NUMEROUS CASES

OF

SURGICAL OPERATIONS

WITHOUT PAIN

IN

THE MESMERIC STATE;

WITH

REMARKS

UPON THE OPPOSITION OF MANY MEMBERS OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY AND OTHERS

TO THE RECEPTION OF

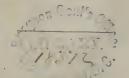
THE INESTIMABLE BLESSINGS OF MESMERISM.

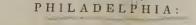
" In the whole domain of human arguments, no art or science rests upon experiments more numerous, more positive, or more easily ascertained."

"To me (and before many years the opinion must be universal) the most extraordinary event in the whole history of human science is, that MESMERISM ever could be doubted." CHENEVIX.

BY

JOHN ELLIOTSON, M.D. CANTAB. F.R.S.





LEA AND BLANCHARD.

1843.

то

THOSE,

HOWEVER HUMBLE THEIR RANK, WHO PRIZE TRUTH ABOVE THE FAVOUR OF THE IGNORANT OR INTERESTED,

AND

FEEL MORE SATISFACTION IN PROMOTING THE COMFORT, THE KNOWLEDGE, THE VIRTUE, AND THEREFORE THE HAPPINESS, OF THEIR FELLOW-MEN, THAN IN PROMOTING WHAT IS COMMONLY CALLED THEIR OWN INTEREST, THESE PAGES

ARE AFFECTIONATELY INSCRIBED.

CHAPTER I.

CASE OF AMPUTATION OF A LEG ABOVE THE KNEE, WITHOUT PAIN, IN THE MESMERIC STATE.

SECTION 1.

DESCRIPTION OF THE CASE.

"I never said it was possible. I only said it was true."-M. G. Lewis.

"Le vrai n'est pas toujours vraisemblable."-Fontenelle.

ON the 22d of November last, the Royal Medical and Chirurgical Society of London assembled to hear read an "Account of a case of successful amputation of the thigh, during the mesmeric state, without the knowledge of the patient," in the District Hospital of Wellow, Nottinghamshire: and voted thanks for it without a dissentient voice.

The mesmeriser was W. Topham, Esq., Barrister, of the Middle Temple: the operator, W. Squire Ward, Esq., Surgeon, of Wellow Hall. The patient was a labourer, six feet high and forty-two years of age, named James Wombell. He had suffered for nearly five years from neglected disease of the left knee, the interior of the joint of which was found after the amputation deeply and extensively ulcerated. "The SLIGHTEST motion of the joint was attended by the MOST EXCRUCIATING agony; his nights were almost wholly sleepless, in consequence of the painful startings of the limb; his pulse was weak and rapid; his face constantly marked with a hectic flush; his tongue foul; appetite gone;" in truth, when Mr. Topham first saw him, on the 9th of September. "He was sitting upright upon a bed in the hospital; the only position which he could bear : he complained of great pain from his knee and of much excitability and loss of strength, from his constant restlessness and deprivation of sleep, for he had not, during the THREE previous weeks slept more than two hours in SEVENTY."

On this day he was first mesmerised by Mr. Topham, and for five and thirty minutes. "The only effect produced was a closing of the eyelids, with that quivering appearance which so commonly results from the process; and, though awake and speaking, he could not raise them until after a lapse of a minute and a half."

On the 10th he was sent to sleep in twenty minutes. On the 11th "he was suffering great agony, and distressed even to tears." Mr. Topham "commenced by making passes longitudinally, over the diseased knee: in five minutes he was comparatively easy; and, on proceeding further to mesmerise him, at the expiration of ten minutes more he was sleeping like an infant. Not only his arms were then violently pinched, but also the diseased leg itself, without his exhibiting any sensation: yet his limb was so sensitive to pain, in his natural state, he could not bear even the LIGHTEST covering to rest upon it. That night he slept SEVEN hours WITHOUT INTERRUPTION."

"After constantly mesmerising him for ten or twelve days, a great change was observed in his appearance. The hue of health returned; he became cheerful; felt much stronger; was easier, both in mind and body; slept well, and recovered his appetite." So great was the change, that Mr. Ward, after having been absent from indisposition, "was as much astonished, on his return on the 27th of September, about three weeks after the commencement of the mesmerism," as he "was delighted to observe the improved condition of the man;" and, had he "not known the previous history of the case, much doubt must have arisen in his mind, as to the propriety of immediately amputating the limb."

"On the 22d of September the patient was first apprised of the necessity of an early amputation. The communication seemed almost unexpected, and affected him considerably, and destroyed his natural sleep that night." The next day he was still "fretting, restless, and in consequent pain." Yet he was put to sleep mesmerically in four minutes and a half.

Like many other susceptible patients, he could now be affected locally when in his natural state,—without coma. For example, passes without contact along his extended extremities would render them so rigid as not to be bent by mechanical force short of danger, though breathing upon them constantly caused them to relax and drop to his sides.

Although in this mesmeric coma the sensibility to mechanical causes of pain was so far lessened that violent pinching, and sudden pricking, and of even the diseased limb, produced no evidence of sensation, and he lost all pain in his knee while this was in perfect rest, the exquisitely sensitive interior of the diseased joint was not proof against the torture of motion, which, however slight, agonized and a woke him. In many cases I have seen excruciating internal pain of nerves, inflamed or otherwise under disease, give evidence of its fierce shootings by the sudden agitation of the frame, expression of the countenance, and catching of the breath, when there was not sensibility enough for sensation from pinching, pricking, cutting, tearing, or even burning; the excruciating internal pain not awaking them unless when at the very highest intensity, or when the coma was not at the greatest depth. When there is exquisite tenderness of a part, as in the kneejoint of this poor man, the coma must indeed be profound,-more profound than it seems ever to have been in this case, except perhaps when the precaution was taken of keeping the fingers on the eyes after the operation was begun,-for motion of the part not to cause anguish. At the time of the operation, the 1st of October, it was found impossible, without such torture as aroused him from his mesmeric coma, to remove him from his bed to the table. Indeed, his coma was not so deep but that it was dissipated by attempting to converse with him; and in general it ceased spontaneously in half an hour, his waking being "slow and gradual and without the least start." Instead of being placed upon a table, he was therefore lifted with his low bed upon a temporary platform, and "he was soon put into the mesmeric sleep, *although he was considerably excited* by hear-ing the cries of another patient upon whom Mr. Ward had been performing a tedious and painful operation." He was then "drawn by means of the bed clothes beneath him towards the end of the bed." Even this movement excited the pain and awoke him. But the pain soon ceased, and, his limb being "raised about two inches from the mattress" by a surgeon present (Mr. Wood), who "rested the heel upon his shoulder and supported the joint with his hand," he was mesmerised into coma again in four minutes.

Mr. Topham continued to mesmerize him for fifteen minutes, and then informed Mr. Ward that the operation might be begun, and "brought two fingers of each hand gently in contact with the patient's closed eyelids; and there kept them, still further to deepen the sleep." This is a circumstance of no little importance to remember. Of all parts of the body, the eyes are the most ready receivers and transmitters of mesmerism. I noticed this first in the cases of the Okeys; and I may remark that all the exquisitely interesting phenomena which occurred in the perfectly genuine and wonderful cases of those two sisters,—I repeat it as emphatically as I can, and hope my words will be read by the uninformed, and presumptuous, and cruel writer of an article in the present number (CXLL) of the Quarterly Review, who exclaims, "how many grave persons were deceived by the impostures of the Miss Okeys of St. Pancras,"—the perfectly genuine and wonderful phenomena of those two sisters, I have verified again and again in numerous other cases, some in one, some in another. The moist mucous membranes are more susceptible than the skin; and of membranes, the surface of the eye and inner surface of the eyelid, to say nothing of the nervous interior of the eye to which there is admission through the pupil to projected mesmeric influence are the most susceptible. Intervening bodies impede mesmerism, and, *cateris paribus*, in proportion to their substance; the eyelids therefore prevent so strong an effect as would result if the mesmerizing body were applied to the eye itself. Still the points of the fingers placed upon the eyelids would have a great effect. The pointed parts of the body, as the ends of the fingers and the point of the nose, I, in the same Okeys and subsequently in others, ascertained to be more powerful in mesmerising as well as in being mesmerised, *cateris paribus*, than other parts. If the fingers had been kept on the eyelids before the patient was moved at all, he probably would have suffered no more while he was moved than during the operation.

The operation was now commenced. "Mr. Ward, after one earnest look at the man," in the words of Mr. Topham, "slowly plunged his knife into the centre of the outside of the thigh, directly to the bone, and then made a clear incision round the bone, to the opposite point on the inside of the thigh. The stillness at this moment was something awful; the *calm* respiration of the sleeping man alone was heard, for all other seemed suspended. In making the second incision, the position of the leg was found more inconvenient than it appeared to be ;" and Mr. Ward, to use his own words, "having made the anterior flap," "was under the necessity of completing the posterior one in three stages. First, by dividing a portion of the flap on the inside; then a similar portion on the outside. This proceeding, which was of course far more tedious and painful than the ordinary one, was necessary to enable me to pass the knife through under the bone and thus complete the whole, as I could not sufficiently depress the handle to do so, without the two lateral cuts." Yet, notwithstanding all this, the patient's "sleep continued as profound as ever. The PLACID look of his countenance never changed for AN INSTANT; his whole frame rested, uncontrolled, in perfect stillness and repose; not a muscle was seen to twitch. To the end of the operation, including the sawing of the bone, securing the arteries, and applying the bandages, occupying a period of upwards of twenty minutes, he lay like a statue."

Soon after the second incision, "a low moaning" was heard at intervals until the conclusion of the operation, that is, after the leg was off and while the arteries were tying and the bandages putting on, giving "to all present the impression of a disturbed dream." That it arose from troubled dreaming I have no doubt; for in the mesmeric coma it is common for patients, after the lapse of a certain time, to dream and talk, and especially of any thing which has just before strongly impressed them; and this patient was very likely, and from my experience I should say, was almost certain, to dream of his having soon to undergo the operation, the thoughts of which had so acutely distressed him and must have occupied his mind to the last moment of his waking state. I have at this moment three patients who in the coma always dream and talk of something which has very recently, generally the same day, interested them, or of something they expect on the same day. Had it arisen from the operation, it would have occurred during the most painful periods; would have occurred, as it did not, exactly and only at moments of the proceeding most likely to be painful, whereas it occurred as much at moments when nothing was doing to give pain. The man could not have moaned from pain in spite of himself at moments when there was nothing to make him moan in spite of himself. It would have been increased, and indeed changed to a sudden and louder noise, whenever the end of the sciatic nerve was roughly treated. For, still farther to test his insensibility, Mr. Ward "twice touched" and, as he informs me, pretty roughly and with the points of the forceps, so that he in fact pricked, "the divided end of the sciatic nerve, without any increase of the low moaning." The pain which such an experiment would occasion to a person in his ordinary state must be equal to a strong dart of tic douloureux; and I defy any human being, in his ordinary condition, to be subjected to such an experiment without, not to say an increase of low moaning if he was already moaning, but without suddenly giving some other more decided sign of anguish, without some interruption to the "perfect stillness and repose of a statue." Mr. Ward further informs me that he "once put his thumb roughly upon the nerve in taking the posterior flap in his hand to sponge, and also used the sponge very roughly." If the man had not been able to bear the pain of the operation without moaning, he would not have been able to retain the *perfect placidity* of his countenance, the *relaxed* and *motionless* state of his *lips* and *hands*, and the undisturbed regularity of his breathing.

The "closed eyelids" quivered to the last, as they so frequently do in the mesmeric coma.

The quivering of the exposed muscular fibres, and the retraction of the divided muscles, were less than usual, probably from the diminution of their irritability by mesmerism.

The mesmeric state of the patient usually lasted half an hour; and after this lapse of time, the operation having been commenced in rather more than a quarter of an hour subsequently to its production, and having occupied, inclusively of applying the bandages, above twenty minutes, he "gradually and calmly," as usual, awoke. Some sal volatile and water had just been given to him, and might have contributed to his waking, because his cona, according to its usual course, was probably near its end, and at this period stimuli which proved inert previously might take more or less effect. This, however, is exceedingly doubtful, as the usual duration of his coma was completed, and as he was not suddenly aroused by the sal volatile, and gave no sign of irritation from it, but, on the contrary, awoke "gradually and calmly." In fact Mr. Wood, who mixed the sal volatile and water, assures me that it was very weak, and is persuaded equally with myself that the man awoke independently of it.

"At first, he uttered no exclamation; and for some moments seemed lost and bewildered,"—a characteristic and striking phenomenon so familiar to mesmerists when any visible change in external circumstances has occurred while the patient was asleep. But, after looking around, he exclaimed, "I bless the Lord to find it's all over."

"He was then removed to another room; and, following immediately," Mr. Topham "asked him in the presence of all assembled to describe all he felt or knew after he was mesmerised. His reply was 'I never knew anything more; and never felt any pain at all: I, once, felt as if I heard a kind of crunching."" Mr. Topham "asked if that were painful? He replied 'No pain at all; I never had any; and knew nothing till I was awakened by that strong stuff" (the sal volatile)." Of course the moment he became sensible he must have tasted the sal volatile, and would fancy that it awoke him, and he must have continued to taste it for some time after he was awake. When mesmeric patients awake spontaneously, they continually ascribe their waking to their first sensation, or even to something imagined.

"The crunching no doubt was the sawing his own thigh bone." It is not uncommon for patients in the mesmeric coma, although insensible to mechanical causes of irritation, yet to hear more or less. As there are in mesmerism various degrees of insensibility to mechanical causes of irritation, from perfect to but slightly impaired sensibility, in different cases; sometimes in the same case at different mesmerisations; and sometimes at different periods of the same mesmerisation; and sometimes one part is insensible and another sensible: so there are various degrees of affection of hearing. In some cases patients hear not the loudest sounds; in others, they hear and answer questions; and it is very common for them to hear well at one moment and appear perfectly deaf at another, as the mesmeric conditions fluctuate in intensity; and the state of sensibility to mechanical causes of irritation and of hearing may bear no relation to each other. It would be wonderful were all this not to happen, since the very same observations hold in similar affections of a functional character independent of mesmerism. I "He was left easy and comfortable; and still found so at nine o'clock that night: about which time" Mr. Topham "again mesmerised him (in a minute and three quarters) and he slept an hour and a half."

Two days afterwards, when he was put into the mesmeric coma, Mr. Topham proposed to Mr. Ward, who intended to dress the wound that day for the first time, to take this opportunity; and the wound was accordingly dressed without the man's knowledge, and therefore without the least pain.

The man has done perfectly well. Within twenty-four hours after the operation he was singing. In three weeks he sat up to dinner, "and had not a single bad symptom: none even of the nervous excitement, so frequently observed in patients who have undergone painful operations, and who have suffered much previous anxiety in making up their minds."

Such was the artless tale; beautifully true to nature in every incident, and at once recognised as pure truth by all who are not ignorant of mesmeric phenomena, or who do not unphilosophically allow unworthy feelings to supplant their judgment.

SECTION II.

DETERMINATION OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON, THAT THIS FACT WAS NOT A FACT.

"Whilst the unlearned were all busied in getting down to the bottom of the well, where TRUTH keeps her *little* court, were the learned in their way as busy in pumping her up through the conduits of dialectic induction;—*they concerned themselves not with* FACTS,— THEY REASONED."

"'Tis above reason, cried the doctors on one side;

"I's below reason, cried the others.

"Tis faith, cried one;

"Tis a fiddlestick, said the others.

'Tis possible, cried one;

'Tis impossible, said the others.''

Sterne.

No sooner was this most interesting and important paper read,-the most interesting in a physiological point of view, and the most important as to the alleviation of suffering, that was ever brought before the society, than up rose Mr. Courson, a surgeon practising in the city, anxious to distinguish himself as the leader of the opposition to mesmerism, and asserted that the paper ought never to have been read, for the only point of interest was the non-expression of pain, and that was a common thing, and he had no doubt the man had been trained to it! While the paper was reading, he had turned round to one of the authors, as to a perfect stranger, without knowing him, as he has confessed to me, and said, "What d-----d stuff this is :" so that his feelings were strong whatever was his judgment. Mr. Coulson has also confessed to me since the discussion, that he has never seen a mesmeric fact and is quite ignorant of mesmerism. What right therefore has he not to believe that insensibility of touch can be induced by it, as those assert who have seen and practised it for years ? Insensibility of all the five senses, or of one or more of them, is a common occurrence of disease. I will adduce, further on, some striking cases, from the Transactions of this very society, of want of the sense of touch only, so that injuries were unfelt. What right then has he, totally ignorant as he is of mesmerism, to assert that the same conditions cannot be induced by the artificial processes of mesmerism?

The only point of interest was the non-expression of pain! It was not worthy

of Mr. Coulson's attention, that the poor man before being mesmerised had not during three weeks slept more than two hours in seventy, but that after having been mesmerised three times, "he slept seven hours without interruption;" that after having been mesmerised about a dozen times a great change was remarkable in his appearance, "the hue of health returned, he became cheerful, felt much stronger, was casier both in mind and body, slept well, and recovered his appetite,"—that he looked "healthy and cheerful, his natural sleep was sound and regular, and his pain soothed and diminished;" that the surgeon, Mr. Ward, after having been absent while Mr. Topham thus mesmerised him, declared "I was as much astonished as I was delighted, to observe the improved condition of the man; he had now much more the hue of health, his nights were more tranquil, his appetite had returned, and in fact such was his state that had I not known the previous history of the case, much doubt must have arisen in my mind as to the propriety of immediately amputating the limb."

All this was beneath Mr. Coulson's consideration. The only point of interest was the non-expression of pain! A friend, formerly a pupil of my own, Mr. Case of Fareham in Hampshire, thinking more rationally than Mr. Coulson of the facts of this case, determined to endeavour to render a woman, two and thirty years of age, insensible to pain previously to the amputation of a thumb, that had for some time been greatly diseased after an accident, resisting all treatment and severely injuring the constitution, which had long previously been in a state of debility and thus occasioned the bad condition of the thumb, that in its turn reflected injury on the constitution. But, after he had mesmerised her daily for ten days, the improvement was so great that amputation appeared unnecessary, and in a short time the thumb was absolutely well, and her health improved so much that she declared she had never been so well and strong. The improvement of the general health,-the strength, the digestion, and the female functions, &c., from mesmerism is generally great, to say nothing of its power over various diseases, medical and surgical. A surgeon in Warwickshire, who was about to amputate a leg severely diseased, as in Mr. Ward's case, and, wishing to prevent pain, had been mesmerising the patient with the effect of such coma and insensibility in three minutes, that the man showed no pain and made no movement when goaded with a pin, when burnt with a hot iron, or when blazing sealingwax was dropped and allowed to burn upon his limb, wrote, in a letter to Mr. Ward,—"as in your case, the man's health is wonderfully improved since mesmerising him."

Then Mr. Coulson believed that the man had disciplined himself to bear pain without expressing his feelings. And what reason had he for all this credulity ? The poor man complained of great pain and could never bear any other than the sitting position for pain; had slept but for two hours in seventy during three weeks for pain; was invariably awakened from his mesmeric sleep by violent pain; could not bear the "lightest covering" on his leg, when not in mesmeric coma, for pain; even shed tears from his intense agony; was greatly affected when the necessity of the operation was announced to him, and, in consequence, could not sleep that night, and the next day was fretting and restless; suffered, the very morning of the operation, such anguish from the slightest movement that it was found impossible, without needless torture, to place him upon a table; and, on being drawn towards the foot of the bed with the bed-clothes under him for the convenience of the operator, such pain was produced that he awoke,--"There was something quite excruciating in the suffering which the state of the knee produced at this moment;" and immedediately before the operation he was considerably excited at hearing the cries of another patient who had just been operated upon in the next room. Truly he was well disciplined to bear pain ! On waking from his mesmeric coma after the operation, he was filled with joy to find his anticipated sufferings were not to come, and exclaimed, not like a man who despised pain and was trained, "I bless the Lord to find it's all over!" Not bearing pain at all better on the day of the operation than when admitted into

the hospital; being, on the contrary, very sensitive of pain, and irritable, he is unhesitatingly pronounced by Mr. Coulson, without a shadow of ground, from mere prejudice, ignorance, and want of penetration, to have been disciplined to bear pain,—to be an impostor, and the barrister and surgeon to have been his dupes or accomplices. Such folly is monstrous.

DR. MOORE, a physician-acconcheur, living in Saville Row, immediately followed, and made no objections, but protested, in a loud voice and rapid manner, that really such a statement ought to have been accompanied by affidavits, and asked if affidavits before the Lord Mayor or some other magistrate had been made. Dr. Moore has the distinction of being the first person who, in a scientific society of gentlemen, required that the detail of philosophical experiments should be supported by affidavit. He had, however, equally forgotten himself last summer at the Phrenological Association, having been for some time in an incessant state of distressing morbid anti-mesmeric irritation, without knowing more of the subject than its unpopular name, and conducting himself precisely in the way in which he complains, as a phrenologist, that the medical profession conduct themselves towards phrenology. When several gentlemen had related most curious experiments in which, during the mesmeric state, individual cerebral organs were at pleasure excited or stupified mesmerically, he exclaimed that it was a very pretty thing indeed for gentlemen to come down and tell us that they had seen this and that. I replied that no experimenters could do more at a public discussion, or in writing, than detail their facts faithfully, and put others in the way of repeating their experiments: and he was at once put to silence for the night.

Thus Dr. Moore made no objections, but called loudly for affidavits and then sat down again. No other notice was taken of this speech than to laugh at it.

The next in eagerness to speak was MR. BLAKE, a young surgeon. He urged that this man shammed, because persons often bear operations without expressing pain: and mentioned that he had seen a tooth extracted from a girl who was not, but pretended to be, in the mesmeric state, in University College Hospital, without ANV sign of pain, although she was strictly observed and even her pulse felt. Now he knew well formerly, for he was present as well as myself, that a friend of his, who counted her pulse during the extraction, declared to us all, truly or not I cannot of course say, that the pulse rose eight beats during the extraction.

Another young surgeon named ALCOCK, followed in the same line of argument; not thinking that the absence of pain ever admitted of evidence, and discrediting the reality of the case because he had often seen persons in an ordinary state bear severe operations without manifesting the slightest pain. Now I do not believe it. No doubt Mr. Alcock thinks he witnessed such self-command; but I do not believe he observed with sufficient minuteness. I, during a period equal to three years, while a student at the two hospitals of St. Thomas and Guy, saw a very large number of operations, as these were both great establishments and close to the river and in a very crowded district, as operations were then far more frequently resorted to than at present, and as Sir Astley Cooper was surgeon to one of them and his glory was to operate, and I do not know that I was absent from a single operation. Yet I never witnessed such a prodigy as apparent total indifference to pain. I recollect a sailor astonishing Sir Astley Cooper by not uttering the faintest sound while his leg was taken off: but the man folded his arms firmly together and his lips were firmly compressed. No one will doubt the high courage of the Marquess of Anglesey. While his leg was amputated he uttered not a sound. A bystander, might have supposed that he felt no pain. But the brother officer, whose hand he held all the time, told a clergyman, a friend of mine, that he never had such a squeeze in his life. Some who have uttered no sound have held their own thigh during an amputation of the leg: but then they could give silent vent to their sufferings by squeezing the limb. Some, when under the surgeon's hand, keep their jaws or lips firmly closed, some sing, whistle, chatter, laugh, or smoke, all the time, and thus find relief. I knew

an old clergyman who had senile gangrene of a toe, to which Sir Astley Cooper frequently applied nitric acid, and he told me that, not liking to cry out and not being able to swear, he always relieved himself in his agony by spouting a sentence of the Philippics, - w avdges 'Abuvalos, &c. Savages, criminals, and martyrs in different causes, have in all ages borne torture bravely, defying pain. But then they have laughed, prayed, sung, talked, or performed some other muscular motion: or, although silent and still, would, I have no doubt, have betrayed to a good observer some sign of suffering or determination in their breathing, lips, closed jaws, or fixed look,-in acting strongly with some part of their body. If a man has held his hand in the fire, he has held it firmly. Dr. Barnes, of Tavistock Place, who was acting surgeon at Macquarie Harbour during 1826 and 1827, for nineteen months, informs me that he saw in all 17,000 lashes given in that penal settlement. The whip had a wooden handle a foot in length, and nine lashes, each composed of two layers of whip-cord about a yard and a quarter long, with nine post-boy knots towards the end, and about two inches apart; the extreme point of each lash was made firm with waxed thread. The culprit was bound arms and legs to a post, and the number of each stroke called out by the chief constable before the lash fell, and about three per minute were given, so that a hundred lashes occupied a considerable time. Dr. Barnes assures me of what every rational man would anticipate,-that no good ever resulted from these disgusting, disgraceful barbarities. The spirit of the tortured person was broken, and he was rendered reckless for ever. As it is a point of reputation with the convicts to appear to despise the torture, and numbers of them are the most daring, determined, and courageous of men, he continually witnessed the absence of all exclamation: but in every instance something was noticeable which disclosed suffering or determination,-the shoulders were generally kept raised, showing the strong action of the surrounding muscles,—or perhaps a bullet in the mouth was found afterwards flattened out to the thinness of a wafer by the action of the jaw.

