DARLINGISM,

MISNAMED ELECTRO-BIOLOGY:

AN ADDRESS

TO THE MEMBERS OF THE MEDICO-CHIRURGICAL SOCIETY
OF GLASGOW,

DELIVERED OCTOBER 14TH, 1851.

BY

ANDREW BUCHANAN, M.D.

PROFESSOR OF PHYSIOLOGY IN THE UNIVERSITY OF GLASGOW.

Moved by James Wilson, Esq. M.D., and seconded by Prof. Laurie, M.D.

"That the Medico-Chirurgical Society of Glasgow deem it to be their duty to "endeavour to put down a system founded on Delusion, and fraught with Immorality;

"and thinking this Address well fitted to promote that important end, RESOLVE that

"the same be published at the expense of the Society."

CARRIED UNANIMOUSLY.

JAMES WATSON, M.D. President.

LONDON:

PUBLISHED BY JOHN J. GRIFFIN AND COMPANY,
53 BAKER-STREET, PORTMAN SQUARE;
AND RICHARD GRIFFIN & CO. GLASGOW.
MDCCCLI.



2

.

THE PRESIDENT,

VICE-PRESIDENTS, COUNSELLORS, AND OTHER OFFICE-BEARERS, AND TO THE MEMBERS OF THE MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.

GENTLEMEN,

Allow me to thank you for the honour you have done me in permitting this Address to be made public with your sand under the protec-To a medical man there can be no tion of your name. higher and more legitimate gratification than to find the opinions he may have formed on any professional subject confirmed and approved of by the only competent judges of them—those who have prosecuted the same studies, and are engaged in the same pursuits. It was to me, therefore, a signal satisfaction to find, that at an unprecedentedly numerous meeting of a Society which cannot but be regarded as a full and fair representation of the Medical Profession in Glasgow, not a single voice was raised on behalf of the delusions of Mesmerism, while each successive speaker denounced the Immorality which it fosters, and indignantly repudiated the Empiricism of which it has been made the cloak. The unanimity of your sentiments upon this subject sufficiently explains

to me how Mesmerism has never made the slightest progress among the educated and intelligent part of the public of Glasgow.

Professor Gregory has said of you reproachfully, but most truly, that "not one medical man of any note" in Glasgow has become a Mesmerist. May you long continue to merit that reproach, and to maintain over the minds of your fellow-citizens that control which your intelligence and moral worth entitle you to exercise.

I have the honour to be,

GENTLEMEN,

Yours most respectfully,

ANDREW BUCHANAN.

13 MOORE PLACE, October 24, 1851.

ON DARLINGISM.

MISNAMED ELECTRO-BIOLOGY.

GENTLEMEN,

In the summer of 1850 Dr. Darling was introduced to me by a respected Colleague, with the request that I would examine his experiments and peculiar doctrines, and give a candid opinion respecting This I readily promised to do, not merely in compliance with the wish of my Colleague, but because the subject appeared to me an important one, and to fall within my special province as a teacher of physio-I accordingly attended two of Dr. logical science. Darling's public Lectures, and three private meetings for the purposes of experiment and discussion, and I was myself twice experimented on by him. From these and other sources of information, and being already familiar with the processes of ordinary Mesmerism, I was enabled to form an opinion of the new system. That opinion I deemed it a part of my duty to communicate to my students in a Lecture delivered at the University last winter. I did this, not merely for their instruction in Physiology, but from a higher motive, which now prompts me to bring the subject upon a more public arena, and before judges more competent to decide upon it. I am persuaded that the cause of sound Morality is deeply involved in the opinion which the public forms

upon this subject, and the practices thence resulting. Now, there is no mode of influencing public opinion upon a subject of this kind so effectual as through the medium of the members of the medical profession. them must at all times belong the important duty of supplying information, and directing the public mind upon all physiological subjects; and they may rest assured, that whatever opinions they as a body may form and promulgate upon such subjects will ultimately be the opinions of the intelligent part of the public, and, of course, of the masses who, having no opinion of their own, merely exhibit in their actions a reflection of that It is, therefore, not merely as a highly interesting medical inquiry that I am now to urge upon your consideration the subject of this Address, but also as imposing upon you the responsible duty of leading the public mind, and protecting the interests of Morality.

I hope, therefore, to meet with indulgence while I offer a few suggestions to my medical brethren upon this new Mesmeric system. In doing so, I shall first classify and describe the phenomena which I witnessed at the experimental exhibitions of Dr. Darling: and I shall thereafter, with much deference, suggest what appears to me to be the true explanation of them. To complete the subject, it would be necessary also, did your time permit, to examine the operative processes employed by Dr. Darling: but as these do not in any essential respect differ from the processes of many other Mesmerists, this inquiry becomes a general one into the ascertained physiological effects resulting from the processes and manipulations of Mesmerism. In this second part of our subject we descend from causes to their ascertained effects, while in the first we ascend from effects to their But it must not be supposed that these are

merely two different methods of developing the same subject: for while the inquiry first indicated belongs almost exclusively to the domain of the psychologist and the moralist, the second is a purely physiological inquiry. The former, too, ought to have the precedence, being necessary, as it were, to clear the ground, that the merely physiological part of the subject, freed from all extrinsic considerations, may be more readily understood.

