies. Mr. Chenevix prints a note from Dr. Holland consisting of these two sentences. "I return the enclosed paper, having nothing to object to the statement respecting the girl whom I saw at your house. *I believe that she was asleep,* and that she could not have slept but by the means employed by you."

The late and the present Dr. Babington then saw the younger of the two sisters. She went to sleep in *two* minutes. Mr. Chenevix opened her eye and pressed his finger hard upon the ball, but she made no motion. "He then put his middle finger into her mouth as far as he could and stirred it about for more than a minute, endeavouring to stimulate the faucies; she showed not the slightest symptom of feeling or anything from this operation. He then tickled her nose and upper lip with a slip of paper and put the same slip of paper up her nostril; but she did not manifest the slightest sensibility to the impression, which should have resulted in ordinary cases." What! no *excito-motory motions, no reflex motions!* What would Dr. Marshall Hall have said. Why, he would at once have condemned the poor little girl as a vile impostor, because when her irritable parts were tickled, she gave no sign, as the creatures do whom he has knocked on the head or whose backbone he has cut through! What, no reflex movements! The girl was evidently no physiologist, or she would have enacted the reflex motions! *But they did not, and do not,* Dr. Hall, in those cases of mesmeric insensibility of the surface. "*But they ought,*" replies Dr. Marshall Hall.* However, Dr.

* For Dr. Hall's strange assertions and reasonings on these points in the Medical Society, when the case of amputation in the mesmeric state was discussed, we refer our readers to Dr. Elliotson's pamphlet just published.

Babington wrote on paper that the two sisters presented the usual phenomena of "profound sleep," but ascribed it to no "new or extraordinary influence," but to "the imagination, aided by the will, exercising a power over the faculties!" Poor old Dr. Babington, who was in no respect better informed, except in a little chemistry, or more skilful, than any good old apothecary of the last generation, and like so many other teachers in Israel must have often wondered and smiled to see himself looked up to and in lucrative practice, and be conscious it was owing to mere luck and his uniformly easy kind manner when his interest did not make him hostile, and to his humorous way of repeating Irish stories all day long, ascribed such a marvellously profound sleep as he witnessed, occurring too but in two minutes, to imagination aided by the will! Did he ever see such a sleep brought on, and so quickly too, by imagination aided by will? He should have tried, and then adduced counter facts. The writer of this well remembers Dr. Babington declaring, when auscultation first excited attention in this country, that for his part he had one day gone into the nursery and put his ears to the chests of his grandchildren and could discover nothing; and so he went on practising to the last day of his life in diseases of the chest without the all important aid of his ear. His pains to investigate the facts of auscultation, and his conclusion and determination regarding it, were altogether the same as those of the mass of the medical world regarding mesmerism.

Mr. Chenevix tried some patients in the Middlesex Infirmary before Dr. Milligan and Mr. Evans Riadore, who avowed their conviction, and also in St. Bartholomew's Hospital before Mr. Earle, who promised to follow up the subject.

Thus we see that Sir B. Brodie, Dr. Prout, and Dr. Holland allowed the reality of the sleep. Dr. Holland shewed his characteristic wariness and ascribed it to Mr. Chenevix's means, but would not commit himself by saying what means he meant, though he disbelieved in any new agency. However, he has ever since considered the subject uttterly unworthy of his attention, and none of the three has ever condescended to witness any new facts in it, or will hear of it.

Dr. Prout was not positively convinced that the sleep was through Mr. Chenevix's means: confessing at the same time he could conceive nothing else to ascribe it to! Oh, the depths of this philosophy! Sir Benjamin Brodie ascribed the effects to the same principle as when giddiness is produced by rotatory motion, or sleep by rocking. Now, if Sir B. Brodie had not been so positive, but has imitated "Sir Isaac, Boyle, and Lock," in being—

.... "humble, teachable, and mild,
Patient of contradiction as a child,"

and had condescended to witness some of the numerous cases within his reach for the last five years, he would have known that the effects ensue from merely pointing the fingers, *and even if the eyes are closed all the time*, or the passes or pointing made *behind the back of the head*, instead of before the face, *and without the patient's knowledge*; nay, out of the patient's sight, and at a very great distance, when the patient can have no idea that the operator is thinking of the matter. And this, by the way, is an answer to those very ignorant persons who go about lecturing and asserting that the effects are to be ascribed to monotony only, or weariness. So much for Sir B. Brodie's explanation.

Dr. Babington did not call in the aid of the principle of the production of giddiness by rotatory motion, or sleep by rocking, but ascribed all to effect on the mind: to—any thing rather than admit the simple truth. Imagination and will when patients are sent to sleep without the possibility of their knowing that the attempt is making!