In an account which Dr. Barnes has kindly written for me of some of these cases, he remarks: "Although those men, by a species of false pride, would endeavour to show what they termed a manly spirit, and bear unflinchingly that . most dreadful torture, without calling out or making any demonstration of bodily suffering by the writhing of the trunk, limbs, or muscles of the countenance,—yet in every instance when punishment was inflicted, the culprit evidently prepared limself to bear up against it, by placing himself in a particular position; for instance, the hands grasped firmly the halberts, the back was curved and the shoulders were raised, the chest was emptied and the abdomen was drawn inwards, the breathing was short and the pulse quickened.

"Thomas Hampden was flogged in June, 1827; he received one hundred lashes, but did not evince any symptoms of pain; yet the punishment was twice suspended during its infliction by my directions, in consequence of the appearance of his countenance and the state of his pulse. Water was applied to his lips, and, although he told the constable he did not require any, yet he drank greedily. When the punishment was complete and the prisoner was released, he threw his shirt carelessly over his shoulders and went to his barracks, and in a boasting manner said his back would not require the doctor; and in order to carry out his principles he went to his labour daily, without availing himself of the privilege which the sick-list afforded of giving rest till his back was healed.

"This man, when in the hospital subsequently with fever, told me the torture produced by the lash was like boiling water poured constantly on the back; and that nothing but the fear of being derided by his fellow-convicts could prevent a man from showing his feelings." His sufferings were, however, shown by the signs of the determination necessary in all the instances to bear up under them.

I do not believe that any person in an ordinary state could bear so severe an operation as amputation of the thigh without making some muscular effort visible to a good observer, or evidencing pain by a look, the condition of his lips or breathing, or by something else inconsistent with the perfect motionless and universal relaxation, the perfect placidity of countenance, the perfect regularity of breathing, in short, the perfect absence of all expression, not to say of suffering, but of determination,-of firmness, that was so remarkable in Wombell. His aspect, during the whole time, was that of a person in a sound and beautifully placid sleep, with the lips, I understand, slightly open: "the placid look of his countenance never changed for an instant; his whole frame rested uncontrolled in perfect stillness and repose; not a muscle or nerve was seen to twitch." The low moaning was, as I have already stated, not correspondent with the course of the operation,-did not occur with any relation to moments when this gave the greatest cause for pain, but seemed totally uninfluenced by the proceedings of the operator; and was not induced or increased even by the severe treatment of the end of the sciatic nerve. It gave all present the idea that the man was dreaming unpleasantly. He made no boast afterwards that the pain had been nothing,-a very trifle to bear: but declared he had felt no pain at all, for he had not known that the operation was performing. His first exclamation, not made the moment he awoke, as if he had meant to say something striking, but after he had looked about in surprise,—a circumstance so in accordance with what mcsmerists always observe when any change in external circumstances has occurred during the state of the patient,-was, "I bless the Lord to find it's all over,"-an exclamation showing no disposition to make the bystanders believe he was a brave hand at bearing pain. Every thing, in short, proves the reality of the case to those who are not the prey of that cruel disease-prejudice.

Suppose, however, that Mr. Alcock, or any of the opponents of the evening, had observed patients during operations with sufficient minuteness to know that they made no muscular effort whatever and showed no expression of pain or determination, but remained all the time in silence, as calmly breathing, as motionless and universally relaxed, with as equally unchanged a placidity of countenance, as this man, all that would amount to nothing, unless, in addition to the operation, a *pointed* instrument had been roughly poked against the divided end of some large nerve and the same undisturbed state of the wholo person had continued as in this man. The divided end of his sciatic nerve was not merely brushed roughly with a sponge, and pinched, but poked with the points of a forceps, and he gave no sign of suffering ! Not one opponent on the score of firmmers all the evening alluded to this, any more than to the astonishing improvement in the man's sleep, and looks, and health, after being mesmerised !

Dr. JAMES JOHNSON, the reviewer, and another doctor whose name I hear was TRUMAN, followed in the same strain with the preceding speakers. Dr. Johnson added that he would not have believed the facts mentioned in the paper had he witnessed them himself. When a man has reached this point of intellect, the sooner he shuts his eyes and retires from this wondrous scene into utter darkness the better. Dr. Truman talked rapidly and confusedly against mesmerism without any argument and with a total ignorance of the subject, that led him into ridiculous statements, which Mr. Symes corrected: he attempted to speak a second time in the course of the evening, and politely believed that the man was prepared for the occasion and designed as a great card by the mesmerists; but the meeting loudly refused to hear him.

Dr. MARSHALL HALL, some years ago, when my Demonstrations went on at University College Hospital, called mesmerism "trumpery" that "polluted the temple of science;"* and now, being, like all the other opponent speakers, totally ignorant of the subject, and glorying in his ignorance, very consistently considered the present case to be one of imposition, because the poor man's sound leg did not start or contract while the diseased leg was amputated! The case, he said, "proved too much, or rather flatly contradicted itself," because the sound leg did not contract when the diseased one was cut. He asserted that, "in cases

* Lectures in Webb-street, Borough-Lancet, Oct. 28, 1837, p. 42.

of insensibility in brutes, from intercourse of any portion with the brain being stopped by division of the spinal cord, or from absolute decapitation, or from stunning by a blow upon the head, such an injury of an insensible leg as pricking it with any thing, lacerating, or cutting,-such an injury for instance as plunging a sharp instrument into the muscles," (I sat next to Dr. M. Hall and those were his very words), "invariably causes both legs to contract; and, unless man differs from all other animals, the same must take place in the human being; and, as this man did not move his other leg,-did not enact the reflex motions, he was no physiologist." Had he been such a physiologist as Dr. Marshall Hall, and read about the reflex motions, "he would have known better, and would have moved the other leg,-and enacted the reflex motions." The ignorant man! Dr. Marshall's Hall's right leg would have moved most physiologically, if a surgeon had plunged a knife into his left! It was very silly of the man not to allow his sound leg to start, nor his diseased leg, nor any part of his frame. But a horse has been just as silly, just "as bad a physiologist," and has just as "flatly contradicted itself," by not "enacting the reflex motions." "A horse was struck with the pole-axe over the anterior lobes of the brain. It fell instantly, as if struck with a thunder-bolt; it was convulsed, and then remained motionless. It shortly began to breathe, and continued to breathe freely by the diaphragm. When lacerated or pricked with a sharp pointed instrument, as a pin or nail, on any part of the face or surface of the body, it was totally motionless, manifesting no evidence of sensation or volition." In another account it is said, "deep lacerations" of these parts produced no movement of any kind, nor any infliction on the skin by "a pin or other pointed instrument." Now this I quote against Dr. Marshall Hall on authority considered by Dr. Marshall Hall at least equal to any in the world,-equal to his own. But whose can this be? Can there be an authority equal to Dr. Marshall Hall's? It is Dr. Marshall Hall himself!* Dr. Marshall Hall in print, against Dr. Marshall Hall in debate! Dr. Marshall Hall in print proving too much, or rather flatly contradicting Dr. Marshall Hall in debate ! But Dr. Marshall Hall in print is quite right.

The other extremity may move, but it may not. I cut off the heads of some frogs, and, in the presence of Professor Wheatstone of King's College, Mr. Atkinson, Mr. Symes, and Mr. Wood, pinched the toes of one leg with the forceps; the leg contracted, but the other leg was still. I repeated the experiment twenty times, and, in almost every instance, the same leg only contracted : once or twice the other leg contracted, but it was when general contractions of the whole mass of the frog took place. I repeatedly pinched the muscles of the thigh, and they alone contracted, the other extremity being invariably unaffected. Provoking frogs! Why did you not contract your other leg? Impostors! You little thought you "proved too much"-for Dr. Marshall Hall; and yet you were but like some other unphysiological frogs. For Dr. Marshall Hall says that, if, when he divides the spinal cord in frogs just below the occiput, so that the creatures remain motionless, he then pricks or pinches the toes, "there is no movement at first, but soon distinct movements take place, and general retractions of the limb !!" not limbs. + Mr. Ward states, in the Nottingham Journal for December 30th of last year, in answer to a very silly letter by a young surgeon at Nottingham, that he has made the same experiment with the same result upon a rabbit. "Having knocked one rabbit down, it at first lay motionless, as if dead from the shock ; it then showed all signs of life by breathing tolerably freely. With a pin I deeply pricked first one limb and then the other-and invariably the one I pricked was retracted, the other lying motionless. Such results have followed other experiments." If, as many have asserted respecting the rogue whose leg was amputated by Mr. Ward, an inquiry were to be cautiously made, there can

^{*} On the Diseases and Derangements of the Nervous System, by Marshall Hall, M. D., F. R. S.

p. 8, 1841. Lectures on the Nervous System. By the same, p. 21.

⁺ On the Diseases, &c. p. 6.

be no question that we should learn the rabbit's motives for not contracting its other leg. It no doubt had its reasons. It no doubt hoped for future favours from the surrounding nobility and gentry. It was no doubt well "trained," and its case "designed as a great card by the mesmerists." It no doubt had been bribed. You little rogue, you little knew you were "proving too much"—for Dr. Marshall Hall. You were ignorantly quiet; but were also spitefully quiet. Why did you not, like the wise young surgeon of Nottingham, stir for Dr. Marshall Hall? Malicious animal ! was it not enough that the man's case proved too much —for Dr. Marshall Hall?* And yet you were not so bad as one of Dr. Hall's

* To expose the miserable shifts to which Dr. Hall condescends to have recourse rather than own himself wrong, I must state that Mr. Ward in his quotation from Dr. Hall's book, made by niyself in the last page, omitted the words, "as a pin or a NAIL," after the words, "when lacerated by a sharp or pointed INSTRUMENT." The question was not with what sharp or pointed instrument the *laceration* was made, but whether the part was not with what sharp with a sharp or pointed INSTRUMENT. Of so little importance did Dr. Hall consider it that, in relating his experiments on the frogs, he employed neither a nail nor pin, but "*pricked* and pinched the toes with the *probe* or forceps." In the society he considered the experi-ment fairly made, when an amputating *knife* was *plunged into the thigh* of the man operated npon." In another relation to the experiment upon the horse in another book, Dr. Hall, we have seen, is not particular about the instrument, but says "*pin or other* pointed instrument." Yet Dr. Hall published a letter in the *Nottingham Journal* for February 3, asserting that the apparent discrepancy between his written and oral statements of experiments arose entirely from Mr. Ward's omission of two words in quoting him. He most wilily does not say what the words are, so that one would suppose they were of great importance; whereas they are not of the slightest, and in the society he spoke of any sort of wound of the insensible leg. In the next newspaper (February 10), Mr. Ward requests him to point out what words of importance were omitted. But Dr. Hall was again wily, and in a short letter to the editor did not point out the words, but mercly repeated that there was the omission-a proceeding calculated to make an impression and screen himself. He knows well that, if a laceration of the surface by a nail would not cause reflex motions, his assertion in the society must fall to the ground ; and he does say, in both the works already quoted, that deep lacerations, and therefore superficial ones also, for these cannot be avoided, with a nail in the struck horse, had no effect of any sort. He knew well that, in his printed accounts, his purpose was to show that a laceration, a wound, a pinch, to produce the reflex motions, must be made on certain parts, for instance the toes, eyelids, and that a straw might suffice ; and that the other parts, for instance the body and portions of the extremities nearer the body, possessed no such impressibility. Again; in no part of his printed accounts does he recite any experiments with knives; all his experiments were made with pins, nails, probes, a forceps, or straws; and thus, when it is pretended that, in saying the man's leg should have moved if man is not unlike every other animal, he meant because other animals moved when a palsied leg was cut with a knife, and that therefore Mr. Ward should have cut the rabbit's leg with a knife, I maintain that this is unfair-that Dr. Hall, referring to his own experiments, and never having used a knife, made the assertion in regard to simple wounding,-

Poor Mr. Wakley, not contented with the displays of medical science which he makes at inquests and which are the richest of my newspaper treats, goes about telling persons not medical, with the most scientific air, that the case at Wellow was proved to be an imposipatients. You did move your pricked leg, though that only; but a comatose patient into whose cheek, hand, and thigh, Dr. Hall ran a pin very deeply, he says, made not a single muscle move on either side.*

I should have thought it more likely for the man's cut leg to have moved than the other. If Dr. Marshall Hall, after meditating upon his "reflex" glories till he lost himself, and lay in his armchair in ecstasy, were to have his knuckles rapped, I engage to say that the hand rapped would be the one to move and be shaken in the air, and "enact the reflex motions," so that all the bystanders would see on which hand he was rapped. The poor man at Wellow made not the slightest movement of either leg! The operation was like an amputation on a powerless dead body.

For the general reader, I will give a short account of the subject of movements produced by irritating animals whose heads have been cut off, or deprived of nervous communication with the portions irritated.

In 1663, Boyle stated that the bodies of vipers, deprived of their head, would move on being irritated.[†] Redi, an Italian physician, found, in 1634, that, after cutting off the head of a tortoise, the legs moved whenever they were pricked.[†] Dr. Whytt, the *justly* celebrated physiologist and physician of Edinburgh, discovered, in 1745, that, if the toes of the hind feet of a decapitated frog are irritated, after ten or fifteen minutes have elapsed subsequently to the decapitation, the feet are drawn up to the body; if one of the legs is pulled down from the body and kept extended, no sooner are the toes of this foot wounded, than the leg is drawn up to the body as before :§ "he also noticed that, though the muscles of the thigh were contracted when pricked or cut, neither they nor the neighbouring muscles were nearly so strongly convulsed as when the toes were wounded;" and that, if the spinal chord of the decapitated frog is first destroyed with a redhot wire, none of these effects result. He illustrates the subject by very numerous instances of movements so excited apparently without our will or consciousness, and he generalised the facts of the subject beautifully. Sir Gilbert Blane, in 1788, cut off the heads or divided the spinal chords of kittens, and found their hind legs shrink from the touch of a hot wire applied to the hind paws; and the tail to move when irritated, even if the chord was divided below the last lumbar vertebra. In 1812, a French vivisector, Dr. Le Gallois, divided the trunk of a frog into transverse pieces, and found that each, as it possessed its portion of spinal chord, moved when irritated.** Nay, Dr. Macartney found that if the eye is taken out of an animal and light suddenly admitted upon its nerve of sensation-the retina, the iris contracts.^{††} But, many years after Whytt, a German physician, named Prochaska, entered, in 1784, largely into the subject, and urged that there were nerves to receive and convey the impression, and nerves to excite the consequent motion, and he termed this their operation "the REFLEXION of sensory impressions into motor." [] Dr. Marshall Hall has taken up the subject with such eagerness, and written upon it so repeatedly

tion by a scientific point : and yet, in the Lancet, for August 18, 1830, he published an interesting ease as genuine, on the authority of Dr. Imray, of fits of catalepsy and insensibility, in one of which, during cupping, the spirits of wine ran about the young lady's neck and caught fire, without any movement occurring to indicate there was sensation or reflex function !

* Lancet, Feb. 10, 1833, p. 685. † Usefulness of Natural Philosophy. Part ii. Essay i. 1663.

‡ Observazioni intorno agli animali viventi, p. 210. 1684.

Observations on Irritability. Sect. iv. Part 4.

|| Same book, sec. ii.

¶ Select Dissertations, p. 262. 1822.

** Sur le Principe de la Vie.

tt Report of the third meeting of the British Association, 1834. p. 53.

tt Commentatio de Functionibus Systematis Nervosi, cap. iv. printed 1784. Opera minora, pars. ii. Vienna, 1800. He even points out the portion of the nervous system which he conceives to receive and then reflect the impression to the muscles; viz., the oblong and all the spinal marrow, and the crura and thalami of the brain. p. 153.

after his first publication in 1833,* that, in his ludicrously uncontrollable and never flagging appetite for notoriety, he would have the world believe him to be a discoverer in the subject, has passed over (as in the case of Prochaska, till he was exposed) or been most unjust to his predecessors, has made incorrect statements, and, though he has the merit of forcing attention to the subject, he has succeeded in forcing far more to himself, comparing himself at last to Harvey, who, in his disgust with the world, would not have given his manuscript on Generation to it, but for being entreated by Ent to forgive it and not to deprive it of what would be useful—when he benevolently relented.[†] The following

* Philosophical Transactions, 1833.

† Those who are desirous will see a full exposure of Dr. Marshall Hall's false claims and injustice to other authors, in the London Medical Gazette for April 7, 14, 21, 28, and May 5, and Lancet for April 28, 1838. Mr. Mayo, who has devoted great attention to the nerves, thus expresses his opinion of Dr. Marshall Hall's claims on the subject: "Dr. Marshall Hall has given the good name of reflex function to this circle of impression and action, and has added one or two additional facts in illustration of the principle." The Nervous System and its Functions, p. 50, 1842. As to the good name, we see that Prochask and called the ope-ration "the reflexion of sensory impression into motor." p. 154-5-6-7. All these statements gratify me as confirming the opinion to which I painfully and dispassionately came when studying the subject for the part of my *Human Physiology* which I published in 1837, p. 495 and following. "Now really the whole truth appears to be what is well known, that an impression made upon any nerve of scnsation, or, what is the same thing, upon any part endowed with sensibility, may induce action of any voluntary muscles calculated to remove it if disagreeable, or to be useful in some way to the individual, even though the brain be prevented from perceiving the impression,-from having a sensation from the impression. The impression need not be upon nerves running to the part of the encephalo-spinal organs, where the roots lie, of the motor nerves excited, for a sharp pinch of the toc will not merely make a man draw away his foot, but raise his arms, make a face and halloo into the bargain, whether he is asleep or awake. Tickling the sentient twigs of the fifth pair, the cyclid, and cornea, is not requisite to eause winking; if by the optic nerve, one not included in Dr. M. Hall's excito motory class, we see a finger suddenly approach the eye, instinctive, involuntary winking will as eertainly occur. Winking will occur if a strong light is suddenly ad-mitted through the lids to the *retina* of a person asleep. The sun's glare upon the retina will excite sneezing. Not only are sneezing, vomiting, sobbing, mentioned as acts of this system, but even deglutition, which is declared *always* to be of this nature, and *always* to require the presence of some stimulus to the sensible nerves of the pharynx, it being 'impossible to perform the act of swallowing three or four times in rapid succession, without taking something into the mouth.' Now if deglutition is always an excited act,-to use this gentleman's peculiar language,-is always produced involuntarily by an impression on the pharynx, it must be as impossible once or twice, without taking something into the mouth, as three or four times, and slowly as rapidly. I however can swallow with nothing in my month in rapid succession, as readily as with something, and above fifty times: that is to say, till the muscles are fatigued. If swallowing is instinctive when any thing reaches the pharynx, so is the act of opening the mouth when a sugar-plum is offered to the eyes of a baby: and indeed the various movements of the extremities, head, and trunk, which naturally are performed on various eircumstances presenting themselves, are just as instinctive; and we have only to observe the movements of other animals, especially of those most like ourselves, and above all of monkeys, to see how instinctive our voluntary actions are when we are most apt to regard them as determined by our reflection. We contract all voluntary muscles either simply because we think proper, as when we cough at the request of another, or because a strong motive is given, as when we withdraw the hand from any thing hot; and the latter is only such an instance as swallowing, coughing, winking, &c., when food is in the pharynx, phlegm in the larynx, or strong light in the eyes. Certain sensations excite a certain desire and this may be too strong for us to overcome. But according to the strength of mind will be the resistance to the strength of the desire induced by the sensation. Some actions result from certain sensations only, and we can neither perform some without these sensations, nor when these sensations exist find it possible not to yield to the desire. With some deglutition is not an act of this kind. But sneezing is with all. 1 never knew a person able to sneeze at pleasure. To be induced to will sneezing we must have a certain sensation. If our attention is drawn to something else, though the irritating cause act, we do not feel the sensation and do not sneeze. If the sensation is felt forcibly, the impulse may be too strong for us to resist, and sneczing will be involuntary: and we can bring ourselves to snecze by attending closely to the sensation, and by increasing it. I have often amused myself by looking more or less at the sun, or thinking more or less of tickling felt at the moment in the nostrils, and so increasing and lessening the inclination to sneeze. Without the sensation and a certain amount of it, the sneezing no more than venereal convulsion passage from Sir Gilbert Blane's Select Dissertations, p. 262, printed in 1822, should be seen by those unread persons who vaunt his pretensions. "There are facts which show that instinctive actions, even in animals endowed with brain and nerves, do not depend on sensation : I took a live kitten, a few days old, and divided the spinal marrow, by cutting it across the neck. The hind paws being then irritated by pricking them, and by touching them with a hot wire, the muscles belonging to the posterior extremities were thrown into irritation, so as to produce a shrinking from the injury; the same effects were observed in another kitten, after the head was entirely separated from the body. In repeating this experiment, I found that when the spinal marrow was cut through between the lumbar vertebræ, and os sacrum, the posterior extremities lost their irritability, but the part below it—the tail, retained it." "In an acephalous monster, the like phenomena were observable. It moved up its knees when the toes of its feet were tickled; it performed the act of suction; passed urine and fæces and swallowed food." Let any one read Dr. Hall's paper in the Philosophical Transactions, above ten years afterwards, when all this is printed as original, without a single allusion to the names of Prochaska or Blane, and consider which was the greater, Dr. Hall's boldness in sending the paper, or the council's in printing it.