I merely premise, that I give to Dr. Darling the title under which he was introduced to me, although I am not aware which of the Transatlantic Universities has the credit of having bestowed upon him "the highest honours in Medicine": and that I give the name of Darlingism to the peculiar modification of Mesmerism embraced by him and his followers,—as I believe it to differ from ordinary Mesmerism in the foundation on which it rests, and the much wider range of application The names of Mesmerism and of which it admits. Darlingism, derived from the authors of these respective systems, appear to me much superior to those of Animal Magnetism and Electro-Biology, which imply an analogy between them and the branches of physical science which we name Magnetism and Electricity, of which no satisfactory evidence has yet been produced.

I. PHENOMENA.

At the public and private exhibitions by Dr. Darling at which I was present, all persons were submitted to experiment who came forward for the purpose. A metallic disc about an inch in diameter, and said to be composed of zinc and copper, was put into the left hand, on which the person experimented on was made to stare intently from a quarter to half an hour. On myself no effect was thus produced, except a little giddiness and

drowsiness, the latter probably from vacuity of mind, and an uneasy feeling of stiffness about the eyes from interruption of the motion of the eyelids. The operator enjoined upon the whole audience a solemn silence during this preparatory process, at the end of which he went round the persons under experiment, making certain passes over the face of each, and directing him in a whisper to keep his eyes shut; and soon after he asked them severally, in the same low tone, whether they could open the eyes. The great majority of them at once opened their eyes, and were declared insusceptible. any one persisted that he was unable to open his eyes, the operator directed more particular attention to him, and after making certain additional passes, declared that the eyes could now be opened, which accordingly After making himself quite sure that all happened. this took place according to his wish, the operator brought the susceptible subject forward and repeated the experiment before the audience, making him declare in an audible voice at the end of it, that he was unable to open his eyes till permitted. In this way Dr. Darling effectually protected himself against all imposition from mere feigned assent on the part of those experimented on; for if they afterwards attempted to gainsay their own public declarations, he proved them to have spoken falsely before many witnesses—a mode of self-defence, of which I was informed that while in Glasgow he had occasion to make use.

The operator having now obtained one or more Susceptibles, as I shall hereafter name them for the sake of brevity, proceeded to assert his control over their minds and bodies by the following experiments: which I divide into four classes, according as the organs chiefly affected by them are—the voluntary muscles, the organs

of sense, the brain and general nervous system, or the organs of involuntary motion.

Control over the Muscles, and Voluntary Motions.

The control over the muscular system was shown, first, by preventing certain muscles from acting; and, second, by preventing certain muscles from ceasing to act till permission was given by the operator; and in some experiments both sets of phenomena were exhibited.

1st. To the first head belongs the experiment already mentioned, of making the Susceptible keep his eyes shut till permitted to open them; and conversely he was made to stare with his eyes wide open, till permitted to He was made to place his hands on the close them. crown of his head, or to extend them in any other position such that the two hands might be in contact, when they were made to cohere so firmly, that they could not be separated by the utmost muscular efforts made, till permission was given, when the hands were separated at once. The Susceptible was made to assume the sitting posture, and could not get up. He was made to stand rigidly upright, and could not stoop down, although tempted by a sum of money laid on the ground before him, and promised to him if he could reach it, which he vainly strove to do. One exception to this result occurred, when I was present, in the case of a little boy, who suddenly overcame the apparent rigidity of his muscles, and pounced down upon a one-pound note.

2d. As an illustration of the second mode of controlling the muscles, I may mention, that the hands were made to revolve rapidly round each other, and this motion could not be desisted from till the permission of the operator was given.

Control over the Organs of Sense, and Sensations.

The control of the operator over the organs of sense and the sensations was shown in three ways: first, by exciting sensations by the mere word of command, without the presence of any apparent exciting cause; second, by making the ordinary exciting causes produce sensations quite different from those usually produced; and, third, by depriving certain parts of the body of their sensibility, so that the ordinary exciting causes produced no effect.

1st. In the first way, I saw four well-grown lads affected from the mere words of the operator, one with a pain in the hip, another with a pain in the knee, the third with a pain in the ancle, and the fourth with a pain in the shoulder. They applied their hands to the pained parts, and exhibited the appropriate contortions of face and person, as they limped in a row across the stage, to the great amusement of the by-standers. The indications of pain which they exhibited varied from those of a transient pang to those of overpowering agony, according to the words of the experimenter.

In the same way, I saw a young man, declared by the experimenter to be cold, and he immediately began to shiver. The sensation of cold increased till he complained loudly of it, but the only comfort he received was expressed in the words, "You will be colder still, sir; you will fall down from cold:" and, accordingly, with the most pitiful plaints, and a gradual contraction and stiffening of his limbs as if benumbed with cold, the young man at length fell motionless upon his side.

