MESMERISM?~~

RISE, PROGRESS, AND MYSTERIES

TTA

IN ALL

AGES AND COUNTRIES, 11/

BEING A CRITICAL INQUIRY INTO ITS ASSUMED MERITS AND HISTORY OF ITS MOCK MARVELS, HALLUCINATIONS, AND FRAUDS.

BY

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THE RISE, PROGRESS, AND MYSTERIES

MESMERISM,

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We have recently been assured that the public now expect the medical profession to investigate mesmerism,* and, as if any stimulus beyond this most reasonable expectation were needed, we are also informed that in Paris every fourth medical man is already a mesmerist, and consequently, either a visionary or a juggler; "for," says Teste, "there is no medium; either medicine is but a chimera, or magnetism is but juggling."

Without understanding the logic which reduces us to this sad alternative, it would be unjust to decide, without examination, that the latter proposition is the true one. It is not easy, however, to determine the best mode of conducting the inquiry. Does the student of mesmerism venture to express his dissent. without having made any experimental investigations on the subject? How irrational to form an opinion on matters with which he has no practical acquaintance! Does he make experiments extensively, and still arrive at hostile conclusions ? How absurd to suppose, that because experiments fail in the hands of a novice, they cannot succeed in those of a proficient! Nor are these the only horns of the dilemma. The state of mind of the student must be peculiar. "Forget," says Deleuse, "for awhile, all your knowledge of physics and metaphysics. Remove from your mind all objections that may occur. Never reason for six weeks, after you have commenced the study." Thus, a perfect faith in the truth of the doctrines of mesmerism is an indispensable preliminary to their successful investigation. In other words, the mind must

* Mesmerism and its Opponents. By Rev. G. Sandby.

feel that conviction which can only result from the sound exercise of reason, before reason is permitted to be exercised at all —a paradox incomprehensible as strange to an unmesmerised capacity. So delicate, moreover, is the mesmeric agent, that the mere presence of a sceptical person will generally prevent an experiment from perfectly succeeding, and has often been assigned as the cause of failure.

A principal authority on the subject demands of his opponents that they shall examine and refute every fact brought forward (as such) in the voluminous works of Wienholt, Olbers, Treviranus, and a host of other writers; prove that their authors "were and are fools, or knaves and liars," and that nature herself is "an arrant quack and impostor;" before they can "be allowed to boast of having refuted animal magnetism."* As well might one hesitate to disbelieve in the elixir of life and transmutation of metals, because he had not examined and refuted the thousand facts, so called, in the numerous works on occult science ! If we can disprove the facts asserted in every similar instance, where *all* the modifying circumstances are known, we may safely neglect the others recorded, of many of the conditions of which we must necessarily be ignorant.

The ancient origin of mesmerism, the nullity of the inferences of the first French commission, the unanswerable conclusions from undeniable facts of the second, the belief in animal magnetism of "that one conscientious man," Jussieu, are amongst the many assertions in the modern works on mesmerism which a simple detail of facts will refute; whilst the result of the last French commission, and of the attempts to gain the Burdin prize, are examples of convenient omissions, which the slightest attention in making an historical sketch should have prevented. Few authors on mesmerism have hazarded a definition of their science, but they have favoured us with abundance of equivocal experiments as the basis of very unequivocal reasoning, doubtful facts, imperfect analogies, vague generalizations, glaring sophisms, forgotten absurdities revived, and new ones originated. In attempting to ascertain what proportion the merits of mesmerism bear to its pretensions, it is difficult to obtain any new data that will satisfy the mesmerists, so long as the inferences clearly deducible are opposed to their doctrines : still they can offer no objection to data furnished by themselves-to the evidence of their own recorded facts.

Before examining mesmerism as it is, however, it will be desirable to glance at mesmerism as it has been, and note the various phases it has from time to time presented, during its rise and progress.

* Isis Revelata.

The subject will be treated under the following heads :-

- A. Assumed antiquity of mesmerism.
- B. Real origin, and progress to the present time.
- C. Description of the various modes of inducing mesmeric phenomena, and effects stated to have been produced.
- D. The facts (so called) of modern mesmerism, arranged so as to collate the statements of different writers in favour of mesmerism, under the following heads :--
 - 1. Alleged conditions of mesmeric susceptibility.
 - 2. Alleged conditions necessary for producing mesmeric phenomena.
 - 3. Various modes of inducing mesmeric phenomena.
 - 4. Various modes of demesmerising.
 - Effects alleged to be produced by mesmeric operations, miscellaneous effects.

And the following alleged effects :--

- 6. Effects on the muscular system.
- 7. Effects on the common sensibility.
- 8. Effects on the sense of smell.
- 9. Effects on the sense of taste.
- 10. Effects on the sense of hearing.
- 11. Effects on the sense of sight.
- Effects on the intellectual faculties and moral feelings; phreno-magnetism, &c.
- 13. Effects as a remedial agent.
- 14. Effects on brutes.
- E. Theories of the mesmerists,
- F. Concluding remarks

ASSUMED ANTIQUITY OF MESMERISM.

§ 1. Mesmerism, according to its advocates, has been "dimly known for thousands of years in barbarous and semi-barbarous countries, known as to some of its high results in many of the great nations of antiquity, though the knowledge was confined to the chosen."* The proofs of this are selected from various sources. From the Bible, Foissac enumerates, as men possessing great magnetic power, Moses, Aaron, Samuel, Balaam, Elias, Elisha, and others. He remarks, that when Moses held up his hands, Israel was victorious, and when he lowered them, Amalek had the advantage. The anger of Naaman at not being touched by the prophet for the cure of his leprosy; the circumstance of Elijah and Elisha each stretching his body over that of the person whom he restored to life; of Elisha requiring a minstrel to play music before he would prophesy to King Jehoram, are illustrations of a knowledge of animal magnetism from the Old Testament, as the sudden death of Ananias and

^{*} Zoist, vol. i. p. 58, and Caldwell's Facts in Mesmerism.

Sapphira, on the words of St. Peter, and the instant cures, usually deemed miraculous, are considered to be so many examples from the New.

§ 2. Almost all the marvellous cures on record have been referred to the operation of this agent. Thus with equal facility are explained the healing of the wound of Ulysses by magical incantation; the cure of fevers and of hydrophobia by pronouncing the word Abracadabra; of sciatica, ague, and renal affections, by music ; of the bite of serpents, by songs ; and the reduction of dislocations, by secret words. King Pyrrhus is reported to have cured diseases of the spleen by gentle pressure over the affected organ with his right foot. The Emperors Hadrian and Vespasian cured congenital blindness by merely touching the eyes; and, besides the royal touch in England and France, the ancient princes of Austria cured scrofula by giving with their own hand a glass of wine to the patient to drink.* The effects of amulets, talismans, lovecharms, and philtres, entitle these to a place in the same category.

§ 3. In Egypt and Chaldæa, the practice of divination and of the prediction of future events; in Greece, the ceremonies at the cave of Trophonius, and the temple of Æsculapius, and a passage from Stobæus, are referred to as proofs that animal magnetism was not unknown. An ironical passage from Plautus is quoted seriously, and the rites at the Pythian and Sibvlline oracles are adduced as reasons for concluding that the Romans possessed similar knowledge.

 \S 4. If the Bible, indeed, furnish examples in support of animal magnetism, the most pertinent one, perhaps, has been strangely overlooked. It is that of "a certain damsel pos-sessed with a spirit of divination, which brought her masters much gain by soothsaying." The rites of the Egyptian and Chaldean priests are too little known to furnish certain evidence of the existence of anything but chicanery and gross imposture, and cannot, therefore, have any bearing on mesmerism. The passage from Stobæus merely proves that Solon (if he really were the author of it) believed that diseases which resisted all inward medicines might sometimes be cured by the simple process of external friction.[†]

* Virey, art. Animal Mag., in Dict. des Sciences Medical. † The passage is from a fragment of Solon, in which the author, after enumerating other employments whereby men acquire riches, and remarking the uncertainty of them, comes in order to members of the medical Ing the intertainty of the construction of the intertainty of the intertainty of success." Then follow the four lines in question, of which the following is a literal translation :-- "But often from a small pain great suffering arises, and one cannot alleviate by giving soothing medicines, and by *touching* (or stroking) with his hand, one immediately makes whole a man afflicted with bad and painful diseases."

§ 5. With respect to the cave of Trophonius, Pausanias informs us that the consultant first drinks of the waters of Lethe, to cause him to forget the past, and then of the waters of Mnemosyne, to enable him to recollect all that he may see or learn in his descent. He next passes into the cave, and is initiated into the secrets of futurity. After a time, except, indeed, he had entered with the felonious intent of stealing the gold and silver offerings, in which case he is seen no more, he comes up again. Immediately on his return, he knows neither himself nor others, but presently he regains his consciousness. It is mentioned by several authors, that the devotees of Æsculapius used to fall asleep in his temples; but if, as is said, they stayed there many days, the mesmeric influence was not more powerful than we occasionally see it in temples of modern date. Plautus adopts the story of Mercury on purpose to make a pun upon it. Mercury, prowling about the streets after dark, meets with Sosia, whom he perceives to be in a great fright at him; and to increase this, he holds a dialogue with his fists, so that Sosia may hear. He congratulates them on having put to sleep four men that day already; whereon Sosia, making a bad pun, expresses his alarm lest he should be the fifth; and then a few lines below comes the passage in question, in which Mercury, speaking ironically, says, "What if I touch him gently, (tractim tangam-what if I stroke him down.) that he may sleep !" The allusion, without doubt, is not to "putting a child to sleep by gently rubbing it,"* but to the power supposed to reside in the caduceus of Mercury of sending any whom it touched to sleep. Indeed, when Mercury lulled Argus to slumber by the sound of his lyre, and deepened his sleep with his caduceus-

"firmatque sopore

Languida permulcens medicatâ lumina virgâ"-

Ovid, Fab. xiii.

preparatory to cutting off his head, he equalled our modern mesmerisers in humanity, and far excelled them in mesmeric power, closing at once a hundred eyes instead of two.

§ 6. Pythagoras ranks high as an ancient magnetiser, and not undeservedly.[†] By a word he is said to have tamed a furious bear, prevented an ox from eating beans, and stopped an eagle in its flight. He was on the same day present and haranguing the public at Metapontum in Italy, and at Tauromenium in Sicily. He predicted future events, and stated that certain periodical absences from his followers were occasioned by his visits to hell. He recollected that his soul had already animated four different bodies before his own. Socrates was ac-

† Foissac instances Pythagoras, Socrates, and Apollonius, as men of mesmeric power.--[Rapports et Discussions, &c., 1833.]

^{*} Elliotson's Physiology, p. 665.

quainted with animal magnetism, for he believed that the gods sometimes allowed to men a foreknowledge of future events, and his familiar demon has been ascribed to the influence of mesmerism. To Apollonius Tyaneus, however, must be awarded the palm as a mesmerist. Not only was he versed in all human languages, though he had never learned them, but he even understood the language of beasts and birds. He foretold future events; and whilst discoursing at Ephesus, was conscious of the murder of Domitian at Rome, at the very instant when the tyrant was slain. He held a conversation with the ghost of Achilles, saw the chains of Prometheus on Mount Caucasus, and in the course of his travels met with trees that spoke, phœnixes, satyrs, and dragons; and lastly, so great was his magnetic power, that his mere presence, without his uttering a single word, sufficed to quell popular tumults. Nothing but mesmerism can account for these things.

 δ 7. If all that was marvellous in the impostures of ancient priestcraft, every instance in which the mind exerted a powerful influence over the body, or one man over his fellow-men, and every case recorded of the remedial efficacy of touching, handling, friction, or any other outward act calculated to excite faith in the patient, are to be referred to mesmerism, then indeed have we evidence sufficient that the art has been known and practised from the most remote period. But unless it can be shewn that by such reference, all that before was unintelligible and mysterious becomes clear and easy of explanation, the question is not very important, since antiquity is no guarantee for truth, nor any apology for error. To establish the claim of mesmerism to an origin so ancient as its advocates assume. it would be necessary to prove, first, that all the circumstances adduced in support of such an opinion are authentic ; secondly, that they can all be clearly and completely explained by the doctrines of mesmerism; and lastly, that they cannot be accounted for in any other way with equal probability. Not one of these positions can be maintained.

REAL ORIGIN AND PROGRESS OF MESMERISM TO THE PRESENT TIME.

§ 8. The mineral magnet was, from time immemorial, employed as a remedy in the treatment of burns and other injurios.* But it was not until the sixteenth century, when al-

^{*} As the magnet and gold were invested with somewhat similar powers by the alchemists, the belief in the remedial efficacy of both might possibly originate in a *literal* acceptation of an enigmatical aphorism. Thus, in the mystical language adopted for concealment from all but the initiated, Geber, in 800, states, "Gold cures leprosy, cures all diseases; meaning simply that gold was superior to the rest, being alone a healthy metal, all others being called leprous or diseased.

chemy was in its zenith, that its use as a remedy for internal diseases became general. At this time, also, we find the earliest speculations on the extensive diffusion of the magnetic principle. Kepler and Descartes obscurely stated, that the motions of the planets were governed by magnetic action; but Paracelsus boldly declared that there existed in all animals a secret virtue, analogous to that of the magnet, which proceeded from the planetary bodies. Van Helmont adopted the same ideas: "the name of magnetism," says he, "is given to that occult influence which bodies possess on each other, at various distances, either by attraction or impulsion. There exists in man a certain energy, which can act beyond his own person, according to his will or imagination, and impart virtues, and exercise a durable influence even on distant objects."

Pomponatius, in the sixteenth century, and Goclenius, Kircher, Van Helmont, Maxwell, and many others in the seventeenth and commencement of the eighteenth, wrote upon the magnetic cure of diseases.*

 δ 9. In assuming the existence of an universal magnetic agent, by which various actions, chemical and vital, were thought to be explained, and in admitting that, by the mere silent but forcible exercise of the will, one can produce notable effects on other living beings, "even at a considerable distance," these authors certainly anticipated much that has since been supposed to have originated with Mesmer. Notwithstanding the objections of the mesmerists to acknowledge that their art ever had any connexion with that of the mineral magnetizers there can be no doubt that it owes its origin to the practices of the latter. The authors cited above were the very men who employed magnetism and mysticism for the cure of diseases and wounds-who used the weapon-salve, and powder of sympathy.[†] If, then, their theory of a general magnetic agent be claimed as an anticipation of the doctrines of mesmerism, it must be reasonable to consider their practice of magnetism as the foundation of the practice of mesmerism.t

§ 10. In the seventeenth century, there appeared in England gardener, Levret, an Irish gentleman, Valentine Greatraks, and a Dr. Streper; and in Italy, Francisco Bagnone, all of whom were believed to have the power of curing diseases by touching or stroking with the hand. The most celebrated of these, Greatraks, is represented by Dr. Rust, Lord Bishop of Derry, as being "a simple, unpretending man, and sincerely

t Mackay's Memoirs of Popular Delusions, 1841.

^{*} Report of the Commission, Paris, 1784. Thouret, Recherches et Doutes, &c., 1784. Isis Revelata, 1836. Caldwell on Mesmerism, 1842. † Paracelsus, and after him Dr. Fludd, declared that man had a north and

[†] Paracelsus, and after him Dr. Fludd, declared that man had a north and a south pole, and for magnetism to have its full effects, the patient must face the north.

pious." The same authority informs us, that not only had he seen, amongst other cures, "dimness cleared and deafness cured by his touch ;, running sores of the king's evil dried up; and kernels brought to a suppuration by his hand ; grevious sores, of many months' date, in a few days healed ; obstructions and stoppages removed ;" but even " cancerous knots in the breast dissolved." He adds, however, " his patients often relapse; he fails frequently." A Dr. Stubbe likewise avers that Greatraks has been seen to " publicly cure the lame, the blind, the deaf, the perhaps not unjustly supposed demoniacs and lepers ; besides the asthma, falling sickness, convulsion fits, fits of the mother, old aches and pains." Notwithstanding Mr. Colouhoun is of opinion that the evidence of these cures is " far beyond the reach of sophistry," we must be permitted to express a doubt whether Greatraks could by a touch clear up an opaque cornea, or dissipate a cancerous tumour. The Lord Bishop of Derry, when speaking of what he did not understand, is not superior to any other witness. The physician was evidently credulous, and both, doubtless, had their judgment misled by the popular enthusiasm of the day. St. Evremond, speaking of Greatraks, observes, "The prophet affirmed that all diseases were caused by evil spirits." A case of gout and rheumatism was attributed to " watery spirits ;" hypochondriasis to an "aërial spirit." "To hear him talk, one would have imagined that he knew all about spirits-their names, their rank, their numbers, their employments, and all the functions they were destined to; and he boasted of being much better acquainted with the intrigues of demons than he was with the affairs of men."* Simple, unpretending, pious individual !

§ 11. The demoniacal possessions of the Ursuline nuns at Loudun, in 1632, for which Urban Grandier was burnt at the stake, by order of Richelieu, the tremblers of Cevennes, and in 1732, the convulsionaries of St. Medard, have been referred to by writers on animal magnetism.† The phenomena in all three cases, presented considerable similarity. In the two first, we find the persons affected had a knowledge of languages they had never learned, could divine the unexpressed thoughts of others, possessed the spirit of prophecy, and were insensible to pain. But the most striking proofs of insensibility to pain were manifested by the fanatics at the tomb of St. Paris, could we believe Carré de Montgeron's account of their proceedings. Whatever their diseases, they were cured. According to Deleuse, these persons mesmerized one another without knowing it ; but it is a strange coincidence that almost precisely similar effects had

 ^{*} Mackay, op. cit. vol. 3.
† Historie Académique du Magn. An., par C. Burdin, Jeune, et Fréd. Dubois, (d'Amiens,) Paris, 1841.

[†] Hist. Critique du Magn. An., Paris, 1813.

been seen a century before amongst the nuns at Loudun, and were ascribed to demoniacal possession; the only animal magnetism here being the will of the cardinal to have some pretext for wreaking his vengeance on an innocent man, who had been so unfortunate as to incur his displeasure.

§ 12. About 1770, Jean Joseph Gassner excited considerable attention in Germany. Ascribing, like Greatraks, many diseases to diabolical agency, he first ascertained whether the complaint was a natural or a diabolical one. This he effected by invoking the evil spirit to manifest itself. If nothing occurred after three times making the summons and the sign of the cross, the disease was decided to be natural, and curable by ordinary remedies; but if the demon responded, and agitated the body with convulsions, then Father Gassner, rubbing his hands on his girdle, pressing his stole and his cross, invoking the sacred name of Jesus Christ, and exercising various touchings on the body, (even of a voluptuous and indecent kind, it is said, on his female patients,) performed some miraculous cures.* In 1794, a Count Thun appeared at Leipsic, professing to cure gout, palsy, and other complaints, by the imposition of his hands. His success was inconsiderable.t

 δ 13. It is to Anthony Mesmer that animal magnetism owes whatever importance is attached to it in the present day. Hell, a Jesuit priest and professor of astronomy at Vienna, had attained a considerable notoriety by his magnetic treatment of diseases. His method consisted in the application of magnetised steel plates of a peculiar form to the naked body. In 1773. Mesmer having obtained some magnetised plates and rods from Father Hell, proceeded to test their efficacy upon the sick. His success probably astonished even himself, and by the jealousy it engendered, led to a quarrel with Father Hell. After a little experience, Mesmer found that the steel plates and rods were needless-that he could produce the same effects by merely drawing his own hands from above downwards in front of the patient. He now developed his theory, and wrote an account of it to the various learned societies of Germany. One alone, the Academy of Berlin, vouchsafed a reply, and that contained so many doubts and queries, that Mesmer declined to attend to it. Failing to fulfil the expectations he excited by promising to cure incurable diseases, he was obliged to leave Vienna. After travelling through Bavaria and Switzerland, he returned to the Austrian capital, but meeting with no encouragement, left it finally in 1777.

§ 14. In 1778, we find Mesmer established in Paris. Deslon, a physician of some reputation, was the first convert of any importance. His example, however, was soon followed, and

^{*} Virey, loc. cit.

⁺ Willich on Diet, 1799.

animal magnetism became in Paris the rage of the day. Pamphlets innumerable, equally extravagant whether in support of, or opposition to, the new doctrines, were published. To increase his notoriety, Mesmer requested the Royal Society of Medicine to appoint a commission to witness and testify to the utility of his treatment; but as he insisted upon selecting his own patients, and would not permit any examination of them beforehand, his proposal was not accepted. After amassing immense wealth, failing to receive the reward he demanded from the French government, rather from the exorbitance of his demands than from any want of disposition on their part, in 1781, Mesmer retired to Spa.

§ 15. Three years afterwards the French Government acceded to the wishes of the proselytes of Mesmer, by ordering the subject to be submitted to the consideration of the Royal Academy of Sciences and the Royal Society of Medicine. Deslon superintended the experiments, which were performed after the method of Mesmer. The commission of the Royal Academy was composed of Bailly, (the reporter,) Lavoisier, Le Roy, Franklin, Sallin, Majault, Guillotin, De Borie, and D'Arcet. Their report was dated August 11, 1784 ; it was concluded as follows :-- " The committee having found that the animal magnetic fluid is not perceptible to any of the senses, that it exerted no action either upon themselves or upon the patients who had been submitted to it; being assured that the pressings and touchings occasion changes rarely favourable in the animal economy, and emotions always injurious in the imagination; lastly, having shewn by decisive experiments that the imagination without magnetism can produce convulsions, and that magnetism without imagination can produce nothing,-they conclude unanimously, as to the question of the existence and utility of animal magnetism, that there is nothing to prove the existence of an animal magnetic fluid ; that a fluid without an existence is consequently without utility; that the violent effects which they observed in the public treatment were attributable to touching, to the imagination running wild, (mine en action,) and to the mechanical irritation which leads us, in spite of ourselves, to repeat that which makes a forcible impression on our senses. And, at the same time, they consider it important to add that the touchings, the repeated action of the imagination in producing the crisis, may be injurious: that the spectacle of the crisis is likewise dangerous as a cause of imitation; and, consequently, that all public treatment in which magnetism is employed as a remedy cannot at length have other than hurtful effects." In the secret report of the same committee sufficient reasons are assigned for concluding that the practice of mesmerism as then carried on, by strongly exciting sexual feelings, had a highly immoral tendency. It

is also remarked, that it was a feigned crisis which gave the signal that determined many others by imitation.