Mr. Chenevix's account closes with a document of five pages by Dr. Elliotson, detailing all he witnessed in the several interviews which he had with him. He first saw the two sisters, and says of one, "she remained for a considerable time, as far as I could judge, by carefully watching her features and her breathing, in a sound sleep;" and of the other, "I was as satisfied of her being in a sound sleep *as a bystander could be*," and, on waking, "her eyes and cheeks were red, and her eyes heavy, exactly as is observed in persons really awakening from sleep." However, Dr. Elliotson was too careful to draw any inference from these two cases. Though he watched them very carefully—"*I might be deceived*," he says in his *Human Physiology*, "*and I drew no inference.*" He then took Mr. Chenevix to St. Thomas's Hospital, where he was then physician, and trials were made, too short, however, as it seems to us, generally for not more than ten minutes, on nine patients. One, labouring under severe hysteria, had a fit instantly, induced probably from emotion; and, at a second trial, though she partly closed her eyes, and no doubt went to sleep, a fit took place in ten minutes. Mr. Chenevix gave it as his opinion, with which our experience justifies us in coinciding, that she would certainly have been cured. In six no effect was produced during an attempt of ten minutes; though in one of them the female functions, which had been suspended for three months, returned in ten days afterwards. An epileptic girl of eighteen was then tried. "In ten minutes

her eyes closed, and her head suddenly dropped forwards; but I did not consider her," says Dr. Elliotson, "to be asleep until ten minutes more had elapsed." She then really *seemed* in sound and tranquil sleep. Her hands, when raised, dropped immediately; her eyes were completely closed. The whole frame remained motionless. I placed my face close to hers, for the purpose of seeing if her eyes were quite shut, and she did not move a feature, *neither did the friction of her eyelashes cause contraction in any muscle.*" This would have settled the case with Dr. Marshall Hall. No excito-motory motion, no reflex motion, from touching the eyelashes! Impostor—you were no physiologist! Poor girl, she could not help it. This was years before Dr. Marshall Hall ever thought of excito-motory, reflex function; and so she did not know what she *ought* to have done. "On being wakened by Mr. Chenevix, the redness of her eyes and cheeks, and the heaviness of her look, were completely those of a person wakening out of sleep." On a second day, "in about the same time as yesterday, she looked asleep; her hands when raised, dropped as before; and Mr. Chenevix signified that he thought her to be asleep," and addressed her. She at once answered, and declared she had been asleep on neither day, though at both times she felt drowsy. It is probable that she was asleep the second time, but instantly awoke, as many do, when spoken to, and there is no doubt she was sound asleep the first time, for it is common for mesmerised persons, and indeed others, who have been fast asleep, not to believe they have. Dr. Elliotson gives in his *Physiology* a notable instance that occurred to Mr. Gibbon Wakefield, who is as hard headed and little credulous a man as exists, and whose conversion we will first stop to relate, upon unquestionable authority. He had been repeatedly requested by Sir William Molesworth to accompany him to University College Hospital, and witness the wonderful phenomena, of the Okeys especially, which had convinced Sir Wm. of the truth of mesmerism; and after visiting the establishment several times to see which, Sir Wm. presented it with thirty guineas. Mr. Wakefield always excused himself, because he said he had always heard a high character of Dr. Elliotson, and did not wish to have his favourable impressions removed by seeing that gentleman make a fool of himself. However, at last Mr. Wakefield went and was astonished, but could not make up his mind to believe what he saw, though the things were astounding, and he could conceive no possibility of explaining than by believing them to be feigned. When the experiments were over, and he was passing through some part of the hospital to leave it, he

accidentally noticed one of the sisters with her back to him, hanging over the balusters carelessly, and looking down, still in the mesmeric delirium, and therefore highly susceptible. He thought this a most favourable opportunity to test her, because he was satisfied that she could not see any thing that he did. He made a pass behind her back at some distance with his hand directed to her; and she instantly was fixed and rigid, and perfectly senseless. He had sense enough to believe his senses; was satisfied now of the reality of all he had beheld; satisfied of the truth of mesmerism; and has since mesmerised many hundred persons, and spread the truth widely. Well—he one day offered to try upon a gentleman who laughed at the thing, and the gentleman was soon in a profound sleep. As he thought it very likely that when the gentleman awoke he would deny he had been asleep, being determined not to believe, he blackened the man's face with burnt cork and put his wife's cap upon him; and placed a looking-glass before him, purposing to convince him by causing him to find himself thus circumstanced when he awoke. The wife, however, now feared that he might be so frightened that he would have a fit, and therefore the cap was taken off and his face washed, and he was then awakened by transverse passes. The gentleman knew nothing that had taken place; but stoutly denied, and does probably to this moment, that he had been asleep! The patient at St. Thomas's Hospital, therefore, of whom we were speaking, probably had really been asleep, though she did not know it. However, some striking effects now resulted. "Mr. Chenevix then mesmerised her arm, with the intention, as he said, of paralysing it. She said it pained her. After a few transverse passes, she said the pain was gone. The same effects were produced, and by the same means, on her head. He then placed a piece of paper, weighing perhaps from one to two grains, on one of her arms, and desired her to raise them both. She felt some difficulty in raising that on which he had put the paper." But, says Dr. Elliotson, in his Physiology, p. 680, "I remained unconvinced." So far was he from readily becoming a convert. What he had seen, however, interested him: and he felt that the matter deserved enquiry.

The next case he saw exhibited unquestionable facts which he could not explain on any known principle. The patient was an ignorant Irish girl, taken by chance from the hospital list of patients he had in his hand, and unprepared to expect any thing.