The fabled power of witches and magicians over the victims whom they tormented, was never represented as more terrible and irresistible than the power of the

experimenter over his subjects appeared to be in these last experiments.

Allied to the last experiment was that of making a body, held in the hand, feel so hot that it was tossed from one hand to the other, like a red-hot ember, and finally dropped; and that of making the seat on which the Susceptibles were seated, become so hot, that they sprung up, holding and rubbing their hinder quarters as if they had been burned, with appropriate grimaces and exclamations. How merciful to these poor creatures it was in the operator not to conjoin this last experiment with that already mentioned, in which he glued them to their seats!

2d. The second mode of controlling the sensations was exhibited by making water taste like milk, wine, whisky, vinegar, or any other liquid which the operator chose to name—the Susceptible, after tasting the water, declaring it to be those liquids respectively.

3d. Last of all, the operator could deprive the skin and subjacent textures of any part of the body of their sensibility so completely, that no effect was produced by pinching, pricking, or striking the part; and the eye was declared to be insensible to a candle held right before it.

Control over the Brain, and Intellectual Faculties.

The Susceptibles, being told they were in California, imagined themselves to be there; and immediately commenced filling their pockets with gold, picking, digging, and riddling, each according to the ideas he had formed of Californian operations. Being told they were in a flower-garden, they busied themselves making up nosegays, which they smelt to the obvious gratification of their olfactory nerves; or if it was the time of fruit, they pulled apples and pears from the walls, and ate them

with all the signs of satisfaction. Being told they had taken too much wine, they immediately reeled, talked nonsense, shouted, and exhibited other marks of intoxication.

Control over the Involuntary Muscles.

It was affirmed by some, that Dr. Darling could control the frequency of the pulse, produce at will the evacuation of the bowels, and render the iris insensible to the influence of light; but I saw no evidence of his possessing any such powers, and he himself spoke to me very hesitatingly with respect to them.

II. CAUSES.

I have thus described the phenomena exhibited by Dr. Darling, his disciples, and coadjutors, as I myself observed them; for in only one or two instances have I trusted to any other evidence. I now proceed to the more difficult task of suggesting an explanation of these phenomena.

But here I am met at the threshold by certain very wise men, who say, "O! give us the facts; that is for us quite enough: we care nothing for your explanations." In so saying, they appear to me not to evince much of the spirit of that philosophy of facts, which they affect to profess and to hold in reverence. To seek for an explanation of any phenomenon, is not to penetrate into its recondite essence, but merely to observe it in a systematic way,—to compare it with other phenomena better understood—to observe how it varies with varying circumstances, and more especially in the least complicated circumstances in which we can observe it, and thus to deduce the laws which regulate its occurrence. Had Sir Isaac Newton been satisfied with accumulating proofs of the fact that apples

fall to the ground, without proceeding to examine falling bodies in special circumstances, as by experimenting on the swinging of the pendulum, he never could have deduced the general laws according to which all bodies gravitate towards each other.

"Is there no imposition in all this?" is the question which every one who witnesses a mesmeric exhibition naturally wishes to ask, and to have answered. Putting the question in a more tangible form, it may be expressed thus: "Are the manipulations and words employed by Dr. Darling and other experimenters, necessarily connected with the signal changes which immediately thereafter take place in the minds and bodies of those experimented on, so that the former of these events can be regarded as the efficient cause of Now, setting aside the obvious effects the latter?" which every one experiences, and reserving a few anomalous cases for consideration hereafter, my conviction is, that no such connection has been established; that the manipulations have, directly, nothing at all to do with the effects which ensue; and that the words of the experimenter merely indicate to the Susceptibles what they are to do, but have no direct share in making them do it. My reasons for this conviction are, first, that the whole phenomena are explicable as resulting from ordinary moral causes; and, second, that they are quite inexplicable according to any known physiological laws, but on the contrary, are in opposition to those laws: which is exactly the twofold division of the argument established at the outset.

I would first remark, that all the bodily and mental states in question, without exception, are of a kind that may be either feigned altogether, or voluntarily assumed. Of the first kind is the existence of pain in any part of the body, which no one can declare but he who actually feels it, and who, it must be admitted, may say he feels it when he feels it not. Of the second kind is the power of calling certain muscles into action, or of restraining their action when once set agoing. None, but he to whom these muscles belong, can declare whether he has or has not the power to make them act, or to restrain their action. The whole of the phenomena, then, of both classes, rest on the testimony of the persons experimented on, as the evidence by which their validity is established; and, except in a single instance to be particularly adverted to hereafter, there is no other evidence by which their validity can be established.

There is also this important peculiarity in the evidence from testimony, that each experimental result is attested only by a single witness; and cannot, from the nature of the case, be attested by more than one: for the consciousness of each individual belongs to himself alone. However numerous, therefore, the witnesses may be, the testimony of no two among them relates to the same event, but to separate and independent events, each of which is attested only by one witness.