§ 16. The commissioners appointed by the Royal Society of Medicine were, Poissonier, Caille, Mauduyt, Andry, and Jus-The first four of these sent in their report in August ; sieu. and Jussieu-who chose to write a separate one in September, 1784. The medical committee decided that the doctrine of an universal magnetic fluid was a mere hypothesis; that this hypothesis was of ancient origin; that there were no physical proofs of the existence of any such fluid ; that the effects produced might be accounted for without supposing any such fluid to exist; that arguments drawn from internal sensations are equivocal, often illusory, and consequently always insufficient; that what is called animal magnetism is the art of exciting convulsions by touching, and the friction of regions of the body the most irritable, in persons the most sensitive, predisposed to the result by many and comcomitant causes, which may be varied. and many of which are of themselves capable of exciting the strongest convulsions in certain subjects, under certain circumstances. That as a pretended means of cure, animal magnetism, reduced to irritation of sensitive parts, imitation, and the effects of the imagination, is at least useless where it produces neither evacuations nor convulsions, and that it may become dangerous by maintaining a high degree of tension of the fibres of those whose nerves are very sensible; that it is very injurious where it produces the effects improperly termed crises; that it is the more dangerous in proportion as these pretended crises are stronger, the convulsions more violent, and the evacuations more abundant; and that there are many constitutions in which the consequences might prove fatal; finally, that a repetition of the magnetic processes would be likely to occasion, in persons predisposed, a spasmodic and convulsive habit.

§ 17. Jussieu agreed with his colleagues in very many of their conclusions, but differed from them in believing that he saw proofs of the existence of an agent which could pass from one person to another, and sometimes exert upon the latter a sensible action. The theory of magnetism, he states, cannot be admitted, since it has not been developed or supported by solid proofs. The experiments made to establish the existence of the magnetic fluid prove only that man produces upon his fellows a sensible effect by friction, by contact, and more rarely by a simple approach at some distance. This action, attributed to an universal fluid, not demonstrated, is certainly due to the animal heat existing in bodies, which emanates from them continually, extends to a certain distance, and can pass from one body into another. The animal heat is developed, augmented, and diminished in a body by moral and physical Judged by its effects, it partakes of the property of causes.

tonic remedies, and produces, like these, effects salutary or injurious, according to the quantity communicated and the circumstances under which it is employed.

§ 18. These reports lessened the reputation of Mesmer, but appeared too late to prevent his admirers from entering into a subscription of 100 louis from each to whom he would impart his secret. Such was the eagerness to subscribe, that in a few days the sum amounted to 340,000 francs. With this addition to his fortune, after a vain attempt to extract still more, Mesmer retired to Switzerland, where he died in comparative obscurity, in 1815. Whatever opinion we may form of his talents, there can be no doubt that Mesmer was disingenuous and mercenary in the extreme. A literary plagiarist, he boasted of the originality of his doctrines; and, sacrificing everything to avarice, he vaunted his disinterestedness and philanthropy.

§ 19. When the fame of Mesmer was beginning to decline in France, England had the honour of ministering to the wants of a few itinerant magnetizers; but the subject never excited the general sensation which it had done in Paris. In 1778, a Dr. Maineduc, formerly a pupil of Mesmer and Deslon, gave public lectures at Bristol, and is said to have realized 100,000*l*., by the practice of magnetism. A Mr. Holloway and Mr. and Mrs. De Loutherbourg were also successful speculators in the same lime. In 1778, Perkins, an American surgeon, practising in London, invented and obtained a patent for his "metallic tractors."

§ 20. "The history of Perkinism," it is said, "and of its alleged refutation by Dr. Haygarth. affords strong collateral evidence in confirmation of the reality of animal magnetism."* The tractors were merely small pieces of steel strongly magnetised. They were applied over the affected part, and gently moved about, touching the skin. Gout, rheumatism, toothache, palsy, were a few of the diseases cured by the tractors. These tractors, however, being five guineas a pair, were beyond the means of the poor, and as Perkins was a quaker, that sect subscribed a large sum and built the Perkinean Institution tin which all comers were magnetised free of cost. Magnetism proving thus efficacious in the cure, it was concluded that it would not be less so in the prevention of disease. Hence, many intellectual but gouty gentlemen wore magnets suspended round the neck, for the purpose of warding off an attack. Among those who publicly vouched for the truth of the wonderful cures performed by means of the tractors, were, eight university professors, four being professors of medicine ; twenty clergymen, ten being D.D.'s; thirty-six medical men, nineteen being

* Isis Revelata, vol. i. p. 219.

† Mackay, op. cit., vol. iii.

M.D's.* Incredulous in the face of this goodly array of testimony, Dr. Haygarth, of Bath, and his friend Mr. Richard Smith, of Bristol had some tractors made of wood, painted and shaped so as exactly to resemble the real ones. These were publicly tried, with all due solemnity at first, upon five hospital patients. Of these, four were affected with chronic rheumatism in the ankle, knee, wrists, and hip. The fifth had chronic gout. All were much relieved. One was sure that his knee felt warmer and thought he could walk across the room. He did so, although he had previously been un-The following day, the real metallic tractors able to stir. were applied, with results precisely similar. Mr. Smith applied the wooden tractors to a patient with rheumatism of the shoulder, so severe as to prevent him from raising his hand; in four minutes the man was able to lift his hand. On the contrary, in another patient the fictitious tractors caused so much increase of suffering that he would on no account submit to a repetition of the operation. "The tractors," say the mesmerists, "being merely conductors, it was of no essential consequence whether they were made of metal, or (as Dr. Haygarth's) of any other conducting substance."

§ 21. The pupils of Mesmer founded societies called "Societies of Harmony" in most of the large towns in France. Their professed object was the experimental investigation of animal magnetism; but this, in many instances, was a mere cloak, under which the libertine sought the gratification of his passions. Amongst the members of one of these societies, and likewise one of the subscribers for Mesmer's secret, was the Marquis de Puysegur. In March, 1784, having magnetised his gardener, he found that his patient was capable of holding a conversation whilst wrapt in magnetic sleep. He found, moreover, that the patient not only understood the words, but even the unexpressed thoughts, of his master; and would answer with equal clearness the intended question, whilst it was vet a mere suggestion of the mind, as after it had been conveved to him in language. This was the origin of the socalled magnetic somnambulism.

§ 22. Contemporary with the Marquis was the founder of another sect of magnetisers. The Chevalier de Barberin mesmerised by prayer, and is said to have effected cures quite as remarkable as any reported by the magnetisers. The Barberinists, or spiritualists, established schools at Lyons and Ostend, and increased rapidly in number, especially in Sweden and Germany. Not only could they induce somnambulism by the mere effort of the soul (the will,) but also clairvoyance in the highest degree, and were the first to propound, that when the

* Quarterly Review, Dec. 1844, art. 3.

operator had once affected a patient, his will could afterwards influence the latter, though separated by hundreds of miles. "The clairvoyant," says one of them, "is, then, a pure animal, without any admixture of matter. (!) His observations are those of a spirit. He is similar to God. His eye penetrates all the secrets of nature."*

 \S 23. In Germany, animal magnetism was eagerly adopted, and early claimed the attention of some men of eminence. In the hands of Sprengel, Reil, Gmelin, Kluge, and others, its wonders developed themselves to a greater extent than ever, and there is scarcely a marvel, however incredible, that might not find a parallel in the annals of German animal magnetism.†

In former days, did a student desire to benefit by communication with any philosopher who had, albeit in possession of the *elixiv vitæ*, "shuffled off this mortal coil," an incantation would raise him; or, should the master of the ceremonies down below refuse to permit such an amount of attention to the magic summons, an epistolary correspondence was allowed, such, for example, as Paracelsus boasted that he regularly kept up with Galen in the shades beneath. The German modification of animal magnetism enables its votaries to hold communion with disembodied spirits with fal less trouble.

§ 24. In 18i7, in Prussia, the practice of animal magnetism was by legal enactment restricted to medical men. In 1818, at Berlin, a prize was offered by the Academy of Sciences for the best treatise on the subject, and a hospital, containing a hundred beds, established for the mesmeric treatment of disease. This was under the superintendence of Wolfart. In Russia, a committee appointed to investigate the subject concluded that animal magnetism was an important agent.

§ 25. In France, public attention had been re-excited by the work of Deleuse.‡ Bertrand accounts for the long time which had elapsed without animal magnetism receiving the notice usually paid in France to a new discovery, by the political events of the period, which, he states, destroyed in most minds the calm necessary for serious scientific observation. To this, Burdin and Dubois reply, that the era of the Revolution was precisely that at which science flourished in their country beyond all precedent. The Abbé Faria was the first magnetiser of celebrity in this new epoch of French mesmerism, (1814.) Dispensing with manipulations of every kind, he induced magnetic sleep by the mere word of command, and the authoritative exercise of his will. The press once more teemed with

^{*} Mackay, op. cit.

⁺ See Forbes' Medical Review for April, 1839.

[‡] Histoire Critique, &c., 1813.

periodicals, pamphlets, and larger works on the subject, in rapid succession.

§ 26. In 1820, on the proposal of M. Husson, Dupotet was allowed to magnetise patients in the Hotel Dieu.* In 1825. Foissac wrote to the Royal Academy of Medicine, to request their attention once more to animal magnetism, announcing that he would produce "somnambulists, who, by passing the hand successively over the head, chest, and abdomen of a patient, could discover immediately his disease, and the pains and various alterations to which it gave rise; could point out whether a cure were possible, and if so, whether easy or difficult, near at hand or distant, and what remedies would attain the end by the most prompt and certain way." "My somnambulists," he adds, " do not always deviate from the principles acknowledged in sound medicine. I will go farther, their inspirations partake of the genius which animated Hippocrates !" To this the Academy made no reply. On Foissac addressing a second and more modest letter, however, a committee was appointed to consider the propriety of acceding to his request.

8 27. MM. Pariset, Marc, Burdin, sen., Adelon, and Husson, (the reporter,) were the members appointed. On Dec. 13th, 1825, M. Husson read their report. The main object throughout is to weaken the force of the conclusions of the commissions of 1784. The reporter dwells upon the changeableness of medical doctrine; reminds us that the circulation of the blood was once declared impossible, vaccination considered as a crime, enormous wigs believed to be conducive to health, and antimony expunged from the Materia Medica; that the magnetism of 1784 was essentially different from that to which they now desire to direct the attention of the Academy ; that the doctrines of Mesmer differ materially from those of the somnambulists ; that as magnetism had attracted considerable notice, and been practised by the profession in the north of Europe, it does not accord with "l'amour propre national" to treat the subject with neglect; that it is the duty of the academy to remove the practice of magnetism out of the hands of charlatans, and those ignorant of medicine, who abuse the remedy, and make it an object of lucre and speculation. He concludes by advising that a special committee be appointed to study and examine animal magnetism.

§ 23. The discussion upon this report occupied three meetings. On its conclusion, 35 members were in favour of, 25 against, the nomination of a committee. The committee was appointed on February 28th, 1826, and consisted of MM. Leroux, Bourdois, Double, Magendie, Guersant, Laënnec, Tillaye,

* At the Salpétrière, Bicêtre, La Charité, and Val de Grace, also, magnetic experiments were carried on.—[Dupotet's Introduction.

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Marc, Itard, Fouquier, and Gueneau de Mussy. In consequence of the retirement of Laënnec, M. Husson was appointed a member, and afterwards, the reporter of the committee Six only of the members had previously declared their sentiments in the discussion which preceded; and Husson's bias towards animal magnetism was notorious. Guersant, Itard, and Marc, were in favour of the doctrines. The first of these stated that he had himself succeeded in producing magnetic phenomena. Magendie wanted to see proofs. Laënnec had tried to magnetise, but could not. Double had made magnetism his personal study, but whether as magnétisé or magnetiser, could never elicit any phenomena.

 \S 29. The report was read June 21st, 1831.* M.M. Double and Magendie declined to affix their signatures, as they had had no share in making the experiments. The following are selected from the numerous conclusions with which this lengthy report terminates:—

2. On many occasions, the will, the fixed look, have been found sufficient to produce the magnetic phenomena, even without the knowledge of the patient.

5. In general, magnetism does not act upon persons in a sound state of health.

6. Neither does it act upon all sick persons.

7. There are sometimes effects manifested, which are due to surrounding physical agencies, (heat, &c.,) and to moral causes, (as hope, fear, prejudice,) finally, to "imagination, which has so much influence on some minds, and on certain organization."

8. A certain number of well-established physiological and therapeutic phenomena appeared to depend upon magnetism alone, and were never produced without its application.

9. The real effects of magnetism are very various. Agitation, calmness, quickened respiration and circulation, slight convulsive emotions "resembling electric shocks," numbness, heaviness, somnolency, and, in a small number of cases, somnambulism.

11. During the state of somnambulism, (of which they indubitably prove the existence,) clairvoyance, intuition, internal prevision, insensibility, and sudden and considerable increase of strength.

15. We can not only act upon the magnetised person (by volition alone,) but even place him in a complete state of somnambulism, and bring him out of it without his knowledge, out of his sight, at a certain distance, and with doors intervening.

17. Magnetism is as intense, and as speedily felt, at a distance of six feet, as of six inches; and the phenomena developed are the same in both cases.

^{*} This report is given in full in Isis Revelata, vol. ii.

18. The action at a distance does not appear capable of being exerted with success, excepting upon individuals who have been already magnetised.

 δ 30. After Husson's report, the subject seems to have been totally neglected by the French Academy until towards the close of 1836, when there appeared in the public papers an account of a case in which a tooth had been extracted without pain, whilst the patient was in a state of magnetic somnambulism. This was authenticated by M. Oudet, a member of the Academy. The patient was a sensitive woman, aged 25, who had suffered severely from toothache for several days. bare idea of having the tooth extracted almost threw her into convulsions. M. Hamard magnetised her, and to test her insensibility, she was pricked with a pin, and one of her fingers held in the flame of a candle for a few seconds. She manifested no sign of pain, but conversed indolently with M. Hamard. At the moment that M. Oudet extracted the tooth, her head appeared to shrink a little from the hand of the operator, and a feeble cry was heard. The patient denied having felt pain. A lengthened discussion ensued.

§ 31. Roux gave two instances—the excision of numerous excrescences and the removal of a cancerous breast, in which, the attention being much arrested, there were none of the usual signs of suffering. Moreau mentioned that the patient from whom J. Cloquet had removed a cancerous breast without pain during her magnetic somnambulism, had predicted that there was disease in her liver. She died on the nineteenth or twentieth day after the operation. On examination, the liver was found to be perfectly healthy, but in the lungs vomicæ full of pus. Velpeau adduced another instance of error in prevision.

§ 32. A commission was once more appointed. It comprised MM. Roux, (the president,) Bouillaud, H. Cloquet, Emery, Pelletier, Caventon, Cornac, Oudet, and Dubois, (d'Amiens, the reporter.) M. Berna had written (Feb. 1837,) to the Academy, offering to prove, by persons "at his own disposal," facts conclusive in support of animal magnetism. He stipulated with the committee that he would produce evidence of

- a. Somnambulism.
- b. Insensibility to pricking and tickling.
- c. Restoration of sensibility at will.
- d. At his mental order, there should be loss of the power of motion.
- e. At his mental order, the patient should cease to answer in the midst of conversation; and, at his will, should answer again.
- f. The last experiment should be repeated, the operator being separated by a door.

g. Awakening. h. After the mental order shall have been given in the state of somnambulism, insensibility shall remain during the waking condition ; and the patient shall lose and recover sensibility at the will of the magnetiser.

§ 33. On July 17th, 1837, the report was read. After giving a sketch of the previous academical history of animal magnetism, the reporter remarks, that the committee had proceeded to their investigation, some prepossessed for, others against, the subject ; but that they were unanimous in arriving at the following conclusions :--

1. That no satisfactory proof had been given of the existence of a particular state, called the state of magnetic somnambulism. 2. Nor of the abolition of sensibility.

3. Nor of power in the magnetiser to restore, by the mere effort of his will, sensibility either locally or generally.

4. The operator failed equally to prove the abolition and restoration of the power of movement.

5. The experiment "e" in the programme (§ 32,) was tried and failed.

6. Transposition of the sense of sight, and

7. Vision through opaque substances, were both attempted and equally without success.

δ 34. At the ensuing meeting, Husson read an address criticising the report. The title, he observes, ought to have been "Report of Experiments made on two Somnambulists." There were many omissions in the historical part. It was wrong to state anything that could render an industrious and estimable colleague (Berna) ridiculous (!); the experiments were not new, and these negative experiments could not destroy the positive facts reported by himself, as observed by a former commission. He concluded by proposing that this report be refused. The Academy declined even to consider his proposition.

 δ 35. Considering clairvoyance as the only unquestionable proof of magnetic somnambulism, Burdin made a proposal to the Academy that he would award a prize of 3000 francs to the person who should read without the assistance of his eyes, of light, and of touch. The proposal was accepted; the money placed in the hands of a notary; the prize ordered to remain open for two years, and a committee of seven members of the Academy appointed to conduct the examination.

§ 36. The committee received many applications. Dr. Biermann, physician to the court of Hanover, writes to inquire whether the attestation of three or four magistrates would be sufficient, as he knew a little girl, named Christel Largrave, who for some years had given proofs of possessing a singular lucidity. When her soul was wide awake, (" au moment du plus grand réveil de l'âme,") she could read manuscripts in divers languages, notwithstanding she only understood, in her natural state, German, her mother tongue. Dr. Bergeron states, that he knows a young servant girl who can read without the assistance of her eyes, not only during magnetic but also during natural sleep. M. Ricard, of Bordeaux, affirms that more than a thousand magnetisers could shew somnambulists who could prove what was required; and as he himself has many "sujets de perfection," he wishes to know the conditions of the prize. Dr. Despines, of Aix, in Savoy, writes, that a young person, named Estelle, had shewn him " more than five hundred times, more than a thousand times, indeed," the transposition of the senses. She could magnetise herself at pleasure.

§ 37. M. Pigeaire, of Montpelier, in a long epistle, describes a prodigy as a somnambulist in the person of his daughter. The discovery of her talent was accidental. The mother made some passes à la Dupotet, at her little girl. On this first essay, in less than ten minutes the somnambulism was complete. She named the contents of a closed box, previously unknown to her; and placed en rapport with a Madame Bonnard, this young lady, aged eleven, declared that Madame was not enciente, and that her accoucheur, who stated the contrary, was deceived. "When a magnetised object," writes her father, " is placed before her, she is rivetted and fascinated by it, and cannot by any effort of the will dispel the charm. During her sleepwaking not a drop of water, not a single comfit, or bit of sugar, can she swallow until it has been magnetised." On one occasion she awoke herself out of the magnetic slumber by making passes before herself with a sleeve of one of her father's coats, crying at the same time, " Réveillez-vous donc." Being consulted during her somnambulism as to the conditions on which she would shew clairvoyance, she replies that her eves may be bandaged so that she cannot see with them, that a plate of glass must be placed over the words she is to read, and that she must feel the surface of the glass with her fingers.

§ 38. To these terms Burdin did not object, though they were contrary to the programme he had drawn up. M. Pigeaire accordingly, brought his daughter to Paris, but to the surprise of the committee refused to allow Mademoiselle to be made "temporarily blind" by any other means than a bandage which he himself would furnish; the book to be read must be placed, not on a level with the bandage, but on the girl's knee. The committee, having on examination found the bandage very inefficient, proposed all the effectual modes of blindfolding they could devise, but to each the father made a decided objection, alleging as a reason for not covering the lower part of the face, that vision might be effected through the medium of the branches of the fifth pair of nerves, or of the facial nerves. Annoyed by the evident want of faith displayed by the committee, M. Pigeaire, with all the dignity of injured innocence, asks if they suspect his little girl, and declines all investigation.

§ 39. Professor Gerdy, who had been present at several of Mademoiselle's performances in public, as well as at some of those of Callyxte and Prudence, (two other clairvoyants,) satisfied himself, from the length of time required for success at all, from the trifling degree of success when obtained, from the restlessness of the clairvoyant, and her constant efforts to displace the coverings over her eyes, and from the frequent failures, that these persons never read words placed before them, except "be rays of light could reach the eye beneath the lower margin of the bandage.

§ 40. In October, 1837, Dr. Hublier, of Provence, writes in behalf of Mademoiselle Emélie, but notwithstanding the glowing terms in which he mentions the clairvovance of this lady, and her wish to obtain the Burdin prize, for one reason or another, the allotted two years were allowed to expire without her appearing to prove her powers before the committee. To afford every chance, M. Burdin then extended the term for another year, and altered the original conditions to the following :- " Bring me any person, magnetised or not magnetised, asleep, or awake, who can read in broad daylight, through an opaque body, whether cotton, horsehair, or silk, placed six inches from the person, who can read even through a simple fold of paper, and that person shall have three thousand francs." Still Dr. Hublier hesitated, sometimes because his " excellente somnambule" was practising to attain the requisite perfection, sometimes because she was indisposed, and so on. As the time of grace grew near its close, Hublier craved another year's delay. This being refused, he sent his protégé to M. Frappart for a preparatory trial.

§ 41. On the first occasion of testing her clairvoyance, after a futile attempt for two hours, Emelie declared she was too much fatigued by her journey. On the second, she complained that headache and oppression at the stomach retarded her lucidity.^{*} On the third, after two hours of study, she said she could read the word "phrenology;" the word was "phthisis." On the fourth, she read " Œuvres de Ciceron ;" the words were "L'Histoire d'Angleterre." She explained these mistakes by stating that she was confused by seeing all the books in the *library*, and that she mistook one for another. To obviate this

^{*} During her magnetic somnambulism, Frappart spoke to her about phrenology; he "fingered her head," and proposed to take a cast; to this she conserted, and when she awoke it was done.

inconvenience, the next (fifth) trial was made in another room. As soon as Mademoiselle told M. Frappart that she was asleep, he placed a book on a chair, four feet behind her, said he was obliged to leave her, but that as soon as she had satisfied herself that she was clairvoyant, she must ring the bell. On his return, she described the size of the book, the colour of the binding, and letter by letter spelt out its title correctly. On the sixth trial, Frappart enters when Emélie rings. She succeeds as well as on the previous occasion, and, moreover, repeats a line correctly from a page to which she directs Monsieur to refer.

§ 42. M. Frappart now writes to ask Hublier to be present at the next experiment. MM. Londe, Teste, Amédée Latour, Douillet, Bæhler and Carpentier, Hublier and Frappart, accordingly, are present. The others being concealed, so that they could watch through small holes made in the doors of the apartment, Frappart enters, and reminding Emélie that this is her last trial, desires her to ring the bell, when she is in the state of lucid somnambulism. In about five minutes the bell sounds; Mademoiselle says she sleeps; a book is placed as usual, and Frappart retires. Six times was this clairvoyant seen to walk to the book and carefully examine it, and also to make pencil-notes of what she read. At length she rings the bell. Messieurs enter, all except M. Londe, who retains his post of concealment in front of Emélie. Mademoiselle describes the book, recites certain passages from it, and is seen by M. Londe to look at her notes. Hublier writes an acknowledgment that for four years he had been deceived by "une maitresse femme."