But after all, Dr. Marshall Hall entirely mistakes the nature of the man's case. The man's head had not been struck nor his spinal chord divided. The stunned horse, the divided frogs, were paralysed solely because the former's brain was overpowered, and the latter's wounded and pinched extremity had lost its communication with the brain. But paralysis, insensibility, and loss of voluntary motion may arise not only from inability in the brain to receive impressions brought to it or to will movement, or from the communication between it and parts impressed or parts to be moved being interrupted, but may arise also from the parts themselves being incapacitated, however capable and entire the brain and its lines of communication may remain. If the part itself is incapacitated, not only cannot the brain obtain a sensation from it or excite a movement in it, but impressions cannot be made upon it by pricking or lacerating or cutting, so that Dr. Marshall Hall would in vain prick, lacerate, cut, or stab it,--it would not "enact the reflex motions." This is the case when the nerves in a part are palsied by cold, or opium, or disease. The brain and spinal chord may be affected at the same time; but that is not necessary, for the incapacity of the part itself prevents both sensation and voluntary motion, and likewise impression and reflex motion. Now this was the man's state: but Dr. Marshall Hall, glorying to remain ignorant of mesmerism, did not know it. Even the exposed muscular fibres of the patient quivered "less than usual;" nor was there the ordinary amount of retraction of the muscles when divided : and, as the man had no power to impose in these two points, Dr. Hall and the rest who speak of imposition must with reference to them charge Mr. Ward the narrator with fabrication. The stupefaction of mesmerism may not be in the brain or chord only, but in the individual parts; just like the stupefaction from exposure to cold which may stupify the brain, but, besides this, stupifies each part. The mesmeriser may

of the cjaculatores, takes place. At the same time the facts discovered by Whytt and others show a connection between motion and impression independent of the brain. But this is probably intended to assist the will in exciting motions on the occurrence of impressions on individual parts; and the impression may be so strong that the will may be compelled to determine the motion, and this compulsion will be according to the strength of the impression and the weakness of opposing motives and of the resolution to restrength of the impression. Nay, these facts show that motion will occur when the brain is removed and there can be no sensation. Yet when the brain exists and in healthy force, that the will does co-operate with this local excitement of nerves of voluntary motion by those of sensation, when we might not be disposed to believe it, appears from the curious facts mentioned at pages 486-491, showing that sensations may occur, and the will may be exercised, almost unconsciously. While the brain exists and the system is in health, these motions do not occur without will, or without sensation should the will be overpowerd." suspend or restore not only one or more of the individual five senses, but also the sense of touch in individual parts,-in an arm, a leg, or a finger. More than this; he removes or restorce not only feeling, but the simple senseless impressibility by which, if even the head is cut off, an irritation of an extremity causes it to move,-causes the reflex function, or "reflexion of sensory impressions into motor," to use Prochaska's two words, to be performed. He can locally suspend them all, as cold, or poison, or discase can locally suspend them all. This was the state of the man. He was in a sleep more or less sound, and more or less extensive through his brain; but his nerves of feeling and will, and his nerves also of common impression and automatic motion, or, in other words, his common reflex or excitomotory nerves and their expansions were also asleep or stupified; and therefore there could be no such movements as Dr. Marshall Hall expected, any more than if the chord or nerves had been disorganized. But because there were none, because things did not happen according to Dr. Hall's notions, nature was wrong, not Dr. Hall; the man was an impostor, not Dr. Hall's fancies unfounded. When the Strasburg doctors disputed on the stranger's nose,--

"'Nature accommodates herself to emergencies,' cried the opponents, 'else what do you say to the case of but half a man, when both his legs have been unfortunately shot off'?'

'He dies of a plethora,' said they, 'or must spit blood; and in a fortnight or three weeks goes off in a consumption.'

'It happens otherwise,' replied the opponents.

'It ought not,' said they."*

Dr. Marshall Hall's error,-thc crror of ignorance, but of wilful ignorance,was in supposing that the alleged insensibility and motionlessness of the mesmeric state resulted from merely the coma. Nay, these may take place without any coma whatever, the person remaining wide awake. In many patients who have been fully mesmerised on former occasions, you may affect an arm or a leg, causing it to become insensible, motionless, perhaps rigid, unimpressionable to pinching, pricking, and cutting; and without mesmerising the brain. Dr. Marshall Hall, while the paper was read, had just heard that local effects without mesmerising the brain could be produced in this man. "I then showed them," says Mr. Topham, "my power of affecting any one of his limbs, even when he was quite awake. At my request, he extended his arms alternately. By making two or three passes over each, without any contact, they became as rigid and unyielding as bars of iron, not to be unbent except by mechanical force powerful enough to injure the limbs; and yet, instantly relaxing throughout, and dropping to his side, from the effect of my breath alone. His right leg was affected in the same degree; and immediate relief from pain was frequently afforded by making similar passes over the diseased one."

I suppose that, had not the blind foes of mesmerisin learnt this reflex operation from Whytt, and second-hand from others, they would have accused every poor decapitated frog of some kind of imposition upon its moving when pinched. THEIR ignorance would have been ITS crime.

Mr. Travers, who was present but said nothing, could have related an instance in which he made Dr. Marshall Hall's experiment of pricking with a sharp instrument upon a man whose hands had lost their feeling. At the request of Dr. Yelloly he pricked the sensible skin of the ball of the thumb with a lancet-shaped couching needle, down to the bone, with no result whatever: no feeling, no starting of the other hand, or of the same hand, took place.

But I will give the particulars of the case published by this very Medical and Chirurgical Society, in 1812,[†] when Sir Astley Cooper, Sir Walter Farquhar, Sir Henry Halford, Sir Everard Home, Drs. Baillie, Bateman, Birkbeck, Marcet, Pemberton, Roget, Saunders, and Yelloly, and Messrs. Abernethy and Cline, selected papers for publication. It is detailed by Dr. Yelloly, and occurred—

* Sterne.

t Vol. iii. page 90, and following.

"In a Jamaica planter, 58 years old, whose mind and muscular frame were unimpaired, but whose hands up to the wrists, and the feet half way up the leg, were perfectly insensible to any species of injury, or cutting, pinching, scratching, or burning. He accidentally put one of his feet into boiling water, but was no otherwise aware of the high temperature than by finding the whole surface a complete blister on removing it. No species of injury to a vesicated part, of either hands or feet, was felt by him. The extremities were insensible to electric sparks taken in every variety of mode. The cubital nerve, where it passes the elbow communicated the sensation produced by pressure or a blow only half way down the fore-arm." "On putting his hand, at the desire of a friend, into a pail of hot grains, which his friend assured him were not too hot, and, to convince him of this, previously thrust his hand and arm into it, there was a very extensive vesication produced. His hands were never free from blisters, which he got by inadvertently putting them too near the fire; and he had met with several severe burns without being aware of it. No degree of pressure was felt by him." To ascertain whether the flesh as well as the surface was insensible, Mr. Travers passed a lancet-shaped couching needle into the ball of the thumb, down to the bone. "Not the least degree of pain, or even of sensation was produced." (Neither did the other thumb start and contract, as Dr. Marshall Hall should think it ought, since he thinks Wombell's other leg ought to have moved.)

A case follows of a lady, about 40 years old, who had "been deprived for more than two years of the power of sensation in her hands and feet. She was insensible to the effects of cutting instruments or of burning coals applied to them. In one instance, when she was employed in shaping a piece of wood with a knife, she incautiously turned her eyes on some other object, and cut off the end of the thumb of her left hand without perceiving the smallest sense of pain." (Nor did the other thumb start and contract any more than the poor man's sound leg when Mr. Ward cut off the diseased. This gentleman and lady were as had as, or worse, than Mr. Tophan's poor man, because from their superior station they should have known better than to sham antiphysiological facts.) "Although electricity produced very considerable contractions in the nuscles of her arms down to her wrists, the effects of it in her hands were scarcely perceptible. After two or three days, however, she *imagined* that she was sensible of *some kind* of sensation from strong shocks."

One of the Okeys, during her mesmeric state of ecstatic delirium, though possessing full power in all her muscles, was insensible to mechanical injury, burning, and electricity. The cylinders of the electro-magnetic machine were held in her hand any length of time, while the wheel was turned as rapidly as possible, without any evidence of the slightest sensation, though no one else could hold them for more than some seconds. She received the charge of a large Leyden vial, and no effect was noticed. When asked what she felt, she answered, in the former instance, "I heard it go giggle, giggle, giggle ;" and in the latter, "I saw the light." At the Adelaide Gallery I put the hands of a female in a state of sleep-waking, who had not been there before, upon the electrical eel near the head and tail, and she took no notice, though I felt a very slight movement of her arms, which nobody else could remark. Now the shock of the eel made very many jump. When I was not present, I know for certain that she received at once the charge of six Leyden jars, each sixteen inches high and eight wide, without evidencing sensation. But, because the condition of Elizabeth Okey, and of this young woman was induced by mesmerism, it was feigned; as though there was more evidence of reality, or could be more evidence of reality, in the other cases than in these.

A third case is annexed, taken from the *Philosophie Zoologique* of Lamark. "A man of 50 years of age, had for fourteen years the right arm completely insensible. The limb, nevertheless, preserved its activity, size, and power. On the accident occurring of a boil upon it, there were heat, swelling, and redness produced in the parts, but no pain, even when it was pressed. During his work, he happened to break the bones of his fore-arm, at about a third their length from the wrist. As he only felt a crash (craquement)," (crunching of the impostor!) "he thought he had only broken the shovel he had in his hand; but it was sound, and he could only discover his accident by being unable to continue his work. The following day, the arm, at the fractured part, was puffed up; the temperature of the fore-arm and hand was increased, but the patient experienced no degree of pain, even during the extension nccessary to reduce the fracture."

Now in these cases published by this very Medical and Chirurgical Society, when things calculated to make a strong impression were applied to one extremity, not a word is said about the other starting; and of course neither the one nor the other started, or it would have struck the patients and the bystanders, and have been mentioned and regarded as a proof that the patients felt. No "reflex movements" were "enacted."

The society believes these cases; but refuses belief when the loss of impressibility occurs in the mesmeric state! insensibility and unimpressibility are then impossible, and *proofs* of imposture! proofs that mesmerism is untrue; and Sir Benjamin Brodie, as I shall presently tell, comes down to the society, sneers at the poor man and the gentlemen who witnessed the facts, and then walks out of the room in perfect satisfaction with his own sagacity and authority.

Mr. Wood, who had assisted at Mr. Ward's amputation, vouched for the accuracy of the whole account of it, and urged that all the proof possible in such a case was afforded,—the absence of all sign of pain and resistance to the expression of pain, and the patient's declaration that he had felt no pain. What more proof was there in the cases just extracted from the Transactions of the Society? None. And the society admitted the reality of those cases without hesitation.

Mr. Liston, also, who, with his whole set to which he belongs, has hitherto scoffed at mesmerism as humbug and mesmerists as tom-fools, could, according to Mr. Wakely, have related an experiment which he made, like Mr. Travers, to test a case of similar insensibility,—and a case still more similar to mesmeric cases, in as far as the insensibility was not permanent but occasional, and united with catalepsy. The Lancet for May 22, 1830, gives a report of a clinical lecture, delivered in the University of Edinburgh, by Dr. Duncan, upon the case of a young woman who had for a short time been subject to seizures of perfect insensibility and catalepsy; "her limbs, on the application of force, yielded" no more readily, however, than lead would, "in whatever direction they were bent; and, when the force was withdrawn, remaining motionless and without tremor, like bars of lead, in whatever position they were placed, no matter how painful under ordinary circumstances, or how contrary to the ordinary laws of gravitation." The poor creature's case was perfectly real; but, because some were so ignorant of medical science as to be unacquainted with the features of such an affection, she was suspected of imposition.

The following is Mr. Wakley's report of Dr. Duncan's account of the experiment: "We cannot avoid noticing, and we do so with feclings of the most unmixed disgust, an unmanly, wanton, and barbarous experiment, practised on this unfortunate patient by an individual, unconnected, we are happy to add, with the department of clinical medicine" (as distinguished from clinical surgery). "It will scarcely be credited, but nevertheless it is strictly true, that during a paroxysm of insensibility, the person to whom we allade, tore with his nails two separate pieces of skin from the hand of the patient. She was not aware of the cruel and unwarrantable experiment at the time, but she felt the effects in the intervals very acutely. It is satisfactory, however, to know that but one feeling of the most unequivocal reprobation pervaded teachers and pupils at this inhuman and unprofessional act." Dr. Duncan hints only that it was a surgeon. Mr. Wakley declares the surgeon was Mr. Liston; for, in the index is this reference to the two pages in which the experiment is related :—

"LISTON, Mr., inhuman experiment by, pp. 278. 281."

Yet it is impossible not to think the statement erroneous, because Mr. Wakley and Mr. Liston are now inseparable friends, and Mr. Wakley has placed his son under Mr. Liston. There, however, stands the accusation in the index to *Lancet* May 22, 1830, p. 278, vol. 18.

In this variation of Mr. Travers's experiment, the injury being committed by laceration with the nail, instead of pricking to the bone with a strong needle, there was no starting of the other hand, nor of the same hand; had such a thing happened, it would have been gladly proclaimed by the tender experimenter, if Mr. Liston was the perpetrator, (and for that we have only Mr. Wakley's assertion,) for I read the case, with Dr. Duncan's remarks, aloud, from my Human Physiology, p. 47, and he was sitting on an adjoining bench, but opened not his mouth. Nay, Mr. Liston himself describes a case in the Edinburgh Medical and Surgical Journal for April 1829, of a gentleman, a patient of his own, who lost his sense of touch over nearly the whole surface of the body, so that he could feel with nothing but his mouth, though he walked and talked, and heard, and saw, and enjoyed life; and also through the deep-seated muscles, tendons, and ligaments, so that, when Mr. Liston cut away one of the bones of his foot, he "felt no pain whatever," and he added, " nor would I now, I am convinced, were you to dissect the whole foot." Not only did the limb operated upon not move, but the other evidently was unmoved likewise. Mr. Liston ought to have mentioned this fact in the society, and now ought to tell it to Mr. Wakley. If such things take place without mesmerism, experience can only settle whether they may take place through mesmerism. They may.

But in the insensibility of a perfect fit of epilepsy, when at its highest intensity, we have the same insusceptibility of pain,—the patient may be scratched, pricked, pinched, cut, even in the hands, something sharp be thrust under his nail, and yet no sign of feeling will appear,—the limb will not move; nor will the opposite limb, even to please Dr. Marshall Hall: and yet in perhaps five minutes, the state shall have passed,—the patient be susceptible of all impressions and perfectly himself again.

Dr. Marshall Hall continued to display his want of information. "What," he argued, "said the patient? Why that he heard the sawing of the thigh bone which is unendowed with sensibility; but he was insensible to the contusion of the sciatic nerve whose sensibility is extreme. What physiologist could believe such an absurdity ?" Now I should think that an impostor would have said nothing about having heard any sound,-would have said nothing about having "once felt as if he heard a kind of crunching," which words were what he really did say, for he uttered nothing about either bone or sawing. He would have declared he had positively heard,-known, nothing. Neither would an impostor have shown he had any hearing by always waking on any attempt to converse with him; but would have always pretended to be as deaf as a post. Yet he always awoke by attempts to converse with him, whereas he did not awake when pricked or violently pinched, even in his diseased leg, which in his waking state " could not bear the lightest covering to rest upon it." An impostor would not have always shammed so very stupidly. Yet these points struck none of the objectors: or at least were not alluded to. The objectors were too dull, or too wily, or too much hurried by their passions, to reflect soberly. As a lecturing physician, Dr. Marshall Hall should have known that, in those extraordinary cases of somnambulism which nobody disputes, and which have been seen in all ages and countries, and are not very uncommon, and are independent of mesmerism, though the person be asleep, his eyes perhaps shut, his breathing heavy, and his head occasionally nodding, he will go about and do many things and do them well,-work, write, compose, may feel, may be awakened by cold air or water, and yet hear nothing, not even the firing of a pistol; and that, on the other hand, he may bear pinching and pricking without sensation, and yet hear and converse with you, perhaps hear far more acutely than when awake: in short, that, the sleep being partial,-affecting some nerves and some cerebral.

organ or organs, and not others, and affecting in various degrees those it does affect, there is an endless variety of phenomena.

In common coma, of the deeper kind and fatal, the patient may feel acutely, though otherwise completely insensible. I was sent for a short time ago to a patient who was a medical man and in this very condition. Unfortunately it was the afternoon and I was out, so that I did not see him; but Dr. Barnes, who kindly supplied me with the facts of the convicts, has furnished me with the particulars. The patient was thirty-two years of age, was accidently knocked down on the head with a bar of iron in Regent Street while returning from a surgeon who had passed an instrument up the urethra, which operation was followed as he went home by a flow of blood. Ischuria ensued, and coma, which after twentyfour hours terminated his existence. "The pulse ceased to be felt at the wrist twenty hours before death; at that time and continuously till he died, a very copious perspiration bedewed the whole body—the hands and feet were icy cold. About two hours before dissolution the temperature of these parts rose considerably; the pupil was now slightly dilated and the tunica conjunctiva became infiltrated with a dark fluid, giving a peculiar carbonaceous appearance to the white part of the eyes: there was no urine in the bladder. The most remarkable feature in this case was the extraordinary sensibility of the entire surface of the body to very slight external impressions; the parts most so were the lower extremities. Now, although the patient was perfectly unconscious of passing events, he could not be roused in the slightest degree by speaking loud or by bawling in the ears, he was unable to swallow the smallest particle of food, he had stertorous breathing; yet, if the hand was placed over his thigh, (even on the outside of the bed-clothes,) and the part gently squeezed, the muscles of the countenance would immediately contract and betray intense agony, and a most pitcous groan would escape his lips at the same time. This condition continued to increase until he died. The sensibility was seemingly as great a few minutes before he died as it was some hours before: so extraordinary was this morbid sensibility, that to attempt to turn the individual in bed,-to elevate his head on the pillow, or to touch the surface of the body on any part, appeared to excite the greatest possible torture. I remained with this individual twelve hours before his demise, and continued to witness this phenomenon at least fifty times."

Mr. Carstairs of Sheffield informs me that, in several instances of deep mesmeric coma induced by him, the person has heard the slightest whisper, *inaudible to the bystanders*, and some of the other senses, particularly that of smell, have also been rendered more acute than in the natural state.

Dr. Hall should have known that mesmerism produces no phenomenon that does not occur in nervous affections without mesmerism, as I often stated in the theatre of University College Hospital, but that it does produce all the most wonderful phenomena of all affections of every portion of the nervous system; and that the torpor or somnambulism or sleep-waking, which it produces, is that which occurs in trances, as the deepest form of singular sleep, with very moderate cerebral activity, at one extreme, and that of persons in extatic delirium at the other, in which most of the faculties are very active, many perhaps far more active than when in the natural state, and only some faculties torpid, and these perhaps but partially torpid, so that, while the patient may be very talkative, clever, and facetious, he may be divested of his usual proper reserve and even of all sense of propriety and really be in a new waking state. I shall in the next chapter detail cases of surgical operations in which the patients, in this peculiar sleep felt nothing, and conversed all the time with the operator. I purpose to enter more fully upon the curious subject of sleep-waking when controverting Sir Benjamin Brodie.

Dr. GEORGE BURROWS expressed his doubts of the reality of the case because of the man saying he fancied he heard something in his sleep. He would not have found any difficulty had he made himself acquainted with the subject of sleep-waking, whether spontaneous or mesmeric, as he and every other teacher should have done long ago.

Another surgeon now rose,-SIR BENJAMIN BRODIE,-whom I never saw in the society before except during his period of presidency, and who, soon after he had spoken what he came to say, seemed to consider that he had settled the matter, and left before the close of the meeting and before I could reply to him. Like all the opponents of the evening he entirely passed over the comfortable nights, the return of the appetite, and the improved appearance of the poor man by mesmerism. He used the argument of the other surgeons, Messrs. Coulson, Blake, and Alcock. My answer to it I need not repeat. But he did more : he supplied a defect of which I have complained,-the want of reference to a case in which, as in this, a nerve was probed; for he described a case brought up in that respect to an equality with the present, and he at the same time most singularly supplied a strong argument against himself and his coadjutors. He related an instance of operation for hernia,-an operation not to be compared for pain to the amputation of a thigh,-in which his patient evinced no sign of feeling, though I have no doubt a minute observer, not engaged in operating, would have discovered some;* the surgeon was therefore tempted to test him, and tonched the divided end of a small nerve which happened to be exposed,-a nerve probably at the most but one-eighth of the size of the great sciatic nerve touched so freely in the man whose leg was amputated. Of course I expected to hear that, like the man at Wellow, this patient still gave no signs of feeling. But he did,-he instantly gave signs of acute pain ! This was not the hit of a sagacious opponent. Sir Benjamin Brodie deserves and has my best thanks for making this case known, and arguing so well for the insensibility of the poor man at Wellow.-

His next argument was, that some people really do not seem susceptible of pain; — cannot in fact be made, or scarcely be made, to understand what pain is. Sir Thomas Hardy, he added, was one of these. I hear it doubted whether Sir B. Brodie has sufficient ground for this assertion. But this is altogether unimportant, for the poor man at Wellow was susceptible of pain. He could bear his pain in no other than a sitting posture; had slept before he was mesmerised but two hours in seventy from his pain; would shed tears from his pain; could not bear except in the mesmeric state the slightest covering on his knee for his pain; and was awakened, even from mesmeric coma when this was not deepened by the fingers held on the eyes, by the slightest movement of the extremity. This argument was therefore good for nothing. But it told, as well as the preceding, for the insensibility of the man in his mesmeric state.

He further urged that patients worn down with suffering (so that he now remembered that the poor man knew what pain was) sometimes became hysterical and more or less insensible. But this patient was not hysterical; and suffered acutely to the last, even while being moved for the operation. This argument therefore falls with the rest.

He allowed after all that the man was in a peculiar state. Of what he meant I have no idea, except that the man was in an hysterical insensible state, which was not the fact. That he was in a peculiar and insensible state when under the agency of mesmerism is very true and for what we contend.

When he had seen Mr. Chenevix, fourteen years ago, mesmerise a little girl into coma, and was asked by that gentleman, "Do you think this girl really and truly slept?" he replied, "I do, and very soundly too:" and when asked, "Do you think she went to sleep of herself out of pleasure or desire, or by means of what you saw me do?" he replied, "Certainly by means of what you did." These means he compared to rocking.[†] Now, if he allowed this, he might, though stationary in his knowledge for fourteen years, allow that the poor man at Wellow was asleep by Mr. Tophan's means. His explanation of the mesmeric sleep reminds me of the explanation given by some people of the shocks of the elec-

* It is said on very good authority that this patient was Dr. Holland, and that he declares he did feel pretty acutely, but concealed it as much as possible by not crying out. Whether or not this is true is unimportant.

⁺ London Medical and Physical Journal. Sept. 1829. p. 214.

trical fish, the torpedo. The facts were at first denied, and, when they could be denied no longer, some would not allow there was any electricity in the matter, but explained them by the animal giving a sudden blow with its broad back, first drawn flat and then suddenly restored to its usual convexity. This explanation was so clear—"*hinc clarum est*," that Marrher says* that Reaumur, the explainer. "arcanum deprehendit." And now we obtain electric sparks from electric fish, and the sceptics exist no longer.

He said that the case before the society was the companion of one, equally an imposture, which occurred 149 years ago, and was published by the Royal Society in the 24th vol. of their Philosophical Transactions, in 1706. He informed the meeting that a man at Tinsbury, near Bath, pretended to sleep for weeks and even months; and once on waking could not be persuaded he had slept so long, " till going into the Fields he found every body busy in getting in their Harvest, and he remembered very well when he went to sleep they were sowing of Barley and Oats, which he then saw ripe and fit to be cut down." This, told with a smirk, as an impudent trick, raised a roar of laughter in the room, and was without hesitation received by the meeting on Sir Benjamin's authority as a case of imposture; the members not appearing sufficiently learned in the Philosophical Transactions to know the case which, however, I related in my Physiology, and not as an imposture, many years ago. He proceeded to state that in this pretended sleep the man was bled, blistered, cupped and scarified, but all in vain : -the impostor still slept, bore it all unmoved, and gave no sign of pain. Nay, the man was so barefaced that, though bread and cheese and beer placed by his bedside regularly disappeared, and evacuations regularly appeared in the utensil, nobody ever saw him eat or evacuate. He was therefore decidedly an impostor; and, as he was an impostor, the patient at Wellow was an impostor, and all mesmerism is false. A rogue shams an epileptic fit in the streets, therefore all epileptic people are impostors, and there is no such disease as epilepsy. Soldiers and sailors sham rheumatic pains and palsied limbs, therefore there are no such diseases as palsy or rheumatism.