Seeing, then, that the whole doctrine rests upon testimony, and, except in a single instance, upon testimony alone, and that there never can be more than one witness to each supposed result, it is necessary to look well to the witnesses by whose testimony the results are established. What, then, is the character of these witnesses? The great majority of them are women and children. The reason of this, it will be said, is, that the nervous system in women and children is more mobile and impressible than in adult males. With the explanation I have at present nothing to do, but only with the fact.

If, indeed, we include under this head all males under the age of puberty, we shall have at least nine-tenths of the whole witnesses, that is, of the whole Susceptibles in any community. But there were adults of the male sex who were found susceptible; what was their char-I answer by an illustration which I myself I saw twelve gentlemen and twelve apprenwitnessed. tice lads ascend the stage together, to be operated upon. In giving them these names, I judged altogether from their dress and appearance, as the operator seemed also to do when he placed them in two ranges opposite to each other. Now, while he did not in any one instance succeed with the gentlemen, he succeeded completely with every one of the twelve apprentice lads, although he was obviously very anxious to succeed with the former, and gave to them almost solely his attention and How, I would ask, are we to manipulative efforts. explain this extraordinary difference of results, if it was not due to a difference of character and moral feelings in the two classes of persons experimented on, corresponding to the difference in their education, age, and position Last of all, I believe it to be conformable in society. to observation, that the most susceptible persons of both sexes are those of weak intellect, and those who have weak nerves, or some actual disease of the nervous system.

Such, then, is the character of the witnesses. It is upon the testimony of persons of immature age and unformed character, or in a state of mental imbecility, of the weakest of the weaker sex, and of the weakest and least respectable of our own, that we are asked to believe in things unheard of in any former age, and which, if true, would disturb the established relations of man to man, and shake civil society to its centre. It

would require evidence of a somewhat different character to make any physiologist believe it possible that any one man can so completely subjugate the mind and bodily organization of another, as to make him will as he wills, think, speak, and act, solely as he directs, deprive his nerves of their sensibility by a word, and inflict upon him at pleasure, and for any length of time, the most excruciating torments.

But, it will be asked, if Dr. Darling and his coadjutors had no power to subjugate the minds and bodies of those on whom they operated, how did it happen, for unquestionably it did happen, that so many individuals of both sexes and of all ages appeared subject to them, and yielded to them an implicit obedience? The question is certainly a most difficult one, but it may, I think, be resolved according to the acknowledged principles of human nature, and the lessons of experience.

Whenever a general belief prevails in the existence of some mysterious and invisible power capable of affecting the condition of the human body or mind, independent of all effects produced by the invisible power itself, supposing it to be real, the belief in its existence, whether it be real or imaginary, produces certain very remarkable effects both on body and mind, which exhibit a great degree of uniformity, and are as widely diffused as the belief in which they origin-These effects are of two perfectly distinct kinds, according as the intellectual or the moral part of our human nature is first implicated, and becomes the prime mover in the series of changes which ensue. the former kind, where the intellect is first implicated, there is invariably a genuine belief in the existence and potency of the mysterious influence supposed to predominate, and that intellectual conviction reacting on the

moral nature and bodily organization, excites fear, enthusiasm, and imitation, with their bodily concomi-In cases of the second kind, again, the belief in the existence or power of the mysterious influence, is always to a certain extent feigned, and in so far the phenomena exhibited, bodily and mental, are under the control of volition, and originate in a deficiency of moral principle; but to the credit of human nature, it is to be remarked, that it is very rare indeed, unless it be in the case of hired impostors, that we witness the disgusting spectacle of this second element operating alone, for it is almost invariably combined with more or less of the former element, so that the basis of the whole superstructure is a half-convinced and bewildered under-I shall, for the sake of illustration, adduce a few instances in which these two principles, or impulses, as perhaps I should rather name them, operate sometimes separately, but much more commonly variously combined.

Of the former principle operating altogether alone, or without the latter, seasons of epidemic pestilence afford striking examples, as the present generation have twice witnessed during the visitations of malignant Cholera. Men saw friends and relatives snatched from before their eyes, whom but a few hours, or even one hour before, they might have seen in apparently perfect The number of deaths reported daily, and the health. suddenness of most of them, left no doubt in the mind of any one, of the existence of some invisible and mysterious influence inimical to human life. mattered not what idea was entertained of that influence -whether it was thought to be a miasmatic poison emanating from the soil, a contagion arising from the bodies of the sick, a disturbed state of the Imponderables, or simply the hand of an avenging Deity.

Whatever it was, all felt that it was a power unquestionably real, and against which the strongest constitution afforded no protection. This appalling conviction overpowered the minds of many, and reacted violently on their bodily frames. Every physician was sent for to see patients, supposed to be ill of the epidemic, but who laboured only under the effects of fear; which prostrated the mind, enfeebled the muscles, rendered the pulse rapid and weak, and the extremities cold, and not unfrequently also brought on diarrhœa; thus producing a severe bodily ailment, and rendering much care often necessary to distinguish the true effects of the epidemic poison from those of the terror which it inspired.

The superstitious notions—whether resting on a real or on an imaginary foundation—which prevail in times of ignorance, afford examples of the effects of a genuine conviction becoming gradually blended with the spurious manifestations of a feigned belief. Such is the superstitious belief in ghosts, demons, and other supernatural influences.