§ 43. In September, 1840, the Academy received a letter from M. Teste, stating that he would produce a somnambulist who could read writing through the walls of a box of either pasteboard or wood. As the phenomenon was not constant, and sometimes very transient, Teste requested the committee to be present at the precise moment previously fixed by the somnambulist herself in one of her sleeps. At the hour thus appointed, MM. Husson, Louis, Chomel, Gerardin, Dubois, (d'Amiens,) and Double, attend. M. Teste shews them a card-board box, and several scraps of paper with written and printed characters on them. The committee, however, prefer one of the boxes with which they had provided themselves. The somnambulist, an agreeable-looking young brunette, is then magnetized by Teste, about twenty passes being made. She is informed of the direction of the lines and of the letters on the scrap of paper contained in the box. In a little time she declares that she can see the inside of the box, and shall be able to read the writing in ten minutes. An hour, however, elapses ere she can see the words. She now states that

there are *two* lines, and she can read the words "*Nous* sommes," but cannot make out the rest. On opening the box in the presence of Teste, the lines are found to be six in number, and to contain neither "nous" nor "sommes" in any of them. The Burdin prize was never awarded, and with its withdrawal closed the connexion of the French Royal Academy of Medicine with animal magnetism.

δ 44. In 1828 and 1829, Mr. Chenevix performed many mesmeric experiments in the Dublin and London hospitals. before some of the most eminent men in the profession. But, notwithstanding this, and the publication of Mr. Colquhoun's -learned work in 1833; the subject excited no general interest in England, until the visit of Dupotet in 1837. M. or Baron Dupotet met with little success at first; but under the patronage of Dr. Elliotson, who, in conjunction with Dupotet, performed a series of experiments upon patients in University College Hospital, he attracted considerable public attention. On the occurrence of some disagreement, Dupotet returned to Paris, and wrote a book abusing Dr. Elliotson, who, it seems, had refused to lend him money. His character is thus described by one of his own craft :- In truth, he was an innocent sort of man, very weak, and of little information, and he knew no more of mesmerism than the most superficial facts. He, however, did good to the cause for a time, and then could do no more, and would have been detrimental had he stayed."*

§ 45. The notoriety obtained by the two girls named Okey, the wonder excited by their performances, their exposure by Mr. Wakley, and the resignation of Dr. Elliotson as physician to the University College Hospital, are within the recollection of every reader.

§ 46. In 1841, M. Lafontaine made a tour through Great Britain, exhibiting his somnambulists in every town sufficiently large to remunerate him. His example was speedily followed by native itinerant lecturers, and very general attention has since been directed to the subject. Within the present year (1844) the metropolis was invaded by two Frenchmen, MM. Marcillet and Alexis. By exhibiting at five guineas per sitting, they were rapidly reaping a golden harvest, when the ordinary clearsightedness of an eminent physician proving more than equal to the mesmeric clairvoyance of Alexis, their career was suddenly checked, and the public mind once more disabused. At Manchester, a Mr. Hawes publicly exhibited his boy "Jack," who had then been in the mesmeric state continuously for three weeks; and who, it was asserted, could read through

[†] See the Exposure, &c., by John Forbes, M.D., F.R.S., in the London Lancet and Medical Gazette, for August, 1844.

^{*} Zoist, vol. i. p. 90.

his forehead, when his eyes were covered with adhesive plaster. After several exhibitions, it was proved by medical men present, that "Jack" certainly could see to a limited extent, but *not until* he had, by moving his eyelids, loosened the plasters sufficiently to assist the visual power of his forehead by ordinary sight. Mr. Hawes refunded the admission money he had received.

§ 47. At the present time, mesmerism presents itself under two additional modifications—hypnotism and mesmero-phrenology. Hypnotism, the mental offspring of Mr. Braid, a surgeon at Manchester, differs from mesmerism as previously known, in not requiring the assistance of a second person to produce the effects. Mesmero-phrenology, phreno-magnetism, or phrenopathy, is a combination of the most startling parts of mesmerism with the least probable ones of phrenology. The discovery of this hybrid is claimed by many individuals, but probably originated in the remark of a somnambulist, made twenty years ago, that her magnetiser must rub her organ of place, and her organ of colour, to elicit more of the information which she believed it to be the function of these cerebral organs to supply.*

DIFFERENT MODES OF OPERATING, AND EFFECTS STATED TO HAVE BEEN PRODUCED.

§ 48. The hand and the eye, being the principal instruments in the mute eloquence of gesture, are naturally employed whenever we desire to arrest attention and excite emotion. The imposition of the hand, moreover, associated as it is with the miracles of our Saviour, and of the prophets of old, has something of a sacred character attached to it. Accordingly, we find it has often been practised by those who wished to exert a personal influence upon their fellow men, and is generally understood to be the outward sign of this influence being exercised. These circumstances have not been overlooked by the animal magnetists.

§ 49. Mesmer's first essays, with his magnetised steel plates, require no description here: if worthy of more than mere mention at all, they belong to mineral rather than to animal magnetism. His mode of procedure, when in the height of his celebrity was the following :--

§ 50. The baquet.—An oaken tub, from four to five feet in diameter, and a foot in depth, covered with a lid in two pieces, constituted the baquet. At the bottom were placed bottles,

Mr. Atkinson refers to this in the Phreno-Magnet. The patient alluded to was probably the one magnetized by Wolfart, and mentioned in the Britsh and Foreign Medical Review, loc. cit., p. 33

with their necks directed towards the centre of the tub, so as to form converging rays. In the centre, other bottles were laid, with their necks in the opposite direction, forming diverging rays. All were corked, and full of magnetised water. There were usually many superimposed lavers of these bottles ; the machine was then at high pressure, (" à haute pression.") The space between the bottles was filled with water, to which pounded glass and iron filings were occasionally added. The low-pressure baquets, however, were made without water. The lids were pierced with holes for the passage of iron rods, bent, moveable, and of different lengths, so as to be readily applied to different regions of the body. Through a ring in the lid was passed a cord with which the patients surrounded their ailing limbs, carefully avoiding to make a knot. Affections disagreeable to the sight, as wounds, ulcers, and deformities, were (conveniently enough) not admitted under treatment. The patients were placed in rows around the tub, in such a way as to touch each other by the hands, arms, knees, and feet. A cord, surrounding the whole number, kept them in their places. Each applied one of the flexible iron rods to the supposed seat of disease. Meanwhile, gentle strains of music, and occasionally the voice of a concealed opera singer, stole upon the ear; the air was redolent of the most delicate perfumes ; the magnificent saloon, surrounded with mirrors, which reflected on every side the attitudes and gestures of the patients, was so artfully arranged as only to admit of a dim twilight. After these magician-like arrangements had been allowed a sufficient time to produce their effect upon the minds of the patients, who were instructed to preserve the most rigid silence, the assistant magnetisers entered. These were the handsomest and most robust young men that Mesmer could select, ("les plus beaux, les plus jeunes et les plus robustes.") Each carried in his hand a magnetising rod about a foot in length. Their duty was, to heighten the effect of the magnetic tub by touching, handling, pressing, squeezing, and earnest gazing, maintaining still the most perfect silence. After the lapse of an hour or more thus occupied, Mesmer himself, arrayed in a robe of lilac silk, and with a grave, majestic air, for the first time entered the room. The less agitated, he calmed immediately by a touch of his magnetic rod. Upon the more excited he acted by taking their hands, and so applying his own, that their thumbs and fingers respectively were in contact, at the same time gazing intensely into their eyes. (" en rapport,") or by making rapid movements with his open hands at a distance from the patient, (" à grand courant,") or by crossing and uncrossing his arms with extreme rapidity, (" les passes en définitive.")

§ 51. The conducting rod answered equally well, whether

made of glass, steel, gold, or silver. One might magnetise with a cane, but then "the pole is changed, and the head, not the point, must be used."—*Virey*.

§ 52. Effects .- The females, always the most impressionable, experienced first, yawnings and stretchings ; their eyes closed ; their limbs tottered ; they felt threatened with suffocation. The sound of the harmonica, the strains of the piano, and the chorus of the singers, appeared to increase the convulsions. Bursts of sardonic laughter, piteous moanings, floods of tears, burst out on every side. The body was contorted with tetanic spasms; the breathing became rattling; all the symptoms more startling. At this moment, the actors in this strange scene ran against one another, amazed and raving : they congratulated each other, embracing with joy, or repelling with horror. The most excited were removed to another room prepared for the purpose. In this, the chamber of the crises. the choking females were unlaced, and suffered to knock their heads against the padded walls, or to roll about on the cushioned floor. - Delrieu.

§ 53. The method of Deslon was very similar, but the committee^{*} especially remarked that many patients were magnetised chiefly by the application of the operator's hands, and by the pressure of his fingers over the hypochondria and lower part of the body—an application frequently continued for a long time, sometimes for several hours. Water containing cream of taxtar was handed round for the patients to drink.

§ 54. The effects induced varied greatly. Some were calm. tranquil, and experienced nothing; others coughed, expectorated, perceived some slight pain, heat-local or universal .and perspired freely; others again were agitated and convulsed. The convulsions were remarkable for their number, their force, and their duration. As soon as one patient became convulsed, many others speedily followed the example. The committee saw an instance in which the convulsions lasted for more than three hours. These fits were attended with expectoration of thick, viscous fluid, forced out by the violence of the efforts. Occasionally there were streaks of blood, and in one young man this was noticed to occur to a great ex-The fits were characterized by rapid, involuntary tent. movements of all the limbs, and of the entire body, by choking, working of the hypochondria and epigastrium, wildness and rolling of the eyes, piercing cries, tears, hiccup, and immoderate laughter. They were preceded and followed by a state of languor and reverie, by a sort of abstraction, and even drowsiness. The slightest noise caused starting, and it was noticed that a change in the time and tune of the airs played on the piano affected the patients; so that the more lively the air, the greater the agitation and the stronger the convulsions. It was surprising to view the profound repose of one part of the patients and the agitation of others. The patients fell one against another, smiled, spoke together affectionately, and mutually mitigated each other's crises. All were under the control of the magnetiser. With a sort of supineness they attended to his voice, look, or sign. The committee could not but recognise, in the constant effects, a great power which affected the patients, and of which the magnetiser appeared to be the depositary.^{*}

§ 55. A female patient of Deslon's, when recovering from the crisis, meeting the eye of the person who had magnetised her, was fixed for three-quarters of an hour. She declared that for the next three days she was constantly followed by that gaze ; asleep and awake, she saw the eye before her.

δ 56. Mdlle. B---- was thrown into the magnetic crisis in three minutes, when she was aware of the operation ; but on another occasion, when the operator was concealed behind a paper door, and she was ignorant of his presence, she was magnetised for thirty minutes without any effect. To prove that this failure was owing neither to want of susceptibility on the part of the patient, nor of power on that of the magnetiser, the latter came from behind his screen and renewed the processes, observing precisely the same distance from his patient that he had done previously. In about three minutes, the patient felt uncomfortable, and choked, and experienced successively hiccup, clashing of the teeth, oppression at the throat, severe headache, restlessness, and pains in the loins. She struck her feet against the floor, stretched back her arms, and writhed about, "in a word, the convulsive crisis was complete, and perfectly characteristic." All this occurred within twelve minutes.[†] In the first trial, which failed, the patient was magnetised at opposite poles, according to the prevailing doctrines and method; in the second, which succeeded, she was magnetised wrongly at direct poles, and therefore ought not to have been affected at all! The magnetiser observed aloud that he must put an end to the crisis, but continued the same magnetising passes that induced it. Nevertheless. the patient became calmer; the heat and pain in the head disappeared ; the uneasiness left, successively, the chest, the stomach, and the arm; and in three minutes the patient felt as usual, quite well.

§ 57. Jumelin contended that the animal magnetic fluid was identical with animal heat, discarded the whole apparatus of

t Ibid.

* Rapport des Commissaires, &c. Par M. Bailly, 1784.

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the baquet, paid no attention to any distinction of poles, and operated by pointing with the fingers and iron rods, and by applying the hands. Eight men and two women were thus operated on without experiencing anything. At length, a female, magnetised without contact, said that she perceived heat. M. Jumelin extending his hand, and spreading his fingers out before the face of the patient, she declared that she saw as it were a flame, which proceeded from the ends of his fingers; magnetised over the stomach, she felt heat there; over the back, heat in that region; she then stated that she felt an increased heat in the whole of the body, and that her head ached. After bandaging her eyes, the stomach and back were again magnetised: the patient now felt heat only in the head, pain in the right eye, then in the left eye and ear. Her eyes were now uncovered, and the operator's hands applied over the hypochondria: she felt heat beneath his hands, and in a few minutes became faint. Recovered from this, the eves were again blindfolded, and M. Jumelin requested the committee, in writing, to preserve silence, but to give the patient to understand that he was magnetising her. No one acted upon her. either near or from a distance, yet effects ensued precisely as before. She said that she felt the same heat, the same pain in the eves and in the ears, and still more of the heat in the back and loins. In a quarter of an hour, Jumelin really did operate upon the stomach and back without contact, but the patient did not perceive it. The magnetic sensations were lessened, instead of being augmented; the headache ceased, and the heat of the back and loins left her.*

§ 58. Desion asserted that a tree or portion of water might be endued with the power of magnetising, but on making the trial, patients fell into a crisis under the wrong tree, and after drinking plain, non-magnetised water, and occasionally were demagnetised by partaking of water that had purposely been magnetised.†

§ 59. The medical committee describe the mode of magnetising with the hand more particularly. They mention two methods; that of actual contact, and that of directing the finger or conducting rod from some distance.

"1. The ordinary procedure in magnetising by contact, consists in applying the hands to the hypochondria, directing the thumbs towards the umbilicus, and placing the index fingers on the epigastrium. It is common, *especially in magnetising females*, to press with the hands over the region of the kidneys. The other parts touched are determined by the seat of

^{*} Rapport des Commissaires. Par M. Bailly, 1784.

[†] Vide Fortes' Rev. loc. citat. and "Rapport," &c.

disease, but whatever they may be, friction, more or less continued, is alternated with pressure.

"2. In magnetising at a distance, the finger or conductor is directed to the nostrils, the mouth, the eyes, the back, or the breast; to the forehead, or to the occiput. The finger or conductor is generally carried along the course of the arms, the sides of the body, the thighs, and the legs. Sometimes the hand is shook, with fingers extended and separated, as if to suddenly shake off the supposed fluid from the finger ends."

§ 60. The hiccup, vomiting, and purging, which occasionally occurred, were ascribed by the committee to direct irritation of the diaphragm, stomach, and colon, by manipulation more or less strong, continued according to the irritability of the patient; fainting, to pressure on the pit of the stomach; convulsions, to continued irritation of the ovaries, by pressure and friction.*

§ 61. Jussieu remarks, that of the effects which he saw from magnetising, some were internal, and only to be known from the account of the patients: such are, heat of the part with which the rod from the baquet is in contact; the sensation of a fluid circulating; of heat or of cold; of malaise; or of perfect health. Other effects were external, and manifest to others; such as yawning, sweating, tears, laughter, agitation, convulsive movements, slight, or severe, sleep, loss or suspension of sense, evacuations of various kinds.

§ 62. He arranges the facts he observed into four classes lst. General and positive facts, of which the true cause cannot be rigidly determined; but of which he considers that many may proceed from some physical cause, (pressure, friction, &c.,) and the rest may be ascribed to an unknown fluid, or to the fluid can be demonstrated, the latter opinion, he considers, ought to prevail as the most ancient and best proved. 2nd. Negative facts, which establish only the non-action of the contested fluid. 3rd. Facts, whether negative or positive, attributable solely to the influence of the imagination. 4th. Positive facts, which appear to establish another agent.

 \S 63. Under the first three heads, the facts and opinions are unfavourable to the doctrines of Mesmer, and may be passed by without comment. The last series of facts is subjoined entire, as being the only one on which Jussieu differed from his fellow-commissioners.

a. A female, blind from thick opacities of both corneæ, became disquieted and agitated in two or three minutes after a rod from the baquet had been directed towards her stomach, though at a distance of six feet. Precaution was taken that

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^{*} Rapport des Commissaires de la Societé Roy. de Médecine, 1784

she should not derive any information from hearing. It is admitted, however, that she could perceive, confusedly, certain objects at a distance of three or four inches.

b. A pati nt, in whom the crisis was a profound sleep more or less prolonged, experienced at intervals, without awaking, a transient convulsive movement, with shock, which was especially excited by an extraordinary noise in the room, as by the click of two rods struck against each other, or by the cry of another patient in the crisis. The magnetic passes made before his face at a little distance usually excited the same convulsion.

c. The crisis of another patient was a general spasm, accompanied by temporary loss of the senses, without any violent movement. The head was carried forwards, the eyes fixed, the arms drawn backwards and stretched along the sides, the hands open, the fingers extended. "My finger," says the reporter, "in contact with his forehead between the eyes, seemed to relieve him a little. If I withdrew it gently, the head followed mechanically in every direction, and came again to rest against it. If, after having thus drawn his head towards one side, I presented my other hand at the distance of an inch, the head retreated precipitately, with the sign of a lively impression. These movements were repeated three or four times in ten minutes; but at the end of that time, the spasm diminishing, the sensibility was no longer the same. On recovery from this state, the patient was ignorant of what had passed."

d. The slightest magnetic movements excited in another patient an impression so lively, that many times, on pointing a finger six inches from his back, without his seeing it, he was seized at the instant with convulsive movements and repeated shocks, which announced to him the action exercised, and continued during that action.

e. The saloons of treatment contained many other patients of different sexes, and of constitutions more or less irritable, who likewise experienced the same, but to a less extent, whenever they had been excited by the touchings over the stomach. "If, unknown to them, one acted on the head or down the back, without touching them with the finger, at some distance, they generally started with vivacity, and turned round to see who was placed behind them."

§ 64. "Ces faits sont peu nombreux et peu variés," says Jussieu, " but they are sufficient (!) to make us admit the possibility of the existence of a fluid or agent communicable from one man to another, and sometimes exercising upon the latter a sensible action."*

* Rapport de l'un des Commissaires. Paris, 1784.

§ 65. The accidental discovery of magnetic somnambulism produced an entire change in the effects of animal magnetism. On arriving at Busancy, his country-seat, the first essay of the Marquis de Puysegur consisted in relieving toothache, in which he succeeded in six minutes. He next cured a robust countryman, named Victor, of "fluxion de poitrine," in four days.* Having magnetised his gardener, the Marquis asked him some questions, and was agreeably surprised at the clearness of his answers. The talent of the patient appears to have increased with each repetition of the experiment, until the sympathy between the two became so great, that the servant when magnetised could divine every thought and wish of his master, impart the soundest advice, and yet was so obedient withal, that, in the words of the Marquis, "I need not speak ; I have only to think before him, when he instantly understands and answers me. Should anybody come into the room, he sees him, if I desire it, (but not else.) and addresses him, and says what I wish him to say; not, indeed, exactly as I dictate to him, but as truth requires. When he wants to add more than I deem it prudent strangers should hear, I stop the flow of his ideas, and of his conversation in the middle of a word, and give it quite a different turn !"†

δ 66. Not content with relieving the ailments of the poor, the kind-hearted Marquis ministered to their wants likewise. The reputation of a physician who gave his patients bread and soup soon became extensive, and Puysegur found that though he magnetised from morning till night, he could scarcely satisfy the appetite-for the marvellous-of his peasants. Recollecting Deslon's feat with the apricot-tree, t an ingenious idea suggested itself. In the village of Busancy stood a fine old elm. at the foot of which ran a stream of the purest water. This was the usual rendezvous of the village Solons and rural swains, and therefore, as Cloquet states, "a tree respected by the old people of the place." Cords were connected to the trunk and branches, and extended to any length amongst the patients, who sat in rows on circular benches around the base of the tree. The Marquis, first touching the tree with his hands, and then making passes at a distance, from the branches towards the trunk, and from the trunk towards the roots, duly charged the whole with magnetic energy. From amongst the crowd of patients, Puysegur selected certain persons, whom he touched separately either with his hands or with his iron These were now "Médecins," and endued with the rod. power of ascertaining the exact nature and seat of disease

* Hist. Academiq. p. 241. ‡ Forbes' Rev. loc. citat. either by common outward touching, or by carrying the hand beneath the clothes of the patient.

§ 67. After the discovery of somnambulism, many of Puysegur's patients evinced that phenomenon. A well-spread table was quickly cleared by these somnambulists, who, in their peculiar sleep, ate and drank like ordinary men; but strangely enough, when restored to their natural state, they had no recollection of having done either the one or the other.

§ 68. The effect of magnetising was now to produce a calm, quiet, skep-like state, during which the magnetised person could neither see nor hear but at the will of his magnetiser. This state was termed the crisis—a striking contrast to the condition so designated in the practice of Mesmer and Deslon. "If any one touched a patient during a crisis, or even the chair on which he was seated, it would cause him much pain and suffering, and throw him into convulsions."* But no such distress seems to have ensued when the *somnambulist touched another person* for the purpose of professional investigation. In this so-styled crisis, the magnetise could see the interior of his own body, or that of any other person when placed in magnetic communication with him, state the nature and seat, prognosticate the course and result, and detail the appropriate treatment, of his disease.

 \S 69. Notwithstanding their eyes were completely closed, the operator could make these somnambulists follow him, by merely pointing his finger towards them, even when at some distance.

§ 70 M. Mialle having told Puysegur that his sleep was disturbed and painful, the latter gave him a bit of magnetised glass, which he recommended him to put on his chest when he wished to sleep. "As soon as I went to bed," says Mialle, "I wished to try the effect of myglass. I had scarcely placed it on my chest, when I experienced a heat like that which M. Puysegur communicated to me ; my eyelids soon became heavy, and I passed an excellent night."

§ 71. The Marquis denounced the crises of Mesmer and Deslon as scandalous and dangerous, and considered the state of somnambulism as the criterion that animal magnetism was acting beneficially. He asserted, that after his own discovery of somnambulism, his brother, M. Chastenet de Puysegur, had informed him that Mesmer had induced a similar state in some of his patients, but that he (Chastenet) had promised to keep this an inviolable secret.

§ 72. Puysegur laid down three characteristics of the state of somnambulism.

* Cloquet, quoted by Mackay, op. cit. p. 329.