But Sir Benjamin Brodie gave an entirely false colouring to the case. The man was indeed, for periods, not seen eating, probably because he ate all his food at once, possibly when he employed the utensil, and because he might, being no doubt aware of the presence of others, like most sleep-wakers, though ignorant on awaking of every thing that had passed, have an antipathy to eat as well as to evacuate when others were present or stirring about the house; just as often occurs in insanity, for in the sleep-waking state the activity of brain that does occur is generally attended with some peculiarity of the feelings: and, indeed, if the acts of eating and employing the utensil were continuous with him, there would be a sufficient reason for his selecting periods for eating when he was undisturbed. But, nevertheless, he was sometimes found taking his victuals and relieving himself in his sleep. The narration runs thus :- " Sometimes they have found him fast asleep with the Pot in his Hand in Bed, and sometimes with his Mouth full of Meat." Again,-" In this manner he lay till the 19th of Nov., when his Mother hearing him make a noise ran immediately up to him, and found him Eating." Again, he did not always eat and evacuate with regularity, as Sir Benjamin Brodie represented :- "In this manner he lay for about ten weeks, and then could eat nothing at all, for his Jaws seemed to be set, and his teeth clenched so close, that with all the art they had with their Instruments they could not open his Mouth, to put anything into it to support him. At last, observing a hole made in his Teeth, by holding a Pipe in his Mouth, as most great Smokers usually have, they through a Quill, poured some Tent into his Throat now and then, and this was all he took for six weeks and four days, and of that not above three pints or two quarts, some of which was spilt too; he made water but once and never had a stool all that time."

* Prælectiones in Hermanni Boerhaavii Institutiones, tom. iii. p. 76.

The narrator, Dr. Oliver, F.R.S., a physician of high standing, an F.R.S. in days when the fellowship was not so common as at present, did not pronounce the man an impostor as Sir Benjamin Brodie so fearlessly does. "I have no room," he says, "to suspect this to be any Cheat, because I never heard of any gain to the family by it, though so near the Bath, and so many people went thither out of curiosity to see the Sleeper, who, when awake, was a support to his old mother by his labour, but now a certain charge to her. Besides, there was seldom any body in the house to attend any profit that might be made by it, he being left alone in the house and every body at liberty to go up to his bedside." Indeed, the old mother was so far from deserving the charge of collusion with her son that, being as ignorant of his disease as Sir B. Brodie, she at first believed his sleep was only sulkiness or "sullen humour," and placed food at his bedside lest he should be starved. How, indeed, could Dr. Oliver for a moment have thought the man an impostor ! For to pass over the scarifyings and various external irritations, hollowing his name in his ears repeatedly and as loudly as possible; pulling him by his shoulders; pinching his nose; and stopping his nose and mouth till Dr. Oliver feared he might choke the man; running "a large pin into his arm to the very bone, but all to no purpose, for in all this time he gave (me) not the least signal of his being sensible," Dr. Oliver held a phial of solution of ammonia under one of the man's nostrils A CONSIDERABLE TIME, so strong that he himself " could not bear it under his own nose A MOMENT without making his eyes water; but he felt it not at all. Then," continues Dr. Oliver, "I threw it, at several times, up that same nostril, it made his nose run and gleet, and his Eyelids shiver and tremble a very little, and this was all the effect I found, though I poured up into one nostril about half an ounce bottle of this fiery spirit, which was as strong almost as fire itself. Finding no success with this neither, I crammed that nostril with powder of white hellebore," "but he never gave any token that he felt what I had done, nor discovered any manner of uneasiness by moving or stirring any one part of his body." "Yet, the next day his nose was inflamed and swelled very much, and his lips and the inside of his right nostril blistered and scubby with my spirit and hellebore." Nay, wishing to remove him to another house, they carried him "down stairs, which were somewhat narrow, and struck his head against a stone, and gave him a severe knock, which broke his head, but he never moved any more at it than a dead man would." This accident was an equally strong test with the applications of ammonia and hellebore, for it was violent and unexpected; and they, altogether, were tests which Sir B. Brodie never saw an impostor bear, and which he passed over in silence. Educated as he was for surgery, and occupied as he all his life has been with the mechanical matters of the profession, Sir Benjamin Brodie must be pardoned for not appreciating and understanding this case; but, I do not pardon him for omitting some of its most decisive proofs of insensibility, nor for declaring that the man was never seen to eat and was therefore a cheat, nor for presuming to understand a form of disease of which he knows nothing. What deception did the man attempt when his food "very regularly" disappeared, once daily or every two days, and evacuations appeared "very regularly" in the utensil? Did the man intend his mother to believe that the latter were supplied by any one but himself? If he had meditated something wonderful in this way, he would have prevented all signs of such matters; and that he could easily have done, as he was generally left alone in the house, while his mother worked out of doors. But, as these circumstances were not calculated to impose, so imposture was not suspected from them. The food at his bedside, in his first paroxysm of sleep, " was spent every day, and, supposed, by him ;" in the second paroxysm, victuals stood by him as before, which he ate of now and then, " but nobody ever saw him eat or evacuate, though he did both very regularly as he had occasion." In fact, all suspicion of imposition is preposterous. We have a simple, attless, natural narration of a case of sleep-waking, bearing upon itself the very stamp of truth to the eyes of every well informed physician.

The changes which occurred at different times were highly characteristic of these more rare affections. After his first paroxysin of sleep he was dumb for a whole month. During the first fortnight of his second paroxysm of sleep he would open his eyes, but afterwards he did not;—a likely thing that a man feigning sleep would ever lie with his eyes open, or open them from time to time! At one period he ceased to cat and evacuate: his jaws closed, and neither food put at his bedside disappeared, nor did an alvine evacuation appear in his utensil for six weeks and four days, though once he made water. At another period, when he was called on by his name "he seemed to hear them and be somewhat sensible, though he could not make them any answer;"-was this likely in a man feigning absolute sleep? His eyes were not now shut so close, and he had frequent great tremblings of his eyelids:—a probable thing this, that he would have kept his eyes constantly in this irksome state of movement when sleep would have been better shammed by keeping them closed! The countryman could never have devised all these little circumstances which practitioners, who have seen as many cases of this description as I now have, recognise at once as striking peculiarities of such affections. It is worthy of notice that the man was so inveterate a smoker as to have "a hole made in his teeth, by holding his pipe in his mouth," yet, by sleeping thus, first in 1694 for a month, then in 1696 for seventeen weeks, and then in 1697 for six months with the exception of a few minutes once, he deprived himself of what must have been an indispensable pleasure.

On waking from his sleep of seventeen weeks, so far from wishing it to be believed, he could not easily be brought to believe it himself till he saw the oats and barley ripe which were sowing when he saw the fields last.

I should say that a more beautifully genuine case of sleep-waking in which coma predominated never occurred. When Sir Benjamin Brodie sat down, Mr. Symes pointed out to him and the meeting the true nature of the case-that it was an instance of sleep-waking, with double consciousness, the man being in a sleep, generally profound, but sometimes with sufficient activity of the sleeping brain to enable him to do certain things-eat, drink, and evacuate, in all these actions voluntarily administering to himself, but not remembering one of them on awaking. In some instances of this peculiar sleep, there is from time to time more activity than he showed, so that persons walk, talk, write and work, nay, they may do some things better than when awake, though the sleep continues and they be insensible to mechanical injury, and snore; and in most instances, as in the present case, nothing is afterwards remembered, and the period passed in this sleep-waking state is as a separate existence. Sometimes the coma is profound and little or no activity of brain is discernible; sometimes there is no coma but great activity of the mind, as a separate period of existence, the character or ways of the person being more or less different from those habitual, and entirely forgotten when the brain passes again into its natural state: and between these two extremes are endless gradations of activity in the various cerebral faculties. Sleep-waking is the most appropriate title, as it comprehends all actions that may be performed: though the word somnambulism is often loosely employed, which strictly applies to those cases in which the patient walks. When the coma is profound the second term waking is hardly appropriate; and when there is no coma the first term sleep is hardly appropriate, and extatic delirium should rather be the designation. But, as a generic denomination, the expression sleep-waking is very convenient and characteristic. Extatic delirium was the wild, and, to a philosophic observer, deeply interesting, state in which the Okeys were usually seen when not in a profound coma or in their natural condition.

This class of affections are most wonderful and absolutely rivet the attention of a thoughtful man; and their varieties are great and beautiful, though beautifully similar to each other. But too often medical men are lamentably ignorant of them, and, when they have an interesting case of this kind, regard it only as

a strange piece of business, and are at a loss what to do, and so torment and physic the patient without mercy, and think no more about it; or perhaps, to save meditation, declare it was all imposition. The records of medicine supply a sufficient number: and, now that by mesmerism we know how to produce them artificially, no medical man is pardonable who does not make himself well acquainted with them. Ignorance of these wonderful spontaneous cases has caused much false and cruel accusation. I have known young children treated as liars, as naughty, as odd children, and youth and grown up persons vilified as impostors, by their families and instructors, and chiefly by medical attendants, because they fell occasionally into a state of sleep-waking, of the modification termed extatic delirium, during which, though not strong enough to strike every one as delirium, their conduct differed from what was habitual and proper; or because after an unsuspected paroxysm, one in which no extravagance had been committed, they denied all knowledge of what they were told they had said or done. An instance occurred of a gentleman so seized while in a box at the theatre, and losing all knowledge of his situation and preparing to perform a private act, nothing of which he remembered when taken before a magistrate. A striking case of this kind has lately been seen by me in the Middlesex Hospital. Dr. Wilson, under whose care the patient was and who to his honour knows and boldly declares the truth of mesmerism, was from this knowledge able to recognise the case: but some uninformed and spiteful person about the Hospital wrote to the lady who kindly interests herself in the poor boy that his only complaint was temper, and a medical whisper has reached me that the case is an imposition. The boy, who, in his natural state, is very respectful and particular in his behaviour, is very regardless of both persons and places in his delirium, sings with great feeling, and recites with capital power of imitation, and eats most voraciously, and his writing is a great curiosity,-quite different from his habitual writing, and blotted all over. I unhesitatingly declare the case to be as real as the boy's existence, and should never have been tired of studying it. The case was drawn up and sent to the Royal Medical and Chirurgical Society by Dr. Wilson, in November, under the title of a case of double consciousness, and a notice affixed in the library that it would be read. But, when the members, having declared that the history of the amputation, being mesmeric, had disgraced them, learned that this case was analogous to mesmeric cases, they actually took down the notice, gave half a hint to Dr. Wilson that he might withdraw the paper, a report went about that the boy shammed, and the paper was not read till three hours before March. I am told that Mr. Bransby Cooper would not believe the occurrence of such cases, and therefore said that the boy should have had a good thrashing, which would soon have cured him. Such a state of things is really lamentable. Let Mr. Bransby Cooper study the diseases of the nervous system before he condemns his fellow-creatures thus. Let him read a similar case of a girl sixteen years old, in the Edinburgh Philosophical Transactions, for 1822, and detailed in my Physiology, p. 365, who, because she recollected in her natural state nothing that occurred in the diseased, was treated in the most depraved manner; and one still more remarkable that occurred in a little girl in America, and is printed by Dr. Belden, under the title of An Account of Jane Rider, the Springfield Somnambulist, a copy of which I deposited in the Library of the Society. His flogging of the poor afflicted boy would be the counterpart of the tearing the hand of the poor girl in the Edinburgh Infirmary with the other surgeon's nails. Thrash the poor boy ! The conduct and manners of the two Okeys in their preternatural state were perfectly different from all that was observed in them when not in this state. They were totally ignorant of all persons, things, names, and circumstances, with which they had become acquainted previously: they knew neither their father nor mother, nor the meaning of the words father and mother: forgetting the meaning of almost every term, they learnt all the improper language so constantly used in the wards of hospitals, and irreverently swore and called bad names, and misapplied words, and were readily

taught to misapply them, without being aware of impropriety,-and the ignorant portion of the medical periodical press cruelly made fun of this : they had to learn every thing afresh : they would have enormous muscular power : they mimicked exquisitely, and had a strong propensity to mimickry and humour, so that they were absurdly thought by those ignorant of particular cerebral faculties being often highly augmented in such cases, whether spontaneously or mesmerically induced, by Mr. Wakley for example, to have been trained and practised impostors, whereas not a single mesmeric phenomenon ever witnessed by any person in them was unreal. The cases of both sisters were genuine throughout, similar but very differently modified, and it was ignorance only which led any one to doubt them, and it was heartless cruelty to slander two perfectly virtuous and afflicted female children, who had been carefully brought up and had lived only with their parents and afterwards in a respectable family till they were seized with cpilepsy. Not merely the Editor of the Lancet knew no better, but the Editors of other Medical Journals; and the display of disreputable unacquaintance with this kind of case, and the composition of vulgar tirades by so many professional men pretending to medical knowledge, was precisely the conduct which we witness in the streets when a deranged or imbecile person is pursued and hooted by boys and rabble, as though he were master of his own condition and conduct, and not the subject of an affliction profoundly interesting to the philosopher and to the man who can feel for others. Every thing stated or ever printed to their disadvantage was an absolute falsehood; I repeat these words emphatically, an absolute falsehood. They are both cured of the violent fits for which they had been long in the hospital, and the reality of which no one had doubted, and for which I at length mesmerised them. One is already respectably married to a young man in her own station of life, and a mother; the other lives with her parents and supports herself by doing needlework for a neighbouring establishment.

Like the boy in the Middlesex Hospital, the sleep-waker at Tinsbury, from whose case I have digressed, was at first supposed, and that by his mother, to be only in a "sullen humour:" though at last she saw the truth and for some time would suffer no one to come near to him for fear of more experiments upon her son,-a likely thing if the case had been shammed for profit! But the sagacious physician saw it was no imposture. The Royal Society were equally rational, and the president, Sir Isaac Newton, October 27, 1721, put his imprimatur to the volume of the Abridgement of the Philosophical Transactions, containing the narrative at full length, by Sir Hans Sloane, which would not have been the case had there been any suspicion of imposition. Indeed, I never heard before of the case being suspected by any one. I have given a pretty full account of the wonders of sleep-waking in my Human Physiology. Beginning with natural sleep, I pass to dreams, and then to that higher activity of the sleeping brain, termed Somnambulism or Sleep-walking, or more correctly sleep-waking; from p. 598 to 660 inclusively; and I likewise devote 66 pages to Mesmerism, and print the leading features of the cases of the Okeys.

I will now extract the whole narrative of the case near Bath :---

" A Relation of an extraordinary Sleepy Person, at Tinsbury near Bath. By Dr. William Oliver, F.R.S., May the 13th, anno 1694.

One Samuel Chilton, of Tinsbury near Bath, a Labourer, about 25 years of age, of a robust habit of body, not fat, but fleshy, and a dark brown hair, happened, without any visible cause or evident sign, to fall into a very profound sleep, out of which no art used by those that were near him could rouse him, till after a month's time; then rosc of himself, put on his clothes, and went about his business of Husbandry as usual; slept, could eat and drink as before, but spake not one word till about a month after. All the time he slept Victuals stood by him; his Mother fearing he would be starved in that sullen humour, as she thought it, put bread and cheesc and small beer before him, which was spent every day, and supposed by him, though no one ever saw him eat or drink all that time.

From this time he remained free of any drowsiness or sleepiness till about the 9th of April, 1696, and then fell into his Sleeping Fit again just as he After some days, they were prevailed with to try what effect did before. medicines might have on him, and accordingly one Mr. Gibs, a very able Apothecary of Bath went to him, bled, blistered, cupped and scarified him, and used all the external irritating medicines he could think on, but all to no purpose, -nothing of all these making any manner of impression on him; and after the first fortnight he was never observed to open his eyes. Victuals stood by him as before, which he eat of now and then, but nobody ever saw him eat or evacuate, though he did both very regularly as he had occasion; and sometimes they have found him fast asleep with the pot in his hand in bed, and sometimes with his mouth full of meat. In this manner he lay for about ten weeks, and then could eat nothing at all, for his jaws seemed to be set, and his teeth clenched so close, that with all the art they had with their instruments they could not open his mouth to put any thing into it to support him. At last, observing a hole made in his teeth, by holding his pipe in his Mouth, as most great Smoakers usually have, they through a quill poured some Tent into his Throat now and then. And this was all he took for six weeks and four days, and of that not above three pints or two quarts, some of which was spilt too; he had made water but once, and never had a stool all that time.

August the 7th, which is seventeen weeks from the 9th of April (when he began to sleep), he awaked, put on his Clothes, and walked about the Room, not knowing he had slept above a night; nor could he be persuaded he had lain so long, till going out into the fields he found everybody busy in getting in their Harvest, and he remembered very well when he fell asleep they were sowing of Barley and Oats, which he then saw ripe and fit to be cut down.

There was one thing observable, that though his Flesh was somewhat wasted with so long lying in Bed, and fasting for above six weeks, yet a worthy Gentleman his Neighbour assured me, when he saw him, which was the first day of his coming abroad, he looked brisker than he ever saw him in his life before; and asking him whether the Bed had not made him sore, he assured him and every body, that he neither found that, nor any other inconveniency at all; and that he had not the least remembrance of any thing that passed or was done to him all that while. So he fell again to his husbandry as he used to do, and remained well from that time till August the 17th, Anno 1697, when in the morning he complained of a shivering and coldness in his Back, vomited once or twice, and that same day fell into his Sleeping fit again.

Being then at *Bath*, and hearing of it, I took horse on the 23d, to inform myself of a matter-of-fact I thought so strange. When I came to the House, I was by the Neighbours (for there was nobody at home at that time besides the sick man) brought to his Bedside, when I found him asleep, as I had been told before. with a Cup of Beer and a piece of Bread and Cheese upon a Stool by his Bed within his reach. I took him by the Hand, felt his Pulse, which was at that time very regular; I put my Hand on his Breast, and found his Heart beat very regular too, and his breathing was easie and free; and all the fault I found was, that I thought his Pulse beat a little too strong. He was in a breathing Sweat, and had an agreeable warmth all over his Body. I then put my Mouth to his Ear, and as loud as I could called him by his name several times, pulled him by the Shoulders, pinched his Nose, stopped his Mouth and Nose together, as long as I durst for fear of Choaking him, but all to no purpose, for in all this time he gave me not the least signal of being sensible. I lifted up his Eye-lids, and found his Eye-balls drawn up under his Eye-brows, and fixt without any motion at all. Being baffled with all these tryals, I was resolved to see what effects > Spirit of Sal Armoniac would have, which I had brought with me, to discover the Cheat, if it had been one; so I held my vial under one Nostril a considerable time, which being drawn from Quick-lime, was a very piercing Spirit, and so strong, I could not bear it under my own Nose a moment without making my Eyes water; but he felt it not at all. Then, I threw it at several times up that

same Nostril, it made his Nose run and gleet, and his Eye-lids shiver and tremble a very little, and this was all the effect I found, though I poured up into one Nostril about a half-ounce Bottle of this fiery Spirit, which was as stroug almost as Fire itself. Finding no success with this neither, I crammed that Nostril with Powder of *White Hellebore*, which I had by me, in order to make my farther tryals; and I can hardly think any Impostor could ever be insensible of what I did. I tarried some time afterwards in the Room to see what effects all together might have upon him; but he never gave any token that he felt what I had done, nor discovered any manner of uneasiness, by moving or stirring any one part of his Body that I could observe. Having made these my Experiments I left him, being pretty well satisfied he was really asleep, and no sullen counterfeit, as some people thought him.

Upon my return to *Bath*, and relating what I had observed, and what proofs this Fellow had given me of his Sleeping, a great many Gentlemen went out to see him, as I had done, to satisfy their Curiosity, in a Rarity of that Nature, who found him in the same condition I had left him in the day before, only his Nose was inflamed and swelled very much, and his Lips and the inside of his Right Nostril blistered and scabby with my *Spirit* and *Hellebore*, which I had plentifully dosed him with the day before. His Mother upon this for some time after would suffer nobody to come near him, for fear of more Experiments upon her Son: About ten days after I had been with him, Mr. *Woolmer*, an experienced Apothecary at *Bath*, called at the House, being near *Tinsbury*, went up into the Room, finding his Pulse pretty high, as I had done, takes out his Launcet, lets him Blood about fourteen ounces in the Arm, tyes his Arm up again, nobody being in the House, and leaves him as he found him; and he assured me he never made the least unction in the world when he prickt him, nor all the while his Arm was bleeding.

Several other Experiments were made by those that went to see him every day from the Bath, but all to no purpose, as they told me on their return; I saw him myself again the latter end of September, and found him just in the same posture, lying in his Bed, but removed from the House where he was before about a furlong or more: and they told me, when they removed him, by accident, carrying him down Stairs which were somewhat narrow they struck his Head against a Stone, and gave him a severe Knock, which broke his Head, but he never moved any more at it than a dead man would. I found now his Pulse was not quite so strong, nor had he any Sweats as when I saw him before. I tryed him again the second time, by stopping his Nose and Mouth, but to no purpose; and a Gentleman then with me ran a large Pin into his Arm to the very Bone, but he gave us no manner of tokens of his being sensible of any thing we did to him. In all this time they assured me nobody had seen him either eat or drink, though they endeavoured it all they could, but it always stood by him, and they observed sometimes once a day, sometimes once in two days, all was gone. 'Tis farther observable, he never fouled his Bed, but did his necessary occasions always in the Pot.

In this manner he lay till the 19th of *November*, when his mother hearing him make a noise, ran immediately up to him, and found him Eating; she ask'd him how he did ! He said, Very well, thank God. She ask'd him again, Which he liked best, Bread and Butter, or Bread and Cheese ? He answered, Bread and Cheese. Upon this the poor Woman overjoyed left him to acquaint his Brother with it, and they came straight up into the Chamber to discourse him, but found him as fast asleep again as ever, and all the Art they had could not wake him. From this time to the end of *January* or the beginning of *February* (for I could not learn from any body the very day) he slept not so profoundly as before, for when they called him by his name, he seemed to hear theu and be somewhat sensible, though he could not make them any answer. His Eyes were not now shut so close, and he had frequently great tremblings of his Eye-lids, upon which hey expected every day when he would wake, which happened not till about the time just now mention'd, and then he wak'd perfectly well, not remembering anything that happened all this while. 'T was observed he was very little altered in his Flesh; only complained the Cold pincht him more than usually, and so presently fell to Husbandry as at other times.

I have no reason to suspect this to be any Cheat, because I never heard of any gain to the Family by it, though so near the *Bath*, and so many People went thither out of Curiosity to see the Sleeper, who when awake was a support to his old Mother by his Labour, but now a certain charge to her. Besides, there was seldom any body in the House to attend any profit might be made by it; he being left alone in the House, and every body at liberty to go up to his Bedside."

The case at Wellow was, I allow with Sir Benjamin Brodie, a companion to this case; not however a companion in imposture, but in the condition of the nervous system. I will now present another companion, seen by myself: since the occurrence of any similar morbid phenomena—just as of the phenomena of mesmerism—at different periods, in different places, in persons of different ranks, and in persons who could never have heard of each other, is alone a very strong confirmation of the reality of those morbid phenomena—a reality, however, which ordinary sagacity, unclouded by prejudice and temper, cannot fail of discovering.

On the 9th of August, 1840, I was requested by Dr. Arnott, who, unlike men of far inferior intellect and attainment, has witnessed my mesmeric phenomena fifty times and is as satisfied as myself of the truth of mesmerism, to visit, with him, a Spanish lady of consideration, about 40 years of age, who had married at 14, miscarried every three months for two years, and then had a child, and afterwards a second. Soon after the birth of the second and up to the time I saw her -a period of above twenty years, she was subject to fits of sleep, which often lasted three weeks, during the whole of which she would swallow nothing but a The fits of sleep would come on suddenly, and she was once seized little water. They would cease as suddenly, so that she often on waking went at the opera. to the opera. In them she was insensible to light and all noise but the voice of her infant. Dr. Gregory the second, of Edinburgh, habitually mentioned in his lectures, when I was his pupil, the case of a cataleptic lady whom he attended, and whose disease had been induced by misfortunes very similar to the history of Isabella in the Fatal Marriage; and in her paroxysms of insensibility she appeared perfectly blind, except when her baby was brought near her, and then she gave slight signs of recognising it. Had the peculiar conditions of these ladies been induced artificially by mesmerism, the doctors would have pronounced them at once most shameless impostors, feigning insensibility, but not able to carry it on where maternal feelings were too strong for them. The same phenomenon is often witnessed in mesmerism. I have had several cases, in persons of both sexes, and of high and humble rank, of perfect deafness in the mesmeric state, except to the voice of the mesmeriser or a noise made by him.