The persuasion that the dead can revisit us, has been known to produce upon the body the most formidable effects, and even to extinguish life. It is a notion which is seldom feigned, and which is without doubt eminently congenial to the human mind; since even persons fully convinced of its vanity, and not deficient in firmness of character, when placed in circumstances fitted to awaken it, cannot banish it from their minds, or reason down its influence over their bodies.

The belief in the power of demons to enter into and take possession of the frame, if less deeply implanted in human nature than the former, and often feigned from various motives, is nevertheless capable, when fully accredited, of reacting powerfully upon the mind and bodily organization. During the dark ages, when the

belief in evil spirits taking up their abode in the bodies of men was universal, it gave rise to epidemic affections of the muscular system—convulsions and frantic gesticulations, the genuine offspring of the appalling idea that an evil spirit had gained possession of the frame. But such affections were always seen alongside of cases of a totally different kind, in which the muscular movements were more or less entirely voluntary, the manifestations of a feigned belief in the supernatural agency. Hecker's well-known history of the "Dancing Mania" shows the extent to which this delusion prevailed: but it does not enable us to estimate how much was the genuine effect of the mental delusion, and how much was spurious, in the extravagancies of those who danced at the festival of St. John, or were exorcised at the shrine of St. Vitus.

If the supernatural agency, instead of being the work of devils, is supposed to be divine, it is easy to perceive what motives will prompt many to make it be thought that they are the subjects of this divine influence, and to magnify and display ostentatiously its effects upon them. But amid the crowd of insincere votaries—of those, for instance, who celebrated the orgies of Bacchus or the mysteries of Isis—it is conformable to the principles above laid down to suppose that there were a few whose minds and bodies were in reality overpowered with devotional fervour, the offspring of their genuine belief in a present and inspiring Deity. The author above cited ably depicts the symptoms, mental and bodily, arising from religious enthusiasm.

In the preceding examples, the phenomena resulting from any widely prevalent impressions on the human mind are exhibited under a twofold character—as originating in a genuine belief, or in a feigned belief. In the examples first adduced, the former element operates alone; in those which follow, the latter element becomes more and more predominant; and we now come to the opposite extreme, where the element of genuine belief, in its unmingled form, almost entirely disappears; and in one of the most extraordinary series of phenomena ever witnessed in a civilized age, we trace on all sides the operation of a feigned belief; although, as already stated in extenuation of human weakness, originating in almost every instance, except that of hired impostors, in a more or less excited and bewildered understanding.

In applying these principles to the subject before us, I must, in the first place, show in what respect the influence wielded by Dr. Darling and his coadjutors resembles the purely mental influences just adverted to.

There is a marked difference between ordinary Mesmerism, and the modification of it practised by Dr. In the former all direct mental influence is excluded, and all experiments are carried on according to the strict rules of a physical science, or at least under that guise; the great object of the experiments being to establish the existence of a physical principle which produces certain effects upon the person experimented on, independently of all communication through his mind, the mere suspicion of which would at once destroy all faith in the experiments. In Dr. Darling's system, again, "mind acting upon mind," is the fundamental principle of every experiment. He publicly professed himself, in my hearing, unable to produce any effect without first communicating to the Susceptible what he was about to do. The adoption of this principle is the master-stroke of Dr. Darling's system. By adopting it, he at once freed himself from the inconvenient restraint of the laws of physical investigation, and rendered his experiments successful in every mind in which ignorance, credulity, vanity, or deceitfulness had a place. Hence the wide popularity of his system.

While the adepts in the ancient Mesmerism had the utmost difficulty, even in a large city, in finding one or two susceptible subjects, Dr. Darling finds scores of them in every crowd which assembles to witness his miracles.

But if Dr. Darling's influence be altogether mental, what is the use of the manipulations which he employs? That they are of no direct use is obvious, for he often operated without them; indeed, with all tried subjects, that is, with those who had already publicly exhibited themselves as his dupes, and could not, without discredit, draw back, he dispensed altogether with the farce of employing them. But they are, nevertheless, indirectly of the highest use, by engendering the mental delusion which is the foundation of his power with the uninitiated. During the quarter or half hour's solemn silence enjoined upon the whole audience, while those under trial stared intently on their metallic discs, a belief came to prevail, that from these discs, or from the person of the operator himself, there emanated some mysterious and irresistible power. What idea was formed of that power may be thought of little consequence; but it has been described to me as having been felt streaming down the limbs just like the current from a galvanic trough—an idea most probably arising from the internal sensations perceived in the muscles of the limb, on the mind being directed intently towards it, and which the imagination could easily fashion into But, in whatever way originating, I believe the idea generally formed of the power in question to be what most Mesmerists profess themselves to entertain, and which their manipulations and modes of speaking are obviously intended to suggest, that it resembles more or less that wonderful power which has been long known to pervade all nature, and to give its terrors to the thunderbolt; and which in our

own day has annihilated the elements of time and space in our written communications, and so given the speed of lightning to human thought: whence the minds of men are fully prepared to receive fresh discoveries without distrust, and almost to deem nothing too arduous to be achieved by it.