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a. Isolation; the patient can have no communication or connexion with any person but the magnetiser.

b. Concentration; the thoughts of the patient are so completely concentrated upon himself, that nothing will distract his attention.

c. Magnetic mobility; the patient is always more or less sensible to the impulse of every thought of his magnetiser.

§ 73. To rouse or disenchant his somnambulists, it was only necessary for the Marquis to touch their eyes, or to say, "Go, embrace the tree."*

§ 74. The Marquis de Tissart, also, established a magnetic tree at Beaubourg, where the officers acted upon their servants, and sometimes these upon their superiors; but "it appears," says Virey, "that magnetism descends well, but does not reascend."

§ 75. Puysegur had discarded the baquet The Chevalier Barberin went farther, and dispensed with all manipulations whatever. (§ 22)

§ 76. Faria, employing neither passes, gazing, nor magnetic apparatus, merely placed his patient in an easy chair, desired him to shut his eyes, and then, in a loud, authoritative tone, uttered the word "Sleep." If, after repeating the command three or four times, the patient was still awake, he was dismissed as unsusceptible. The Abbé, however, caused sleep in very many of his patients, and boasted that he had, "in his time, produced five thousand somnambulists by this method."

§ 77. At the magnetic clinique in Berlin, Wolfart used the baquet and steel conductors of Mesmer; the only alteration being that of substituting woollen for silken cords, on the assumption that the magnetic fluid could not be transmitted by silk.

§ 78. The methods of magnetising subsequently adopted were often modified according to the whim of the operator. They consisted of the mere exercise of the will, of a fixed and continued gaze, of breathing upon the patient, of passes with and without contact, and of all these combined. As scientific experimentalists increased, the rules of operating became more exact, and the conditions essential to success more strictly defined. Deleuse† laid down very precise directions, and his work and that of Kluge‡ will furnish the most plain and accu-

* The Marquis had an interesting subject in Agnès Burgnet, the wife of a farrier, at Busancy. He brought her to Paris, where she was known under the title of the Marchioness, and consulted her exclusively about himself, his lady, children, servants, and many of his friends.

† Hist. Critiq. 1813.

t Versuch einer Darstellung des An. Mag. &c., 1815. For a minute detail of the mode of making passes, &c., either of the above, Isis Revelata, or Spillan's Translation of Teste, may be referred to rate exposition of animal magnetism, according to its advocates.

§ 79. To become a successful magnetiser, Deleuse, after noticing the desirableness of forgetting all previous knowledge, and of carefully eschewing the exercise of reason, advises thus :--" Imagine that it is in your power to take the malady in hand, and throw it on one side. Have an active desire to do good, a firm belief in the power of magnetism, and an entire confidence in employing it ; in short, repel all doubts, desire success, and act with simplicity and attention."*

§ 80. In general, a person possesses magnetic power in proportion to his strength and vital energy. He should have a strong constitution, be in the prime of life, and possess "a sound and energetic mind, a lively faith, and a determined, despotic volition." If an unhealthy person attempted to magnetise there would be danger of his " communicating his diseased feelings to the patient."-Isis. If the operator is the weaker person, either no effects ensue, or they are inverted, the operator himself becoming magnetised.-Kluge.

§ 81. The susceptibility of the patient is generally inversely to his strength of mind and health of body. Females are usually more susceptible than men.

§ 82. When operating successfully, the magnetiser always feels a glow and the sensation of something flowing from the points of his fingers. Silk gloves prevent alike the sensation and the success of the process; gloves of linen or leather have not this effect. If both operator and subject are isolated by electrical non-conductors, the effects produced are greater, and the loss of power and fatigue of the magnetiser less.-Kluge.

δ 83. Manipulation with contact-the pressure being either really considerable, or slight, with the desire of the operator that it should be strong-is more powerful, but passes at a distance, " are frequently employed in magnetising very irritable patients, who cannot endure any stronger method."†

§ 84. Kluge considers that there are six degrees of magnetisation, the effects produced varying in each.

1st. The sensation of a current from the head to the extremities ; 1 slight redness ; increase of heat, ascertainable by the thermometer; perspiration; general ease and comfort.

2nd. Increased heat appearing to the patient to spread out from the stomach as from a centre ; pulse becomes fuller and stronger; breathing deeper; there is heaviness, then closure of the eyes and incapability of opening them. The patient is perfectly conscious, though not always able to speak. Hearing, smelling, taste, and touch, are acute-often extremely so

[†] Isis Rev., vol. i. p. 271.

^{*} Mackay, op. cit quoted ; p. 341. † Isis Rev., vol. i. p. 271. † That is, in the direction of the wafts of air made by the passes.—C.R.H.

Sparks or luminous halos, prickings, twitchings, shuddering, uneasiness at the stomach, and sickness, occasionally follow.

3rd. Yawning, stretching, sighing, deep sleep, in which the patient has neither sensation nor consciousness. Occasionally, tremblings, faintings, convulsions, catalepsy, and even apoplexy.

4th. The patient awakes " within himself;" he is in the state of magnetic somnambulism. The eyes may be either closed or open, but in either case the patient can distinguish nothing but the difference between light and darkness. The eyeballs are fixed and straight, or convulsively turned up, pupils dilated and inactive. The sense of feeling becomes metamorphosed into that of seeing. The region of the stomach is the centre of most acute sensation and of most distinct vision; hearing is also performed by the pit of the stomach. The faculties become more perfect by repeated exercise. Smell has its sensibility much heightened. Living objects are seen more distinctly than inanimate ones. If the somnambulist be touched by a person whom he dislikes, the part touched becomes cold and pale, and convulsions commonly occur. Metals, especially when magnetic, produce unpleasant effects. On restoration to his ordinary state, the patient recollects nothing or very little of what occurred during his somnambulism, but if thrown into a similar state again, remembers perfectly all that had happened in his last somnambulism.

5th. The patient is able to see the minute structure of any part of his own body, or of that of any other person placed en rapport with him. This is the stage of clairvoyance. Besides having a clear insight into the exact nature and seat of the disease either of himself, his magnetiser, or any other person placed in magnetic communication, the clairvoyant prescribes the means of cure with unerring certainty. Sometimes not only has he felt the sensations-of the disease nder which his magnetiser laboured at the time, but has actually caught the very disease itself, and suffered from it after being awoke.

6th. The secrets of the past, the present, and the future, are now no longer concealed from the somnambulist. His language is elevated and energetic, his intellect strong and clear. He can see the interior of the body of any distant person, provided he knows him; or if he does not, provided any one placed en rapport thinks intently of the distant person. His knowledge of remedies becomes more extensive than before. If asked how he obtains all this knowledge, the somnambulist usually states that he feels it through the pit of the stomach. In this state of calmost heavenly felicity, is incapable of impurity, and "even the guilty obtains the feeling of virtue."

§ 85. According to Deleuse, some persons, when in the

state of somnambulism, "see the fluid encircling the magnetiser like a halo of light, and issuing in luminous streams from his mouth and nostrils, his head and hands, possessing a very agreeable smell, and communicating a particular taste to food and water."*

§ 86. The mode of magnetising adopted by Foissac and Dupotet, in the experiments made before the French committee of 1826, somewhat resembled that of Deslon, (§ 59,) and is described in detail in the report.[†] As the decision of this committee is considered a "great fact" by the advocates of mesmerism, the *whole* of the facts upon which it was founded are here condensed. These facts are classed in the Report under four heads :---

1. Magnetism without effect.—The reporter, (Husson,) Demussy, and Bourdois, were repeatedly magnetised, both when in health and when indisposed, without experiencing the slightest effect

 \S 87. M. Itard is said to have presented "a commencement of the magnetic action." He had been for eight years afflicted with chronic rheumatism, of which the seat was then in the stomach. The pain was, in general, very variable. He thought he felt a blast of warm air from the passes, which he ceased to perceive after closing his eyes; he felt headache and dryness of the tongue, though it appeared moist, and his pain left him.

§ 88. 2. Slight effects of magnetism.—M. Magnieu, M.D., had an urism of the heart; was magnetised six times. A sense of coolness was experienced in every part towards which the fingers of the operator were for a long time directed. The pulse was always lower by from three to ten beats at the termination of a sitting, except at the last, when it remained 83.

§ 80. M. Roux had a chronic affection of the stomach; was magnetised six times: he experienced, at first, a sensible diminution in the number of inspirations and pulsations; afterwards, a slight degree of heat in the stomach, a great degree of coldness in the face; the sensation of the vaporization of ether, *even when no manipulations* were practised, and finally a decided disposition to sleep.

§ 90. A. B—, aged twent five, magnetised three times; her complaint was headache, with neuralgia of the left eye. The respiration and pulse were quickened; sleep induced; headache relieved; neuralgia unaffected.

§ 91. T. T—— complained of pains in the loins and abdomen; magnetised five times. The inspirations increased in quickness to twenty-seven per minute, and then—the magnetic operations proceeding—decreased to twenty-four; pulse accel-

* Quoted by Mackay, vol. iii. p. 340.

† Isis Rev., vol. ii. p. 203.

erated. The woman was afraid, and "evidently teased and annoyed." Effects:—frequent and long-drawn sighs, sometimes interrupted, winking and depression of the eyelids, rubbing of the eyes, repeated deglutition of the saliva," (a motion which, in the case of other magnetised persons, has constantly preceded sleep,) and, finally, the disappearance of the pain in the loins.

§ 92. 3. Effects produced by ennui, monotony, and the imagination.—Mdlle. L——, aged twenty-five, a patient in the Hôtel Dieu, had amaurosis, of three years' duration ; was magnetised eleven times. Commencement of drowsiness at the third sitting ; convulsive motions of neck, face, hands, and shoulder, after fourth sitting. Pulse always quickened. At eleventh sitting, Dupotet placed himself behind her, and though he had no intention of magnetising her, and made no gestures whatever, "she experienced a more decided tendency to sleep than upon any of the preceding days, accompanied, however, with less of agitation and convulsive motions." Her amaurosis unaltered.

§ 93. L. G---- had leucorrhœa, was subject to hysteric attacks; also a patient in the Hôtel Dieu; magnetised eight times. Agitation, plaintive cries, long and interrupted sighs, stiffness and twisting of the arms, directing of the hand towards the pit of the stomach, bending of the whole body backwards, so as to form an arch, of which the concavity was in the back, and occasionally some minutes of sleep at the termination of the scene, occurred equally after the magnetic process, after Dupotet had merely directed his fingers behind her chair towards the middle part of her back, when he had placed himself in front, at the distance of two feet, "without touching her, without practising any manipulation or external act, but having an energetic intention of producing in her some of the magnetic phenomena;" and, lastly, in the absence of her magnetiser, but under circumstances which led the woman to suppose that he was present.

§ 94. A man, aged twenty-seven, an epileptic, was magnetised at the Hôtel Dieu fifteen times. Drowsiness and sleep, easily disturbed, resulted after the magnetic passes, and equally so when the operator (Husson) placed himself behind the patient's chair, without any magnetic manipulations at all.

§ 95. 4. Effects due to magnetism.—A child, aged two years and four months, had the passes made at it. It yawned and rubbed its eyes, scratched its head and its ears, "seemed

* These signs, the committee remark, were constantly observed in all cases where magnetic action was induced, and were considered to indicate its commencement. to contend against the approach of sleep, and soon rose, if we may be allowed the expression, grumbling."

§ 96. A deaf and dumb lad, aged eighteen, an epileptic, magnetised fifteen times. Effects, heaviness of the eyelids, general numbness, a desire to sleep, and sometimes vertigo; fits suspended for a time.

& 97. Itard, one of the committee, was again magnetized (§ 87) by the same operator (Dupotet) in 1827. He then perceived a heaviness without sleep, a decided sensation of a peculiar nature, a setting on edge in the nerves of the face. convulsive motions in the nostrils, in the muscles of the face and jaws, and a flow of saliva of a metallic taste-a sensation analogous to that which he had experienced from galvanism. In 1828, M. Itard, who suffered from pains in the head, was magnetised eighteen times by Foissac. The operation almost constantly produced a flow of saliva, twice with a metallic flavour. A little twitching of the tendons of the forearms and legs. The headache ceased each time after a treatment of from twelve to fifteen minutes, "it entirely disappeared by the ninth sitting, when it was recalled by an interruption of the magnetic operations for three days, and again dissipated by the same means." During the treatment, Itard experienced "a sensation of general health, an agreeable disposition to sleep, somnolency accompanied with vague and pleasant reveries. His complaint underwent, as before, a sensible amelioration, which, however, was not of long duration after he ceased to be magnetised."

§ 98. The committee next adduce fifteen cases in proof of the existence of the state of magnetic somnambulism, and arrange them so as to present the manifestation "in a regular increasing progression." The cases last detailed must, therefore, be considered the strongest.* Of all the fifteen, the following is a brief analysis, as regards the effects produced by animal magnetism :—

a. Loss of external sensibility in seven cases : imperfect in two of these; complete in five.

b. Contraction of the pupils in one.

c. Convulsive motions of any part towards which the operator, or any one else, directed a finger, (considered by Dupotet "as an unequivocal sign of the existence of somambulism,") in five. In two of these cases, they occurred without any regularity, and both when it was wished to excite, and the reverse; in two, they occurred regularly, and without mistake; in one, correctly, so long as the eyes were uncovered;

* Those abridged (§ 99, 100, 101, 102) are the four last and therefore the strongest, in the report.

sometimes correctly, and sometimes not, when the eyes were bandaged.

d. In one, a hoarse cough is said to have "indicated the commencement of magnetic action."

e. Rise of pulse during the magnetisation was a general but not universal phenomenon. In one case, the pulse fell in frequency.

f. Great increase of strength during the process in one.

g. Diminished animal heat, appreciable by the thermometer, in one. (the 15th case, Mdlle, Celine Sauvage.)

h. The tongue, from being moist and flexible, became dry and wrinkled, in one, (the 15th.)

i. The breath, until then sweet, became fetid and repulsive in one, (the 15th.)

j. The patient sent to sleep, and again awakened, by Foissac, "by the mere influence of his volition," in one.

k. Prognostications erroneous in two.

1. Acknowledged imposture throughout, in three.

m. Clairvoyance in two.

n. Intuition and prevision in three.

§ 99. The first *clairvoyant*. Petit, could not distinguish the hour by a watch, the hands of which had intentionally been deranged; could see nothing when an opaque body was interposed between his eyes and the object, when his eyes were bandaged. But when his eyelids were closed and uncovered, he could read after some effort. He thus read the address on the *outside* of a sealed letter, but could not discover any of its *contents*. He played a game at cards correctly, and it was observed that " the ball of the eye seemed to move under the eyelids, and to *follow the different motions of the hands.*" He became so eager at one game, that he was insensible to the influence of a person who "vainly attempted to operate on him from behind, and to make him perform a command intimated merely by the will."

§ 100. The other clairvoyant, P. V—, aged twenty-four, had hemiplegia of the left side of two years' standing, and hypertrophy of the heart. He had derived "perceptible relief from the means employed," (moxa, seton, &c.,) but still walked with crutches. After the first sitting, his deafness and headache disappeared. Later on, he announced that he could be cured only by animal magnetism, but that he must continue to take nux vomica, and use sinapisms and baths of Bareges, that he should be bled in the arm, and in three days he would be able to walk without his crutches. (Prevision.) His prescriptions were followed, and on the third day he dispensed with his crutches. During his somnambulism, Paul could read very well, when his eyes were kept closed with the fingers by different members of the committee : " the ball of the eye was in a constant rotatory motion, and seemed directed towards the object presented to his vision." He attempted in vain, however, to distinguish different cards which were applied to the pit of the stomach.

§ 101. Prevision .- P. C-, aged twenty, an epileptic, predicts a fit, which duly occurs at the time stated. He predicts a second, but says that it may be prevented by magnetising him a little previously. As the time fixed upon was inconvenient, Foissac put a stop to this fit by magnetism. Three more fits occurred within a few minutes of the times severally specified. Pierre then prophesied that he should have two fits more, the first to occur in nine weeks, at three minutes past six o'clock; that, in about three weeks after this fit, he should become insane, that his insanity should last three days, during which he should be so wicked as to fight with everybody, that he should even maltreat his wife and his child, that he ought not to be left alone with them, and that he did not know but he might kill some person, whom he did not name. He ought then to be bled successively in the two feet. " Finally," he added, " I shall be cured in the month of August; and when once cured, the disease will never attack me again under any circumstances." Two days after giving this prophecy, Pierre was himself so injured about the head by an accident, that he died in twenty-three days. On dissection, were found the effects of the recent injury on the membranes of the brain, and a substance containing hydatids on the plexus choroides.

§ 102. Intuition and Instinct of Remedies.—Mdlle, C. Sauvage prescribed for three patients.

a. The first was M. Marc, (one of the committee.) Her diagnosis was, determination of blood to the head; pain in the left side of his head; oppression after eating; slight cough; lower part of the breast gorged with blood; some impediment in the alimentary canal; the region of the xiphoid cartilage contracted. Treatment.—Copious bleeding; hemlock cataplasms; laudanum to be rubbed into the breast; gummed lemonade; to eat little and frequently, and not to take exercise immediately after a meal. Marc stated that he did feel oppression after a meal; that he frequently had a cough; that he had felt pain in the left side of his head, but that he was not sensible of their being any impediment in the alimentary passage.

b. A young lady, aged twenty-five, had suffered from ascites for two years. Paracentesis had been performed ten or twelve times. The surface of the abdomen was unequal and corrugated; " and these irregularities corresponded to the obstructions which had their seat within." Dupuytren and Husson, her medical attendants, had prescribed goat's milk, the goat having been previously rubbed with mercurial ointment. The somnambulist examined the patient for eight minutes, applying her hand repeatedly to the stomach, the heart, the back, and the head. *Diagnosis*.—" The whole belly diseased; in it a scirrhus and a large quantity of water on the side of the *spleen*; intestines much puffed up; pouches containing worms; swellings containing puriform matter; and at the bottom of the stomach there was an obstructed gland, of the thickness of three of her fingers. *Treatment*.—Amongst a farrago of improper or inert remedies, Celine recommended "a very little mercury taken in milk. She added, that the milk of a goat, which had been rubbed with mercurial ointment half an hour before drawing it off, would be the most proper."*

c. Madame La C----, a young married woman, " having the whole right side of the neck deeply obstructed by a great congeries of glands close upon each other," was suspected of having syphilis, and mercury had been given largely. Diagnosis.-Stomach had been attacked by a substance like poison; slight inflammation of the intestines; in the neck, a scrofulous complaint. Prognosis (i. e. prevision.)-That by following the treatment laid down by her, the disease would be mitigated in three weeks. Treatment.-Small doses of magnesia; leeches to the pit of the stomach; water-gruel; a saline cathartic every week; two clysters each day-the first to be made of decoction of cinchona, the other of marsh-mallows :friction of the limbs with ether; a bath every week; milk; light meats; and abstinence from wine. This plan produced " a perceptible amelioration of the symptoms," but the friends becoming dissatisfied, the patient again took mercury. A post-mortem examination shewed tuberculosis of the lungs and cervical glands, "the mucous membrane of the great cul-desac of the stomach almost entirely destroyed," but there was no indication of the presence of any syphilitic disease, whether old or recent.

So ends, to use their own words, "the faithful exposition of *all*" which this celebrated committee observed.

§ 103. In the experiments of the next French commission, (§ 32, 33,) Berna's first patient was a girl of seventeen or eighteen years of age, of a nervous and delicate constitution, but with an air cool and sufficiently resolute. In order to test

^{*} M. Husson adds, in a note, that with respect to the singular coincidence in the prescription of mercurialized goat's milk, by both the regular and irregular medical attendants, "it is presented as a fact, of which the reporter guarantees the authenticity, but of which no explanation can be given." But surely he here deserts his colours. The common mesmeric faculty of "community of thought?-if exercised between M. Husson, who was present, and Celine-would fully account for the marvel.

her natural degree of sensibility before any magnetic operation was commenced, some of the committee stuck needles into her hands and neck, to the depth of half a line. She said she did not feel anything, nor did her expression betoken pain. On noticing the surprise of her questioners, however, she acknowledged that she did feel "a little pain." Sitting down by her side, and looking earnestly at her, but without making any passes, in about two minutes Berna declared his patient to be in a state of somnambulism. Her eyes were then carefully bandaged. After again gazing steadfastly at the somnambulist from a short distance, Berna announced that she was struck with general insensibility.

§ 104. The reporter directs attention to the difficulty of testing this general insensibility under the circumstances allowed. By agreement, the committee were not to prick with needles deeper than half a line, nor in any other parts than the hands and neck. Again : of that index of pain, the face, there were alone visible the forehead, the mouth, and the chin; still, when Dubois stuck the needle suddenly under the chin, the patient instantly and with vivacity made a movement of deglutition: merely touched with the finger upon the hand by Cloquet, she perceived the impression.

 δ 105. The committee now desired to test the power of Berna to paralyze his patient and deprive her of sensibility by the sole and tacit intervention of his will. In his programme, Berna had stated, that as a signal that the magnetic action was sufficiently intense, he would raise his hand. He promised to deprive of sensibility, 1, The whole of the body; 2, any single part of the body. To deprive of motion, 1, The two arms; 2, the two legs; 3, an arm and a leg; 4, one arm only, or one leg only; 5, the neck, on either the right or the left side; 6, the tongue. To verify the insensibility, the committee were restricted to the assertion of the patient, and the expression of the body. As regards the paralysis, if the patient did not move the limb she was required to raise, it was sufficient, according to the magnetiser, to prove that the limb had been struck with palsy; that this had been done by the silent will of the operator; and that it depended on the agency of animal magnetism !

§ 106. The committee, suspecting that if they demanded evidence in the order of the programme, the command, 1st, "Lift both arms;" 2nd, "Lift both legs," &c., might inform the patient of the parts which her magnetiser wished to paralyze, laid down the following directions:—M. Berna was to maintain the most absolute silence; the committee were to indicate, in writing, the parts of which they desired to have the sensibility or mobility removed or restored. Instead of raising his arm, Berna was to give the signal by shutting one of his eyes. The orders then written were, 1, Remove the sensibility of the chin; 2, of the right thumb; 3, of the left shoulder; 4, of the front of the right knee.

§ 107. To these conditions M. Berna would not agree, because the parts pointed out were too limited; they were not in accordance with his programme, and, morcover, he did not understand why these precautions should be taken against him. He then bade the somnambulist awaken, raised the vandage from her eyes, and looked at Bouillaud. That gentleman then pricked the patient; she turned her head towards him, and Berna cried out, "Behold the sensibility restored!"