Like the boy stigmatised by Sir Benjamin Brodie as an impostor, the Spanish lady, in her fits of sleep, would relieve her bowels, and she rose out of bed for this purpose, and even performed the usual subsequent act: though in one paroxysm the call of nature was unheeded by her, and an immense collection of hardened matters took place.

She was insensible to mechanical injury—pinching, pricking, &c., but not to cold; and this again is a common fact in mesmerism. I have patients at this moment who give no sign of feeling, however you pinch them, but withdraw the hand instantly that a cold body touches or even is brought near to it. The lady was, on the other hand, fond of cold, for, if ice were given her, she would sit up in bed, smell at it, and appear to like it.

When I visited her, she was in an attack. I found her eyes firmly closed and her upper extremities rigid, not yielding to an attempt to move them, and her hands placed up against her face. I blew in her face, and her eyelids corrugated the first time, but did not upon repetition. I understand that at 11 P. M. the rigidity regularly ceased and she sunk completely relaxed into a deep sleep. How analogous, how identical, will not every one, familiar with the state artificially induced by mesmerism, recognise these phenomena to he with those of mesmeric patients!

The attacks had become less frequent of late and shorter, continuing a week only: but the present had lasted ten days, and Dr. Arnott informed me that when he called the next day she was still asleep. Headache preceded the first attack, and often continued and tormented her. The present attack was ascribed to improper food. The afflicted lady was tired of her disease, and wished for death. I recommended mesmerism as an almost certain cure, if properly and perseveringly employed; but did not visit her again as she was about to leave England immediately. It was lucky for her character that she was not a patient in the University College, or, as it was formerly called, North London, Hospital; that neither Mr. Wakley, nor the Edinburgh surgical experimenter of whom he writes, was allowed to see her; and that her case was not described to the Royal Medical and Chirurgical Society of London.

Sir Benjamin Brodie, after agreeing with Dr. Marshall Hall that according to the laws of physiology the man's sound leg ought to have moved during the operation on the other, concluded by declaring himself perfectly satisfied with the old report of the French Royal Commission in 1784, and the more recent determination of the French Academy against the truth of mesmerism. The selfish, insincere, and ambitious Bishop Watson-the writer of The Apology for the Bible, used to profess himself, in his days of wealth and importance, perfectly satisfied with Chemistry as it was when he was nobody and published his Chemical Essays :--- " for his part he never troubled himself with the new-fangled discoveries and doctrines of Sir Humphry Davy."* I was once summoned to an old man near his death with the influenza, who had been forty years check-taker at Covent Garden or Drury Lane Theatre, and, though at his post every night, had been so occupied in the money department that he actually had never once in his life seen a play, but had been for forty years contented with sitting at the receipt of custom and never felt any desire to step three yards farther into the house and learn what a play was like. 1 have heard that Sir Benjamin Brodie, when I demonstrated mesmerism at University College Hospital, used to say that he disliked turning his horses' heads towards Russell Square to see a patient, lest people should think he was going to that scene of humbug, University College Hospital. From his total want of curiosity while I have demonstrated mesmerism at my own house for the last four years to any respectable person who requested me, and from this declaration at the Society, I can believe the anecdote. Sir Benjamin Brodie is to be pitied : but he is also to be condemned. He ought to know that the French investigation was most superficial and incomplete, conducted in the most random way; that the commission allowed that the effects were not imposture, and only ascribed them to imagination, imitation, and touch; that the results were varied, and the report says-"Nothing can be more astonishing than the convulsions;" "he who has not beheld them can have no idea of them; and even, in beholding them, one is equally surprised at the profound repose in which some of the patients are placed, and at the agitation which animates others. It is impossible not to recognise in these effects, which are constant, a great power which agitates the patients, which ever masters them, and of which the person who magnetises them seems to be the depositary ;" -that one of the French Commissioners, truly virtuous, highly distinguished in Science, and well accustomed to investigate nature-the celebrated Jussieu, who had pursued the investigation with the greatest attention, firmly refused to sign the report of the rest, though threatened by the minister, Baron Breteuil, and made one separately, favourable to mesmerism, and setting forth the solid reasons of his convictions, after having made separate experiments; that, in 1825, on a suggestion that the Royal French Academy of Medicine should in-

vestigate the subject anew, a powerful report in favour of the investigation was made by the Commissioners, Drs. Adelon, Pariset, Marc, Burdin, senior, and Husson; that nearly one-half of its members confessed that they had seen, and that they believed, mesmeric phenomena most marvellous and important: that, after the investigation, a powerful, and in every respect admirable, report in favour of the truth of mesmerism was made in 1831, by the Commissioners, Drs. Bourdois De La Motte, Fouquier, Guéneau de Mussy, Guersent, Itard, J. J. Le Roux, Marc, Thillaye, and Husson, and received by the Academy with the liveliest interest; that some of the adversaries of mesmerism in vain attempted to disturb the religious silence of the assembly by murmurs of disapprobation, but that the immense majority instantly repressed their attempt, and testified by loud applause to the honourable reporter, M. Husson, how highly they appreciated his zeal, talents, and courage;* that great discoveries, great progress, have been made in the subject since the old report—that the science has been enriched since that time as much as Chemistry since the days of the Alchymists; that many men, his equals in education, information, ability, strength of mind, disinterestedness, and industry, have not contented themselves with an antiquated report, and a modern superficial and unfair report of careless and prejudiced men, but boldly asked nature to report whether mesmerism is true, and have received from her one plain, uniform, and often repeated answer-Yes.

Sir Astley Cooper, who, though really distinguished in mechanical surgery, was otherwise but scantily informed, and was endowed with a moderate degree of the higher intellectual faculties, always refused to witness mesmerism, "because he had a character to lose." A low estimate must he have formed of his own character if it could have been lost thus ! How sad an absence of moral courage and dignity ! And so poor Sir Astley died as Sir Benjamin Brodie at present intends to die, without a sight of the mesmeric phenomena !-- just as many astronomers in Newton's time died in perfect ignorance of Newton's discoveries, and at his death, forty years after the publication of his Principia, he had not, as Voltaire remarks, twenty followers out of England: and just as the Professor of Philosophy at Padua refused to walk into Galileo's house and look through his telescope to see whether the satellites of Jupiter really existed, and the Professor at Pisa made speeches to show that the facts could not be facts. In Kepler's correspondence (Kepleri Epistolæ) is a letter from Galileo, in which he writes :-- " Oh my dear Kepler, how I wish that we could have one hearty laugh together. Here, at Padua, is the principal professor of philosophy, whom I have repeatedly and urgently requested to look at the moon and planets through my glass, which he pertinaciously refuses to do-why are you not here ? What shouts of laughter we should have at this glorious folly ! and to hear the philosopher of Pisa labouring before the Grand Duke with logical arguments, as if with magical incantations to draw the new planets out of the sky." When the assertion that the blood circulated first attracted public attention,

When the assertion that the blood circulated first attracted public attention, not only were those who believed the fact vilified as visionary, credulous, and ignorant, by the medical profession, and therefore by the mass of the public who thought the doctors must be proper judges of the matter, giving them credit for more knowledge, sense, and honesty than they possessed; and lampooned both here and on the Continent, and nicknamed *circulators*; Harvey himself losing his practice, while his loquacious and shallow opponents, now forgotten, flourished; no doctor beyond the age of forty, at the time, ever believing the circulation to the day of his death : but books were written to prove by reasoning that the facts of the circulation could not be facts. Among the rest was one entitled :—Ereco motus sanguinis NON CIRCULARIS. Candidate, Simon Boullot:—a thesis read in the University of Paris before the President, Hugo Chasles, 1482. Another, Ereco sanguinis motus circularis IMPOSSIBILIS, 1472. Candidate, Francis Bazin;

* Rapports et Discussions de l'Acadénie Royale de Médecin, sur le Magnétisme Animal. Par M. P. Foissac, M. D., Paris, 1833, p. 208-an historical work which all interested in the subject should possess.

President, Philip Hardouin de St. Jaques.* But if Galileo and Harvey, the philosophers of facts, were pronounced visionary and credulous, so was Bacon, who nrged men to avoid fancying and to busy themselves with observation, experiment, and induction. When Elizabeth thought of making him her attorney-general, Cecil represented him to her "as a man of mere speculation, as one wholly given up to philosophical enquiries, new indeed and amusing, but fanciful and absurd and therefore more likely to distract her affairs than to serve her with proper judgement," in short, as an inferior practitioner, though at length Lord Chancellor.+

Sir Benjamin Brodie need not fear his company if he cease to scorn mesmerism, for he will find himself with Cuvier and La Place.

Cuvier thus writes: t-" The effects produced upon persons who, before the operation (of mesmerising) was begun, were in a state of insensibility; those which have taken place upon other persons, after the operation itself had reduced them to that state; and, also, the effects produced upon brutes; no longer permit it to be doubted that the proximity of two animated bodies, in a certain position, and with the help of certain motions, do produce a real effect, wholly independent of the imagination of either. It is also evident that these effects are owing to a communication which takes place between the nervous systems of the two parties."

La Place thus writes : §-" The extraordinary phenomena which result from the extreme sensibility of the nervous system in some persons have given birth to a variety of opinions, on the existence of a new agent, denominated animal inagnetism. It is natural to suppose that the influence of those causes is very weak, and that it can easily be disturbed by accidental circumstances, but it would be unfair to conclude that it never exists, merely because, in many cases, it does not manifest itself. We are so far from being acquainted with all the agencies of nature, and with their different modes of action, that it would be unphilosophical to deny their existence, because in the present state of our knowledge they are unexplainable to us."

M. Chenevix states that he had more than one conversation with La Place upon the subject, about 1816 and 1817, and that the expression of that great philosopher constantly was : " that the testimony in favour of the truth of mesmerism, coming with such uniformity from enlightened men of many nations, who had no interest to deceive and possessed no possible means of collusion, was such that, applying to it his own principles and formulas respecting human evidence, he could not withhold his assent to what was so strongly supported."

Sir Benjamin Brodie joins the ranks of Mr. Wakley, and id genus omne of intellect, and information, and character, rather than of La Place !

Although it would disgrace Sir Benjamin Brodie to listen to mesmerists for a moment or to withhold his sneers, "it would not," I quote Mr. Chenevix, "disgrace the greatest man whom England ever has produced to attempt an experiment or two upon a doctrine which Hufeland, Jussieu, Cuvier, Ampére, and La Place believed. Nay, would it not disgrace him more to condemn, without knowing any thing about it, what they knew and credited ? Is supercilious ignorance the weapon with which Bacon would have repelled a new branch of knowledge, however extraordinary it might have appeared to him." "Surely what great men believe, ordinary men may try."

Mr. BRANSBY COOPER, now began, by asking the advocates of mesmerism to give him "the rationale of the facts." The point first to be ascertained was

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^{*} In 1723, a thesis was printed against inoculation :- Ergo variolas inoculare NEFAS; and in 1691, a thesis declaring the enormous wigs of that day to be healthier than our own hair : ERGO coma adscititia nativâ SALUBRIOR. 1691, Candidate. H. Petr. Mattot ; President, Pet. Paul Guyard. Authors, and presidents, and doctrines, have all vanished into thin air.
† See the Life, prefixed to his works.
‡ Anatomie Comparée. Tom. ii. p. 117.
§ Traité Analatique du Calcul des Probabilities. p. 158.

^{||} London Medical and Physical Journal. June 1829, p. 500

evidently whether the statements of mesmerism were facts: and the author had opened his paper with these words. "I shall abstain entirely from any preliminary remarks upon the supposed cause of the effects I have produced; I shall still call the state 'mesmerism,' because the name involves no principle; it regards the phenomena only; and not the specific cause of them." "The generality of men, when they hear of some novel phenomenon, instead of testing the truth by experiment alone, endeavour to ascertain the cause by their own powers of reasoning; and belief or disbelief is made to follow the result. The startling phenomena of mesmerism have but too frequently illustrated this remark. To facts I shall therefore confine myself; and to such only as I can personally vouch for !"

He then found a difficulty in admitting the facts, because the man seemed to hear the sawing of the bone; and contended that if the man could not feel he could not hear,—that "hearing and feeling were the same." Therefore no deaf man can feel a pinch; nor men with palsied legs hear!

I presume he meant that in coma all the senses must be equally dull. His companion, Mr. Liston, who saw the case of coma with exquisite sensibility of the surface which I have described, could enlighten him on this point, were it not too philosophical a point for Mr. Liston's notice. If Mr. Cooper were not a surgeon only, but well acquainted with the more remarkable nervous diseases and with the phenomena of mesmerism, he would know that a person may be asleep and snore, and yet hear and talk; and that touch, taste, smell, sight, hearing, may each be suspended or active, while the others are, one, or more, or all, active or suspended. However, this ignorance was very excusable in him, after the speeches which others had made.

He sat down calling upon the gentlemen present acquainted with mesmerism not to let their opponents have it all their own way, and to come forward with their *facts* in a manly manner. Now nothing could be a greater treat than to see their opponents have their way, and rush headlong violently down the steep, like another set of obstinate beings in olden time who had more legs to stand upon. As to coming forward with facts, there were strong facts, and facts only, given; and given in as manly a manner as any thing could be given to the Society; and more facts than the Society knew what to do with : and yet he asked the supporters of mesmerism to come forward with more facts than were related in the paper; and he had *begun* by asking for the rationale of the facts, as if he admitted the facts and there were not facts enough.

This gentlemau is a teacher at Guy's Hospital.

Mr. LISTON now rose, and, leaning forward, wished to "know if the interesting patient had sufficiently advanced in his education since the operation to be able to read with the back of his neck or with his belly." He said no more, and, if he had a friend in the room, that friend must have wished he had not said so much. His little speech fell flat and did not excite even a smile, except one of pity from myself.

However, Mr. SYMES assured him, as I could have done on my own part, that he had witnessed vision when the eyes were indisputably bandaged, so that the patients in their ordinary state could not have discerned the faintest glimmer of light.

Mr. Liston made no allusion to the case of the poor cataleptic girl in the Edinburgh Infirmary, from whose hand, according to Mr. Wakley, he tore a piece with his nails; nor of the gentleman from whose insensible foot he cut away a bone, and whose whole foot he might have dissected without causing the least sensation.

Mr. ARNOTT found some difficulties in the case; but observed that the statement was highly interesting, and the subject deserving of attention, for he had seen operations performed without the knowledge of the patient when insensible through opium or great loss of blood. There is therefore some reason to hope that Mr. Arnott will feel it his duty to ascertain by experience whether patients can be rendered comatose through mesmerism and unconscious of surgical operations. Dr. MANO considered that the subject was of great importance, and should not be treated with ridicule, or at once rejected because it was startling. He declared Sir Benjamin Brodie's suggestion that the man was hysterical to be totally unsupported; and stated that he suddenly ran a pin deeply into the elder Okey when her back was turned, and that she manifested not the slightest sensibility.

Many who had witnessed the wonderful phenomena in the Okeys, and not ventured to believe there was not some undiscoverable collusion, became firm converts to the truth by making a pass behind the back of one of the sisters after the demonstration was over, on meeting with her accidentally in the passages or on the stairs when her back was turned and it was absolutely impossible for her to see or suspect any thing.

Dr. Mayo pointed out the difficulty of supposing that all the persons of different countries and ages who exhibited mesmeric phenomena were impostors.

Capt. VALIANT related the case of his own nurse who had a very severe operation successfully performed upon her in the mesmeric state without any sensation. Dr. James Johnson sneered at the poor woman's truth, and wished to know if she did not beg her mistress to be present at the time. To this Captain Valiant immediately replied in the affirmative. Dr. Johnson then sneeringly wished to know what that was for. To which the Captain replied that it was surely natural for her to desire a female to be present, and that no one could be more proper than her own mistress under whose protection she was living. Dr. Johnson, as a father, should have been contented with viewing the poor man whose leg was amputated as an impostor, without attempting to insinuate that this poor female also had acted disreputably.

The authors of the paper, Mr. Topham and Mr. Ward, heard all the speeches without a single observation; and it was my intention, before I left home, to follow the same course of absolute silence, and amuse myself by seeing to what length the meeting would go. Indeed I should not have attended the meeting at all, but that several friends wished to be admitted as visiters. However, I did rise, after being repeatedly called for, and pointed out the striking facts of the narration which had been entirely unnoticed by any of the speakers: I read from the Lancet the case of the Edinburgh surgeon, tearing the hand of the poor girl in the infirmary with his nails, Mr. Liston sitting on the bench next to me and saying nothing: and I advised them not to reason or rely upon others, but to act as I had done,—to go to nature and ascertain for themselves from her whether mesmerism was true.

As soon as I sat down thanks were voted, without a dissentient voice, for the paper, and the society adjourned, disbelieving and ignorant of the most common and elementary effects of mesmerism, and having afforded a fine illustration of the remark of Mr. Chenevix, made fourteen years ago,—" The ignorance of the medical world in this country is as great as the precipitancy with which the case is prejudged."

As soon as the society had adjourned, Mr. Topham went up to the president, and in my hearing formally withdrew the paper from the society, saying that he wished to withdraw it on the spot; and he took his leave with the words,—"it must accordingly be considered as withdrawn."

The authors advertised it as a pamphlet on the following day, and published it on the next.

SECTION III.

RESOLUTION OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY NOT TO LEAVE A TRACE IN THEIR RECORDS THAT THIS FACT HAD BEEN PRESENTED TO THEM.

"Galileo, Newton, Salomon de Caus, Volta, Fulton, Winser, Arkwright, Gall, and all who have presented themselves with a truth in their hand at the door of this great bedlam, called the world, have been received with stones or hisses."—Jobard.

On the evening of the next meeting of the Society, December 13th, before the

chair was taken, Dr. Copland, the eminent compiler, goodnaturedly told me that he was going to oppose the confirmation of the minutes of the proceedings of the last meeting. I as goodnaturedly replied that I was very glad of it; and hoped he would not stop there, but propose a strong vote of censure upon the authors, the council, and all concerned in its presentation to the last meeting. He immediately looked grave and astonished. But I laughed on, and assured him I was in earnest, —and desired nothing more for the sake of mesmerism than that the society would distinguish itself to the very utmost in its dire hostility. He evidently considered the society an important body. But I hold no society or college higher than a common club, except so far as it acts rationally and with the simple love of truth and of the happiness of man and other animals.

An M.D. standing by, named Evans, living at the western extremity of Hill Street, on the left, with two very large brass plates, immediately that Dr. Copland had announced his intention to me, volunteered to second the motion: but Dr. Copland looked as if he was not ambitious of such distinguished support, and scarcely noticed him. He now said that he believed the patient an imposter, for that he had taken or seen taken off a leg from a man who gave no sign of pain; and he had published the case. I asked, "and was a nerve handled roughly with an instrument as in the case of the man at Wellow." He turned perfectly white, and said "Yes, it was." "Of course," I remarked, "you published this striking fact in your narration of the case?" "No, I did not," he replied.

When the chair was taken, a secretary read as minutes of the preceding meeting merely that such a paper had been read; no abstract being given according to the established custom of the society. The authorities thus disdained to possess the particulars on their books. The president then put the usual motion for the confirmation of the minutes, when Dr. GREGORY, known in connection with small pox and cow pox, rose to express his disapprobation of the authors having published the paper immediately that it was read.

Dr. COPLAND rose to oppose the motion on two grounds,-the character of the paper, and the publication of it by the authors without the permission of the society. He would allow no trace to remain that such a paper had been read. The president stopped his arguments on the first point, as the paper had been discussed at a previous meeting and thanks been voted for it. The deadly hostility of Dr. Copland to mesmerism is well known. But to-night he was particularly unwise. He protested that the paper ought not to have been read, because the author was not a medical man !- As though knowledge was ever to be despised from any source. Why one of the authors was a surgeon, though neither was a fellow of the society. I have heard papers read at the meetings of the College of Physicians (of which he rejoices to be a fellow) by persons not medical, once by the very reverend Dean of Westminster; and the society has of course no law as to who may be authors of papers: and several members of the society are not medical men. On this point he was set right by more than one member. He then contended that, if the account of the man experiencing no agony during the operation were true, the fact was unworthy of their consideration, because pain is a wise provision of nature, and patients ought to suffer pain while their surgeon is operating; they are all the better for it, and recover better! Will the world believe that such folly was gravely uttered? This will be remembered as a doctor's speech in 1842, when the doctor himself shall be forgotten. In due consistency, Dr. Copland, when he is about to have a tooth extracted, of course goes to a clumsy dentist and begs the man to give him all the pain he can. In due consistency, he of course gives his patients that physic which he thinks most likely to pinch them well, because they must be all the better for being twisted with sharp pain while it is operating; the agony must do them good, and make them anxious to take his physic again. He then confined his motion to the erasure of the minutes, on the ground of the publication of the paper by the authors when they had no right.

Dr. Evans fulfilled his promise of seconding Dr. Copland, but made no speech.

There was now a mighty, virtuous indignation expressed by several at the publication of the paper by the authors.

Dr. JAMES JOHNSON said it had been printed before it was read in the society. Dr. MERRIMAN, known as an accoucheur and examiner at Apothecaries' Hall, said it had been published before it was read in the society; which statement was incorrect, unless Dr. Merriman confounded printing with publishing. "Common sense should have told the authors not to publish it,—the publication was a gross

Dr. GREGORY was so shocked that he proposed the affair should be promulgated by advertisement in three newspapers.

insult to the society."

Dr. COPLAND declared the authors had broken faith with the society in publishing it, and had made a semblance of its being published under the society's sanction.

Dr. MOORE protested that the authors had violated the laws of the society; and, at the same time that he was so indignant at its publication having been taken out of the hands of the society, declared, most consistently, that it was unworthy of a place in their minutes. "How would the character," he exclaimed, "of that medical society be affected, on whose records it should appear that it had received and discussed a subject like mesmerism, when no proof existed as to its truth?"

Dr. COPLAND rose again, and asked if the society would pocket such an affront as the publication?

Mr. SYMES begged the president to inform the meeting, whether the authors had not formally withdrawn the paper as soon as it was read. The president made no reply: and at this I must express my regret. His conduct had in the whole affair been most sensible and impartial. He is in truth in all respects a gentleman; but he seemed distressed and confused at the hubbub of the meeting, and did not reply, though he evidently ought, and in the affirmative.

Mr. Wood, who was present as a visiter, hearing such remarks made upon Mr. Tophan behind his back, rose and was requesting permission, as the friend of the absent gentleman so accused, to say that Mr. Topham was not aware that he had been violating any rules of the society in publishing the paper after he had withdrawn it, when he was suddenly interrupted by one of a number who humbly live, and move, and have their being in Sir Benjamin Brodie,—

Mr. CÆSAR HAWKINS, who objected to his speaking, because he was not a member of the society: and Mr. Wood was not allowed to say another word. Here was a body of men censuring an absent gentleman in strong language, and, when his friend rose craving permission to explain for him, that friend was instantly compelled to hold his peace. This was conduct unworthy of a society of men of the very humblest class. No law of the society forbad Mr. Wood to speak; and, had there been such a law, the laws of justice, and of that charity without which Mr. Hawkins is as "sounding brass," would have been superior to it under these circumstances. Ungenerous man ! I envy you not your heart. You little thought what you caused to pass in Mr. Wood's recollection when you acted thus. You caused him to remember that but five days before (December 8th) he saw you standing near a table, while the leg of a poor young woman was cut off in the midst of agonizing shrieks, she being evidently in the last stage of consumption, and with which, as well as her scrofulous knee, she had been under the same surgical care for four months. On this very day she had died (December the 13th); and, on being opened, it was seen that at the time of the operation she had been very far advanced in consumption. Not only was the upper part of the right lung extensively disorganised, but the whole left lung was studded with tubercles, which in the upper part had suppurated and formed several large abscesses; one abscess was very large, and had burst into the cavity of the chest. It is a surgical rule not to operate for even a fistula, unless the lungs are examined and found healthy. Here the operation could only agonise the poor creature and shorten the wretched remnant of her days; and the reflection that she might probably have been spared the useless agony of the operation by mes-

merism,-a blessing in the eyes of every one but Dr. Copland,-drew a sigh from Mr. Wood as Mr. Hawkins vented forth his hostility. Had indeed the stethoscope been employed the state of things would have been known, and she spared the operation altogether,-the stethoscope, without being conversant with which no man can treat diseases of the chest without daily blunders, but which has been despised in the building where the unfortunate woman died, is spoken of now by one there as a folly reminding him of a fishing line with a fool at one end and a fish at the other, and was spoken of formerly with equal contempt by one who now uses it hourly, but who, when I first defended its importance years ago, persecuted me with his tongue, and said it was just the thing for Elliotson to rave about and he had never met with a single sensible man who advocated it.-So Mr. Wood sat down, amidst loud cries of "Chair !" " Chair !" even from an old practitioner, not a member of the society, who lives near University College, and is as violently, as he is ignorantly, antimesmeric: and, though I have been above thirty years a member of the society,-had been its president when it obtained its charter, which has no other living name in it than my own,-had procured for it myself the epithet Royal, and for its members the title of Fellows,-had allowed the society to hold its general evening meetings and the afternoon meetings of the council at my house when it had no house of its own, and given the members numerous conversazioni during the two years of my presidency, and afforded not merely my house but the proper trifling hospitality on all these three kinds of occasions,—and had furnished many papers to the Society's Transactions; —1 thought that I could not consent to continue a member of it. The substitution of perverse prejudice for scientific and candid spirit was discreditable enough, but the want of common justice and feeling was too disgusting: and, after much calm reflection upon my opinion, I sent my resignation.