To some such belief, recommended to each by his own peculiar modes of thinking, the weak-minded, the timid, and the ignorant, partly from conviction, and partly through fear, confusion of mind, or mere love of the marvellous, yielded an unreserved assent; while it cannot be doubted, after the analogies above cited, that a much larger number feigned a belief of the same kind, which they employed as a cloak to gratify vanity, love of display, and similar feelings. They were not slow to perceive that these darling passions might be indulged in with impunity, since they saw others indulge in them to the uttermost without exciting either derision or indignation, but, on the contrary, calling forth universal applause, and being hailed as something marvellous and superhuman.

To those who know human nature, it will not, I believe, appear at all surprising, that if a pleasure be held out which can be indulged in not only with impunity but with applause, very many persons should so indulge themselves without analysing very nicely, or indeed caring much about the conditions implied by the indulgence.

It remains only therefore to show, that the gratification held out and sought after, is an adequate one. Now who will say that is not an object of ambition with many to be thought made of finer mould than their fellow-creatures,—to have more delicate nerves, and a nice susceptibility of impressions, not perceived by grosser natures? Who will say that there are none

who care to exhibit on a platform, to be the great object of attraction to a large audience or to a drawing-room circle, and to become the leading topic of conversation thereafter? Such indeed is the thirst for notoriety in the human mind, that every physician has met with cases in which even diseases, that is, bodily or mental infirmities, have been feigned for no other discoverable motive than the notoriety thereby attained. Of this, let the following be an example:—

In the year 1827-8, a rumour reached Glasgow of a young woman near Kilpatrick being affected with a black sweat, which dyed her whole body of a black colour. This affection, from its singularity, naturally excited much attention and speculation in medical circles, and had even become a topic of general conversation and interest in the surrounding country. Learned men found notices of similar diseases in the records of Physic, and the Greek name of Melanhydrosis was bestowed upon it, under which it might probably have had a place assigned to it in all succeeding systems of Nosology, but for the sequel of this history.

On the 28th of Jan. 1828, four medical gentlemen of this city, the late Dr. Young, the late Dr. Auchincloss, Dr. M'Farlane, and the narrator set out for the purpose of seeing with their own eyes this extraordinary case. Having previously communicated with the medical attendant, they met him at Kilpatrick, and accompanied him pretty high up the Kilpatrick hills, where, in a picture quely situated cottage, they were introduced to the patient. They found that, contrary to what usually happens, rumour had greatly under-estimated the blackness of the case: for not only was the woman's skin as black as that of a blackamoor from head to foot, but the urine and stools, which the surgeon had with a praise-worthy zeal ordered to be preserved for inspection,

were as black as ink. But what astonished them most of all was that a plate of blood, which had been drawn the day before for the relief of the patient, was as black as the excretions, the serum being like ink, and the coagulum of a dusky hue.

So far every thing corresponded to or exceeded the accounts which had been received, and the new disease seemed likely to turn out a case of universal Melanosis; for not only were the excretions black, but the purple tide from which they all proceed had the same black A case more complete in all its symptoms could Still, however, the visitors were not well be conceived. not satisfied; for we are proverbially a race of sceptics. So the public says of us, reproachfully; but we understand the matter better. Accustomed every day of our lives to be deceived and imposed upon, we at first arm ourselves with incredulity in self-defence; till at length it becomes with us a habit founded on the conviction, that in Medicine so far as it rests upon testimony, all true knowledge is the offspring of philosophic doubt.

It was found that the skin could be freed of its black colour by means of soap and water, and a large portion of the woman's back having been so purified, it was resolved to watch the progress of the black exudation: the visitors keeping guard over her by turns, while the rest gathered zeolites in that famed locality, or otherwise amused themselves. For some hours no change could be discovered; but at length, when the late Dr. Young was on guard, he saw the woman get up upon her hands and knees, and move about under the blankets in a way that excited his suspicion. He accordingly darted forward, and seizing the woman's hand, discovered in it a ball of dyer's blue.

The woman acknowledged the imposition, for which

no motive could be discovered but the gratification of a morbid thirst for notoriety.

There is still another form of delusion of mind, which produces many converts to Mesmerism in all its modifications; but I have purposely separated it from the rest, as it is too sacred and respectable to be mixed up with aught that can move laughter, or excite the graver feelings of contempt and indignation. To understand this delusion, we must enter the chamber not of feigned, but of real sickness, and suppose—what happens every day—that a protracted and perhaps painful disease has baffled the skill of the physician, and exhausted all the resources of his art. In such circumstances, there is nothing more natural than for the patient and his friends to try another and another physician; and if they all concur in speaking doubtfully of the result, or declare the disease to be incurable, still, it is in human nature to cling to hope; and thus, occasionally, the door is thrown open to the numerous tribe of deceivers who prey upon afflicted humanity, and among the rest, ready at the summons, comes the arch-deceiver Mesmerism. It would exceed belief, were I to tell, that there are educated men who intrust the health and lives of themselves and those dear to them to some "clear-seeing girl," who either visits them or merely corresponds with them, and whom they in perfect seriousness believe to have the power of seeing into the interior of their bodies, and telling both what disease they labour under and what should be done to remove The fact, however, is, that this is done in the middle of the nineteenth century in this country, and done by educated men; for it is only in educated circles that this form of madness has hitherto shown itself. Now, it is very easy to form an abstract opinion of these and other similar delusions, the brood of Empiricism;