"She exhibited no apprehension of any kind, but was talking very cheerfully to me. Mr. C., without saying one word to her, began his mani-

pulations, at the distance of half a foot, but did not touch her. In about one minute she said, in a plaintive voce, "Sir, don't do that;" and seemed in great distress. She afterwards told us that Mr. C. drew weakness into her, and made her feel faint. She complained of pain in the abdomen. Mr. C. moved his hands transversely before it, and she said the pain was gone. (She had felt a slight pain there before we saw her.) She then complained of great uneasiness in her chest; and after some transverse movements, made by Mr. C. with the intention of removing it, she declared it was gone. The pain in the abdomen returned and ceased, as before, by the manipulations of Mr. C. Mr. C. then darted his open hand towards one arm, without touching it, and told her to raise both arms. She scarcely could move that which he had thus mesmerised. He then made some transverse passes before it: she at once moved it, and declared the stiffness and uneasiness to be gone. The same was repeated with the other arm, and with the same effect. He told her to lift her feet: she did so with perfect ease. He then darted his hand toward one leg, and she stared with astonishment at finding that she could not stir it without the greatest difficulty. He then made some transverse passes, when she instantly raised it, and said there was neither pain nor stiffness in it. He then closed her eyes, and put a very small piece of paper, weighing perhaps one grain, on her foot, in such manner that it was utterly impossible she could perceive it: she could scarcely move that foot. The paper was removed in the same manner, and without her knowing it: she could instantly raise her foot. She now complained of pain about the heart: Mr. C. demesmerised her, and she said it was gone. In all these experiments, Mr. C. had most clearly announced to me, in French, what his intentions were; and the effects coincided so accurately with those intentions that I confess I was astonished. Deception was impossible. Mr. C. looked round at me, and asked, in French, if I was satisfied. I really felt ashamed to say no, and yet I could scarcly credit my senses enough to say yes. I remained silent. He then asked me, still in a language unintelligible to the patient, 'Shall I bring back a pain or disable a limb for you once more?' I, of course, requested that he would do so. He complied instantly, giving her a pain in the chest once, and disabling her several times from moving her limbs, and removing those effects at pleasure, according to the intentions which he announced to me; the whole taking place exactly as it had done in every former trial on this woman. As, however, she began to feel faint and uncomfortable, Mr. C. judged it prudent to desist; assuring me that such experiments as these should never be repeated but with moderation, and only by experienced mesmerisers.

"On questioning this woman a few days after Mr. C. had produced such decided effects upon her, respecting what had occurred, she declared that he had disabled first one limb, then another, and restored their use, exactly as appeared to be the case; that she never had felt any thing like it in her life before; that, though she had not slept during the operation, she had felt very drowsy; that she had not been at all afraid; but, said she, 'I hope never to see that doctor again, as I am sure he has something to do with the devil.'"

"From this time," says Dr. Elliotson, "I was satisfied that such a power as mesmerism exists, and hoped some day to enquire into it. I had no opportunity, however, before the arrival of the Baron Dupotet in this country a few months back." This was written in that part of his Physiology which appeared in 1837.

Of all the persons who witnessed the experiments of Mr. Chenevix in London, he was the only one who turned them to account. On the others whose names are enumerated, Lord Lansdowne, Drs. Babington, senior and junior, Hargrave, Holland, Milligan, Prout, Whymper, Wilmot, Wright, Messrs. Bagnold, Brodie, Earle, North, Riadore,

But we trust to prove our former assertion, that to Mr. Chenevix is owing the establishment of mesmerism in this country. Of all that he did here we have put our readers in possession. He immediately returned to Paris. "All his ambition," he says, "was to excite curiosity; to break the ice of public incredulity, to turn the attention of a few of my eminent countrymen to a subject of which so many distinguished foreigners have long admitted the truth."

He was employing himself in the preparation of a work, in which the results of experiments and observations upon 442 persons were to be detailed,—results obtained by laborious investigation, "six, eight, and sometimes ten hours a day," "during ten months;" when an acute disease terminated his existence. Whether the work had proceeded far enough to make the publication of what was prepared advisable we know not,—but we do earnestly suggest that the MS. should be placed in the hands of some able English mesmerist for examination. It cannot but be of the highest value and importance.

Fourteen years have elapsed since he announced the work in the *London Medical and Physical Journal*, and nothing has been heard of it. The journal in which he published the papers which we have now made known to our readers, has long ceased to be continued, though it ran through thirty-four years. Of course it will never be reprinted; and will soon be found only in the libraries of medical bodies; and to the world will ever be unknown. Indeed it is unknown abroad, and is now pretty well forgotten here. The labours of Mr. Chenevix would have been entirely lost, and mesmerism would for a long while have dropped in this country, but for the impression made upon Dr. Elliotson by the case of the Irish girl operated upon in St. Thomas's hospital.

No fruit of his efforts to convert the English appeared up to 1836. He had died in 1830: not one man among those, to whom he had been at the pains so disinterestedly to exhibit facts, had evinced any recollection of his efforts. He was a man of independent fortune, a thorough gentleman, highly intelligent, literary, and scientific, and his courage in announcing the truth of mesmerism here, his disinterested and untiring efforts to convince persons and establish knowledge in the room of entire ignorance and prejudice, cannot be highly enough praised. The reward he obtained from the Royal Society was the following insult to his memory in the annual oration delivered by the President, the weak but worthy Mr. Davies Gilbert, Nov. 18, 1830.