Mr. PERRY, a secretary, condemned the publication of the paper, and so did-Dr. MAYO, and Dr. WEBSTER of Brook Street, and I think Dr. ADDISON of Spring Gardens, and Mr. DAVIES of Highgate.

This virtuous indignation at its publication was truly laughable. The speakers all knew that the society would not have published this paper, and they would have risen in arms at the bare suspicion that the council contemplated such a thing; and yet as much clamour was made as if the society had been deprived of a treasure. I resolved to take no share in the discussion, as I knew that neither the authors nor the public would care whether the minutes were confirmed or not. I never enjoyed a farce of Foote's more than the acting of this evening; for, by a little effort, as I sat silently observing the speakers, I represented to myself that they were enacting all their parts for my amusement.

I am clearly of opinion that the society had no right to complain. This society by its laws (ch. xii. 5), cannot publish a paper without the consent of the author. Had the paper not been formally withdrawn, the publication would have been unjustifiable.

As to the printing of the paper in readiness for the withdrawal, surely if the authors had a right to withdraw it and publish it immediately, they had a right to be ready with the printing.

Indeed had they not done all this, they would have shown no spirit. For they had learnt, on the best authority, from various quarters, that a fierce attack would be made upon them in the society; that this member by name would demolish them and mesmerism and all concerned in mesmerism, and that member by name would teach people to send papers on mesmerism to the society; that "a rod was in pickle for them, and for the impostor of a patient," &c. &c. Their resolution therefore was wise to hold their peace at the meeting, and to withdraw the paper and publish it themselves, instead of allowing it to be locked up for ever in a dark closet with the other valuables of the society.

A little debate arose about the effect of confirmation of minutes. Dr. Roors, of Russel Square, thought that, if they were not confirmed, the vote of thanks

passed at the last meeting would drop; as though the business of a meeting was not valid till minutes of it were confirmed at another.

Mr. QUAIN, of University College, and Mr. DREW, jun., of Gower Street, urged that the non-confirmation of the minutes could not affect the proceedings of the previous meeting; that they were merely records, and their confirmation a mere assertion that they were correct.

This I apprehend is perfectly true; and the society had a full right, as the president said, to preserve no record of the previous meeting. What is done at one meeting, if it is not a prospective resolution, is complete. When a person is elected a member or officer of a body, he is fully elected; the minutes record merely the fact. But minutes may affect a prospective measure. If a meeting resolves that a certain thing shall be done at another meeting or any time subsequent to it, and the second meeting does not confirm the minutes, they are erased; and, as then no such resolution can be shown, the measure previously resolved upon cannot be taken, unless by another resolution. For want of noticing this distinction of the two cases, the confusion about the confirmation of minutes affecting or not affecting measures, I presume, arises. The idea of the non-confirmation of the minutes affecting the vote of thanks, when the persons thanked had received the thanks, and gratefully gone off with them, never probably to come near the society again, was very amusing.

So the virtuous indignation of a large majority condemned the minutes to nonconfirmation,—a most ridiculous proceeding, since, from reporters being admitted, the whole proceedings of the previous meeting were already published in the various journals, and recorded more publicly than they would have been in the minutc-book of the society, which nobody sees but the secretary when he writes in it and the president when hc signs his name.

I forgot to mention that Mr. BRANSBY COOPER joined with the rest, and was not contented with virtuously disapproving of the publication, but informed us that the society ought to be grateful to us for coming forward to be so defeated, and that no men had ever had a more complete beating than had been given us. It was hardly noble in a victor not to be satisfied with seeing his focs at his fect, but thus to jeer and tell them, as they lay prostrate, they were benten. And yet again it was very good of him, because we should otherwise not have known that we were beaten.

CHAPTER II.

NUMEROUS OTHER CASES.

"MESMERISM is too gross a humbug to admit of any farther serious notice. We regard its abettors as quacks and impostors. They ought to be hooted out of professional society.-Any practitioner who sends a patient afflicted with any disease to consult a mesmeric quack, ought to be without patients for the rest of his days." Mr. Thomas Wakley, Lancet, Oct. 29, 1842.

1. It is a great happiness to me that, before Mr. Ward undertook to operate as he did in the case which has been described, I was originally consulted upon the possibility and safety of operating in the mesmeric state without pain and gave a decided opinion that to induce such a state and perform the most painful operation in it, both without pain and with a successful result, was very practicable. I had myself witnessed five years previously the introduction of a seton into the back of the neck of Elizabeth Okey without sensation in the mesmeric state. "For a length of time she had perfect loss of the sense of touch,-anæsthesia, in her cestatic delirium. She could hold nothing unless she saw it ; nor, till she acquired the habit, could she walk without looking at her feet. She used to take red-hot coals out of the fire and wonder, as she held them, why other people cried out and desired her to put them down; and why her hands became blistered." As she suffered excruciating neuralgic pain in her head, I prescribed a seton. She was not apprised at all of it; and was standing before me and several others chattering wittily and deliriously, when Mr. Wood, who was behind her, suddenly took up the flesh of the back of her neek, run a large seton needle with a skein of silk into it, and put on the plaster, without a moment's check to her chattering and fun, or any sign of her noticing it, though I watched her most minutely. On dissipating the state, and bringing her to her natural condition, she scon found there was something wrong at the part, and put her hand to it, saying some one must have pinched the back of her neek. In her deep coma, and in that of her sister, there was always insensibility of touch, and cupping and the severest blistering were perfectly unnoticed.

2. Soon afterwards I met with a beautiful case of mesmeric susceptibility and the permanent cure of severe and obstinate epilepsy by mesmerism, in a little boy, Master Salmon, of Red Lion Street, Holborn, whose case I shall send to the Zoist. I threw him into sleep-waking daily for the cure of his fits. In this state, though he saw, and heard, and whispered, he had no feeling. He had an eruption in the head, which was dressed every day, but with great pain. His mother dreaded this daily business; and I advised her to mesmerise him always before she began. She did; and the removal of the old dressings, the washing, and the fresh dressing, were regularly from that time done by her in his mesmeric state, and he never suffered in the least, and she then always awoke him by a few transverse passes. His head got well.

3. I have at this moment a beautiful case of mesmeric susceptibility and the cure of severe hereditary and long-standing epilepsy by mesmerism, in the person of a young female whose phrenological phenomena are mentioned in my letter to Dr. Engledue appended to his celebrated address. In her sleep she converses, after having been in a profound coma, with her jaws locked, for more or less time : but has insensibility of touch except in the skin of the face, though exquisitely sensible, throughout her frame, to temperature, whether hot or cold. a fact I have noticed in several other instances of sleep-waking. She had suffered severely from a decayed great molar tooth. I took her to Mr. Nicholles in Bruton Street, and threw her in a few minutes into the mesmeric state. I then relaxed her firmly locked jaw by laying my fingers upon it, and the tooth was extracted without her knowledge, though it had three fangs and was firmly fixed. Yet, what is as remarkable as the exquisite sensibility to heat or cold in parts that are not sensible to any mechanical injury, although the extraction of the tooth gave no sensation, the presence of the blood in her mouth was felt unpleasantly. She continued for some time longer in the deep and silent stage of her coma, in which she has no muscular power to raise her hand, or her head, or to spit. She soon began working her lips uneasily; and her jaw had, as usual, soon closed again. I relaxed it again, and she worked both it and her lips with increasing uneasiness. She at length awoke, immediately spit out a dessert-spoonful of blood which had lain in the front of her mouth and annoyed her; and was delighted to find her troublesome tooth had been extracted without her knowledge. She is one of a large family at Islington, admirably brought up, and with a most beautiful cerebral conformation, of the finest moral feelings and strength of mind, and as incapable of deception or affectation as those, who in their unfeeling ignorance, accuse the most innocent mesmeric patients of deception, are destitute of common sense and common charity. I shall send her case to the Zoist next year.

4. "March 10, 1841, at the house of M. Talbot-Descourty, in presence of M. M. Raisin, M. D., Dean of the Faculty,—Perrin, M. D.—Feuguerolles, Advocate,—Bertrand, member of the Academy,—Courty, Journalist,—Augot, sen. and Augot jun, merchants, M. La Fontaine threw G. Louis Eugene Chanal into mesmeric coma with complete insensibility. Dr. Perrin, after having satisfied

himself of this by pricking him repeatedly, stated that the pulse was 100. M. Talbot, surgeon-dentist, then proceeded to extract the last lower left molar tooth. As it was broken, M. Talbot was obliged to cut away the gum from it, and the patient gave no sign of sensation. M. Talbot then introduced the instrument into the mouth-the instrument with which he had first attempted to extract the tooth; pushed back the head of the young man, who made a sort of grunt which was unusual to him in the mesmeric sleep, fixed the instrument, extracted the tooth, which was barred, and therefore more calculated to give pain. Dr. Perrin found the pulse at this time 76. M. Talbot discerned no trembling of the hands, such as is common during an effort to disguise the signs of sensibility. The patient rinsed his mouth and was awakened. The moment he awoke, he entreated M. La Fontaine not to allow his tooth to be taken out, because he had no longer any pain; but, finding the blood in his mouth, he applied his hand to it, and discovered that the tooth had been extracted. Dr. Perrin found the pulse now to be 88.

Every one present testified that he had not shown any sign of sensibility.

This report being a faithful detail of the facts which passed before our eyes, we have signed it. March 10, 1841.

LA FONTAINE, TALBOT-DESCOURTY, Chir. Dentiste."

The pulse was only 76 while the tooth was extracting in his placid sleep, and 88 at the moment when he learnt the circumstance.

5. In the summer of 1841, I exhibited such mesmeric facts to Dr. Engledue, Mr. Gardiner, and Mr. Prideaux, of Hampshire, as to convince them of the reality of mesmerism. They have all become powerful and practical supporters of the truth. Mr. Gardiner, by its means soon afterwards cured a young lady in the Isle of Wight of the most distressing nervous symptoms, which had long incapacitated her from either occupation or amusement and resisted all medical treatment. Besides being cured, she exhibited many of the most powerful mesmeric phenomena, which I went over to the Island to witness. In her state of sleepwaking she felt no mechanical injury, and therefore suffered nothing when a tooth was extracted. I will give the particulars of the extraction in the words of Mr. Gardiner :--

"To the Editor of the Hampshire Telegraph.

"Sir,—Some erroneous reports having been recently circulated on the subject of an important and interesting experiment, in which Mr. Martin the dentist, of Portsmouth, removed two teeth during the mesmeric trance, without the knowledge or suffering on the part of the patient, I beg you will favour me by inserting the following simple statement of the case. Having been interrupted in the course of certain mesmeric experiments by a violent toothache in one of my patients (whom I had exhibited to Drs. Elliotson and Engledue), it occurred to me that the insensibility, which is an invariable concomitant of the true sleep-waking state, would afford me an admirable opportunity of benefiting the sufferer, and of extending the application of mesmerism. My friend, Dr. Engledue, obtained the assistance of Mr. Martin, a gentleman who knew little, and believed less, about mesmerism, and who decidedly questioned the practicability of the proposed operation. He came. In two minutes the patient (a young lady) was in the perfect mesmeric trance, and therefore insensible. Mr. Martin seized the tooth (a molar or jaw tooth) with the forceps-purposely prolonged the wrench (as agreed upon by Dr. Engledue prior to his visit, in order to test thoroughly the insensibility of the patient), and drew forth the tooth. Not a pang or symptom of suffering ! In a short time I restored the patient to her natural state in the usual manner. Upon being told that the tooth had been extracted, she exclaimed, · Did 1 feel it ?- a singular greeting to a dentist's ears! Mr. Martin then proceeded to examine her mouth, and suggessted the removal of another tooth. The

patient laughingly consented, and sat again. In one minute and a half I again entranced her, and she became of course insensible as before. The tooth being in an advanced stage of decay, was crushed under the instrument, and the remnants were with much trouble extracted.

"During the whole of this trying operation not a groan or complaint escaped the patient. Shortly afterwards I again restored her, upon which she turned to the glass to *ascertain* whether or not she had really lost the second tooth! It would be difficult to determine which party evinced the greater degree of delight and astonishment,—the one having witnessed a novel and most astounding phenomenon,—the other having been *unconsciously*, almost magically, freed from her tormentors.

"I have confined myself to a simple narration of facts, and shall not trespass on your columns by detailing the general phenomena of mesmerism, which are nevertheless of the highest importance and interest. Whenever a new truth is advanced, short-sighted individuals immediately ask '*Cui bono*?"—There is an answer.

> "I remain, Sir, "Your obedient Servant, "JOHN B. W. S. GARDINER."

" Portsmouth, Dec. 9th, 1841."

6. Mr. Prideaux, who practises at Southampton, has had extraordinary experience in this way, and obliged me with the following letter:-

"My dear Sir,

"In compliance with your wishes I have great pleasure in furnishing you with a few brief particulars of the cases in which I have operated on the teeth of patients when in a state of magnetic sleep. My first information of the operation of tooth extraction having been performed during this state, and without pain to the patient, was derived from Teste's "Manuel pratique du Magnétisme Animal," published in Paris in 1840; a work not known in this country so much as it deserves to be. Upon becoming myself a magnetiser, I naturally became desirous of trying an experiment so applicable in my own profession, and an opportunity soon presented itself. A patient I was then in the habit of frequently entrancing, and who when in this state had always shown insensibility to the ordinary tests of feeling, such as pricking, pinching, &c., had a great number of decayed teeth and stumps, from which she suffered so much, without being able to summon resolution to undergo their extraction, as gladly to embrace my proposal of being operated upon in the mesmeric state. During the next magnetic sitting, I took the opportunity of removing two of the most troublesome teeth, and with the most perfect success. The patient sat with the hands quietly folded in the lap,—the countenance was placid and serene,—and the whole attitude that of repose; in short, not the slightest trace of mental emotion was perceptible, and upon being awakened, it was not till she had examined her mouth that she could credit the reality of her painless release from her tormentors.

"I should have proceeded in the task of extraction on this occasion, but it appeared to me a pity that a phenomenon so interesting in its results to every friend of humanity, from the new era it promised to introduce in operative surgery, and withal so calculated to carry conviction to the minds of sceptics, should be shrouded in comparative privacy, (only one friend was present), and I accordingly resolved to defer the extraction of the remainder, and invite a party of medical men to be eye-witnesses of the operation. I took an early opportunity of doing so, and on this occasion extracted two teeth and three stumps from the patient, who, to their great amazement, manifested the same insensibility and indifference to the operation as before.

" I have since extracted from the same patient seven teeth and eight stumps, at three different sittings, (making in the whole, eleven teeth and eleven stumps,) with equally satisfactory results, and I may remark that the patient being comparatively a young person, no absorption of the alveolar process and gum had taken place, but all the teeth were firmly rooted.

"On the last occasion, five teeth and two stumps were extracted preparatory to her being supplied with a set of artificial teeth. Several were from the front of the mouth, and as tooth after tooth was extracted, the patient was excessively diverted at the alteration in her appearance; in fact she could with difficulty control her laughter; and as soon as the operation was over she called for a looking-glass, and holding it up before her *closed* eyes examined her mouth attentively, drawing back the lips on either side with her fingers to get a better view, and finishing by a hearty fit of laughter at the droll figure she presented with her mouth almost toothless. This sitting was witnessed by a friend of mine, Mr. Henry Goode, B. A. of Pembroke College, Cambridge, who chanced to be spending a few days with me at the time, and who will be happy on all occasions to corroborate the account I have just given, as well as to produce the teeth extracted if required.

"I have extracted single teeth from three other patients during mesmeric sleep, with equally satisfactory results, the insensibility being evidently perfect. In fact in two of these cases, the patients were utterly unconscious during their mesmeric state that any operation had been performed on them, being engaged in a conversation on another subject at the time, which suffered no interruption, beyond a slight indistinctness in articulation during the few seconds the instrument was in the mouth.

"A fifth patient on whom I have operated during the mesmeric state, is a young lady who required to have several of her molares separated with a file on account of the commencement of decay, and one stopped. I found her a most troublesome and restless patient, in her natural state, shrinking when the cavity in her tooth was touched, and complaining greatly of the unpleasantness of the sensation of filing. I succeeded in entraneing her at the first trial in about five minutes, and in this state she allowed me to operate for two hours with the most passive indifference, assuring me she felt nothing, except a slight sensation of heat, when the file was used rapidly and continuously for some time together.

"This case is I think interesting and valuable, and affords some evidence in favour of an opinion I brought forward on analogical grounds, in my pamphlet on the Mental Functions, viz.: that there are distinct sets of nerves for feeling and temperature, an idea which you have since informed me suggested itself to Darwin, from seeing a case of paralysis, in which the sense of temperature remained after feeling was lost.

"The subject is certainly one of importance, and I have made several attempts since to *isolate* these two senses, and in one patient with perfect success. The means I employ are, the application to the skin of a glass stopper heated to a temperature just below what would suffice to raise a blister, to test the sensibility to temperature, and pricking with a common needle, to test that of ordinary sensation, and I possess the power of rendering the patient sensible to the heated stopper and insensible to the needle, or insensible to the heated stopper and sensible to the pricking, or insensible or sensible to both, at pleasure.

" Believe me, my dear Sir, "Yours, very sincerely,

"J. S. PRIDEAUX."

" Southampton, Nov. 20th, 1842."

I fear that those members of the Medical Society, who were puzzled by the man's low moaning, will be more puzzled by the lady who was fast asleep and felt not the severest mechanical violence, and yet walked, and talked, and saw. And puzzled they will be till they have studied, as they ought long ago, the history of somnambulism, catalepsy, and the whole of that family of nervous affection. When the ignorance of medical men ceases, the character of innocent patients will no longer be traduced.

7. The following is from the Jamaica Morning Journal, October, 1842:-

"To the Editor of the Morning Journal.

"Sir,

"I have deemed fit to forward for your consideration, the following unvarnished fact. If after perusal you are disposed to publish it, my consent is freely given. First, however, I must apprise you, that the science of mesmerism has ever been viewed by me with much prejudice, and I do not think I should have troubled myself to see the effect of its operation, had it not been for the occurrence which called my profession into action. As a person perfectly disinterested-who had never seen mesmerism practised, I was asked to remove a tooth for a lady while under its influence. I readily acceded, not only from the novelty of the situation, but to enable me to form my own opinion on this (latterly) all engrossing subject. Previously to the arrival of Mr. Garrison of mesmeric celebrity, I examined the tooth on which I was to operate, and found it to be the dens sapientia on the right upper jaw. The tooth was carious; and although the patient had suffered much pain, yet at this moment, from my appearance, she stated herself perfectly free from toothache. Satisfied in what manner, and what instrument I should use for the operation, I prepared myself accordingly. Mr. Garrison shortly after arrived, and I think I may say, without fear of contradiction, that this singular operation was performed before sixty or seventy gentlemen, most of whom are known to possess high intellectual powers, and the respectability of whom cannot be questioned. During the few moments which Mr. Garrison occupied in placing the lady under mesmeric influence, I kept myself aloof from the patient, and not until I was informed all was ready, would I approach her. In doing so, such part of the room was selected to enable all the bystanders to witness this very singular exhibition. Mr. Garrison then manipulated, to produce a relaxation of those muscles which kept the mouth shut, and gradually effected extension-the head was somewhat elevated-the eyes perfectly closed. I immediately applied the scarificator, and not the slightest wince-not a movement of the most minute description could I detect! In the act of introducing the forceps, the mouth partly closed, and (forgetting the situation of the patient) I requested her to extend the mouth, with which she immediately complied. The tooth was instantaneously removed—the mouth remained extended—the eyes were closed, not a shrink did I observe-not a muscle did I see move, and myself and all present were left to form our own opinion. The tooth has three fangs connected together, forming one large root in a somewhat conical form-the length a little better than three quarters of an inch. As regards my opinion, when asked, at the conclusion of this singular operation, I expressed myself by no means satisfied, because at my bidding the mouth, the second time, extended, but I was immediately informed that on my desiring the extension, Mr. Garrison (who was at the back of the lady) had again acted on the muscles, and thereby had caused compliance.

"What appeared to me, however, the most inexplicable, was the circumstance of the mouth retaining its original position, still extended after the removal of the tooth, which is perfectly unnatural, and which has never been witnessed by me during a practice of twenty-one years, and not until the mesmeric operator manipulated the jaws, to cause contraction, did the patient attempt to eject the blood from her mouth. One of two points-the patient must have been totally insensible to pain, or she exhibited an extreme firmness of purpose, and determination unparalleled.

"Mesmerism is a subject I do not comprehend, and consequently offer no opinion. Did I understand its art, I might perhaps be foremost in the field to uphold its doctrines. As it is, I can only reveal that to which I am a witness, regretting that I do not possess mesmeric influence for the benefit of those who consult me professionally. "I am, your obedient Servant,

"92, Orange Street."

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"J. THOMAS DIAS, Surgeon Dentist.

P.S. I forgot to add, that on the patient being restored to a state of sensibility, she assured those present that, she was totally unconscious of the operation, and felt no pain.

" J. T. D."

8. I received the following letter from Mr. Carstairs, of Sheffield :--

"Devonshire Street, Sheffield, Nov. 17th, 1842.

"Sir.

"I have the honour to acknowledge the receipt of your favour of the 16th, and proceed at once to comply with your request. Although my experiments have not been so numerous nor so important, *per se*, they are drops in the bucket of truth, which, united with others, tend to prove that operations may be performed without pain through mesmerism.

"In two cases I have extracted teeth: one in one case and two in the other. The patients were females, and neither of them was aware on being roused from the state of mesmeric coma, that the teeth had been extracted. In another case of a lad about twelve years of age, I opened a large abscess behind the ear and discharged about a table-sponful of pus, inserted a dossil of lint, and dressed the wound without the patient being sensible of pain. He had not been previously mesmerised, and was not aware of my intention, when I began to make the passes, which were effectual in producing sleep in about five minutes. In another case I cut a large wart from the back of a female's hand, who had been mesmerised by me several times before. I had aroused her, and then produced catalepsy in the arm and hand, so that she saw what I was doing, but suffered no pain nor inconvenience from the operation, although an extremely nervous, irritable person. The only other case I have had was inserting a seton, which was accomplished without the slightest pain.

"I remain, "Yours faithfully, "THOMAS CARSTAIRS."

9. The following is from Dr. Engledue :---

"Southsea, December 1st, 1842.

" My dear Doctor,

"I forward you the result of an operation performed during the mesmeric trance.

"Miss K. æt. 17, had suffered for two years from a variety of symptoms, the result of spinal irritation. The right knee was slightly contracted from the commencement of her illness, but for twelve months preceding the operation, the contraction was so complete that it was quite impossible to separate the heel from the back part of the thigh.