§ 108. Second examination .- The same patient as before. All the commissioners except Roux, Bouillaud, and Dubois d'Amiens, were requested to retire, lest their presence should alarm the young woman, (\S 103.) After two or three minutes' somnambulising, Berna declared that his patient was ready. He was asked to paralyze the right arm alone, and to give the signal by closing his eyes. Seated before his patient, Berna lowered his head towards her hands, she placing hers upon his lap. Dubois, noticing this, interposed a sheet of writing-paper between the hands of the patient and Berna. On the signal being given. Bouillaud asked the patient to move each of the limbs successively. She replied, that she could not move the right leg nor the right arm. Berna then willed to paralyze the left leg alone. She said that she could not move the left arm, but she could move the left leg very well. Bouillaud requested Berna to uncover the eyes and act upon the iris, as being a part endued with mobility and sensibility. This was declined, together with the next proposal, to paralyze all four extremities at once. "These were not in the programme." Berna agreed to paralyze the left leg, and to give the signal by extending his forefinger. The somnambulist declared that she could move the left leg very well, but that she could not stir the left arm. It is remarked, as a curious coincidence, that Bouillaud had slightly touched the left hand of the patient, and this she probably mistook for the tacit expression of the will of her magnetiser. In excusing his want of success, Berna. prete-ded that though he had failed to affect the limbs he intended, yet it was a proof of the power of animal magnetism that he had been able to produce paralysis at all !

§ 109. Third examination.—The somnambulist was placed en rapport with M. Roux. M. Oudet spoke to her, but Berna interfered immediately, stating that the patient could not hear him, as she was not en rapport with him. Notwithstanding this, she had just before replied, without hesitation, to the questions of M. Cornac, who was not in magnetic communication with her ! Her magnetiser probably had been inattentive. Berna was desired to cause his patient to cease to hear any person named by the tacit order of his will. The experiment was tried and failed. Bouillaud wished to have the sensibility of the right hand removed. Berna objected on the plea that as his patient was in a state of somnambulism all sensibility was already removed. He was then requested to *restore* sensibility in the *left hand alone*. On examining the patient, he declared that *he had made a mistake*, for instead of acting mentally upon the *left*, he had restored sensibility in the *right* hand !

§ 110. Fourth examination .- A new female, aged thirtyone, was the somnambulist. Her eyes were bandaged after the arrival of the committee. Interrogated by her magnetiser, (who alone conversed with her on this occasion.) whether she could discern what passed before her, she replied that she should be able to see better if Berna would stand before her. Berna accordingly placed himself so near her that their legs touched each other. "How many persons are there present?" "Many, at least five." Berna, then, in a loud voice, directed the reporter to take a card and write something upon it. The reporter accordingly wrote on a card, in printed and distinct characters, the word "Pantagruel," and placed the card against the back of the patient's head. On being questioned, the somnambulist replied, with some hesitation, that it was "something white, which looked like a visiting card." " Could she see anything upon the card ?" "Yes," said she, boldly, "I see some writing." "Is the writing large or small ?" "Very large." "Wait-I do not see well. Ah! there is first an M; yes, there is a word beginning with M." Without being noticed, the reporter now substituted a card perfectly blank. To repeated questions, the patient replied that she could only distinguish the single letter M; presently she added, with an air of doubt, that she perceived on the card two lines of writing. Cornac then presented to the occiput a card on which he had written the word aimê. She perceived, she said, that there was writing, but could not tell what it was, nor what it signified. Cornac then took a long purse out of his pocket. "It is something round," said she. Replacing his purse, Cornac held up his hand alone. "It is something round," said the patient again.

§ 111. The patient now complained of being dazzled by the light. Being relieved by a few transverse passes, she turned her head on one side and peeped from beneath her bandage at the reporter, who was writing notes at the distance of about two feet. "Do you see that gentleman?" asked Berna. "Yes; he has got something white and long"—(he was writing on an oblong sheet of paper.) The reporter now approached the somnambulist, stood behind her, and put the pen between his teeth. "Do you see that gentleman behind you?" "Yes." "Do you see his mouth?" "Not very well." "Why?" "He has something white and long in it." The word "misere" was then written on a card, which was placed against the occiput. The somnambulist, without hesitation, stated that she saw a card, and on it some writing. After appearing to try to distinguish the characters, she said that the word commenced with a T. Without her knowledge, the reporter substituted a blank card. She then said that she could distinguish four or five letters in the word.

§ 112. Berna then requested aloud the reporter to take a playing card and apply it to the occiput. " Shall it be a court card ?" asked the reporter. " As you choose," was the reply. M. Dubois, whilst pretending to select a playing card, privately took a blank card of similar dimensions, and applied it to the occiput in the usual way. The operator, seated before his patient, magnetises her with all his might. She hesitates to answer the questions; she makes efforts, and says that she sees "What kind ?" She hesitates again, and at length rea card. plies that it is partly red and partly black. The operator requests that the card may be passed round to the front, and placed over the bandage. This is effected without allowing much of the card to be seen. After great hesitation, the patient declares that the card is a "knave," then a "knave of a black suit," and lastly, "the knave of clubs !"

 δ 113. The magnetiser next held an object in his hand, close to the bandage over her eyes. After some apparent hesitation, the patient said she saw something round; afterwards, she thought it was flesh-coloured, then yellow, then the colour of gold; about as thick as an onion; that it was yellow on one side, white on the other, with black below. She now wished to give over, but on being solicited to explain the nature of the object a little more clearly, she repeated that it was "yellow and white." "You say it is white ?" asked Berna. "Yellow on one side, white on the other, with black below," was the positive reply. "Have you anything like it?" "No." "Have I?" said Berna. "Ah! Yes, you have." "If you had, what would you do with it ?" "I would place it round my neck." Requested to explain at least the use of the object, the somnambulist appeared to collect all her powers; she uttered the word "hour," and then, as if suddenly enlightened, she cried out it was to "tell the hour." The object, which she had thus mistaken for a watch, was a silver medal! this was the concluding and a conclusive experiment.

§ 114. Of 164 persons magnetised in 1828 and 1829, by Mr. Chenevix, we are informed that "ninety-eight manifested undeniable effects, some in one minute, some not till the operation had been repeated several times." When disease existed, relief was almost always obtained.

§ 115. Mr. Chenevix operated by passes, or by will alone; and in one instance, through a door, his presence being unknown

to the patient. It is worthy of remark, that he seems never to have magnetised by the will alone, except he had on a previous occasion operated on the patient in the more ordinary way.

§ 116. Amongst the effects stated are, drowsiness, sleep, evacuation of the bowels, a sensation of heat or cold, of pain, and loss of power to move a limb, at the will of the magnetiser, closure of the eyelids without sleep, but with incapability of opening them, except at the will of the operator, and hysteric fits.

§ 117. Curative effects.—Mr. Chenevix states that he had, by animal magnetism, cured epilepsy, tendency to palsy, a man pronounced by Dr. Cotter to be "far advanced in consumption;" had caused the expulsion of worms in seven cases; and narrates the cure "of severe disabling sciatica of six years standing, a rapidly advancing cure of numerous scrofulous ulcers, a rapid improvement of a diseased knee, two instances of return of soberness in a few minutes from intoxication, remission of intense agony from a gunshot wound till the surgeon arrived to amputate the fingers, and the complete caiming and rapid improvement of a baby under some severe disease."*

§ 118. In a trial made upon some privates in the Coldstream Guards, the first was not affected; the second went to sleep. "His arm was raised nearly as high as his head, and then let suddenly to fall, and yet he slept on. After he had slept fiveand-twenty minutes, transverse passes did *not* awake him, but he awoke as soon as he was *called by his name*." This experiment was repeated several times, and once by the serjeant, with similar result. On one occasion, when a person who had not mesmerized him, raised and let drop his arm, he awoke.

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

§ 120. After mesmerizing one of the band (Garrand) for thirty minutes, with no sensible effect, Mr. Chenevix touched his hand with a silver pencil-case, with the intention of producing, according to his own will, the sensation of heat or cold. "The results of the first six experiments were perfectly correct,—that is to say, he felt the pencil-case cold when I (Mr. C.) willed that he should feel it cold, and hot when I willed that he should feel it hot, without committing a single mistake; but when the experiment was often repeated, he began to err, and his sensation ceased to be according to my will." Dr. Whymper tried the same experiment with similar result.

§ 121. "Garrand's eyes were most strictly blinded; he was

desired to raise both his arms, and being asked whether he felt anything in either of them, he said, "No." A piece of paper, weighing perhaps from one to two grains, was placed upon his right sleeve in such a manner that it was impossible for him to feel it. He was then desired to raise both his arms, and was asked, "Do you feel anything?" "Yes." "What?" "A stiffness and weight in my right arm." This was exactly what *Mr. C. had willed.* The same experiment was tried upon his feet, and with similar success, *until too often repeated.* By mesmerising his patient for two or three minutes, with the *intention of fixing him in the chair* in which he sat, on being told to go, the man rose, but with considerable difficulty, as if labouring under severe lumbago. A minute's demesmerising removed the pains.

§ 122. Sir B. Brodie, Drs. Milligan, Prout, Holland, and Babington, it is said, were satisfied that an epileptic girl seemed to be sent to sleep by Mr. Chenevix, but did not see reason to assent to his view that the sleep was produced by magnetic influence. Professor Farraday doubted the reality of the sleep. "His doubt arose from the girl coughing and putting her hand to her mouth at the time."*

§ 123. Dr. Elliotson, writing in 1837, states that himself, several medical students, and other gentlemen, submitted themselves to the manipulations of Dupotet. On some, no effects whatever were produced; in the greater number, "tingling or some strange sensation in the arms, legs, or face, frequently with little twitchings, an oppression and unusual heaving of the chest in respiration; and some always felt a heaviness or unusual sensation about the forehead, and even drowsiness, convincing them that they were under some strange influence, and on repetition, experienced nothing more; 1 (Dr. E.) was mesmerised frequently, and always, but once, with the effect of tingling and twitching, only."

§ 124. In the year following, however, Dr. E. witnessed far more extraordinary effects, in the young females, Jane and Elizabeth Okey. These girls were first magnetised by passes in the usual way, but their susceptibility afterwards became extreme. Tea, a penknife, a watch, touched by the magnetiser, and placed in the hand of the patient, magnetised her immediately. Water previously touched or breathed upon, gold, and especially nickel, previously held in the magnetiser's hand, would cause immediate stuper Lead was inert. A slip of crumpled paper and a piece of oilskin produced no effect.

§ 125. Two different states seem to have been induced, mesmeric coma, during which the patient was perfectly devoid of sensibility and consciousness; and exstatic delirium, when

^{*} The Zoist, vol. i., loc. cit.

she became loquacious, obedient to her magnetiser, and manifested the most wonderful of her mesmeric powers. Whilst in this latter state, the coma might be induced instantaneously. and thus the patient be rendered fixed and motionless, in whatever posture she happened to be at the instant.

§ 126. "A magnetised sovereign having been placed on the floor, Jane Okey, then in a state of delirium, was directed to stoop and pick it up. She stooped, and having raised it about three inches, was fixed in a sound sleep in that constrained position. Dr. Elliotson pointed his finger at her, when her hand immediately relaxed its grasp of the coin, and she reawoke into a state of delirium, exclaiming, 'God bless my soul.' "*

 δ 127. When employed in any act, or speaking, at the moment of being thrown into the mesmeric stupor, the act was continued, or the same words repeated over and over again. until the patient was demagnetised; thus, Okey, in one instance, was deprived of the power of moving every part except the right fore-finger, with which she was rubbing her chin at the time; she continued to rub her chin during the whole of her trance. On another occasion, she was thrown to sleep when pronouncing the word " you," and continued to repeat it until awakened.

δ 128. One day when leaving the room, Elizabeth was touched and instantly sent to sleep by a sleeve-cuff that had been accidentally magnetised by a spectator. Another time, when she was employed in writing, a magnetised sovereignt was placed upon her boot. "In half a minute, her leg was paralyzed, rooted to the floor, perfectly immovable at the joints, and visited, apparently, with pain so intense, that the girl writhed in agony. The muscles of the leg were found as rigid and as stiff as if they had been carved in wood. When the sovereign was removed, the pain left her in a quarter of a minute."1

§ 129. During the existence of the magnetic delirium, which lasted for an indefinite time-once, for twelve days-Okey was an admirable mimic, gave shrewd and witty, but often extravagant answers to questions; could see with the back of her hand, predicted the course of her own ailment, the means of cure, She declared that a the death or recovery of other patients. tall negro appeared to her and told her what answers to give ; and that, when a patient was to die, she saw the angel of death, whom she called "Great Jacky," sitting on the bed-clothes

§ 130. At the experiments performed on the two Okeys by

Mackay, vol. iii. p. 380.

+ Dr. Elliotson states that he has frequently "mesmerised one sovereign, among many, with his eye alone." (!) t Ibid.

Mr. Wakley, at his own house, Dr. Elliotson and others were present. Dr. E. Having thrown Elizabeth into the magnetic state, Mr. Wakley applied alternately pieces of magnetised nickel and lead, for some time without any effect, but at length the catalepsy occurred, and lasted a quarter of an hour. During the next experiment, a gentleman present said, in a whisper, and with much sincerity, " Take care, don't apply the nickel too strongly," when the face of the girl immediately became violently red, "her eyes were fixed in an intense squint; she fell back convulsively in her chair, and all the previous symptoms were produced more powerfully than before. Dr. Elliotson observed that the effects were most extraordinary; that no other metal than nickel could produce them, and that they presented a beautiful series of phenomena. This paroxysm lasted half an hour. Mr. Wakley retired, with Dr. E. and the other gentleman, into an adjoining room, and convinced them that he had used no nickel at all, but a piece of lead and a farthing. This experiment was twice repeated with the same result. third trial was made ; nickel was used, and no effect produced." In seven successive experiments with glasses of water, magnetised and not magnetised, no effect whatever resulted.

§ 131. From twenty-nine experiments, it was found that "sovereigns unmesmerised threw the girls into convulsions, or fixed them. Mesmerised sovereigns sometimes did and sometimes did not produce those symptoms. Elizabeth Okey became repeatedly fixed when drinking unmagnetised water; whilst magnetised water frequently produced no effect."

§ 132. Dr. Elliotson confinued his investigations, and has since published a further account of the Okcys. They would be mesmerised by merely touching an animal, and with a rapidity and intensity always proportionate to the size of the animal. Placing the finger on the nose of a small deer caused mere rigidity and concussion of the head; of a large deer, stupefaction, and, at last, perfect insensibility and relaxation. Touching the dry rough trunk of an elephant had no effect, but the instant that the elder Okey "touched the soft, moist, mucous membrane of the trunk of *this immense beast*, she dropped senseless, and snored loudly, and did not become sensible for ten minutes."

§ 133. "These sisters," writes Dr. E., "exhibit perfect specimens of double consciousness; the most remarkable, perhaps, on record. In their exstatic delirium they know nothing of what has occurred in their natural state; they know not who they are, nor their ages, nor anything which they learnt in their healthy state; and in their natural state, they are perfectly ignorant of all that has passed in their delirium. They

would then, indeed, speak ; but their minds were nearly blank ; they knew nobody, nor the names, nature, nor use of anything : they had to learn everything afresh. For about a twelvemonth. whatever was told them they believed ; and whatever name was given to them for a thing, they invariably adopted. Not knowing what the terms father and mother meant, and the elder being told that I was their father, and Mr. Wood their mother. they always considered these words as applicable to us only. This state has gradually improved; so that though at this moment, while in it, they know nothing of their natural mode of existence; they are comparatively sane; they have learnt afresh to read, write, work, &c. in this state; and behave extremely well, and speak nearly like other people, talk very little nonsense, and are only rather odd. Whenever they have been brought out of this state, during now three years, they, on coming into their natural state, lose all the intermediate period, and connect the present moment with the last of their natural state, when they were thrown asleep. Vice versâ-when, by being sent into mesmeric sleep in their natural state, they wake up into the delirium, the present moment is continuous with the last of their former delirium. I have allowed the interval to be days, weeks, months, and never once have I witnessed a shadow of inconsistency; never once have they betrayed in one state a trace of knowledge obtained in the other state, or of anything connected with it, or a trace of the character of the other state."*

THE FACTS OF MODERN MESMERISM.

§ 134. So numerous and so contradictory are the circumstances recorded as facts by the mesmerists, during the last three or four years, that it is impossible to comprehend, still more to represent, what the advocates of mesmerism consider to be the present state of its doctrines. On this account, the only unexceptionable mode of presenting the so-called facts of modern mesmerism in their true colours, appears to be, to select several of the accredited works in favour of mesmerism which have been published within the last few years, and concisely to analyze their contents. The works mentioned belowt have

 Animal Magnetism. By Edward Lee, Esq. London : 1943.
Facts in Mesmerism. By Charles Caldwell, M.D., Louisville, Ky 1842.

^{*} Elliotson's Physiology, p. 1166.

^{† 1.} Facts in Mesmerism. By the Rev. C. H. Townshend. London :

The Zoist—containing Dr. Elliotson's papers. 1943-4.
The Zoist—containing Dr. Elliotson's papers. 1943-4.
The Phreno-Magnet, edited by Spencer T. Hall, Esq. London : 1943.
Animal Magnetism. By A. Teste, M.D., of Paris. Translated by Dr

been chosen as containing the latest exposition of mesmerism in France, America, and our own country.

CONDITIONS OF MESMERIC SUSCEPTIBILITY.

§ 135. Statistics.—Out of thirty-one persons mesmerized in two years, sleep-waking was fully developed in fourteen.— *Townshend*. Of one hundred persons magnetised in France by Ricard, somnambulism was induced in twenty-five.—*Lee*. A friend of Dr. Caldwell mesmerized fourteen out of fifteen. Dr. C. himself succeeded in "a heavy majority" of those on whom he operated.

§ 136. Influence of Sex, Age, Health, Mind, &c.—Not only does a certain degree of intelligence appear requisite for the favourable manifestation of the mesmeric phenomena, but persons in perfect health have frequently exhibited them. Fear and nervous agitation are wholly incompatible with their genuine de-

7. Mesmerism and its Opponents. By the Rev. George Sandby. London: 1844.

8. Mesmerism ; with Reports of Cases developed in Scotland. By Wm Lang, Esq. Edinburgh : 1843.

9. Trials of Animal Magnetism on the Brute Creation. By John Wilson, M.D. London 1839.

10. The Rationale of Magnetism, Animal and Mental, &c. By Samuel Spurrell London: 1844.

11. Neurypnology. By James Braid, Esq., M.R.C.S.E. London: 1843. And also, for convenience of reference, though the author is by no means to be enrolled amongst the supporters of mesmerism, as commonly understood, many of his views being ingenious and philosophical,

12. Lectures. By J. P. Catlow, Esq. Reported at length in the Manchester Guardian for 1842; and

13. A Paper by the same, on the Fallacy of Mesmero-Phrenology, in the North of England Magazine.

As far as brevity will allow, the extracts from these works are given in the words of their authors. Many passages are placed in juxtaposition, as referring to the same subject, which, in the original work, are perhaps widely separated. Superfluous parts are omitted—though in no instance is the meaning compromised—when, with that exception, the words of the original are copied verbatim. On this account, marks of quotation are seldom used, unless the expression seems intended to be emphatic, or the construction of the sentence is peculiar. Italies are always copied; but they are also frequently introduced where they are not met with in the original. The facts are not selected for the purpose of opposing mesmerism; on the contrary, the facts upon which each author appears to lay the most stress, and in many cases all the facts he furnishes, are presented. No arguments could confute the assertions of the mescrists or completely as the facts they adduce to support them; and no change could be made in the language in which many of these facts are conveyed, without lessening their manifest absurdity, and, pro tanto, weakening their anti-messmeric force. On trying to invest them with a dress of his own, only approaching the style of the original, the copy appeared so like a burlesque, that the writer felt sure the authors of the mesmeric facts themselves would have considered it such

velopment. Sensibility, not weakness, is the real condition on which mesmerism depends. Each successive time a person is mesmerised, he becomes more easy of mesmerisation, and more at home in his new capacities. Out of twenty-three in whom sleep-waking was induced, more or less perfectly, six only were women, one only a decided invalid. One of the persons at Cambridge upon whom no effect could be produced, "was determined to resist the influence, and to that end was solving an abstruse mathematical problem" all the time he was being mesmerised. A boy, aged fifteen, mesmerises his brother, aged eleven.—Townshend.

§ 137. Weak persons, and sick and feeble-minded persons, are not in the least more susceptible than the healthy, and strong, and resolute. Those who are subject to sleep-waking, and the more singular forms of hysteria, are almost all susceptible. Old people are often susceptible, and males, probably, as much so as females. Sometimes there is extreme susceptibility whilst there is disease, and none afterwards when the disease is cured. Mrs. C— was mesmerised at the first attempt in fifteen minutes, but never could be since. Even such a slight feverish illness as a cold lessens susceptibility.—*Elliotson*.

§ 138. Children are often easily magnetised. Sick and delicate persons are more susceptible of the magnetic influence than those in robust health. Where there is any unequal action, any irregularity in the system, any improper or feeble circulation, any extreme or overwrought activity of the cerebral or nervous temperament, there the mesmeric influence seems to produce an effect. Its tendency appears to be, to restore the equilibrium of a disturbed or irregular distribution of the nervous power.—Sandby.

§ 139. Women, generally speaking, are incomparably more susceptible of the magnetic influence than men. They have more sensibility, more tendency to the marvellous, more veneration, less energy, less pride, and, in consequence of all these circumstances, a livelier faith, which constitutes one of the most necessary conditions to the production of magnetic phe-Many men may be magnetised, and have been so; nomena. but most of them, it should be remarked, very much resembled women in the weakness and delicacy of their organization; or they happened to be placed in physiological conditions, which deprived them for a time of the prerogatives of their sex. Children can scarcely be magnetised. Old people not without The first approach of youth and adolescence appear difficulty. to be the periods of life, at which magnetism succeeds best; but it is chiefly at the beginning, and during the first periods, of puberty, that young girls are most susceptible of its action. In general, persons of the nervous temperament are most susceptible. It is chiefly in emaciated persons, enfeebled by some

chronic disease, that it is easy to produce magnetic phenomena. — Teste.

§ 140. Women are mesmerisable more easily, and in a larger proportion, than men; and delicate, sensitive, and weakly women, more easily than robust and less sensitive ones. Men can be mesmerised as certainly and as deeply as women, though not in so large a proportion. Persons, when in perfect health, are as certainly and as easily mesmerised as when they are sick; and, in many cases, more so. "I have known mesmeric sleep to be retarded, and rendered less perfect, if not actually prevented, by indisposition."—*Caldwell*.