"Mr. Chenevix was undoubtedly a man of considerable ability, acquire-

ment, and industry. We have from him seven different communications to the *Philosophical Transactions:* an Analysis of the Arsenities of Copper,—Observations on Dr. James's Powders, with a Method of preparing a similar substance in the Humid Way,—Observations and Experiments upon Oxygenated and hyperoxygenated muriatic acid,—an Analysis of Corundum,—Observations on the Chemical Nature of the Humours of the Eye,—Inquiries concerning the Nature of a Metallic Substance under the title of Palladium,—on the action of Platinum and Mercury on each other.

In the latter years of his life, which could not have reached three score, he appears to have abandoned chemistry, and to have fallen on *speculations* (phrenology and mesmerism) *wholly unworthy of being noticed in this place!"*

In 1837 a Frenchman named Dupotet, and styled Baron Dupotet, who had long practised mesmerism, came over to London to propagate it and gain money. He had an introduction to the Middlesex Hospital and was allowed to make experiments upon several patients. He produced decided effects; but Mr. Mayo, and all those to whom he was introduced, disregarded them more and more, and at last left him to make the experiments by himself; and the poor man was in despair, when Dr. Wilson advised him to go to Dr. Elliotson, who, he added, would look into the subject and soon see if there was anything in it. M. Dupotet followed this advice, was well received by Dr. Elliotson, who said he was glad of the opportunity of investigating a subject, of the truth of which Mr. Chenevix had convinced him eight years before, and which he had ever since hoped one day to enquire into for the purpose of ascertaining the amount of its truth. He daily mesmerised several patients and produced marked results, that is, mesmeric coma and involuntary movements. Among the rest was Elizabeth Okey, in the hospital for epilepsy, and whose sister had been also in the hospital for the same disease. After several trials she was sent to sleep, but the sleep was for weeks of only a brief duration, she being roused again almost as soon as she lost herself; and the appearance she thought so ridiculous that she was always unwilling to undergo the process. Gradually the sleep lengthened, and at last ecstatic delirium occurred, and, after he had ceased to visit the hospital, all those wonderful phenomena which so many witnessed, of which all the world has heard, and of which Dr. Elliotson has engaged to furnish this work with a full account, as well as an ample answer to the ignorant persecutors and slanderers of her and her sister. In the autumn Dr. Elliotson left London for his annual tour, which he found always absolutely necessary for his health, and left M. Dupotet to mesmerise three or four patients, whose treatment he had begun. That person, however, with great weakness and want of propriety, gave out that all poor people who wished to be mesmerised might apply to him

at the hospital and would be attended to by him there. The committee were obliged to put a stop to this, and Dr. Elliotson on his return highly approved of the step and disapproved of the liberty taken by M. Dupotet. Dr. Elliotson, having returned, now took the care of his mesmeric patients into his own hands, and M. Dupotet commenced daily demonstrations of mesmerism at half-a-crown a head at a house which he hired in Orchard-street, Portman-square. His rooms were always crowded, and he exhibited several genuine and remarkable cases; and he made very many converts, who still talk of the wonders they beheld. At last, notwithstanding his ample receipts, he got into difficulties, though we believe through no fault of his own, but the mismanagement of some and the bad conduct of others; and after vain attempts to borrow money, left London, and is now at Paris. Having been afforded every facility at the hospital by Dr. Elliotson, to whom entirely he owed his success, for before he saw that gentleman he was about to leave England in despair; having been shewn every kindness by him, except that of lending money, which he ought not to have required and which could have been of use but for a moment, he employed himself as soon as he returned home again in writing a very shallow book, containing no information, but silly abuse of Dr. Elliotson for having been so grand as to make his annual tour for fresh air and health, while M. Dupotet was showing mesmeric facts, although by so doing Dr. E. placed M. Dupotet in a situation for which he could not have hoped,—that of treating a certain number of patients in one of our public hospitals. On the cause of his anger,—the refusal of pecuniary loans,—he is silent. In truth, he was an innocent sort of man, very weak and of little information, and he knew no more of mesmerism than the most superficial facts. He however did good to the cause for a time, and then could do no more, and would have been detrimental had he stayed. All things serve a purpose for a certain time only, and are then destined to waste away as useless.

Dr. Elliotson and his clinical clerk, Mr. Wood, regularly mesmerised certain patients. Some excellent cures were effected, and such striking phenomena produced that the students regularly attended; then students from other schools; then they all requested to bring their friends, so that for convenience he was obliged to mesmerise no longer in the wards but in the theatre, just as the surgeons perform their operations not in the wards but in the theatre. Requests were poured in upon him from all classes of medical men and from others to be permitted to witness the cases; the highest

nobility and even royalty attended. This of course excited the jealousy of his colleagues. The school, which was at a low ebb when he condescended to join it on account of the wise and liberal plan of the institution, (and no other man of his station would have joined it,) had thriven more and more every year, and his classes continued to thrive during that time. But his colleagues determined he should not occupy, what he never once thought of, a more conspicuous place in the public view than themselves; the truth and benefits of mesmerism they cared not one straw for. They would not witness his facts, —they boasted of this, began every sort of petty, disgraceful annoyance, and at last, without any previous communication or hint, while effecting easy and satisfactory cures, he received an abrupt order from the council that his patients were no longer to be treated mesmerically,—a council of persons neither medical nor at all conversant with literature or any science, except two or three of their number. *The very moment* he received this insult, worthy of the most ignorant, miserable, bigotted, and despotic only, he sent his resignation, and has never since entered either college or hospital.*