"For nearly three months she was regularly mesmerised by Mr. Gardiner; all the symptoms were very much relieved, and some altogether removed by this treatment. The knee-joint, however, continued firmly contracted. I shall not now enter into a description of the reasons which prompted me to perform the operation of division of the tendons at the back of the knee-joint, my only object is to report that the operation was performed during the mesmeric trance and without any manifestation of feeling. Some hours after the operation, the patient was demesmerized; there was no expression of astonishment and no remark made, till some spots of blood on the sheet of the bed attracted her attention. The proceedings were then explained to her, and the effect can be more easily imagined than described. "I remain,

"My dear Doctor, "Sincerely yours,

"W. C. ENGLEDUE."

10. I will now furnish an account, from the Jamaica Dispatch, of August 20th, 1842.

"A mesmeric experiment was made at the private residence of a gentleman of this city on Thursday last, at which several physicians and gentlemen of high respectability were present, and which, we are informed by a gentleman who witnessed it, was in every respect successful. The patient, a lady, was put into the magnetic sleep by Professor Garrison; and, while in this state, the painful surgical operation of removing a large excrescence from the upper eyelid, or brow, was performed by Dr. Arnold, assisted by two other physicians, without the movement of a muscle on the part of the patient, or the least sign of pain. The patient had long desired the operation to be performed, but had not possessed the fortitude to submit to it, and she was in utter ignorance of the design of the physicians to remove the excrescence on this occasion, and knew nothing of it until the whole had been done and the wound dressed, and she had been awakened from her sleep; indeed we are told, that while the wound was being dressed, Professor Garrison willed her to sing a favourite air, which she immediately did."

11. The following case I have in the handwriting of the surgeon and Captain Valiant. I have seen the woman and mesmerised her frequently; and have the honour of knowing General Sir Thomas Willshire and Captain Valiant.

"Mrs. Gregory, nursery-woman to Mrs. Valiant, the lady of Captain Valiant, 40th Regiment, for a long time suffering from decayed teeth, which caused much constitutional irritation, applied to me early in May, complaining of headache and pain in the upper jaw, of the most excruciating kind. On examination, the gums were found ulcerated, the alveolar processes carious on the right side, and presenting numerous spicula of bone projecting through the gums, which were exquisitively painful on the slightest pressure with the finger. Filing off the spicula of bone was advised and consented to. The performance of the operation, having been proposed while she was under the influence of mesmeric sleep, was undertaken on the 25th of May, in the presence of Sir Thomas Willshire and Captain Valiant of this garrison. Sleep was speedily induced by Sir Thomas and she was pronounced in a fit state to bear the operation in half an hour.

"An incision was made on either side of the alveolar processes extending from the incisor to the molar teeth, dividing the gums, which were turned back so as to expose the diseased bone. The spicula being considered the principal source of annoyance were filed off smooth with the jaw, the gums approximated, and creosote applied to the carious points. The filing occupied fully five minutes. The patient, however, to my great astonishment, evinced not the slightest feeling from the operation, and continued undisturbed in the enjoyment of profound sleep for one hour, at the expiration of which time she was awaked by Sir Thomas, appearing as if aroused from a dream. Some minutes elapsed before perfect consciousness became restored, when she expressed herself incredulous that any operation had been performed on her jaw, being quite free from all pain.

"The phenomena evinced could only be elicited by Sir Thomas Willshire, who so kindly afforded his services to the poor woman: they appeared to be completely under his control. By his request her mouth opened to admit my instruments, which she did not feel. His taking wine and cake produced in her corresponding actions and sensations of mastication and deglutition. The pulse rose to 120, and some excitement and spasmodic action supervened on Sir Thomas withdrawing himself for a little. But his approach and contact quieted, and eventually restored, the patient to perfect composure during her slumber.

"I had hitherto been in the habit of ridiculing, and, indeed, disbelieving, every statement connected with mesmerism; but find it impossible to reject the facts of this case, brought home by the evidences of so many senses.

" JOHN CHARLTON, M.D.

" Assistant-Surgeon, Royal Marines."

" Melville Hospital, Chatham, " June 9th, 1842." The following statement was drawn up and given to me by Captain Valiant :--

"Elizabeth Gregory, nursery-maid to Mrs. Valiant, usually called Anne, mesmerised by Sir Thomas Willshire, May 25th, 1842, Brompton, Kent.—Sir Thomas commenced at six minutes past one o'clock to mesmerise the patient for a painful operation, to be performed by Dr. Charlton on her jaw and gum, during her sleep. Anne had previously suffered very much from the fracture of the jaw, in consequence of having had five teeth taken out, perhaps unskilfully, at one time. Matter and proud flesh had formed, and caustic had been employed in reducing them. She had also been mesmerised before, for experiment, three times, by Sir Thomas, and the same number of times by Captain Valiant.

"In six minutes Anne was asleep. Soon afterwards Captain Valiant called loudly, without her hearing him; but when Sir Thomas took her hand, and spoke in a low tone, she heard, and answered that she was asleep and comfortable.

"At half-past one o'clock Dr. Charlton lanced Anne's gum down to the jaw from one end to the other, and made it bleed considerably, which the patient did not appear to feel at all. Dr. C. then filed her jaw-bone for the space of five minutes and a half till what he desired was accomplished, which also she did not feel in the least—not a muscle nor nerve either twitched or moved. She opened her mouth for the operation to be performed at the command of her mesmeriser, who held her hand, and she constantly opened it wider at his direction. Dr. Charlton mentioned that a few days ago, when he merely touched the patient's jaw with a probe, she felt the pain so severely as very nearly to faint. While waiting for some creosote, Sir Thomas took some wine, when Anne went through the form of tasting and drinking, and on being questioned said, she tasted wine. The same experiment was tried with a piece of biscuit, and she said she tasted biscuit. Sir Thomas held a watch over her head, and asked her what it was. She replied-'I don't see it, but I know what it is.' It was then held to her waistband; and she said it was a watch. Captain Valiant pinched Sir Thomas's hand, which she immediately felt too, and said somehody was pinching her hand, and she did not like it. Dr. Charlton applied some creosote to the patient's jaw.

"At twenty minutes to three o'clock Sir Thomas awoke her, when she was not conscious of having had any thing done to her, and was very thankful to find the operation was over, and wished very much that what had been done to her during her mesmeric sleep might be published, for the good of the world in general."

12. I shall now detail a case which occurred many years ago in Paris;—the mesmeric operator in which—Dr. Chapelain, and the surgical operator—M. Jules Cloquet, are now both alive in that city.

"Madame Plantin, aged 64, living at No. 151, Rue Saint Denis, consulted M. Cloquet, April Sth, 1829, respecting an open cancer which had existed for several years in her breast, and which was complicated with a considerable enlargement of the right axillary ganglions. M. Chapelain, her physician, who had mesmerised her for some months, with the view of dissipating the disease, could effect only a profound sleep, in which sensation appeared suspended, but intellect remained perfect. He suggested to M. Cloquet to operate upon her in the mesmeric sleepwaking. M. Cloquet, having judged the operation indispensable, consented, and it was fixed for the following Sunday, April 1st. The previous two days, she was mesmerised several times by Dr. Chapelain, who prevailed upon her when in the state of sleep-waking to bear the operation without fear, and brought her even to converse about it calmly; although, when she was awake, she could not listen to the proposal for horror.

"On the day fixed, M. Cloquet arrived at half-past ten in the morning, and found the lady dressed in an arm-chair, in the attitude of a person calmly asleep. She had returned about an hour from mass, which she habitually attended at that time of the day. Dr. Chapelain had thrown her into the mesmeric sleep on her return. She spoke with perfect calmness of the operation which she was about to undergo. All being ready she undressed herself, and sat upon a common chair.

"Dr. Chapelain supported her right arm. The left was allowed to hang at her side. M. Pailloux, internal student of the Hospital Saint Louis, had the charge of presenting the instruments and applying the ligatures. The first incision was begun at the arm-pit, and carried above the breast as far as the inner side of the nipple. The second was begun at the same point, and carried under the breast till it met the first. M. Cloquet dissected out the enlarged ganglions with care, on account of their proximity to the axillary arteries, and removed the breast. The operation lasted ten or twelve minutes.

"During all this time, the patient conversed calmly with the operator, and gave not the least sign of sensibility;* no movement occurred in the limbs or FEATURES, no change in the RESPIRATION OF VOICE, no emotion EVEN IN THE PULSE, was discernible ; this patient remained uninterruptedly in the same state of automatic indifference and passiveness, (état d'abandon et d'impassibilité automiques, or, as Mr. Topham says of his patient, 'uncontrolled, in perfect stillness and repose,' 'like a statue !') in which she was some minutes before the operation. There was no necessity to restrain her, we had only to support her. A ligature was applied to the lateral thoracic artery, which was opened in removing the ganglions. The wound was closed with sticking plaster and dressed, and the patient was put to bed, still in the same state of sleep-waking; and was left in this state for eight and forty hours. An hour after the operation a slight hæmorrhage occurred, which proved of no importance.

The first dressing was removed on Tuesday the 14th; the wound was washed and dressed afresh; the patient showed no sign of pain; the pulse was undisturbed. After this dressing, Dr. Chapelain awoke the patient whose sleep-waking had lasted from one hour before the operation, i. e. two days. The lady seemed to have no idea. no conception of what had passed; but, on learning that she had been operated upon, and seeing her children around her, she experienced a very strong emotion, to which the mesmeriser put an end by immediately sending her to sleep again."

Some of the surgcons of Paris scouted this case just as the London Medical Society, in imitation, scouted that of the amputation. Lisfranc explained it somehow or other, and Baron Larrey accused the poor lady of being an "accomplice of mesmerisers." The latter should have remembered that there was once a soldier named Blanchard, who refused all his advice to part with his right log on account of fistulous ulcers of the foot, tumcfaction of the cellular membrane, a white swelling of the inner ankle, disease of the ligaments, and caries of the tarsal bones, and who was pronounced incurable by the certificates of six physicians and surgeons; that, when the Marquis de Puysegur mentioned to him that by means of mesmerism the poor man was greatly relieved, he burst into a laugh, said the patient would never be cured because the bones were diseased and the periosteum gone, and that amputation would be indispensable. By mesmerism the poor soldier was completely cured.

I have extracted the case of the lady from the highly-favourable report, in 1831, of the Committee appointed by the French Academy of Medicine to report upon mesmerism, and to be found in Dr. Foissac's excellent work. The committee continues thus:---

"The committee sees in this case the most evident proof of the suspension of

* She was "not a physiologist," or she would have "enacted the reflex motions."

† This ought to convince Dr. Marshall Hall, who is represented by the Lancet to have said in the society, and I hear he did, though I do not remember it,-" Could the man keep his heart quiet as he did the muscles of his face and leg? Why was not the action of the heart, the number of the pulse, carefully noted? We should then have had positive proof of the supposed loss of consciousness in the actual absence of all emotion." He may be referred to the case of the boy mentioned at p. 40. ‡ Rapports et Discussions de l'Académie Royale de Médecin sur le Magnétisme Animal.

1833. p. 156.

§ Same book, p. 400.

sensibility during sleep-waking, and declares that, though it did not witness the case, they find it so *stamped with the character of truth*, it has been attested and reported to them by so good an observer who had communicated it to the surgical section, that they do not fear to present it to you as a most unquestionable proof of the state of torpor and stupefaction produced by mesmerism."

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I may mention that the case is related as perfectly genuine in the *Penny Cyclopædia*, published by our Society for the Diffusion of Useful Knowledge, article *Somnambulism*, in which the truth of mesmerism is admitted to the extent even of *clairvoyance*; Lord Brougham being president of the society, and the Bishop of Durham, several peers, several Fellows of the Royal Society, men of the first distinction in science and literature, and several professors of University College, where a general stand was made against mesmerism, being my colleagues on this committee.

In the *Hermès** it is stated likewise, that M. Cloquet attests not only that there was complete absence of pain, but that, while he was washing the surface around the wound with a sponge, the patient felt tickled, and several times said merrily, "Come, leave off,—don't tickle me." Her laughter, thus occasioned, was heard by M. Plantin—the patient's son, and by Madame Granier, who were outside the door.

This remarkable circumstance must be viewed side by side with the uneasiness felt from the blood in the mouth of my patient who had no sensation from the extraction of her tooth, and whose case I have related at p. 40; and with the exquisite sensation she always had both of heat and cold in parts perfectly insensible to pinching, &c.—a fact noticed by me in several other cases, and by Mr. Prideaux in regard to heat in one of his patients, spoken of at p. 43; and in regard to cold in the Spanish Lady mentioned at p. 30, who was comatose without mesmerism.

No man who has a heart can read the narration without being affected, and earnestly hoping it is true. But, though its truth is equally certain as that there is such a surgeon as M. Cloquet, it has lately been denied in England and the parties have been vilely traduced.

In the London Medical Gazette for the 2d of last December, immediately after an imperfect and incorrect account of the discussion in the Royal Medical and Chirurgical Society on the paper which detailed the case of amputation in the mesmeric state, is an anonymous letter of three paragraphs—signed "a member of the Medical and Chirurgical Society," who is ashamed to give his name, and therefore does the deed in darkness—the first styling the account "very silly" and unfit for the society, the second heartlessly accusing the poor patient of deception, and the third as tollows:

"It is rather remarkable that it should have occurred to no one present to mention the case of a woman whose breast was amputated, some years ago in Paris, by M. Cloquet, while she was (as it is supposed) in a state of mesmeric stupor. This woman was believed to have been insensible to pain during the operation; and was a better actor than the man mesmerised by Mr. Topham, as she did not even moan. Some considerable time afterwards, however, while dying of an internal complaint in another hospital, she confessed to the nurse that the whole had been a cheat; that she had experienced pain like other persons, but had sufficient command over herself not to show it."

The Nottingham surgeon, to whose letters I have already twice referred, writes,—" some years ago in France the breast of a female was removed while she was professedly in a mesmeric sleep. She died a *few days afterwards*; an operation which in other cases rarely indeed proves fatal. Is it not too probable that the attempt to bury the anguish in her own bosom proved too much for nature to sustain ? Another mesmeric operation case succeeded better, but the patient's subsequently confessed that her insensibility was all feigned." "Many similar cases have occurred, &cc."

* L' Hermès, Journal du Magnétisme Animal. Paris, 1829, tom. iv.

Now the statements of both writers are altogether untrue.

Madame Plantin was never in an hospital, but the wife of a wealthy merchant of Paris; resided in a country house which she could hardly be prevailed upon to leave in the fine season of spring to take up her abode in Paris for the purpose of being mesmerised, for she disliked mesmerism because it had been tried upon her at different times unsuccessfully, and she was unwilling to submit to the restraint of mesmeric treatment; and she was terrified at the thought of a surgical operation under any circumstances, and declared she would rather die, and had indeed suffered severely from refusing even to be bled in one of her pregnancies.

M. Cloquet testified to the Academy that she was pious, modest, and incapable of any collusion; and Dr. Caldwell of America, hearing a rumour in London that this surgeon confessed he had operated upon other patients in an ordinary state who bore the pain as unmoved, called upon M. Cloquet, in Paris, to ask the question, and told me that he received for answer, "Jamais! jamais!" However, Dr. Davison, a friend of mine, called upon M. Cloquet at my request in January, to make inquiries respecting the case; and the following is an extract from his reply:—

"The letter to which you allude in the Medical Gazette is false in every particular, save the death of the patient. The lady was never the inmate of an *kospital*. She was the wife of a rich negociant, an excellent person, respected by all who knew her. She died above a fortnight after the operation, of a pleurisy;* the wound having done well, and she having taken a drive some days previously. Cloquet saw her and is quite sure that she never made the confession alluded to."

As to the other case, spoken of by the Nottingham surgeon, Dr. Davison has made every inquiry in Paris, and cannot learn that it ever occurred. "Many similar cases have occurred!" I call upon him to make good all his assertions. He knows that Mr. Wood flatly contradicted him in *The Nottingham Journal* in regard to the one, and pointed out that he gave no authority whatever for the others: yet, though two months have elapsed, this candid person has never replied or ventured to recur to the subject.

It was most improper in the *Medical Gazette* to insert a serious anonymous charge against a person now no more—and that person a female, a foreigner, and whose family are now all resident in Paris and of great respectability; and shameful in the Nottingham surgeon to make these wholesale accusations, not one of which he has been able to prove.

The unscrupplousness of so many medical men to blacken the characters of their fellow-creatures, already one would think sufficiently afflicted, by accusing them, without any other reason than their own ignorance, of imposture, is a foul spot upon the profession. Wherever a person displays mesmeric phenomena, or is cured or even relieved by mesmerism, he is at once impudently called an impostor, and any sort of thing fabricated to support the cruel charge.

> "L'homme est de glace aux vérités; 11 est de feu pour le mensonge." La Fontaine.

The Okeys not only were impostors, but confessed the imposition ! In a letter, *paid for as an advertisement*, in the *Newry Telegraph* for last February 9, signed—

> J. MORISON, M.D. J. Woods, Surgeon, W. STARKEY, M.D.

G. H. KIDDS, L.R. C.S.

are these words,-"If we except Dr. Elliotson-whose mind always exhibited a

* The appearance of the inflamed pleura and lung after death are fully detailed in the Hermès.

tendency to wild and extravagant theories, and who in consequence of his attachment to the marvellous lost his chair in the London University, as also his standing as a practitioner—all the others, as Mesmer, Dupotet, La Fontaine, preached the mesmeric doctrines to some advantage, if not to the public, at least to themselves." I never knew even the names of these four gentlemen before, but they ought to be aware that the character of my mind is the opposite of what they aver. I have never speculated, but have always devoted myself to the observation of facts; so that, whatever I have advanced, I have seen ultimately established. I appeal to my writings on Quinine, Hydrocyanic Acid, Iron, Crcosote, Glanders, the Use of the Ear in ascertaining the State of the Heart, my Human Physiology, and my Lectures on the Practice of Medicine and my Clinical Lectures. I came into practice solely from the devotion to facts evinced in my Clinical Lectures. Phrenology I have lived to see established, though it had not twenty advocates in this country when I first wrote in its favour; and in it I have adhered so closely to facts that I have not yet admitted an amount of statement which is current among eminent phrenologists. However, let this pass.

"The Okeys," these gentlemen further say, "were proved to be impostors,*

* I make the following extract from the letter which I addressed to my pupils on resigning my chair in University College, and which is to be had at M. Baillière's :--

"In an evil hour, I consented to show some experiments to the Editor of the Lancet, after repeated entreaties conveyed by his assistant, Mr. Mills, who had witnessed the phenomena at the hospital, reported many in the Lancet, been enraptured with them, and declared them over and over again to be so satisfactory that to doubt or to suspect the two Okeys of imposition would be the height of absurdity. I exhibited to the Editor the production of the singular delirium, and a variety of the most beautiful and satisfactory experiments which he has *entirely suppressed*. But I presently feared what would be the result. He said he was pestered with letters upon the subject; but that nineteen out of twenty were unfavourable. Nineteen persons, of course, purchase more Lancets than one; and I fancied I already saw his rejection of the evidence. The mental phenomena were such as no person capable of sound and refined obscrvation, and fitted for philosophical investigation, could for an instant have imagined to be feigned. The physical phenomena with the hand, the eye, metals, and water, were as striking and conclusive, with the exception of some with lead and nickel; and those I have since proved to large numbers of able judges to be equally conclusive. Mesmerised nickel produces upon the elder sister the most violent effects, which none but a very ignorant person could consider pretended. Now, when this, or gold or silver, has been rubbed upon a part, and the friction has been desisted from before the effects come, or the effects have come and have ceased, they may be at once excited in the former case, or re-excited in the latter, by friction of the part with any thing—a piece of wood or a piece of lead; and this excitement may be produced again and again. Friction was performed with lead upon parts to which nickel had been applied either with or without effect as it might be, and the effects took place violently. This explanation I gave to the Editor, but he was either too dull to understand, or had his reasons for not understanding. In another set of experiments lead produced effects, though nickel had not been applied to the parts; and yet I never had been able to mesmerise lead by holding it in my hand and to produce effects by then applying it. Those effects I candidly said I could not explain, since I had not commenced experiments with lead or nickel for more than two or three days; but, as there was no more deception in the cases, nor less certainty of the various facts which I had observed, than in chemistry or any other natural science, I added that these results showed only that they required farther investigation, and that I had no doubt I should, by perseverance, dis-cover their cause. The Editor knew that I was about to leave London that same day for an absence of six weeks on the continent, and yet he could not wait for my return and give me an opportunity of farther research, but, with that gentlemanly delicacy for which he and his friends are so remarkable, published, almost immediately, what professed to be an account of what he had seen,—a most imperfect and worthless account, however; in his plenitude of scientific importance, he declared that not one more experiment on magnetism would ever be required; and answers which were sent he never published. He omitted to state a circumstance in his experiments with lead, which had never been allowed to happen in mine, but which, when reflecting upon them on my tour, I thought might have influenced the results. In employing the lead, I had noticed that he applied it against a piece of niekel held in his other hand, before he applied it to the patient. On my return, I applied lead to her as before, and, indeed, copper also; yet never obtained an effect. I then applied the lead or the copper, as it might be, against a piece of mesmerised nickel or gold, before applying it to her; and its application to her was then always productive of effects. I discovered that the surface of the lead or copper had become nickelized or aurified by the

and afterwards acknowledged the tricks which they had practised on the credulity of Elliotson." The only reply to be nade is, that this is totally untrue. One of them was said by Mr. Wakley to have been reported to have figured at Irving's chapel. The report was not only totally untrue, but I cannot find that it existed before it appeared in the Lancet. Mr. Wakley, like Dr. Johnson, is a father, and he should have some feeling for innocent young females, who, though in the humbler walks of life, are not his inferiors in respectability. He even advertised in the morning papers "An editorial article on the tricks and deceptions practised by performers and patients under the stale name of animal magnetism, showing the total failure of the patients to fulfil the promises of the magnetisers, when the signals which pass between them are effectually disallowed."

However, his day of triumph has passed, and his chief business now must be to cousider how he can best extricate himself from the sad position into which he has fallen from having so overcunningly, hastily, and violently committed himself. Some say he is ready to hang himself. But I implore him for the sake of science and humanity not to think of such a folly, nor to imitate the dignified exit of the Tartar General, who, according to the dispatch of Sir H. Pottinger, "retired to his house when he saw that all was lost, made his servants set it on fire, and sat in his chair till he was burnt to death."

Not only the occurrence of mesmeric phenomena, but even improvement from mesmerism is sufficient to subject an innocent person to the charge of imposition.

Above a year ago I was first requested to visit a patient whom I found labouring under a very severe form of St. Vitus's dance of NINE years' duration. The disease is very common; but I have seen only a few instances of so long a duration of it, and never one of such violence as it generally exerted on the organs of respiration at night. We meet daily with persons who have constant twitchings of the features and workings of the head, arms, or trunk; but this was general, as well as constant, and often most frightful. To suppose the case as one of imposition would have been as ridiculous as to suppose a case of confluent small pox to be an imposition. Such movements night and day for nine years,-nay, such movements for a day, I defy any human being to make voluntarily. The patient, though shut out from society, except that of intimate friends, and from all public amusement, bore this sad affliction so patiently as to increase one's pity. Dr. Marshall Hall had attended, and given the following opinion of the case :-- " Chronic inflammation of the membranes in which the spinal marrow is inclosed, with the effusion of lymph or serum, and consequent irritation of the spinal marrow itself, with the spasmodic actions which such irritation is calculated to induce. The essential character is its chronic form." So real and severe did he consider the case, that he prescribed mustard cataplasms to the spine, cupping on the back of the neck EVERY FIFTH DAY, and mercury to such an extent that not one sound tooth is left in the patient's head : and declared he

contact; and thus the difficulty was solved. These experiments I have repeated again and again before numbers of gentlemen, taking the greatest care that the patient should not know when I applied lead or copper which had not been in contact with nickel or gold, and when I applied lead or copper which had been in contact with either of them; and the results have been uniform. I was obliged to leave the poor little girl in an intense coma, with occasional violent tetanic spasms, at the Editor's house, little imagining that any farther experiments would be attempted, especially in my absence, by a person ignorant of the subject and altogether incapable of making experiments. I had seen sufficient of the cxtreme carelessness, and want of information and philosophic power, of the Editor, during the experiments conducted by myself, and which he frequently altogether deranged, not to be convinced that in my absence no experiment could be made in a manner to justify conclusions. In his ignorance, he acted as though mesmeric susceptibility is always present and always the same: whereas the reverse is the fact; and experiments with water and metals frequently repeated so derange the susceptibility that we are often obliged to desist.