§ 141. A temperament, composed of about three parts nervous, and one of bilious, is the most susceptible.—Mr. Prest, in the Phreno-Magnet.

§ 142. It is not the persons who, in their waking-state, possess the greatest amount of knowledge, or mental qualifications, who are brought to perfect somnambulic lucidity. Experience has proved, on the contrary, that it is generally the most ignorant and common individuals who most frequently arrive at this extreme development of the faculties, and who attain most quickly to perfection.—*Ricard*, quoted by Lee.

§ 143. With children, and persons of weak intellect, or of restless and excitable minds, Mr. Braid states that he has always been foiled in his -endeavours to produce hypnotism, though most anxious to succeed.

CONDITIONS NECESSARY FOR PRODUCING MESMERIC

PHENOMENA.

§ 144. Health, strength, &c., of operator.—A physical sympathy between the parties seems the first requisite. A superior state of health, or of muscular energy, or of mental power, on the part of the mesmeriser over the patient, seems another condition; and yet this is by no means invariable, or without exceptions.—Sandby.

§ 145. On the Okeys, the effect was always proportionate to the greatness of surface brought into contact, (§ 132;) or if there was no confact, to the proximity of the operator, the rapidity of the passes, the size of the surface with which the pass was made, the greatness of the living mass with which the part making the pass was connected—for example, the larger the operator, or the greater the number of persons with whom he connected himself—the greater the effect. And yet, Elizabeth Okey, who was "a small, feeble girl," mesmerised a woman who had a "jumping fit," and mitigated the attack very considerably.—*Elliotson*.

§ 146. Influence of the will.—" By exercising my influence over the will of the sleepwaker, I could, at any time, compel

him to execute whatever was in the compass of his ability. That my own state of mind, or body, or both, influenced the sleepwaker, it was impossible to doubt. On days when my thoughts were pre-occupied, or my health a little out of order, the patient in the mesmeric state was dull, spiritless, and disinclined to exertion. Mesmeric phenomena really shew that the mesmeriser's will sways the patient's volition in a very peculiar manner. In mesmerism, it is the mind which originates the impulse. I have always found that mesmeric effects were always in exact proportion to the degree of voluntary effort I put into the performance."

§ 147. A fellow traveller in a coach is sent to sleep and awoke again by a silent exertion of the will. Anna M—, a practised patient, is twice magnetised when supposed not to be expecting it, in a similar way. At nine o'clock one evening, Anna, being in her own house, distant a quarter of a mile, suddenly falls fast asleep and cannot be awakened by her mother and sisters, but awakes spontaneously in an hour. Her mesmeriser, at his own house, had willed that she should fall asleep at nine, and awake at ten o'clock.—Townshend.

§ 148. "The will is in a manner everything with me in magnetism; and the art of the magnetiser is reduced to knowing how to impress his will opportunely. Thus the magnetic fluid is moved by the will; but since it is our organs which serve it as conductors, the gestures become in consequence the indispensable auxiliaries of all mental action."

§ 149 Rosalia is magnetised. Her operator then leaves the room, and magnetises a step on the stairs pointed out by an incredulous bystander. Rosalia is roused up and allowed to retire to her bedroom. In five minutes she is found fixed, immovable, on the tenth step, the one over which the magnetiser had made passes, and which he had willed should affect her. She says that there escaped from the step a hot vapour which sent her to sleep.

§ 150. Any object appears to the sleepwaker of whatever form the mesmeriser wills. Thus, the operator wills silently that the floor shall seem a ploughed field, or a frozen river; and the patient Rosalia says that she sees it as such accordingly. He wills that an imaginary cord shall encircle the neck of the somnambulist. Rosalia cries out, "Ah, Sir! how this squeezes my neck." He wills that a barrier shall exist in an open doorway. Rosalia cannot pass through, and exclaims, "The door is barred."

§ 151. By his unexpressed will, the magnetiser is able to render real objects invisible, and to make ideal objects which are not present visible to the somnambulist. A simple magnetic pass is sufficient, the operator willing at the same time, for a piece of furniture, a person, or a portion of a room, to disappear to a somnambulist. On the other hand, the mesmeriser mentally, but in silence, determines that Rosalia shall see a little girl seated on a certain chair : he makes passes over this chair. Rosalia, sleepwaking, says that she sees "little Hortense." She then leaves the room. The magnetiser now moves the chair into six different places before he fixes it. On re-entering, Rosalia sees "not one little girl, but six little girls." She says in explanation, "In good faith, Sir, you need not have removed the chair from its place, then I should have seen but one child; but everywhere you put it down, the *fluid* passed through, and formed a child quite like to that one which is above."

§ 152. "On a great number of small cards there were written beforehand the different movements which the persons present may make the somnambulist perform, by presenting to the magnetiser such of the cards as may express their desire. Ricard, after this plain admonition, repeated each time, 'Callixte, my friend, pay attention, I am going to speak to you,' reads mentally the phrase or phrases which were just presented to him, adds not a word, makes no gesture, and Callixte, who constantly has the bandage on him, obeys his thought."—§ 39.— Teste.

§ 153. The will, in some cases, is alone sufficient (the subject being at a distance, and unconscious of the operator's intention) for the production of mesmeric somnambulism, and the manifestation of its most extraordinary phenomena. In such cases, the facility of experimenting successfully is augmented not a little by the mesmeriser having frequently operated on his patient. Several cases are given, in which the somnambulist names any individual thought of by the mesmeriser.—(Vide § 370.)—Caldwell.

§ 154. A hadystated her intention of magnetising the younger of her two daughters, who were seated together at a piano in an adjoining room, separated from the one in which she herself was by folding doors. On proceeding to carry her intention into effect, magnetisation was produced, after a brief period, in the young lady, who was not awaze of what was going on, her sister not being at all affected.—Lee.

§ 155. A certain mesmerised patient is insensible to any voice but that of the operator. It is silently intimated to the mesmeriser to will that his patient should be sensible to what is done and said by others. She then distinctly feels, hears, and answers, to all around her.—Spencer Hall.

§ 156. Of Mr. Lang's first patient it is stated, "We all in turn tried her with simple orders, but only expressed mentally, not articulated; and each of us in turn found his wishes complied with." On another occasion she manifested the usual response to mental orders, an effect being invariably produced by the conception of the command, " although not always the one desired." (!)

§ 156. With the second patient, the individuals present willed that she should raise one of her hands ; this she did, in every instance, correctly. A bystander leaves the room, and "conceives the wish that the patient shall come to him; but he does not conceive his wish till the expiry of three minutes. When the three minutes had expired," says the reporter, "I looked towards the patient, and observed that she still kept her seat, but was sitting forward in an attitude of attention, as if listening, and she continued thus for nearly three minutes longer. Thinking that the experiment had failed, I said to the operator that he had better speak to her. He accordingly approached her, and taking her hand, inquired if she wanted anything. She said, 'What is it you wish me to do ?'-' Nothing,' he answered; 'I did not wish anything.' But he had misunderstood her question. It was evident from what followed that she was asking for *directions* from him as to what she ought to do. He then said to her, 'Do you hear anything ?- Yes,' she replied; 'a voice calls me.'- 'Well then, go,' said the operator. She paused on this, and then said, ' Always asking something improper.' She now rose from her seat, and came into the middle of the room; but the light from the fire, into which this movement had brought her, seemed to confuse her, and after some hesitation, she said to the operator, 'I cannot find the way-put me on the way.' On this he led her to the door, and set her face towards the darkness. As soon as this was done, she went on with confidence and without hesitation, walked through the dark passage, went straight into the room in which the gentleman was, and proceeded to the particular corner in which he was standing.'

§ 157. Of another case the operator writes,—" I have latterly several times put the patient to sleep without her knowledge or consent, by stealing behind the chair while sewing, and making a few passes over the back of the head. Once or twice I have put her asleep by merely willing that it should take place, without expressing my will, either by word or action. Another powerful proof of the *will* over certain individuals while in the sleep is the fact of *any person* being able to cause her to come to them (him ?) by *silently willing it*. This she will do while blindfolded; and although a dozen persons be in the room, she has invariably gone to the individual willing her, and describes, at such times, that she feels something irresistibly drawing her forward, and cannot stay back by any effort of her own. I can also awake her at any time by merely willing it, without any contact whatever."—Lang.

§ 158. "I am certain I never produced any effect by my will. In experiments of all sorts, and on all parts, I have willed most intensely and most perseveringly, and done nothing else, and no effect ever came. I have willed most intensely, and at the same time stared at the situation of a cerebral organ, or breathed two hundred times over a cerebral organ, and all in vain; whereas an accidental pointing at it has excited it. I have pointed, or made passes, or gazed, willing most intensely and perseveringly, and not willing at all, but thinking of anything except the matter before me, and the effects have come as soon in the latter case as in the former. Perfect sceptics and enemies of mesmerism every day produce effects by passes, pointing, &c., against their will, and persons often produce effects without thinking of mesmerism at all."

§ 159. Thomas Russen, who had been mesmerised by Dr. Elliotson for an attack of deafness and dumbness, brought on by fright, was afterwards magnetised by his master, who states—"I mesmerised him this morning by *will merely*, and when he was engaged in conversation with some friends of mine who were in the room, and afterwards he took it into his head to go off when I was passing the room he was sitting in. He seems such an imaginative youth that he will be falling off his perch whenever he sees me or thinks of me." He afterwards had another attack in consequence of hearing a conversation at dinner on deafness, dumbness, and loss of sight, amongst other subjects. He went out of the room and had a fit. On coming round in about half an hour, he made signs that he could not "speak, or hear, or see."—*Elliotson*.

§ 160. Patients may be hypnotised entirely through the imagination; but the most expert hypnotist may exert all his endeavours in vain if the party does not expect it, and mentally and bodily comply, and thus yield to it.—Braid.

§ 161. The editor of the "Magnet" states, that "he has operated on hundreds of different subjects, has experimented with the magnet, with the galvanic battery, with electricity. with minerals and metals of all kinds, and in every imaginable way, with passes and with the will; and he finds that he can produce precisely the same results without any magnet, or electricity, or battery, or metals, or minerals, or passes, or will, at all ! True, the sleep may be induced by a battery or electrical machine, but it may be induced equally as well with a chair or a block of wood, or without any means whatever, except the mere process adopted for the purpose, or by the mere direction or request of the operator. We have caused subjects to fall asleep again and again, while we were willing them to keep awake all the while. Take any subject who is highly susceptible, and cause him to apprehend you are willing him to go to sleep, and during the sitting you will him not to go to sleep, and you will find that he will fall into the somnipathetic state, in despit of your will, just as certainly as he is susceptible, and apprehends what the result should be."-Rev. La Roy Sunderland, Editor of the New York Magnet.

§ 162. Mesmeric power of inanimate objects.- A piece of silver or copper caused the sleepwaker's hand to become and remain rigidly shut. If the mesmeriser closed the hand without any coin, the same result ensued. A prism, turned with the point towards the patient, produced in two several cases starting and slight shudderings. A mineral magnet, concealed in the operator's hand, when extended towards the patient. caused startings, convulsive movements in the hands, and a sense of coldness. In three sleepwakers the south pole of the magnet attracted powerfully; the north pole repelled. Sometimes the north pole would cause the patient's head to retreat by jerks, as if driven backward by successive shocks. A pair of scissors caused shuddering. Of different precious stones, when presented to the forehead, some produced agreeable, others disagreeable feelings. Some felt hot, others scratched as if they would tear the skin off the face. Diamond was agreeable; opal was soothing; emerald unpleasant; sapphire positively painful, and felt rough, though it was polished; whilst a diamond felt smooth, though it was cut in facets -Townshend.

 δ 163. The introduction of any foreign body into the hand, such as a key, produced intense rigidity, and farther, this effect only took place to a very limited extent, or not at all when the foreign body had been previously handled and breathed on by the operator. (First case.) Metals applied over the stomach, without the aid of the mesmeriser, afforded relief when it was disordered. Gold applied to the patient's hand, rendered it rigid; silver removed this state. Silver, again, in its turn, would produce rigidity, and gold take it away, and so with other metals. By placing a piece of gold in the lips, a fixity similar to lock-jaw has been produced. The patient has been awakened in this state, when no power she could exert could open the mouth; but instantly, upon another metal being applied, the fixity was gone. (Third case.) "The patient can be attracted through any part of the house by the operator holding a piece of gold near to her head, and if the head be slightly touched by it, a convulsive shudder is the consequence, with the expression of extreme pain. She always describes a bright vellow flash of light, and a feeling of great pain when so touched. Iron has a very disagreeable, and similar effect as gold." Fifth case.-Lang.

§ 164. In a mesmerised boy, gold applied to the palm caused the hand to close; iron rubbed on the back of the hand caused the hand to open, except once, when it had an opposite effect (which is ascribed to the *friction* with the iron increasing the power of the gold, and overpowering the mere antagonistic pro-

perty of the iron !) Friction with the finger wetted with saliva, on the back of the hand, caused the hand to open. On another occasion, after applying a mesmerised sovereign to the palm, the hand closed, and any metal touched by the gold had the same effect. The palm was rubbed with the poker and it closed again firmly, "the friction probably overpowering the specific influence of the iron." (!) After rendering the thighs rigid by rubbing and suffering them to relax, a mesmerised shilling was placed under the patient's thighs without effect; a mesmerised sovereign being substituted, both lower extremities were slightly agitated. A mesmerised shilling put into the hand of another patient, produced agitation of the part and distress in the countenance; placed upon his under lip, it set the lips and tongue in motion. When placed upon his head, it caused agitated movements of the whole head. "Mr. S. (the mesmeriser) wetted his own finger with saliva, and touched the back of his hand with it, and he presently began to rub his hand violently with the other; and the hand and arm were at the same time agitated, and he moaned and his countenance expressed great distress for a minute or two, till Mr. S. quieted him, though with difficulty, by wiping his hand and stroking down his arm. A mesmerised sixpence was placed upon a fold of the bosom of his shirt, a full inch from his body, but in half a minute convulsions of the whole trunk supervened. Mr. S. wetted with saliva a piece of paper less than half-an-inch square and placed it on his boot, and in half a minute he began to kick his leg about and rub it with the other, struck and rubbed the inside of the lower third of his thigh with his hand, and cried out that something was coming into his thigh, his countenance all the time expressing great anguish, and it was with much difficulty he was tranquillized. Mr. S. again wetted his own finger and applied it this time to the patient's lip: motion of the tongue and jaw took place, and he several times bit his lip so hard that the marks of his teeth were left in it. He appeared in such distress, and the convulsive motions of the legs returned so frequently, that Mr. S. endeavoured to awake him, but in vain. The respiration was at this time extremely slow. After the lapse of several minutes, he spontaneously fell into his ordinary calm sleepwaking, and, on his face being but once blown upon, awoke, but with a severe headache."

§ 165. Mesmerised money and paper produced the usual effects, when placed under or upon him, even without his knowledge. "When I avoided mesmerising them first, the agitation was the same, and he tossed about in his chair, as if he knew that they were there; but not if he was ignorant of their presence—imagination thus producing what mesmerisation did when there could be no imagination." (?)

§ 166. In one case, when the limbs were rigidly extended,

nickel caused the left arm and leg to relax; gold effected the same on the right extremities. In another, a mesmerised gold watch placed in the patient's hand had no effect. A half-crown caused grinding of the teeth, general rigidity, apparent insensibility, and the lips were convulsed as before a fit. Nickel removed all this. A sovereign had the same effects as the halfcrown, and the nickel equally removed them. The watch was tried again, and it now acted as the sovereign had done; so likewise did pieces of mesmerised ivory and glass, and the nickel at once removed their effects. Mesmerised iron and zinc caused rigidity and grinding of the teeth, which ceased on the removal of the metals. On another occasion, a *rough* piece of nickel acted in the same way, and caused a sensation of *coldness*; a *smooth* piece of the same metal removed the effects, and *felt warm and comfortable*.

§ 167. Another patient is distressed beyond measure if a piece of gold is placed on his hand after lying on the hand of another person, but not at all if it had been taken from the mesmeriser's hand. "Nay," says Dr. E., "if the gold is taken off my right hand and placed upon his left, or off my left and placed upon his right, he is distressed, and shakes it off, and if it is placed in his palm, violent spasm of the hand occurs; though he expresses no uneasiness when it is taken from my right and placed on his right, or from my left and placed upon his left. Neither temperature, nor anything but occult property, can explain these wonderful facts $(!) \dots$. Different metals have different powers on different persons."—*Elliotson*

§ 168. Somnambulists are very sensible to the contact, and even to the approach of metallic substances. Copper, in particular, affects them painfully. Susceptible individuals may be put to sleep by means of a magnetised ring, but the sleep in such cases is often painful.— Teste.

§ 169. Magnetised water has a ferruginous taste.—Georget. A peculiar taste.—Foissac. An agreeable taste.—Townshend. A taste of lemon; of chocolate; of rum, or orgeat, or any other liquor intended by the magnetiser.—Teste. Mesmerised water has a powerful narcotic property. An overdose produces "paleness, exhaustion, rapidity and extreme smallness of pulse."—Elliotson.

§ 170. A Mr. Pennington informs us that a penny (or other piece of copper) dropped into mesmerised water, demagnetises it, and destroys its power over the patient. In a certain patient, when a piece of magnetized iron is brought suddenly before his face, sleep is produced "as quickly as if caused by an electric shock." Mr. P. placed a small horse-shoe magnet in one room, and took his patient into another, and told her to look in the direction of the poles of the magnet. *This also* caused instant sleep. If the mesmeriser handles a magnet, he loses his magnetic power for a time, the loadstone having the power of taking away from a person his magnetising power. Hence, it is suggested, that any person wishing to examine a mesmerised patient, should first disarm himself of all magnetic power by touching a common magnet, he would *then* be in no danger of inducing the agitation, shuddering, convulsions, &c., considered to be the usual effects of "cross-magnetism."

§ 171. A German silver pencil-case was placed in the hand of a mesmerised patient. "The hand and arm stiffened with mesmeric cramp, the fingers were stretched out laterally, attended with a general shivering of the body." There was pain in the hand the next day.

§ 172. Mesmeric sleep was induced in one case by administering the protoxide of nitrogen, (nitrous oxide, or laughing gas.) "The person had never taken the gas before, but had beenseveral times mesmerised. On this occasion, he had no intention of being mesmerised, and had even refused, in the earlier part of the evening, to submit to the operation." Another dose of the gas awoke him.

§ 173. A Mr. Potchett finds that the results he has obtained from standing upon iron plates, or the application of the poles of a magnet, whether to the operator or operated, are in no way different from those of the application of many other substances, and by no means calculated to establish any general proof of the agency of ordinary magnetism in producing the condition called mesmeric.

§ 174. A Mr. Sunter found, by repeated experiments, that so long as his patient was placed on the insulated stool of an electrical machine, and charged with the fluid, he could not be sent into the mesmeric sleep at all, but on removing him from the stool, Mr. Sunter threw him into the sleep in half a minute, at two yards distance. It is worthy of remark, that this patient, on a previous occasion, in his somnambulism, had said, in answer to the question, "What is it that produces the mesmeric sleep." "You attract the electric fluid from me, which produces sleep."—Phreno-Magnet.

§ 175. Patients have been hypnotized whilst positively, and also whilst negatively, electrified, without any appreciable difference in the phenomena, so that they appear to be excited independently of electric or magnetic change. It has repeatedly happened that two patients have mutually hypnotized each other by personal contact—a fact irreconcilable with the theory of a special influence transmitted being the cause of the phenomena, "plus and minus being equally efficient."—Braid.

VARIOUS MODES OF INDUCING MESMERIC PHENOMENA.

§ 176. Mesmeric influence is in proportion to the energy employed, and to the rapidity of the mesmeriser's respiration during the act of mesmerising. It seems capable of aggregation by passing through different persons. Thus, a patient already herself in the state of sleepwaking, mesmerises her sister. The effect was increased when she took one of Mr. Townshend's hands, whilst he made passes with the other, the sleepwaker continuing to mesmerise with one hand. Another sleepwaker informed her magnetiser that if he would breathe upon his hand, and then lay it on her forehead, his power would be increased. He found this the case." — *Townshend*.

§ 177. In making the passes, it is unnecessary to employ any greater muscular force than what is required to lift the hand and prevent it from falling. The movements should be easy, and not too rapid.—Deleuse, quoted by Lang.

§ 178. The greater the certainty with which the patient anticipates the sleep or cure to be effected, the better.—La Roy Sunderland.

§ 179. It is the passive duty of the patient wholly to resign himself, and to think of nothing during his mesmerisation. As to different passes, in fact all processes succeed when they inspire confidence in those who employ them. Amongst other modes described is "insufflation, in which the breath is the vehicle of the magnetic agent." Rosalia is eighteen leagues from her magnetiser. The latter addresses to her, by post, a letter, in which is written merely the word "Sleep." This is sent three days afterwards. Some minutes after receiving it, Rosalia falls into a state of somnambulism, during which, she asserts that she has been put into it by means of the magnetised letter.—Teste.

§ 180. By placing his fingers on the forehead for four minutes, Dr. Elliotson threw a patient into the mesmeric state. The same person he mesmerised by *pointing his fingers to the back of her head, without her knowledge.* He has succeeded in mesmerising susceptible patients "without their knowledge, behind their backs, and this with the eye only.".... "Generally, the pointed parts of the body, as the bent knuckles, and still more the tips of the fingers, the chin, and still more the *point of the nose* (!,) are more efficacious in producing mesmeric sleep than an equal portion of flat surface." Dr. Elliotson has often known touching the point of the patient's nose with the tip of his finger produce instant sleep for a period.

§ 181. Highly susceptible patients will be sent to sleep through imagination, or the mesmeric influence of those

around gazing at them. Of one female sleepwaker, it is stated, "to hold up anything before her, and say you will mesmerise her through it, though nothing was done, instantly mesmerises her, as well as merely to stare, or point a finger at her, for a moment, at a very great distance." Of another, "a glass of water would send her to sleep for hours, if she said it would, provided it was mesmerised," though it was never messmerised at all; and yet the sleep was "perfectly real"

§ 182. "I have three patients," writes Dr. Elliotson, " whom I was originally some weeks in sending to sleep, though I gave them each half an hour daily of manipulations and gazing, but who now go to sleep on my merely raising my hand, or looking at them, when they are prepared to expect sleep. I told each of them that, if she sat still, I would mesmerize her in the next room through the door; I retired, shut the door behind me, did nothing, but walked on into a further room, turned back, and found her asleep. So with the other two in succession. While I did this, I thought as little of them as possible, and busied myself with anything to distract my attention."