but it is a very different thing indeed, as all who have tried it will attest, to express that opinion in the hearing of the patient. When we try to do so for the first time, we find, to our surprise, that our hearts and our heads are at open variance; and we are constrained to acknowledge how truly pardonable those delusions must be, which our tongues would refuse their office were we to attempt to condemn. I know that I address those who have been placed in the painful predicament of being compelled to disguise matured opinions, or even to mumble out a few words of dubious commendation as to some proposed remedy or mode of treatment, rather than do what humanity recoils from—dash the cup of hope from the hands of a dying man.

To conclude my analysis of Darlingism. Some of my medical friends are disposed to adopt the view, that it may depend on a weak and disordered state of the nervous system, such as we observe in somnambulists and monomaniaes. Now, that organic alterations of the brain and nerves, and functional diseases of the nervous system from whatever cause proceeding, do actually play a most important part in producing the phenomena under consideration, I have no doubt; but I apprehend them to do this simply on the two principles above laid down, either by rendering the intellect weak and easily perplexed and stupified, or by blunting and perverting the moral feelings. But the advocates of this theory urge farther, that in certain unusual conditions of the nervous system, most commonly the result of disease, there is a susceptibility of impressions which are either not perceived at all, or are perceived quite differently by nerves organized more rudely, although more according to the healthy standard; and that in this way the gifted individuals whose nerves are so constituted, experience feelings, and become endowed with energies

both of mind and body, which cannot be judged of according to the laws which govern the nervous system Now, this is obviously a purely in ordinary men. physiological doctrine, which will be more appropriately discussed hereafter. I therefore in the meantime merely remark, that out of the total number of Susceptibles, there are not many who are known to labour under diseases of the nervous system, or who exhibit any cognizable indications of having nerves more finely organized than those of other men and women, but that for their benefit, I shall in the meantime admit the explanation proposed above. I do this, because I am anxious to leave open as many doors as possible through which an escape may be made without discredit by those who may have been foolish enough, through a misplaced love of applause or mere imitation, to exhibit themselves as Susceptibles, without duly considering how much their character as men of sense and probity might suffer thereby.

Taking then into consideration the different explanations proposed above, I think we shall not greatly err in estimating, that of one thousand Susceptibles, or persons affected under the new mesmeric system, ten, or one in a hundred, were complete impostors—a proportion much less than at the exhibitions under the old mesmeric system, where there was commonly only one Susceptible: and that one either hired and carried about by the operator; or a "wonderful girl" from some of the neighbouring factories, supported by the ingenious persons who had discovered her gifts. A much larger number, two hundred at least, must be regarded as having spoken and acted in direct opposition to their feelings and conviction; but of them a more lenient judgment will be formed, when we consider, that most of them were boys or very young persons, who looked upon the whole

exhibition in no other light than as an amusing game, in which they were privileged to join along with their seniors, and some of whom were, I believe, influenced by an amiable desire to please their parents, guardians, or teachers, who operated personally, or were at least known to the quick-sighted urchins as having a leaning towards Mesmerism. By far the larger number, estimated at seven hundred and forty, were more deceived than deceiving; they imagined that the operator had filled their bodies with animal magnetism, or some other mysterious power which they could not resist, and before they were well aware, they had committed themselves to such an extent, that to retreat was more difficult than to advance; in so far, therefore, we can impute to them nothing more than a mere error of judgment, or a want of self-possession, with consequent obfuscation or suspension of their mental faculties: but it would be carrying charity too far to say the same of those who, instead of continuing in the stolid state throughout, regained the possession of their mental faculties so completely, as to indulge in wit and repartee, see an adored object conjured up by the operator, kiss it and bow to it, sing songs, deliver speeches, and, in short, cut a decided figure upon the platform. I insist particularly upon the fundamental importance of this distinction, between those who continue in the stolid state throughout, and those who emerge from the stolid into the "lucid" state; although I am unable to assign numerically the proportions which they bear to each other and to the whole. Last of all, fifty, or five per cent., a proportion probably too high, but intentionally taken in excess, may be considered as labouring under disease of the nervous system, or as having more delicate and impressible nerves than other men. The result is therefore as follows:—

Want of Moral Principle,	10
Weakness of Moral Principle,	200
Weakness of Intellect, alone,	
Weakness of Intellect, combined with Moral Weakness,	
Weakness of Nervous System,	50
Total Susceptibles,1	.000

I never witness a mesmeric exhibition without much pain, as I look upon it as a lamentable picture of human weakness. I am very far from thinking that in the preceding analysis I have over-estimated the element to which the moralist will look with most interest. interest will not be merely of a speculative kind, when he considers the number of mesmeric exhibitions which have taken place during the last eighteen months, and are still taking place in this city, and throughout the whole country. He will then see that he has to deal with a practical question, and with practical duties arising out of it; and if he views that question as I view it, he will not withhold his more powerful influence in aid of my humble attempt to put down, by rendering disreputable, the meetings for mesmeric purposes which are now nightly held in this city and elsewhere, to the great detriment of the morals of the community.