* We extract the following account from Dr. Elliotson's farewell Letter to his class:—

"My enquiries were soon attended with such results that a large number of medical men, most distinguished noblemen, nay royalty itself, members of the House of Commons, some of the first men of science in the country, Professors of Oxford, Cambridge, King's College, and Edinburgh, the Presidents of the Royal and Linnæan Societies, and teachers of the various hospitals, flocked to witness my facts. Some of these gentlemen made handsome donations to the hospital in consequence, and others expressed their intention to do the same, but have declined in consequence of my resignation. This soon excited envy, and this excited a commotion; and the late Dean advised me to desist. He urged that, whether the wonderful facts were true or not, and whether great benefit in the treatment of diseases would result or not, we ought to consider the interests of the school;—not of science and humanity, observe—but of the school: that, if the public did not regard the matter as true and the benefits as real, we ought not to persevere and risk the loss of public favour to the school; that I was rich, and could afford to lose my practice for what I believed the truth, but that others were not;—in short, his argument was "*rem—rem;*" and "*virtus post nummos.*" I replied that the institution was established for the dissemination and discovery of truth; that all other considerations were secondary to this; that, if the public were ignorant, we should enlighten them; that we should lead the public, and not the public us; and that the sole question was, whether the matter were a truth or not. I laughed at the idea of injury to the pecuniary interests of the school.

"The commotion increased. My demonstrations were debated upon at meetings of the faculty, and discussions went on between members of the council, and professors, an exquisite secretary, and other more humble holders of office. At one meeting of the medical faculty, a professor boasted that he had seen none of my experiments and should have considered himself disgraced if he had; that animal magnetism had been proved above forty years ago to be a perfect humbug and imposture; and that it was now in as bad repute with the public as Christianity had been at its first promulgation.

Mr. Wakley, thinking to distinguish himself and sail gallantly with the stream, fulminated forth what he called

Another professor boasted that he had seen none of the facts, and, though invited by my clinical clerk to observe them while visiting his own patients in the ward, that he had declined the invitation. One professor declared that he never could procure a vacant bed because I detained my patients so long in order to mesmerise them: and another reported that patients would not apply for admission, lest they should be mesmerised, and that others left the hospital to avoid mesmeric treatment. But, when I enquired of the officer whom I understood to have furnished these absurdities, he assured me that he was blameless, and made the general scape-goat of the place; and he entreated me to accept his denial without an enquiry which would embroil him with the professors. Not conceiving that any thing but reputation could accrue to the hospital from the demonstration of physiological and pathological facts to crowds of the first men in the country, among whom were characters totally opposed in politics to the place and who otherwise never would have entered it,—I persevered. The president of the college—Lord Brougham and five other members of the council did not refuse to attend the demonstrations; nor did the professors of the faculty of arts; nor Dr. Grant, Dr. Lindley, nor Mr. Graham. But, with the exception of these three last gentlemen, whose conduct throughout has commanded my respect, I never saw any of the medical faculty: if any ever were present, it could have been only to reconnoitre unobserved by me. The Irish, the Welsh, and four of the six Scotch medical professors, held meeting after meeting of the faculty or of the hospital committee, which my disgust prevented me from attending. At these meetings I know that the most bitter feelings against me were manifested, and matters discussed which were perfectly irrelevant, but the introduction of which showed the hostility of certain parties. I have always acted in the most honourable and correct manner; and dare any examination of my conduct.

"Dr. Lindley and Mr. Cooper confessed to me that they could not imagine that my demonstrations would hurt the hospital; and Dr. Lindley, in his own noble and honest manner, declared that he thought the facts which he had witnessed were very curious and deserved investigation. The feeling, however, for what reason they could not tell, was so strong, that they conceived my best course was to give up the demonstrations. Mr. Cooper suggested, as indeed Dr. Davis had done, that I should show the patients in my own house, or some house in the neighbourhood. One professor recommended a public-house. But I declined to exhibit hospital-patients to a number of persons anywhere but in the hospital. For the sake of peace, therefore, I consented never to show the phenomena again in the theatre of the hospital, unless my colleagues approved of the list of those to whom I wished to demonstrate them: and both gentlemen agreed that this ought to content the party. It, however, did not content them. They still refused to come and examine into the phenomena; and, when I sent to the medical committee a list of many of the highest names in and out of the profession, who had applied for permission to witness my facts, they absolutely refused to read it.

"Entreated on all sides to exhibit the phenomena, I requested of the council permission to demonstrate them in one of the theatres of the college, when this was not in use. But I was refused. One of the council, whose goodness and liberality render him an ornament to the Jewish nation and to England, moved the reconsideration of the refusal or made a motion for permission, but in vain. I hear that he entreated the council to witness the phenomena and judge for themselves as he had done, but in vain. Yes, the majority of the council, perfectly ignorant of the subject, refused to go to learn anything of it before they passed judgment upon it; and among these were legislators, barristers, and one physician. Yet this same council gave permission for the exhibition of a calculating boy to the public, at so much a head, and tickets were purchased by any one, as for a concert."

experiments on a subject of which he is as ignorant as of Latin, French, or mathematics; and from his effrontery at once frightened the medical profession, and those, who firmly believed, now imitated Peter and denied their convictions. Nothing daunted, however, from the time of his resignation to the present, Dr. Elliotson has shewn the phenomena at his own house very frequently to those who requested the favour, and has made many hundreds of converts, who in their turn have converted others.