§ 183. One lady became so susceptible, that Dr. Elliotson "merely ran into the house, pointed his finger to her eyes for an instant, reducing her to a state of closed eyes and powerlessness, and left her." He never found the state deepened or prolonged in this patient by continuing to mesmerise her for ten or twenty minutes. Another female, on the first attempt, was thrown into the mesmeric state by pointing for three min-But on the third trial, pointing for five-and-twenty utes. minutes did not produce the least drowsiness. It is not unusual for manifest sleep to be effected, and then cease during a mesmerisation : so that it does not recur at that time, though the process is continued, and even if sleep has been produced and continue, the continuation of the process may not seem to deepen or prolong the sleep, the patient may wake just as soon as if the process is desisted from as soon as sleep takes place. In other instances—and these are the most common—the sleep, if it has ceased, is renewed by continuing the process; and, if the sleep has not ceased, it is deepened and lengthened by continuing the process.

§ 184. Mr. S— merely begged his patient—a practised one—to sit down, and leaving him by one door quietly went round to the other, and mesmerised him through it for five minutes. On opening the door, Mr. S— found him asleep.

§ 185. With the Okeys, coma could be produced through screens of pasteboard, thin wood, or glass; but screens lessened the effect in proportion to their thickness.

§ 186. In exciting the cerebral organs, breathing over them will sometimes succeed, at others, not. Touching is always more powerful than pointing, because "all mesmeric power

usually lessens with distance." The thicker the hair, the slower the effect; pointing over the organs with thick gloves on the fingers, prevents all effect. Sometimes touching with a paper-knife, corner of a book, &c., will excite them; at others not. To deepen sleep, there is no surer mode than to establish contact with the patient. The more extensive the contact, the greater, in general, the effect.—Elliotson.

§ 187. A patient is magnetised by the operator placing his hands upon her head, and then breathing upon it. Another is "roused out of the mesmeric sleep *into* the state of sleepwaking, by calling her by her name and asking her a few simple questions."—Lang.

§ 188. A lady, describing her own mesmerisation, states that sleep is produced in her in about half-a-minute, by the steadfast gaze of the magnetiser, or by his will in another room in about one minute.

§ 189. On a female entering a room where there was a patient already mesmerised, she was desired to sit down near to the person under operation. In about a minute she fell into the same state. "This," says the mesmeriser, "was what I expected and intended. I now connected their wrists by the extremities of a *silk* handkerchief, when, on touching or pointing with the finger to any organ of either one or the other, both shewed expressions of features and manifestations alike, though the one actually operated upon shewed them rather earlier than the other."

§ 190. Mr. Pennington throws patients to sleep by touching the organ of somnolence; awakens them by touching consciousness. "On touching one side of consciousness, the one hemisphere of the brain becomes awake, on which side the organs cannot then be excited, but they can be excited on the other side." (§ 226.)

§ 191. Mr. Pembroke found that philoprogenitiveness could be acted on by pointing, and yet with a stick of sealing wax it required contact. Pointing with a hollow glass tube produces excitement of the organ at a greater distance than pointing with the finger alone.

§ 192. Mr. Jones found that he could excite the cerebral organs by touching them with the point of a black-lead pencil. Another patient, who is deaf and dumb, was so susceptible that a waft of a handkerchief five yards off was sufficient to throw him into the mesmeric sleep; a waft of the handkerchief *upwards* would " take him out" of the sleep again. In this patient, the cerebral organs could be " powerfully excited during the vigilant state."

 \S 193. Mr. Hamilton states that he has procured manifestations of the cerebral organs :

1. By touching the head with his finger.

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2. By pointing, without contact.

3. By causing pieces of paper, chalk, charcoal, India-rubber, sponge, &c., to be placed on the head by a third person, Mr. H. standing at a distance.

4. By suspending brass weights, and divers other substances, over the head of the patient, at distances of from two to six inches.

5. By causing a third person to point at the organ with a long rod.

6. By pulling a hair immedrately over the organ.

7. By blowing upon the organ through a glass tube.

8. By placing a curved wire on the side organs.

9. By addressing the patient in appropriate language. (!)

§ 194. In one case, mesmeric sleep is produced by the operator making passes near to a wall, on the other side of which the patient sat, engaged at the time in conversation, and perfectly ignorant of what was going on.

§ 195. In another case, the patient is magnetised at a distance of three miles, "Joseph Flower was selected as the most likely subject for the trial, and he was placed in a room near the Brightside Railway station; the operator going forward in the train to Rotherham, a distance of about three miles. It was agreed that, at a given time, the manipulations should commence. Flower knew that an attempt would be made to magnetise him, but he did not know when. Within a minute of the agreed time, the subject was asleep, and was at once attracted by a tremendous force towards Rotherham. The gentlemen present (six or seven in number) were anxious to take him out into the open air; but for some minutes their united strength was unable to accomplish that object. (!!) They at length, however, succeeded in carrying him out and restoring him to partial consciousness. In the meantime, the train from Rotherham was bringing the operator back; as it neared, the subject became more calm, and on being touched by him was instantly restored."

§ 196. Dr. Buchanan (of Louisville) mesmerises his patients by taking a metallic rod and grasping it firmly, the patient holding the other end. He considers that the agent is the nervous fluid, which is thus conducted along the rod into the system of the patient.—*Phreno-Magnet*.

§ 197. Mr. Braid directs his patient to look at an object, so placed as to require " the greatest possible strain upon the eyes and eyelids." The eyes are to be kept steadily fixed on the object, and the mind rivetted on the idea of that one object. Presently the eyelids close with a vibratory motion, or become spasmodically closed. If it be desired to procure sleep without excitement or rigidity, and with the pulse and respiration slower than natural, the patient is directed to close the eyelids and bring the eyes loosely upwards, as if looking at an object at a great distance, the eyeballs being turned up only gently, so as to cause dilatation of the pupil; and the limbs placed so as to relax the muscles as much as possible, and thus prevent acceleration of the pulse. The cerebral organs are as well excited by touching with a glass rod as with the finger.

§ 198. Mr. Catlow, at his public lectures, induced sleep by acting continuously on any of the five senses. Thus, through the medium of common sensation, by brushing the forehead gently with a large camel-hair pencil; by gently brushing the hair all one way; by brushing the back of the hand; or the patient could send himself to sleep by gently rubbing the ball of one thumb with the other, concentrating his attention upon it. Through smell, by the inhalation of agreeable odour. Through taste, by the continued sucking of agreeable substances, as lozenges. Through hearing, by simply stopping the ears, or by making a monotonous noise for a long time, as when the mesmeriser repeats the word "cup" very gently and deliberately. Through sight, by gazing, or by throwing alternately light and shadow on the eyes of the patient for a length of time. Through continued slight muscular action, (and hearing conjoined,) as by the patient himself repeating a word very frequently. A boy fell asleep after pronouncing the word "cup" 450 times. And, lastly, by causing the patient to fix his mind upon any idea, without performing any manual operation whatever. Mr. Catlow also employed a "Soporific Machine," which by making a monotonous noise, and waving a card before the eves with a slight fanning sensation, acted upon several of the senses at once and produced sleep.

MODES OF DEMESMERISING.

§ 190. "The mesmeric sleepwaker cannot awake without the mesmeriser's aid. The mesmeric patient can neither throw off his bonds, nor be delivered from them by other than the mesmeriser. I have seen such attempts vainly made, to arouse a sleepwaker otherwise than by the mesmeriser, that I have been led to conceive that he might be torn limb from limb (as certain animals may be in certain states of torpor) without awaking. As with the mesmeriser his sleep began, so, it appears, by the mesmeriser alone can it end; and thus the peculiar slumber, called mesmeric, is not only the proof of a suspended will, but of a will subdued and actually held subject by another"—Townshend

§ 200. The first thing to be done is, to apprise the patient of your intentions, and to advise him to participate in them; one-half the business will be done as soon as he will have a wish to awaken. § 201. To demesmerise Madame C., the operator had only to say the words, "Awake, madame !" and two or three violent frictions, which she could not be prevented from practising on her eyes, always restored her immediately to life.—Teste.

§ 202. One of Dr. Caldwell's patients is asked if he would like to wake up. "Yes." "How long before you will awake?" "A minute." Without any demesmerising process the patient awakes suddenly to the instant.

§ 203. Another patient is awoke "in a moment," by the mere effort of the operator's unexpressed will.—*Caldwell*.

 \S 204. A very susceptible patient is stated to have the power to *awaken herself* at will, "which she does by drawing her fingers in a peculiar manner from the top of her forehead over her nose, to her upper lip."

§ 205. A Mr. Pembroke gives several cases where the sleepwaker was aroused by a bystander speaking to him, just as effectually as he usually is by the mesmeriser.

§ 206. "A Mrs. Barnes," says Mr. Inwards, "will go to sleep when mesmerised, and then *the operator has no power whatever* to awake her, neither has any other person. You might as well try to make an impression on a block of wood, as to call into exercise any of the senses."

§ 207. Pouring water "from an altitude of eight or ten inches, in a continuous stream" upon the spine and head, and then slowly down the arms to the finger-ends, taking especial care not to wet certain "magnetic points," is directed as the mode of removing the ill effects of cross-magnetism : even when madness has been caused by cross influence, Mr. Spencer Hall declares that he had found this method successful.— *Phreno-Magnet*.

§ 208. Sometimes the patient is only partially awoke, though apparently fully roused. This is a condition of real danger; the patient has no more self-control or management of his actions than a child or idiot, and yet for a time will converse most sensibly, and recognise every person present. "I have seen this distinctly in two patients."—Sandby.

§ 209. All mesmerised patients will in time awaken of themselves.*—Merely raising one or both eyelids will awake some, if net, blowing upon the exposed eyeball will. Sometimes the eyelids remain closed after the mesmeric coma is over, and cannot be opened without much breathing upon them, or passes with the ends of the fingers and thumbs, or the steady application of these upon them, or *puinting at them with these* or some pointed body perhaps metallic.

§ 210. One patient could only be awakened by transverse

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^{*} In his Physiology, Dr. Elliotson states "possibly after many hours, or some days."

movements of both thumbs together over the eyebrows. Transverse passes on any other part produced no effect, and unless the thumbs were moved together, no effect was produced. Transverse passes by the thumbs of two persons at the same time, one passing his thumb along one eyebrow, and the other his along the other, had no effect; nor did transverse passes of the eyebrows with different substances awake her. But the thumbs of the same person who used these substances, though covered with four folds of silk, awoke her.

§ 211. "To awaken another patient," says Dr. Elliotson, "at last I made outward passes with my thumbs on my own eyebrows. He did the same on his own, and immediately awoke in his natural state."

§ 212. Many patients can only be awakened in a particular way: and what is remarkable, a way which was perfectly and instantly successful, will wear out—will lose its efficacy, and another mode will at once succeed. If the patient can speak in the mesmeric state, and there is any difficulty, it is best to prevail upon him to tell you some mode of waking him. At last, the efficient mode, ordered by the patient himself, may lose its efficacy, and he must be made to tell you another.

§ 213. If an epileptic fit occur during the process of mesmerising, it may be proper to desist till this is over; but in general the fit yields the sooner to a steady continuance of the passes, or to passes down the chest and back with contact, transverse passes before and behind the trunk, or to—what is often better--breathing very slowly and assiduously upon the eyes, nose, and mouth, or the boson, and holding the vatient's hands in our own.

§ 214. To remove rigidity from the stiffened limos, use transverse passes, touching with the hand, or with anything; breathing upon the part; darting the fingers at the part without touching it. The contact of a child's hand, the breath of a child, would relax the part where the muscular force of a strong man could not, if gloves and other substances impeded other influence than the mechanical.

§ 215. In one case, if a stranger willed ever so much to relax the patient's clenched hand, or bent arm, by breathing on it, the hand did not relax : she having no idea what he was attempting, and his breath being intensely disagreeable to herwhereas the mesmeriser's breath relaxed it instantly. Yet this patient could be attracted by the stranger's tractive passes just as well as by those of her magnetiser.—Elliotson

 \S 216. To excite a dormant organ, a puff of air is sufficient; dehypnotise a rigid muscle, a smart blow, or pressure, (made either with insulating rods, glass, or sealing-wax, or the points of the fingers;) a sudden noise as clapping the hands, a smart slap, pressure and friction over the eyelids, and a current of air

wafted against the face, are the different means of arousing the patient from the hypnotic state.—Braid.

§ 217. Patients will awake if left to themselves. A smart pinch will very generally rouse them.—Catlow.

EFFECTS STATED TO HAVE BEEN PRODUCED BY MESMERIC OPERATIONS.

§ 218. Miscellaneous Effects.—The first effect is a look of stupor in the eye, and a lack of power to wink; the eye closes. Long after this, the hearing retains all its acuteness; after the patient is deaf to every sound save that of the mesmeriser's voice, he is still alive to feeling. The usual sign of the patient having passed into the mesmeric state is, that the head of the patient will follow every motion of the mesmeriser's hand.

§ 219. Mdlle. M—— is asked whether she is asleep. She replies, softly but distinctly, "Oui, je dors." On one of the party expressing a doubt of the fact, she exclaims, "Yes, certainly, I am asleep." A Belgian gentleman in the mesmeric state, mentions when he is asleep, and when he wishes to be awoke.

§ 220. A gentleman, at Cambridge, whilst in the mesmeric state, is touched by a by-stander. "The patient's whole body quivered, his features were convulsed, his countenance became deadly pale, and he seemed to gasp for breath, like a person who has been suddenly immersed in cold water." In another case, a violent fit of shivering is caused by a stranger touching the patient without having been previously placed *en rapport*. (Cross-Magnetism.)

 \S 221. One patient cannot sleep the night after being mesmerised, but feels *none of the usual ill effects* from a wakeful night.

§ 222. Mesmeric patients act upon real impressions, and in perfect conformity with external circumstances. They retain all their sense of locality, all their cognition of time, and their knowledge of the persons who may be around them.—*Townshend*.

§ 223. It is just as common to produce vigilance in some patients as somnolence in others, by mesmerism; and it often happens that susceptibility to external and even remote influences is as refined in one state as in the other.—Spencer Hall.

§ 224. In some instances, the contact of any other person than the mesmeriser; nay, the proximity of any person, produces the greatest distress, and sometimes the most violent disturbance. Some patients feel cold if others approach, (Cross-Magnetism;) and some have fits if their mesmeriser leaves them.

§ 225. Just before sleep comes on, one patient feels " as if

some one gave her a blow on the top of the head, and from that moment she loses her consciousness."

§ 226. In a youth, "I pointed," says Dr. Elliotson, " to one eye only—the right. Both equally nearly closed. When I spoke, he answered faintly that he was neither asleep nor awake; that he could not hear or see with his right side—that is, his right half was asleep. If I raised the right arm, it dropped, for that side was asleep, and he never was cataleptic; if I raised the left, it remained, for he had power in his left half, and he voluntarily sustained it. This was the first time I witnessed mesmerism of one side of the brain only.

-Elliotson.

§ 227. A lady stated, that from the moment her thumb touched the thumb of the-mesmeriser, a leaden weight settled on her eye-lids, making resistance to sleep impossible.

§ 225. A patient of Mr. Majendie's, "without the slightest suggestion or prompting, said, that she *saw* the sparks of fire pass from the points of the magnetiser's fingers into the water which he magnetised for her."

§ 220. In the mesmeric state, the sleeper is *fast asleep*, and knows nothing of the effects produced by his mesmeriser.— Sandby.

§ 230. All somnambulists are not conscious of their state; and several, especially at the first experiments, are very far from thinking that they are asleep.

§ 231. Madame H—, whilst being magnetised, converses and jokes with her magnetiser, without the least emotion, up to the moment when sleep comes abruptly to close her eyelids, "and from the first second, this sleep is a perfect somnambulism."

§ 232. In magnetising Paul Villagrand, "the entire body was agitated with partial or general shocks, resembling those occasioned by the action of electricity."

§ 233. Somnambulism consists of incomplete isolation, when the patient can recognise others besides his magnetizer: complete isolation, when the patient is bereft of all his senses; perfectly insensible to everything but what is done by his magnetiser; deaf, dumb, blind, and without feeling to all others: and lucid somnambulism, during which we have evidence of-1, vision without the aid of the eyes; 2, intuition; 3, internal prevision, (foreseeing changes connected with the patient's own body;) 4, external prevision, (foreseeing things in general;) 5, penetration of thought; 6, transposition of the senses. This last is, however, considered by Teste a very rare phenomenon. He confesses that he never witnessed an instance of it, but cites the following from Despine:—Sophia Laroche "hears, sees, reads, feels, tastes, and touches, by means of the feet and hands."-Teste.

δ 234. Mr. Spurrell, on putting E. W. into the mesmeric sleep, observed that the patient's face looked glossy, as if smeared over with some "luminous oil;" the features seemed enlarged, and "what is very remarkable, the eyelids of the patient had become so perfectly transparent, that I could see the eyeballs," says Mr. S. "through them more clearly than in the natural state with the eyes wide open, although they were now shut." All his patients are fortunate enough to see a "blue fire" emanate from the operator to them, and from them, in return, to the operator. At first this "blue fire" is propelled towards the patient, principally through the eyes of the operator; "when reaching the latter, a correspondent flow of the same fluid emanates from him, and through the same organ. the eye, which thus called into action trickles down his cheeks, and by the passes of the operator is made to overspread his whole person, whence clairvoyance ensues."

§ 235. The effects of hypnotising are all consecutive, and consist of, first, increased sensibility of all the senses, sight excepted, mobility and docility, (the primary phenomena;) and afterwards of insensibility, torpor, and cataleptiform rigidity, (secondary phenomena.) By a puff of air directed against its organ, one sense singly may be roused whilst the others remain dormant.

§ 236. During the torpid state, a puff of air or gentle pressure against one eye will restore sight to that eye, and sense and mobility to one-half of the body—the same side as the eye operated on—but will leave the other eye insensible, and the other half of the body rigid and torpid as before. Neither hearing nor smell, however, are restored in this case to either side. By very gentle pressure over both eyeballs, the patient shall be instantly aroused to the waking condition, as regards *all* the senses, and mobility of the head and neck. Thus, by one mode of acting through the eye, we reduce the

Thus, by one mode of acting through the eye, we reduce the patient to a state of hemiplegia, by the other, to that of paraplegia, as regards both sense and motion. (§190, §226.)

§ 237. During the state of cataleptiform rigidity, the circulation becomes greatly accelerated; in many cases it has more than double the natural velocity, and may be brought down to the natural standard, *in most cases in less than a minute*, by reducing the cataleptiform condition. It is also found that it may be kept at any intermediate condition between these two extremes, according to the manipulations used; and that the blood is circulated with less *force* (the pulse being always contracted) in the *rigid limbs*, and sent in correspondingly greater quantity and force into those parts which are not directly subjected to the pressure of rigid muscles.

HISTORY OF MESMERISM.

§ 238. By acting on both eyes in the manner required to induce the state of paraplegia, (§ 236,) the force and frequency of the heart's action may be as speedily and perceptibly diminished, as the action of a steam-engine by turning off the steam. By again fixing the eyes, its former force and velocity will be almost as speedily restored, as can be satisfactorily proved to any one who keeps his ear applied to the chest during these experiments. The amount of change in the pulse, by acting on the two eyes, and thus liberating the organs of special sense, and the head and neck, is about 60 per cent, of the actual rise of the pulse when at the maximum above the ordinary velocity of the circulation.—Braid.

EFFECTS ON THE MUSCULAR SYSTEM.

§ 239. Traction and imitation of gestures.—M. de Lausanne was the discoverer of the mesmeric attraction, (? vide § 63, c.) When he was in another room, or even outside the house, his sleepwaker turned her head in the exact direction of her mesmeriser. "Theodore was standing with his back to the mesmeriser, while some one engaged his attention in front; and the mesmeriser going to a good distance, so as to render any cognizance of his gestures by feeling impossible, gently beckoned the patient towards him, who turning quickly round, hastened to the mesmeriser."

§ 240. On the mesmeriser presenting his foot towards A. $M \longrightarrow$, when standing up, she invariably commenced a series of regular revolutions, from right to left, stopping always when she had half completed the circle, with a bend and a dip, like that of a magnetic needle (!) If the mesmeriser, standing opposite to his patient, began to turn round; she did the same, but in the contrary direction. Other sleepwakers did the same, but the foot, instead of attracting, seemed to repel them. Thus by alternately attracting with the hand, and repelling by the foot, the patient could be "kept oscillating to and fro like the pendulum of a clock."

§ 241. The mesmeriser and the patient are placed back to back. The former makes sundry grimaces and contortions of visage, which are exactly and simultaneously imitated by the latter. -Townshend.

§ 242. In Mr. Lang's first case, traction was practised successfully by any of the company. In another, the whole body was extremely sensible to the approach of the hand; without being touched, the patient could be made to rise from her seat, and by the approximation of a hand to her foot, the latter could be attracted and made to follow, as was the case with her hands on former occasions. When two or more hands were presented at the same time on different sides to a hand of the patient's, the latter fluttered about between them, as if uncertain where to fix, being apparently equally attracted by all. As this was continued, the motions of the patient's hand became quicker, and the sense appeared to acquire additional acuteness. There was sometimes exhibited a sort of repulsion from one of the hands, although not always the same one.

§ 243. On another occasion, as the operator continued to move his hand nearer, and again draw it away, which he did *frequently and rapidly*, never, however, allowing his hand to come actually in contact with hers, the patient's fingers and hand became more agitated, the hand rose from her knee, and followed the operator's hand, which was withdrawn and raised, as if irresistibly attracted.

§ 244. In another patient, when blindfolded, a steadfast gaze either by the mesmeriser or any of the bystanders, sufficed to attract the hand.—Lang.

§ 245. A Mr. Coster narrates the following cases of attraction towards the north. "Every day, just after I close her eyes, her arms begin to swing round like the swifts of a mill, and she cannot stop them; but the moment I breathe or blow upon them, they drop as if they were dead. But the most extraordinary of all that I have read or heard of, is this :- A few days ago, she put her feet into a new pair of pattens, and she had no sooner done so, than back she ran to the wall, and could not stop herself, which caused her to be very much frightened. We then wished to try the experiment of metal upon her, and caused her to stand on a piece of iron, with all her weight on one foot, the toes pointing southward, and almost instantaneously round she went to the north, and there remained. This has been done repeatedly by her, in the presence of many persons, some of whom have held her tight, but to no purpose ; round she went to the north. Also, Mr. Holding's son, a boy between ten and twelve years of age, who also in the second stage, or half-sleep, evinces the same phenomena; by standing on any metal he is carried round the same way-to the north." -Phreno-Magnet.