It is needless for me to add, that with a few very narrow limitations, I regard the act of mesmerising as a grave moral offence, seeing that it tends to seduce the minds of the young, the ignorant, the weak, and the vain, from their allegiance to truth.* It is more peculiarly censurable when practised by parents upon their children, by teachers upon their pupils, by masters upon

^{*} Although morality is one and immutable like the truth on which it rests, yet it must be admitted, so long as fallible mortals hold opinions diametrically opposed, that they may follow opposite courses of action without blame. It is scarcely necessary, therefore, for me to say, that I am far from imputing moral delinquency to all those who practise Mesmerism.

their dependants; and, generally, by persons of superior attainments, character, rank, or position in society, who exercise a powerful sway over the minds of those beneath them. It is most of all censurable when practised by medical men, whose fancied acquirements, associated as they are in the minds of the vulgar with death and dissection, have always been regarded by them with a superstitious awe, which assists powerfully in propagating the mesmeric delusion. I myself never mesmerised any one, and would on no account attempt to do it; but I feel confident, that if I were to proclaim myself a Mesmerist to-morrow, I should get at least a few foolish people to enact all manner of absurdities, under the pretext that I made them do it.

While I decline personally all interference with persons in the mesmeric state, I shall conclude by suggesting an experiment which will satisfactorily refute the whole doctrine, and for which the only qualifications necessary on the part of the experimenter are, that he have a muscular arm, and a thorough disbelief in Mes-The experiment touches the system at the only point where it is accessible to experimental investigation. I have already pointed out that it is a peculiarity of Dr. Darling's system, that of all the conditions of body and mind which he holds himself out as capable of producing, there is only one which admits of having its existence established by any other evidence than the mere assertion of the person mesmerised. That exception becomes, therefore, most important both to the Mesmerists and their opponents, as affording the most trustworthy evidence either for or against the system. If a man affirm that he has a pain in his head, there is no mode of directly testing the truth of his assertion. If he affirm that he cannot move his arm, so long as he commands his muscles to be quiescent, no one can impeach his veracity. But if he affirm that his hand, or any other part of his body is destitute of sensibility, that assertion can be tested by unequivocal means. Now the experiment may be conveniently made upon the back of any young lad under sixteen years of age, which answers well, as young persons of that age are the most numerous of all mesmeric subjects, and are agreed by adepts to be Suppose then the young susceptible to be the best. duly mesmerised. Let him first be made to feel very hot, and then showing him a cool and refreshing stream, let it be suggested that he should go in to bathe, when he will proceed to denude himself of his upper garments. The process of denudation is to be arrested when he is naked as far down as the middle, or the operator may employ any other artifice or means he chooses to bring The preliminary arrangehim into the same condition. ments being made, the young Susceptible is to have his feet mesmerised and so made fast to the floor, his mouth and organs of articulation are to be mesmerised so that he cannot cry out, and his hands are to be fastened mesmerically above his head, exactly as if he were tied up to the halberts; last of all, his back is to be most carefully mesmerised, so as to deprive it of all sensibility from the nape of the neck to the lowermost dorsal vertebra, and across the shoulders to the insertion of the deltoid muscles on either side. These preparations might seem ominous of evil to the young Susceptible, were he not fully convinced that he can feel no pain, and the same conviction will induce every believing parent or guardian to resign his son or ward to the experimental test. The result of the experiment will, however, show that there are no less than four deviations from the "straightforward path" of the "first of virtues" in this common mesmeric exhibition. It will show that the young Susceptible can draw down his hands, and that

right quickly; that though his feet be fastened to the floor, he can scamper off to the furthest corner of the room; that though his tongue be mute, he can cry out for mercy; and that though his back be insensible to pain, he will not wait long to have its sensibility tested. The only instrument required in this experiment is a hazel sapling, not more than four lines in diameter at the thickest part, but tough and flexible. Twenty-four stripes should be bargained for, but descending as they will do from an arm uplifted and nerved by a spirit of the most obstinate unbelief, they will be administered with such right good will that the twenty-fourth or twelfth part of the whole number will be all that is necessary.

Should this experiment not succeed in ninety-nine cases out of a hundred, I promise to recant publicly the errors into which I have this night fallen, and to believe in Mesmerism ever after.

Postscript.—The Author having finished his proposed analysis of the new Mesmeric system of "mind acting upon mind," proceeded to give a sketch of the second part of his subject, comprehending an inquiry into the physiological effects of the processes of Mesmerism, and a few remarks on some recent publications on this so-called science: but this sketch being too brief to be at all commensurate with the importance of the subject, is for the present suppressed.