Another Frenchman named La Fontaine, came over two years ago, like Dupotet, on a pecuniary speculation. He also shewed some genuine and striking cases. He lectured in the provinces, and the sister countries; but at last found the affair unsuccessful. He appeared a less educated man than Dupotet, and his knowledge of mesmerism was as limited. He did great good, however; and more ostensible good than Dupotet, because he came at a period when the conviction of the truth had become much more diffused, and persons were more disposed to attend to the subject.

The converts have gone on steadily increasing; the converted experimenting for themselves and converting others, till, during the last twelvemonth, the conviction has spread far and wide, and people need no more be afraid of being laughed at for expressing their belief. Numbers of persons originally converted at University College Hospital and in Dr. Elliotson's house, but afraid to express their mind, have now taken courage, and talk of the convincing wonders they long ago saw, and speak of the absurdity of doubting the truth of the cases of the Okeys. Those who were terrified by Mr. Wakley's firing and ran away, have now stopped to take breath, looked back, and found that he had no shot, produced merely noise and smoke, and that the giant himself was an unwieldy, feeble, short-breathed, puffing mortal, only able to throw his arms about menacingly and make ugly noises, so that little boys need not be at all afraid of him and may laugh at him. It will soon be considered ridiculous for a man to declare he believes mesmerism to be nonsense. The honest among the most noisy opponents will become Sauls of Tarsus and be the most strenuous proselytes; each of this class will confess his sorrow, as Mr. Chenevix did, that this—

"Presumptuous ignorance had shut in his own face the door of a science more directly interesting to man than all that chemistry and astronomy can teach. "Nine-tenths," he continues, "who may read will laugh at this as I did, in 1797, at my friend in Rotterdam. Let them do so; but while they laugh, let them learn, and not, thirty years afterwards, have to lament that so short a remnant of life is left to them to enjoy this new and valuable secret of nature."—

The uncandid will be silent, and then at last begin to allow there is something in it, and pretend that they always allowed as much, but did not think it right to be precipitate, and only objected to the nonsense of the matter.

So at last it will be spoken and written of as a matter of course, lectured upon as a matter of course, and employed as a matter of course; and all the folly, ignorance, injustice, and vulgarity that have been exhibited must be most charitably forgotten; only that copies of the *Lancet*, its heavy offspring the *Provincial Medical Journal*, the *Dublin Medical Journal*, *Dr. Johnson's Journal*, and *Dr. Forbes's*, will still be accessible on the shelves of public medical libraries, and we, "before we forget them," must from time to time present our readers with a tit-bit of an extract, sometimes from one of them and sometimes from another, to show the world how wild and vulgar doctors can be among themselves, and how closely their conduct resembles that of the most uneducated, who wonder at what they never saw before, and refuse to believe their senses because they wonder, forgetting that what they do believe is all equally wonderful, but not thought so because they are accustomed to it.

"Wonderful," says Mr. Chenevix, "indeed, it may appear; but what makes anything wonderful to us, if not our ignorance. In my recollection, they have wondered at hydrogen and oxygen; at a dead frog jumping between two slips of metal; at gas lights and steam boats; and now they wonder at all who wonders at these familiar things. They would pity the wretch who would not instantly believe that a stone falls, and a balloon rises, by the same impulse: or that the taste which his tongue receives when placed between a piece of silver and a piece of zinc, has the same origin as the thunder which strikes his soul with awe. Every thing in creation is wonderful, or nothing is so, but the last known truth always appears the most miraculous to unreflecting minds." "Since the world began men have been wondering at every thing till habit *tamed* their minds upon it."

We ask not the aid of those medical journalists. On the contrary we entreat them to continue in their present course of absurdity, for their "fantastic tricks," like those of "angry apes before high heaven," will amuse us in our leisure moments, and enable us to amuse our readers as well as ourselves, by *playing with them*, and teasing them, and showing the world what comical creatures they are when well worried. The facts of mesmerism which we possess are now profusely abundant and extensively scattered without the assistance of professors, examiners, colleges, halls, medical journalists, or fashionable practitioners. It must go on conquering and to conquer—for MESMERISM IS ESTABLISHED.

S. I. L. E.

VII. *The Lecture Mania.—The Medical Profession.—Mr. Spencer Hall.*

We have been engaged in the collection of facts and in the careful observation of the phenomena developed by the mesmeric excitation of cerebration. At a future period we shall enter more fully upon this interesting subject; but we do not feel ourselves at present in a position to advance any opinion, except this, that we protest in the strongest language against the unphilosophical manner in which the question has been handled by injudicious partisans;—men, some of them evidently sincere in their motives, but rash and careless in the extreme when promulgating their opinions and their presumed facts.