"During the five months which have elapsed since my return, I have repeated all my experiments and continued my observations, not only on the two Okeys, but on other patients; and all the results of my former enquiries have been confirmed and all difficulties solved." would have treated his own child in the same manner. He treated the case for three months, and wished to continue his plan for a twelvemonth. But, though the poor patient submitted patiently to be thus disfigured, the family medical attendant and friends could not allow it, and Sir Benjamin Brodie was consulted, who condemned the treatment in the most unqualified manner, declined to prescribe medicines or to see the patient again, and stated that nothing more could be done than to endeavour by every means to strengthen the debilitated frame. Dr. Hall, however, wrote a letter, still in possession of the family, maintaining his opinion, and treating Sir Benjamin Brodie's opinion most contemptuously. Some months since, when asked my opinion of mesmerism in the case, I replied that, though I had never failed in curing the disease with oxyd of iron in children and youth, when it had not lasted more than some months, I had never succeeded with iron or any other medicine when it had lasted some years and in adults: that I had never known mesmerism to fail any more than iron in the former cases: but that, as iron failed in the latter, I could not venture to hope that mesmerism would succeed. I advised that, as mesmerism had been begun, it should be continued rather than the case be abandoned; though I entreated them not to be disappointed if no good resulted. For the last four months mesmerism has been daily persevered with; and the gradual but steady improvement in the strength, the sleep, and looks of the patient, and the decline of the disease, astonishes every one. Now that Dr. Hall has learnt the improvement by mesmerism, he says that he all along (while cupping every five days, and giving mercury freely, and proposing to do all this for twelve months!) suspected, and is now (mesmerism having done great good,) perfectly certain, that the case was feigned !! I should like to observe his countenance when he says so.

Of all persons Dr. Hall should be careful. Because, in his introductory lecture,* he is at great pains to impress upon his pupils the duty of being careful in investigating cases so as not to accuse a sick person of imposition. He quotes the following passage from a physician of a Parisian hospital, as "candid and touching."-" How frequently does it happen that individuals labouring under inflammation of the cerebral membranes, have been treated as malingerers, or as being of lazy disposition. A young girl is brought to the hospital without any apparent functional disease : she is morose and stupid, and answers only by monosyllables after having been frequently and earnestly interrogated. The physician mistakes this for caprice or dissimulation, but she dies." "I shall never forgive myself for having committed a similar error with regard to a schoolboy." "The expression of this boy's countenance was perfectly natural; the pulse not accelerated; he lay in bed, with the knees drawn up to the chin, making no complaint of suffering, and merely anxious to be amused by entertaining stories. I made the child get up : he did so, but remained moping about the chimney corner. I compelled him to walk up and down the room; his steps were uncertain, like those of a drunken man. This poor child was forcibly dressed, and even beaten by his parents" (the treatment prescribed with a promise of certain success for Dr. Wilson's poor boy by Mr. Bransby Cooper),† "who thought he affected to be ill. I was soon, however, painfully convinced of the error into which we had fallen: the poor boy died of hydrocephalus."

* Lancet, Oct. 7th, 1837, p. 40.

† Lancet, March 11th, 1843, p. 876.

put a rope's end round your neck." The threat was executed; the rope was drawn *tightly round his neck*, and he was *pulled forcibly from his berth*. As he seemed strangling, the rope was shifted to his chest, and he was hauled upon deck, and his head as he went up struck against the scuttle. Shortly afterwards he was found dead.—The impostor.

To accuse patients of imposition is very easy. But it is a very vulgar, as well as cruel, habit, founded on ignorance, presumption, and heartlessness. We should never prefer such an accusation on light grounds: and, to be assured of the grounds, we should be well acquainted with the subject. He who is ignorant of a subject is surely not justified in giving an opinion : and yet, medical men and others, because they are ignorant of the phenomena of the more wouderful and uncommon diseases of the nervous system, and of mesmerism, preposterously pronounce the subjects of them impostors, and those who know the truth, to be fools, or rogues, or in league with the devil. It was the same cause which made the people pronounce Democritus mad, when he looked for the source of insanity in the brain; to pronounce Roger Bacon a sorcerer, who knew physical facts of which they were ignorant; to ascribe epilepsy to St. Vitus's dance, and numerous other diseases, to demoniacal possession;* to ascribe the phenomena of electrical and galvanic apparatus to the agency of spirits, as the savage supposed there must be a spirit inside the watch. Of peasants better things could not be expected: but the whole of education is so unsound that gross ignorance and superstition exist among those who presume to teach, and have been judged fit for instructing others, and believe they have received the Creator of the Universe, or the Holy Spirit, into their persons at the ceremony of episcopal ordination, but should be compelled

> "To cast their orders at their bishop's feet, Take their dishonoured gown to Monmouth-street." Cowper.

The Abbé Wurts of Lyons, in a work on the Superstitions of Philosophers, wrote, at the beginning of this century, that, although all belief in the devil was apparently given up, he was really the chief personage, though disguised, in the lodges of freemasons, mansions, and palaces, and acted sometimes under the form of a wonderful man, a physical philosopher, a mesmeriser, &c.

Another Catholic author, in a book published not many years ago in France, wrote thus: — "The effects of mesmerism are not explicable by any natural causes. No natural means are employed to produce them. Mesmerism is a stratagem invented by the devil to seduce souls, to increase the number of his adherents, and oppose the works of Jesus Christ and his ministers. No Christian can employ mesmerism for himself or others without mortal sin. Mesmerism undermines faith and morals. Government ought to proscribe it. In order to be initiated into its mysteries, Jesus Christ must be denied, and the cross trampled upon. All mesmerisers are disciples of Lucifer."[†]

How slavishly does the alleged Protestant writer of a disgraceful English sermon, of which not a copy would have sold but for the wretched state of our education, adopt the thoughts and words of the Roman Catholics, against whom he is so fierce. Thus vaccination was discovered to be Antichrist, and sermons were furiously preached against it when I was a boy, as they had been previously against the inoculation of small pox. Thus we read that the miraculous cures of Christ when he was thought "beside himself" by " his friends," were attributed to the devil, ‡ as though this were so benevolent an individual.

Ignorance mistaken for knowledge, is a frightful perpetrator of injustice and cruelty. Were I a preacher, there is one sin,—a daily, hourly sin—one productive, unheeded, of immense mischief,—against which I would lift my voice in

‡ Mark iii., 21, 22.

^{*} See the Rev. Hugh Farmer's Essay on the Demoniacs.

[†] Foissac, pp. 251, 394.

season and out of season, but which I never once in my whole life heard preached against, though I find it treated of in one of the late Dr. Arnold's sermons. It is the sin of presuming to hold opinions upon which we have not qualified ourselves to have any opinion at all. Men and women, young and old, educated and uneducated, rich and poor, equally commit this from morning to night, committing it not only in word but in action : and yet they, in superficial routine, pray to God to keep them from presumptuous sins, -"Keep thy servant also from presumptuous sins,"*

Of all classes, the medical profession should conduct themselves the most rationally. They profess to be very scientific, liberal, and humane.

It is the character of a *scientific* man to acknowledge that he is only an observer of the universe, and of a minute fraction of it; that he comes into existence with his peculiar nature and is placed here, without his own interference, and has had no share in constructing the universe; that he must admit all that he finds, and could never have imagined what he does find; that he can explain nothing, and what he calls explanation is merely the placing of various facts under the same head. Medical men constantly refuse to admit facts, because they presumptuously suppose beforehand that such facts are not; thus creating the world according to their poor narrow conceptions, and forgetting that it is their duty to be "humble, teachable and mild."

Those who declare they would not believe the facts of mesmerism if they saw them, could not have believed the miracles had they lived in the days of Christ, and cannot in reason now, because they must believe on the reported evidence of other men's senses instead of their own. An exemplary clergyman once said to me, "How can I refuse to believe the facts of mesmerism and say that I believe the miracles ?" A friend of mine on coming up to town this spring, enquired earnestly if the case of amputation had occurred at all, since the existence of Wombell, Mr. Ward, and Mr. Topham, was altogether denied in his part of the country.

It is the character of a *liberal* man to give others credit for sincerity, a love of truth, industry, and sense equal with his own; yet they are puffed up, thanking God that they are not such fools as some other men are,-even as this mesmeriser.

"Plagiarist! liar! impostor! heretic! were among the expressions of malignant hatred lavished upon Galileo," in 1609.

Deleuze proved in 1819 that our "adversaries do not know mesmerism, give its partizans credit for absurd opinions, pass over in silence the most convincing proofs, while they refute facts which nobody maintains, and, when forced to confess incontestable phenomena, ascribe them to something inadequate to produce them." 1

Foissac, in 1833, complained that "able men write daily against mesmerism without knowing any thing about it, or having studied it, and do not hesitate to insult and defame those who feel it a duty to do homage to truth, in receiving the testimony of their senses and obeying their conscience."§

The conduct of many up to 1843 shows that they have not advanced in wisdom. A friend told me he had sent a copy of Mr. Topham's pamphlet to a Fellow of the College of Physicians, who returned it unopened.

It is the character of a humane man to be anxious that all promises of benefit to his fellow-creatures may be fulfilled; that every alleged means of curing disease may turn out, not a fallacy, but a reality,---to "hope all things." Medical men should be the humblest of all practitioners of art. Highly as I estimate the powers of my art, when carefully and earnestly employed, and invaluable as is a skilful, laborious, and conscientious medical man, we know in our hearts that we have yet but an insufficient insight into disease; that the investigation of cases is too difficult and too laborious to be carried on efficiently, in the greater number

* Psalm xix.

+ Life of Galileo, published by the Society for the Diffusion of Useful Knowledge, p. 20. § Ibid. p. 551.

‡ Foissac, p. 241.

of them, by persons who see many in the day, whether in charities or in a profitable round; that well established measures require more pains for their perfect administration than are generally given; that for a very large number of cases our means are very inadequate, for many all but useless; and that medical men are receiving money every day for doing little or no good. Were not their art so imperfect, they would not have to complain, as they do everlastingly, of the prosperity of quacks and persons altogether, and not, like themselves, in part, pretenders. They should each feel it a duty strenuously to be looking out for improvements of their art; and satisfied that it may be as greatly improved as any other art, they, instead of hugging themselves on their receipts and sneering lazily at the disinterestedly industrious, when a new fact or remedy is mentioned, should hopefully listen, and determine to ascertain what amount of good it contains, ashamed of the errors and vices of their predecessors, who violently opposed the truths of the circulation,-the lacteals, and then of the lymphatics,the physiology of the brain,-inoculation, and then of vaccination,-bark,-antimony, &c;-remembering that our College of Physicians imprisoned one physician for employing cantharides, and another for differing from Galen; that Ambrose Paré was "hooted" for tying wounded arteries instead of applying boiling pitch, the pain of which they thought nothing of, and which Dr. Copland would have admired; that just as the course of the earth taught by Pythagoras had to be taught afresh by Copernicus, at the end of two thousand years, after being reviled, and then again required all the powers of Newton for its demonstration, so the truth of nerves of sense and motion being distinct fell into contempt in the last century, and no preparation of that ancient and powerful remedy, colchicum, was in the London Pharmacopœia when I was student at St. Thomas's and Guy's Hospitals, in 1808.

The happiness of a scientific, liberal, and humane course they would find great beyond all expectation. They would feel raised as men, and be enabled not to view their poor coterie, or college, or profession, as their world, fashioning their opinions, and habits, and whole nature by its cramping influence; but, regarding themselves as a part of universal nature, would find themselves always moving freely in it, would keep their regards constantly upon its truths only, and, walking happily onwards, bestow no more attention upon the sayings and doings of the coteries and prosperous men of the moment, than upon the noisy sparrows which flutter and chirp outside their window to-day and will not be heard of to-morrow.

If I have expressed myself strongly in this pamphlet, it is what I intended. The adversaries of mesmerism and of mesmerists have had their full sway hitherto, and they must be thankful for a change. Our turn is now come. Their conduct has shown that patience, sincerity, disinterestedness, and mild persuasion are lost upon them. Our objects are of incalculable importance,—the establishment of means to cure diseases at present more or less troublesome, difficult or impossible to cure,—the prevention of pain in surgical operations,—and possibly other advances on which I will not venture at present to say anything. This must require a great effort, for it will form an era in the history of man; and those who are willing to assist must be in earnest. I feel no hostility to our opponents. They merely act the part of puppets;—not knowing why they so act, and blindly obeying the general laws by which a supply of opponents to every truth and improvement is always provided. The statistics of opposition to good things would show that their course obeys fixed laws; and they are to be pitied for being destined to the parts which they so eagerly perform.

FINIS.

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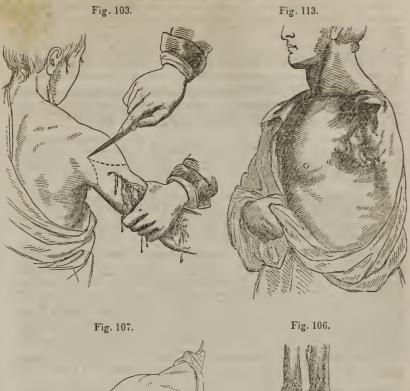
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Extract from the Article-Lobélia.

CHEMICAL CHARACTERISTICS.—A strong decoction of lobelia dropped into rectified spirit deposits a precipitate (gum). Acetate, and especially diacetate of lead, form yellow precipitates with the decoction. Protonitrate of mercury also forms a copious precipitate. (For other chemical characteristics, see above.)

PHYSIOLOGICAL EFFECTS.—An accurate account of the effects of this plant on man and animals is yet wanting. But from the observations hitherto made its operation appears to be very similar to that of tobacco (see p. 317); and from this circumstance, indeed, it has been called the *Indian Tobacco*. I have before remarked, that both in its taste and in the sensation of acridity which it excites in the throat, it resembles common tobacco. This analogy between nicotiana and lobelia, originally noticed by the American practitioners, is confirmed by Dr. Elliotson. (*Lancel*, April 15, 1837, p. 144.)

a. On Animals generally.—Horses and cattle have been supposed to be killed by eating it accidentally. (Thacher, American New Dispensatory, p. 2.) An extraordinary flow of saliva is said to be produced by it on cattle. (Lancet, May 13, 1837, p. 299.)

[Mr. Procter administered a grain of lobelina in solution to a cat. In less than two minutes it produced violent emesis, and much prostration, from which the animal fully recovered in three hours. Again, one grain of the substance in an ounce of water was administered directly into the stomach of the animal by an elastic tube. Immediate and total prostration was the consequence, which in half an hour rendered the animal almost motionless; the pupils of the eyes were much dilated. The animal gradually recovered its strength, but the effects of the prostration were evident for fifteen hours afterwards. No emetic or cathartic effects resulted. (Am. Journ. of Pharm. vol. xiii. p. 10.)—J. C.]

6. On Man.—az. In small doses it operates as a diaphoretic and expectorant. Mr. Andrews, (Lond. Med. Gaz. vol. iii. p. 260,) who speaks from its effects on himself, says, it has "the peculiar soothing quality of exciting expectoration without the pain of coughing."

B3. In full medicinal doses (as Bj. of the powder) it acts as a powerful, nauseating emetic. Hence it has been called the emetic weed. It causes severe and speedy vomiting, attended with continued and distressing nausea, sometimes purging, copious sweating, and great general relaxation. These symptoms are usually preceded by giddiness, headache, and general tremors. The Rev. Dr. M. Cutler, (Thacher, op. cit.,) in his account of the effects on himself, says, that taken during a severe paroxysm of asthma, it caused sickness and vomiting, and a kind of prickly sensation through the whole system, even to the extremities of the fingers and toes. The urinary passage was perceptibly affected, by producing a smarting sensation in passing urine, which was probably provoked by stimulus on the bladder. It sometimes, as in the Rev. Dr. Cutler's case, gives almost instantaneous relief in an attack of spasmodic asthma. Intermittent pulse was caused by it in a case mentioned by Dr. Elliotson. Administered by the rectum, it produces the same distressing sickness of stomach, profuse perspiration, and universal relaxation, which result from a similar use of tobacco.

 $\gamma\gamma$. In excessive doses, or in full doses too frequently repeated, its effects are those of a powerful acro-narcotic poison. "The melancholy consequences resulting from the use of Lobelia inflata," says Dr. Thacher, (op. cit.) "as lately administered by the adventurous hands of a noted empiric, have justly excited considerable interest, and furnished alarming examples of its deleterious properties and fatal effects. The dose in which he is said usually to prescribe it, and frequently with impunity, is a common teaspoonful of the powdered seeds or leaves, and often repeated. If the medicine does not puke or evacuate powerfully, it frequently destroys the pa-

PEREIRA CONTINUED.

tient, and sometimes in five or six hours." Its effects, according to Dr. Wood, (United States Dispensatory.) are, "extreme prostration, great anxiety and distress, and ultimately death, preceded by convulsions." He also tells us that fatal results (in America) have been experienced from its empirical use. These are the more apt to occur when the poison, as is sometimes the case, is not rejected by vomiting.

USES.—Lobelia is probably applicable to all the purposes for which tobacco has been used (see p. 319). From my own observation of its effects, its principal value is as an antispasmodic.

1. In asthma (especially the spasmodic kind) and other disorders of the organs of respiration.—Given in full doses, so as to excite nausea and vomiting, at the commencement of, or shortly before, an attack of spasmodic asthma, it sometimes succeeds in cutting short the paroxysm, or in greatly mitigating its violence; at other times, however, it completely fails. Occasionally it has proved serviceable in a few attacks, and, by repetition, has lost its influence over the disease.

To obtain the beneficial influence in asthma, it is not necessary, however, to give it in doses sufficient to excite vomiting. Dr. Elliotson (*Lancet*, April 15, 1837, p. 144,) recommends the use of small doses at the commencement, and says that these should be gradually increased, if neither headache nor vomiting occur; but immediately when these symptoms come on, the use of the remedy 1s to be omitted. Given in this way, I can testify to its good effects in spasmodic asthma. It has also been used in croup, hooping-cough, and catarrhal asthma, but with no very encouraging effects.

2. In strangulated hernia, Dr. Eberle, (Treat. of the Mat. Med. vol. i. p. 48, 2d ed.) employed it effectually, instead of tobacco, in the form of enema.

3. As an emetic, it has been employed by Dr. Eberle (op. cit.) in croup; but its operation is too distressing and dangerous for ordinary use.

ADMINISTRATION.—It may be given in powder, infusion, or tincture (alcoholic or ethereal.) Dr. Reece employed an orymel. The dose of the powder as an emetic, is from grs. x. to $\exists j.$; as an expectorant, from gr. j. to grs. v. It deserves especial notice that the effects of lobelia are very unequal on different persons, and that some are exceedingly susceptible of its influence. (Elliotson, Lancel, June 1832; and April 15, 1837.)

1. TINCTURA LOBELIE, E. (U. S.): *Tincture of Lobelia*.—Lobelia, dried, and in moderately fine powder, $\exists v.$; Proof Spirit, Oij. This tincture is best prepared by the process of percolation, as directed for the tincture of capsicum; but it may also be made in the usual way by digestion.)—[The U. S. P. directs Lobelia, four ounces; Diluted Alcohol, two pints. Macerate for fourteen days and filter, or proceed by displacement.]—Dose, as an emetic and antispasmodic, from f $\exists j$. to f $\exists j$. repeated every two or three hours until vomiting occur; as an expectorant \mathbb{M}_x , to f $\exists j$. For children of one or two years old, the dose is \mathbb{M}_x . \mathbb{M}_xx .

2. TINCTURA LOBELLE ETHEREA, E.; Ethereal Tincture of Lobelia.—(Lobelia, dried, and in moderately fine powder, $\overline{3}v$.; Spirit of Sulphuric Ether, Oij. This tincture is best prepared by percolation, as directed for tincture of capsicum; but it may be also obtained by digestion in a well-closed vessel for seven days.) This may be used in the same doses as the alcoholic tincture.

With some persons the ether is apt to disagree, and for such the alcoholic tincture is preferred. Whitlaw's ethereal tincture, used by Dr. Elliotson, consisted of Lobelia, lb. j.; rectified spirit, Oiv.; spirit of nitric ether, Oiv.; spirit of sulphuric ether, Ziv. Macerate for fourteen days, in a dark place. (Lancet, June 3, 1837.)

[As has been stated, page 395, heat injures the activity of lobelia, when its active principle is in a free state, and though combined with a weak acid in the plant, boiling is found to impair the activity of the decociton, hence in making preparations which require heat, some acid, as the acetic, should be associated with it. A VINEGAR of LOBELIA may be prepared by treating four ounces of lobelia by displacement, with two pints of diluted acetic acid. With vinegar of lobelia, a syrup may be made in the same manner as syrup of squills.

By treating the powdered seeds with eight parts of diluted alcohol, containing 1 per cent. of acetic acid, a preparation is obtained possessing the activity of lobelia in a concentrated form (Procter).—J. C.]

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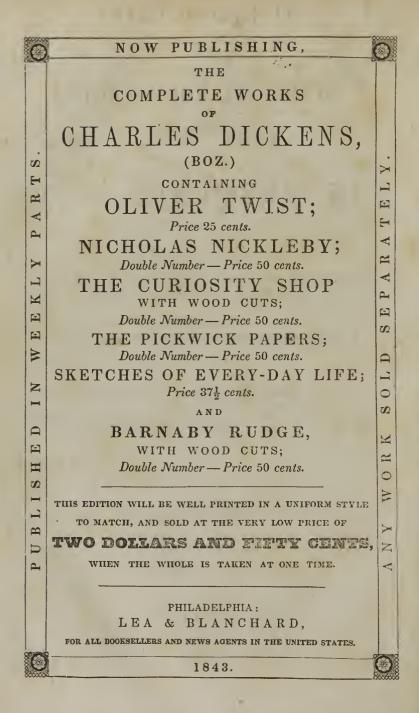
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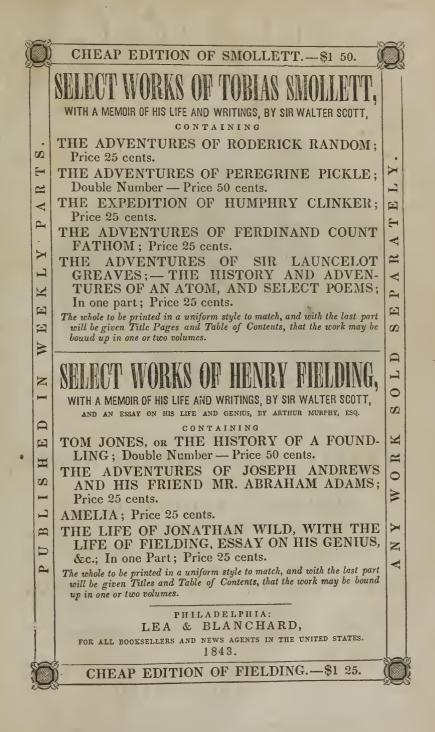
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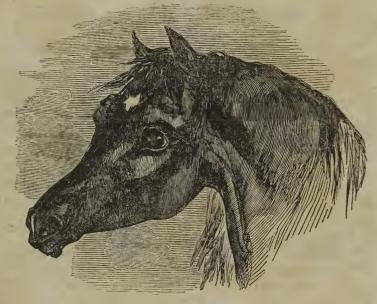


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