In the public press we are continually perusing the reports of lectures, and we are astonished at the unwarrantable assertions made, at the dictatorial manner in which presumed facts are advanced, and the effrontery with which conclusions are ventured, regarding the phenomena produced in this the first stage of the inquiry into a new science. We question much whether the great cause of truth is advanced by performing experiments in public—experiments, in our opinion, much more suited for the quiet retirement of the philosopher's study than the bustle and turmoil of a public lecture room. How numerous the failures at these lectures! How vexatious the opposition at the termination of many of these hazardous displays! We know nothing about the power we have at our command except from the effects we produce, and since no two cases are precisely alike, and each case assumes a distinctive character modified by the particular organism influenced, and most probably by the peculiarities of the organism producing the influence, surely some caution is necessary, ere we venture to perform experiments as proof of the discovery of a great truth, calculated to produce important changes in medicine and in morals.

What can be more suicidal than the following exploit? A lecturer after entering into a lengthened detail of the phenomena manifested during the trance, offered (having neglected to provide himself with a patient) to mesmerise any individual from amongst the audience. Several presented themselves. By this rash procedure this gentleman appeared to forget that this would be considered an *experimentum crucis* —that from the success or failure the truth of his statements would be judged, and that if he failed, perhaps not two of his audience would attribute it to the right cause; an indiscreet,

premature and ill-timed attempt to overcome it *may be* an impossibility. Such has lately occurred. Two hours were occupied in fruitless endeavours to produce the trance, the audience became irritated, and the experimentalist was obliged to retreat amidst groans and hisses.*

Besides the numerous disturbing causes which prevent the accession of the trance, we believe we have yet to discover what may be called the mesmeric difficulties. This conclusion is forced upon us the more we see and the more we become acquainted with the experience of others. An individual who is generally successful in inducing the trance endeavours to do so in a particular case, but after repeated trials, discovers that no effect is produced. A friend makes the attempt with the same patient and succeeds in a few minutes. The occurrence of even one such case,—but they are innumerable,—should cause us to pause before we indiscriminately take individuals from a crowded assembly to risk the effect of a failure before the unscientific and the prejudiced.

Again, we consider it to be exceedingly indiscreet for individuals who know nothing of their own anatomical structure, or of the laws governing their organism, to experiment in a public lecture room on a subject requiring so much care and attention. Here is a branch of science referring to the most extraordinary phenomena ever developed in man, but, with the exception of a few bright examples, completely and entirely in the hands of those whose previous education by no means entitles them to become expounders of its doctrines. Not that we find fault with any individual for investigating the matter for himself. He has a perfect right to do so; indeed, we hold that he would be culpable if he did not do so. We are acquainted with many individuals not members of the medical profession who have devoted themselves to the most rigid and untiring investigations; but these are the men who

* "Mr. Brookes having imprudently offered to operate on persons who might be utter strangers to him, only stipulating that the operatees should have large heads and black eyes, the company, consisting principally of females, looked anxiously around for some possessing the desired qualifications. Two young women, large-headed and black-eyed, and strangers to Mr. Brookes, were at length selected, and successively subjected to the manipulations of the lecturer; but alas! all was of no avail. They pertinaciously persisted in keeping awake; and after a couple of hours ineffectually spent in the grimaces and manipulations of the operator, the perfect indifference of the patients, and the entertainment of some of the audience, the disgust of others, and the wearying of not a few, the lecturer was compelled to submit to an unqualified failure, and to leave the stage amidst the hootings and laughter of the company, who were not sparing in denunciations of the pretended science of mesmerism as arrant humbug."—*West Kent Guardian, Feb.* 11, 1843.

do not intrude themselves before the public, these are the real promoters of science. What we contend for is the manifestation of a little modesty and caution; a greater love for science and the promulgation of truth, than for the accumulation of shillings, the worship of Mammom, and the admiration of the multitude; a disinclination to promulgate theories, and considerable hesitation before announcing facts; but above all, a cessation of public lectures, and the speedy investment of the remedial application of the science in the hands of those whose education, calling, and public responsibility, evidently points them out as the party to wield this new power.

The science of Cerebral Physiology for a long time suffered, and indeed is still suffering, from the same injudicious interference. Individuals imagined because they could comprehend the leading principles of this science that they were justified in delivering lectures and offering to develop character. And at the present time, because men have witnessed the method pursued to produce the trance, *and know that they in common with all the rest of the race* have the power to produce it, immediately commence an expedition for the purpose of gratifying their active acquisitiveness, but with very little regard for the progress of truth or the advancement of science.

We consider the medical profession responsible for this state. They have conducted themselves more like the ignorant and illiterate than the members of a profession having for its object the study of human nature and the alleviation of the miseries of suffering humanity. Who ought to know better than medical men the lamentable ignorance which pervades all classes of physiologists regarding the laws governing vital phenomena, and the little power they have, even with their most powerful appliances, to check the progress of disease, to remove pain, or to render evident the secret workings of the most simple function? We blush for the members of the medical profession; we feel ourselves debased and lowered by the mere recital of their sins of omission and commission, and we regret that Great Britain should have been made the theatre for the display of such moral degeneration, the development of so many passions and such misdirected exertions. Really the conduct of some of the *"leading members" (?)* has been disgraceful. One, Dr. James Johnson, said at a meeting of the Medico-Chirurgical Society, that a particular case was a case of gross imposition, and that if he had witnessed the phenomena *"he would not believe the*

evidence of his own senses!!" Such conduct is worse than the course pursued by the Ptolemists when Galileo discovered the four moons of Jupiter. "I will never," said one, "give in to the four moons of this Italian from Padua; I will rather die for it." He would not look through the telescope to see whether they existed or not; but Dr. Johnson's conduct is characterised by far greater imbecility, for he declares if he were to see the mesmeric phenomena, he would not believe the evidence of his own senses!

Medical men in the most obstinate manner have refused all investigation. They have used their power, and most extensive this is, with all practitioners, to endeavour to destroy the reputation of those individuals who have considered it their duty to avow their belief in the truth of the mesmeric phenomena. But a change is in progress. How are the mighty fallen! or rather, how are the ignorant and prejudiced enlightened! Lately, at a public lecture in our own neighbourhood, we understand these gentlemen assembled in a strong body, surrounded the patient brought forward for exhibition, and seemed perfectly satisfied of the reality of the phenomena produced, and thus before a large audience tacitly gave in their adherence to the truth of that which they had been for two or three years rabidly denouncing! Some expressed their astonishment; some, if we may judge from the appearance of their features, were like the London physician, apparently doubting the evidence of their own senses; while others far bolder, exclaimed, "O! we always said there was something in it, and we have refused to give an opinion till the subject was completely investigated." Innocent imbeciles! These of all men we pity. These are the pickers-up of the crumbs their bolder brethren let fall; men who are guided by the opinions of their neighbours and never think for themselves, who stand aloof and ultimately locate themselves just where the popular breath may waft them. They conduct themselves just as cows in a field towards a recently erected rubbing post. "First, they are suspicious and alarmed and stare at a distance, by degrees they approach and make their awkward attacks, and lastly they quietly put it to its use."

From some of our preceding observations it will be seen that we do not approve of the statements contained in the Phreno-Magnet. The editor is evidently a gentlemen by no means qualified to enquire into this intricate question, and we suspect that he will be the cause of considerable mischief and will retard the progress of the science. He has published, and avowed his belief in, the extraordinary doctrines and

assertions which have lately been advanced in America; but he has eclipsed the Yankees and out-Heroded Herod. Here is a specimen of modest philosophical induction :—

"Every day some new and glorious revelation is made to those who are drawn by this principle, this clue through the windings of nature; and it was little more than a fortnight ago that we discovered a most important class of mechanical faculties, as to the existence of which heretofore we had never received the slightest hint. Thus we are not only able to prove the existence in the eye-brow of those organs previously known to phrenologists, as well as those discovered by us last year, but a great number of others, all equally characteristic and conclusive in their manifestations. Besides a numerous cluster of observant and other organs about the root of the nose, we find in the eye-brows special faculties not only for walking, riding, swimming, driving, sailing, rowing, climbing, descending, aërostation, evolution, convolution, extension, and contraction, for pulling, pushing, lifting, dropping, various modes of gyration, leverage, &c., and in the region of the outer angle of the eye-brow which has hitherto been appropriated to Order, besides one for velocity, and another for retrogressive motion, we find shooting, spearing, crouching, springing, striking (or smiting, as with a battle-axe), slinging, and other belligerent faculties, all of which have been attributed by phrenologists to the combined and modified impulses and actions of the comparatively few organs marked on the common busts and charts; and in the manifestation of these functions, the various attitudes assumed by the patients under operation, might be studied with advantage by the sculptor and painter, or the scholar who would become perfect in the exhibition of his physical powers."

Verily! Mr. Hall, we *do* expect wonders from you, but *we do* not expect "in time to gather such a mass of information on the various phenomena of human life as will render our work acceptable to every lover of unsophisticated truth, and to phrenologists in particular, by leading to a more ample and accurate cerebral classification."

We say, save us from such unadulterated truth. From all we have heard of Mr. Hall, and if we may judge from the style of his lectures, we believe him to be a gentleman influenced by good motives; but not having enjoyed the advantage of a scientific education, he is evidently inclined to follow the promptings of an imaginative brain, rather than the calm, persevering, philosophical course essential to the cultivation of inductive science and so successfully pursued by the great founder of Cerebral Physiology.

We entreat Mr. Hall to pause. Let him repeat his experiments again and again, not upon one or two patients, but upon dozens. Let him mark upon a few busts the localities of his presumed organs without any name attached, and forward them to friends in distant parts of the country. Let him ask them to forward to him the result of their experiments, and *we* will wait with patience his candid report.

In the name of science we plead for a little respect, and demand investigation conducted with some appearance of philosophical spirit.

E. U. G. E.

NOTICES.

We have received from Dr. ELLIOTSON an account of an astonishing Cure of violent and singular periodical Insanity by Mesmerism, rejected by the *Lancet* five years ago: and of the Cure of Master Salmon of Epilepsy by Mesmerism. But they arrived too late for insertion. We shall publish them, and a group of cases of St. Vitus's Dance remarkably cured by Mesmerism, in our next number.

We had prepared reviews of *Teste* and *Townshend on Mesmerism*, and of the *American Phrenological Journal*, but have no room.

In our next, we shall give Practical Instructions for Mesmerising.

We acknowledge the present of Mr. EDWIN LEE's "*Animal Magnetism.*"

☞ *All communications must be addressed to the Publisher in London.*