§ 246. One patient seemed to follow the sidewise movement of the operator's hand; and when it was held above her head, she made an effort to stand up. These effects took place only *when her eyes were open*, and not if the mesmeriser acted behind her back.

§ 247. A boy, during the mesmeric sleep, imitates the movements of his mesmeriser. While making the longitudinal passes, Dr. Elliotson said aloud that he would make the transverse ones, but continued the longitudinal. "However, his hand moved transversely." It frequently happens that other parts besides those from which the mesmeriser makes tractive passes will move. Sometimes both hands, both legs, or all four, if traction is made to one only. Old movements continually recur, when, if the patient had a desire to impose, they would not, because no steps are taken to prevent him from seeing what you are about. So strong is the disposition when once given, that the movement will continue after the mesmeriser ceases to give an impulse.

§ 248. After demonstrating traction, an iron waiter was placed before the patient's eyes, and his legs rose again, though nothing was done. "A hat was held before his face, and I," says Dr. Elliotson, "stood at his feet, and said aloud that I would draw up his legs. But I did nothing, and yet his legs soon began to move, and at last rose to a level with his body. I then said nothing, but endeavoured to draw up his left arm by passes, but no effect ensued, and his sleep was afterwards found to *have become very deep*. A board was placed before his face, and I opened my mouth on the other side of it. Unfortunately, a visitor, *fancying* he saw the boy's mouth opening, said 'Oh, yes; he is opening his mouth? Mr. Wood declared he saw nothing; but the mouth *now opened immediately*. The same occurred when I put out my tongue, though nothing was said."

§ $24\overline{9}$. Several patients, when in the mesmeric state, always *look* before they imitate the gestures of their mesmeriser. In imitating grimaces, attitudes, and movements made behind a patient, he generally copies them very slowly, often erring at first, before giving the correct imitation.

§ 250. In one patient, if any part was pressed against with the point of the finger or anything else, it immediately pushed against the object; a finger on his nose caused his head to rise and move forwards; if put on the back of his head, his head pushed backwards; if on his arm, his arm rose.

§ 251. Having thrown a young lady into " a profound snoring sleep," writes Dr. Elliotson, "I attempted to draw up her arms and head by tractive movements, but failed. But I discovered that if I said aloud they would move, they did. On being asked why she raised her arms, she replied she did not know, but could not prevent their rising, and that she heard me say they would rise up. If I desired her to raise her arms or move her head, no effect followed; but if I said the thing would take place, it did." On another occasion, Dr. Elliotson tried to draw up her hands and arms by tractive movements. "I did not succeed for some time; and when the effect came, it was at first slight, the hand rising a short distance only and dropping again. I then made no tractive movement, but merely said that 'her right arm would go up,' and it almost immediately began to move, and ascended slowly. Whatever movement I said would occur of any part, it did occur. I then said aloud that she would sit up in bed, and sing a song.

She at once slowly rose in bed, and began to sing, snoring and nodding, as if overpowered with sleep; sometimes so asleep that she was silent; and then reviving and resuming the song. I said she would whistle, and she forthwith attempted. I then said she would sing a song, which I learnt she did not know. She took no notice, and presently fell into a very deep sleep." On another occasion, " while I now said her arm would ascend. I begged Mr. Wood to say it would not; and it did not for a few minutes, but at length it did, though slowly, and threatening every now and then to descend-my influence being opposed, but proving ultimately victorious. As soon as Mr. Wood said with me that it would ascend, it ascended immediately and freely. In another experiment, I said the arm would ascend, and by tractive movements endeavoured at the same time to draw it down. The arm presently began to ascend, but did not rise much for some time, and, when it was elevated, the hand and fingers turned down in the direction of my hand." She had now become susceptible of influence before being actually mesmerised. After drawing up her arms by tractive passes, Dr. Elliotson said, "her right arm would go over to her left side, and at the same time endeavoured to draw it by tractive passes to the right; it went over to the left." She refused to eat bread-and-butter when she was in the mesmeric state, but on Dr. Elliotson saying, "Now she will eat it," she did so against her will, grumbling all the time.

§ 252. Of another patient Dr. Elliotson remarks, " any stranger could draw her by tractive passes, and more powerfully than myself, if his efforts were on the right side, and mine on the left, even if he stood at some distance from her, and I close to her. Every phenomenon, stiffening, contraction, &c., was more ready and more powerful upon her right side than upon her left; even the excitement of her cerebral organs is more ready in the right half of the brain."

§ 253. A youth during the mesmeric state is attracted by his magnetiser, but ceases to be so, and relaxes his grasp of the hand, the moment any third person touches the mesmeriser.

 \S 254. In one mesmeric patient, his two hands repel each other.

§ 255. A female becomes rigid, and, her feet remaining fixed, imitates the gestures of her magnetiser, whatever kind of muscular efforts and contortions are required. The approach of others repels her, though by making tractive passes any one could draw her limbs in the required direction, she frowning the while.

§ 256. With one female patient, a tractive movement with one finger would signify the wish of the experimenter often just as well as one with the whole hand or both hands. The result would equally ensue whether he wore gloves or notnay, if tractive movements were made with a pencil case, a paper-cutter, &c., she obeyed, provided care was taken to make it evident that this was moved by the experimenter. If the pencil-case was moved with a careful concealment of all motion of the hand, or an empty loose glove was employed for traction, with the same care, no effect followed.—Elliotson.

§ 257. The hypnotised patient has a tendency to approach to, or recede from, impressions, according as they are agreeable or disagreeable, either in quality or intensity.—*Braid*.

§ 258. The patient is drawn by the hand of the operator, by the heat of a red-hot poker—if not *too hot*, for if so it repels and by a lighted candle. The boy (James) is brushed to sleep *in a minute*, and (having intentionally been made to abstain from food before the experiment) he is allowed to taste a morsel of bread; he then follows the bread wherever the operator takes it, and when he has obtained it, applies it to *his ear*!

§ 259. Mr. Catlow causes three patients when asleep to take hold of each other's hand. Mr. Catlow takes hold of the last, and then *yawns* several times : they all yawn sympathetically.—*Catlow*.

§ 260. Muscular power and performance of muscular actions.—The phenomenon of the clockwork lowering of the eyelids, and remarkable manner of their closing, are not imitable, for they are out of the reach of human muscular power, as long as it remains under its usual conditions.

§ 261. There is an apparent lack of power in the eyelids to perform the usual office of nictitation. The upper lid falls very gradually, and sometimes remains not quite in contact with the lower. In this case, unless the person is in the habit of sleeping with the eyes open, he rarely falls into sleepwaking. When sleepwaking is perfect, there are the following differences between the state of the eyes here and in common sleep; 1, the line of junction of the lids is higher; 2, there is a compressed look about the lids, as if they were rather held down by force than quietly and naturally closed; 3, the eyeball is in frequent and violent motion. No force short of that which would seriously injure the sleepwaker can wrench asunder the eyelids. By a command of the mesmeriser, however, the eyes can be opened, and the direction of their axes is usually upwards and inwards.

 \S 262. The voice of the patient is usually pitched to that of the magnetiser.

§ 263. One patient, during the mesmeric state, was *unable* to speak, though he heard every question put to him, and was desirous of answering, as he told his mesmeriser afterwards.

§ 264. E. A, when in the mesmeric state, could throw,

in wrestling, a person he could not master when awake.— Townshend.

§ 265. On the fingers of the operator being withdrawn from his cerebral organs, William invariably fell backwards, apparently as if all his energies were prostrated, and would have fallen down but for the arm of his mesmeriser.—*Phreno-Magnet*.

§ 266. One patient's mesmeric state was that "of extreme diminution of muscular power."

§ 267. In another, "after a strong or continued muscular exertion—as the ascent of an arm, &c. &c.—sudden relaxation would always occur, and *the sleep become so profound* that they dropped powerless, and no impression could, for a time, be made upon them."

& 268. Dr. Wilson (of Middlesex Hospital) had a mesmeric patient, who seems to have been a melancholy hypochondriac. He always remained wide awake, not being even sleepy under his mesmerisation. At first he trembled and twitched, then his limbs became rigid, and attracted towards the operator. The force of extension he felt to increase and decrease, as the operator's hands approached or receded from him. Assisted by tractive passes, he could raise heavier weights than when in his natural state—viz., seventy pounds with his arm, twentyeight pounds with his leg. If Dr. Wilson went into the next room, so that merely the points of his fingers could be seen, the effects still ensued. His susceptibility so increased, that at last Dr. W. affected him at a distance of 112 feet. A bystander stepping between the two appeared to deter the power of magnetism for a few seconds; but after his standing there for a few seconds, it appeared to return with its full strength. The man would sometimes endeavour to think of anything else rather than the operation when Dr. W. began; but the effects came on just as certainly. "This man obeyed and approached according to the information of his external senses only; for he always looked intently and involuntarily at Dr. W. the whole time; and when Dr. W. once bandaged his eyes, he would slowly move in any direction in which he was told that Dr. Wilson was moving him, though Dr. W. was perfectly still."

§ 269. "Patients can tell if great muscular action has been excited in them; and those who have no muscular power in the sleep, but can talk, can tell, on awaking, whether you have made them talk much by the amount of refreshment they feel on awaking, which is proportionate to what you have made them do. If experiments in exciting strong muscular efforts are made, they are still stronger and stronger the more of these experiments are made upon them. So far from feeling fatigue, many females susceptible of mesmerism, if weak, out of spirits, and eating and sleeping badly, are invigorated by once mesmerising them, and a few times will set them up far better than medicine and country air. For common fatigue and exhaustion, a good mesmerisation is excellent."—*Elliotson*.

§ 270. Two mesmeric somnambulists being brought into the same room, "hastily embraced each other with apparent rapture, folded their arms round each other, and clung together with a rigid and tenacious grasp that would have caused pain to any one in a natural state. A bystander endeavoured to lift the hand of one of them from the shoulder of the other, and with all his force could hardly move it. It was with the greatest difficulty the two could be separated." Two other mesmerised patients, also, "when brought into contact, clung to each other with the greatest avidity."—Lang.

§ 271. Muscular rigidity.—" When two persons are in frequent mesmeric relationship, the phenomenon is carried forward into the natural state. This I found to be the case after I had often mesmerised Anna M—, and E. A.—, I could at any time fix the hand or arm of either of these persons in any position I pleased, and in all the rigidness of catalepsy. Once I persuaded E. A.— to permit me to try whether, in his waking state I could prevent him from opening his eyes. The experiment was perfectly successful. By pressing down the upper eyelid with a finger of one hand, and placing a finger of the other upon the lower lid, I could so influence the levator muscle as (after withdrawing my hands) to keep either eye closed while the other was wide open. The patient could not, in general, shut the right eye without also shutting the left."—Townshend.

 \S 272. A highly hysterical patient, when mesmerised, would become perfectly rigid if a foreign body touched her, or if a person only walked across the floor.

 \S 273. A mesmeric lady, describing in a letter her feelings during somnambulism, states that the *sensation* attending the catalepsy "though strange, is by no means painful."

§ 2^{14} . Of his deaf and dumb mesmeric patient, Mr. Jones asserts, "Every muscle of his face and body can be excited *while in his normal state*, by the mere touch of the finger. If I apply my finger to the back of his wrist, his hand becomes clenched and cannot be opened until I apply my finger to the front of the wrist. A third party has no power in opening the hand, but if while a third party is touching the front part of the patient's wrist, the operator then touch any part of the patient's body, the patient's hand will immediately fly open. By applying the finger to the jaw-bone, below the ears, the mouth flies open, and cannot be closed until the operator touches the chin. Every attitude of each limb and body can be effected by the mere touch of the finger, whilst the patient is in a vigilant state."—*Phreno-Magnet*.

δ 275. In Mr. Lang's first case-

Upward passes along the arm without contact, produced catalepsy;

Downward passes without contact, removed it;

Downward passes with contact, produced rigidity;

Upward passes with contact, removed this;

Downward passes without contact, reproduced the rigidity. § 276. On another occasion—

Downward passes with contact, produced rigidity;

Upward passes with contact, increased this;

Passes with contact made down the back, produced intense rigidity of the whole body; continued, they brought on relaxation; then rigidity, and then relaxation again.

 \S 277. In the second case, the same passes which produced rigidity, if continued *too long*, brought the arm or leg back to pliancy.

§ 278. In the sixth case, it is found, after the second experiment, "that the limbs can be made rigid whilst he is in his ordinary state; and not only can they be made rigid by others, but he can himself by a few passes of the one hand make his other arm perfectly rigid. His arm was pricked and pinched severely whilst in this state, without his knowledge, and consequently without pain."—Lang.

§ 279. Stiffness and rigidity of the muscles of both extremities and trunk were invariably removed by downward passes with contact in Mr. Syme's case.

§ 280. Spasmodic lock-jaw is very common, and is to be remedied by breathing or making passes over the part.

§ 281. One of the Okeys was so susceptible "that an intense look behind her at the distance of many yards would arrest, stupify, and fix her rigid, perhaps as she was running up stairs. For a short time, I could make the elder sister's hand close rigidly, by merely looking at it intently. A sudden noise, also, such as clapping the hands, would stupify her and render her a rigid mass."—*Elliotson*.

§ 282. The meremention of the word catalepsy before Miss Clara D., when in the mesmeric state, was quite sufficient to give her all the symptoms of it. Her limbs then yielded to all the impressions given to them, and continued up to the end of the fit in the most distressing and fatiguing positions which they could be made to assume.—*Teste*.

§ 283. Aften ten or fifteen seconds have elapsed subsequently to the closure of the eyelids, by gently elevating the arms and legs, it will be found that the patient has a disposition to retain them in the situation in which they have been placed, if

he is intensely affected. If this is not the case, in a soft tone of voice desire him to retain the limbs in the extended position, and thus the pulse will speedily become greatly accelerated, and the limbs, in process of time, will become quite rigid and involuntarily fixed, the breathing being oppressed and quickened. At this stage, the transition from torpor of all the senses and cataleptiform rigidity, to the most exalted sensibility and flaccidity of muscle, may be effected almost with the celerity of thought, even by so slight a cause as a breath of air directed agains, the part. If left at rest it will speedily merge back again.—Braid.

§ 284. Mr. Catlow's patients became rigid, and their limbs retained any position given. Green, who was not considered to be in the mesmeric state, but only had his eyes closed, on his arms being raised, retained them so for three-quarters of an hour. At the end of that time his pulse was 120. In another patient the lower extremities remained extended for forty minutes.—*Catlow*.

EFFECTS ON THE COMMON SENSIBILITY.

§ 285. Insensibility; increased sensibility, and community of feeling.—Theodore, when his mesmeriser is warming himself at the fire, rubs his hands and spreads them out, as if over the flame, precisely as the mesmeriser does; on being asked what he is doing, "Je m'échauffe," he replies. A. M. coughs when his mesmeriser coughs. Several patients, when cold, asked the mesmeriser to warm himself, which at once warmed them.

§ 286. The hair of the operator was pulled. Theodore immediately winced, as if he had felt the injury, "and," says Mr. Townshend, "put up his hand to that part of the back of myhead where my hair had been pulled, throwing his arm round my neck, as if to defend me from any other attacks that might be made upon me."

 \S 287. Another patient discriminates correctly between the sensations of roughness and smoothness felt by the mesmeriser on touching alternately the carved and uncarved portions of a chessman.

§ 288. On one occasion, when Mr. Townshend had a blister on his side, a mesmerised patient said that something pained *her* side, "as if the skin were torn off."

§ 289. E. A., when sleepwaking, asserted that he was corporeally insensible; "and anxious as it seemed to try experiments upon himself, he would bite his own hand till he drew blood, without, as he affirmed, exciting sensation."—*Townshend.*

§ 290. One patient declares that warm water (115° F.) feels

" very cold—freezing;" water at the temperature of the atmosphere " nice and warm."

§ 291. When the operator is lugged, pinched, or pricked, the patient complains: of this many instances are given.

§ 292. In the seventh case, pinching and pricking were tried without causing the slightest symptom of pain, "no sensation or consciousness being perceptible, with the exception of a quiet smile upon the patient's lips."—Lang.

 \S 293. During the mesmeric state the sensibility is sometimes absent, sometimes unimpaired, even at the same sitting.

§ 294. It often happens that a mesmeric patient who will bear hard pinching, is sensible to tickling, or gentle pressure, or difference of temperature.

§ 295. One patient has no sense of mechanical injury below the elbows and knees; although, when in the first degree of sleepwaking she has perfect sensibility throughout; another has sensibility only in the face and head. A third feels no lower than the neck. A fourth feels mechanical injury in no part of the surface. Yet all these feel temperature-heat or cold-far more acutely than when awake; and some of them complain of the slightest pressure, though none of pinching, pricking, &c. The seat of insensibility in some will vary at different times, insensibility extending more or less at different mesmerisations, and parts being insensible at one time which are sensible at another. In a young woman during the mesmeric state, there was no feeling to pricking, cutting, or pinching below the ridge of the lower jaw, and a line continued from this around the back of the neck, some little way down the trunk, and all the way down the upper extremities, except the points of the fingers and thumbs; but above this limit, and all over the head, the sensibility was not at all diminishedshe felt the slightest touch. The gums had no feeling; the inside of the cheeks and lips had. She had an exquisite sense of temperature.

 \S 296. The proximity of the mesmeriser often causes a feeling of warmth; that of others, the sensation of coldness : greater in proportion to the number of persons.—*Elliotson*.

 \S 297. Mr. Thompson's patient felt a warm heat come out of his mesmeriser's fingers, which took away the pain.

§ 298. In the case of Anne Vials, "the fact of a fly walking over the pupil of the eye, when wide open, has happened two or three times. The fly even once stopped and cleaned its wings on the eyeball. I once saw the end of a pocket handkerchief placed gently on the pupil, and the lid neither winked nor moved at the touch. She was perfectly unconscious of the act."—Sandby.

§ 299. Almost always magnetism gives rise to opposite sensations, according as it is directed to the head or feet. Most frequently the sensation of heat is felt at the head, and that of cold at the feet; but the contrary may also happen. Some persons experience indifferently either cold or heat—that is, the same sensation, whatever part of the body may be magnetised.

§ 300. "The intensity of the sensation, whatever be its nature, is invariably proportioned to the effort of the magnetiser's volition, and also to the intensity of the sensation which the latter experiences in his fingers. This fact goes very far in proving the existence of the fluid." The magnetiser, independently of the electrical formication which he feels in his hands, feels also, very frequently, in these organs, a sensation of heat or cold, but *always* the inverse of that which the patient feels.

§ 301. "Some somnambulists are endowed with the melancholy privilege of feeling momentarily the pains experienced by the patients with whom they are brought in contact, and even of presenting the symptoms of the affections under which these patients happen to labour."—*Teste.*

 \S 302. In the first stage of hypnotism, the tactual sensibility is so great, that the slightest touch is felt, and will call into action corresponding muscles. The sense of heat, cold, and resistance, is also exalted to that degree, as to enable the patient to feel anything without actual contact, in some cases at a considerable distance, (eighteen or twenty inches,) if the temperature is very different from that of the body; and some will feel a breath of air from the lips, or the blast of a pair of bellows, at the distance of fifty, or even ninety feet, and bend from it, and by making a back current, as by waving the hand, or a fan, will move in the opposite direction. In the second stage, there is perfect insensibility. The patient will not feel what is either hot or cold, although not only approximating to, but brought into actual contact with the skin. He may now be pricked, or pinched, or maimed, without evincing the slightest symptom of pain or sensibility, and the limbs will remain rigidly fixed.-Braid.

§ 303. In several of Mr. Catlow's cases, insensibility to pricking was often manifested.

 \S 304. Mr. Lynill, a non-professional gentleman at Manchester, relates, that by mesmerising a woman in labour, he rendered her insensible to the pains for an hour and a half.— Zoist.

§ 305. Surgical operations rendered painless by means of mesmerism.—Amongst the many instances recorded, we find venesection, extraction of teeth, insertion of setons and issues, removal of tumours, and amputation of limbs. Of the last and most important operation, three cases are well authenticated. James Wombwell, who had his leg removed at Wellow Hos-

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pital, himself states, "I never felt any pain at all; but I once felt as if I heard a kind of crunching" Of Luther Carey, whose leg was amputated in America, it is noted, "During the operation, the patient complained of a sensation in the bottom of his foot, as though some one was pricking it; and at one time, for a brief period, appeared to be rousing from the magnetic state, and half conscious, by suspicion at least, that the operation had commenced, and at this time there was quite a struggle, and much muscular action, but he was soon thrown more fully into the magnetic state, and was then quite unconscious of what was going on, entering into conversation respecting the operation, and proposing that it be postponed to the next week, &c., and insisting, even after the leg was amputated, that he would not have it done until it was fully paralyzed, at the same time expressing some doubt whether the doctor would be able to accomplish this." Of Mary Ann Lakin, whose thigh was amputated at Leicester, the correspondent of the Leicester Mercury remarks, " During the operation, an all but inaudible moaning was heard, and a slight movement of the body was perceptible; but as far as could be judged, there was an entire absence of pain. This was evinced by the countenance preserving throughout the greatest placidity, not a single motion of a muscle indicating sensation. On being demesmerised the patient was not aware of what had taken place till informed by those in attendance."

EFFECTS ON THE SENSE OF SMELL.

§ 306. The mesmeriser smells at flowers, and then at eau de Cologne. The patient, his eyes being mesmerically closed, distinguishes between these, and names them correctly. Another patient names correctly when the operator smells at flowers and snuff.

 \S 307. One patient likes the smell of the heliotrope during his waking state, but dislikes it when he is sleepwaking, because his mesmeriser does so.

 \S 308. Ammonia held under the nose of a mesmerised patient produced no effect.—*Townshend*.

§ 309. Two patients coughed and sneezed when the mesmeriser took snuff. One of them, when a by-stander inhaled assafactida, described the smell as being "very bad and disagreeable "-Lang

§ 310. When the operator smells camphor, the patient names correctly what it is. Strong ammonia has no effect so long as it is held to the patient's nostrils; removed to the mesmeriser's nose, the patient instantly declares that he smells hartshorn.— *Caldwell*.

§ 311. In one of Mr. Catlow's patients, strong ammonia had

"a very slight effect," only causing the patient to raise his head.

§ 312. In the first stage of hypnotism, smell is wonderfully exalted; one patient has been able to trace a rose through the air when held forty-six feet from her. In the second stage, a rose, valerian, or assafætida, or the strongest liquor ammoniæ, may be held under the nostrils without being perceived.—Braid.

§ 313. "The sense of smell," says Dr. Fahnestock, (an American,) "in the pathetised subject, like that of seeing and hearing, commonly lies dormant or inactive, but is at all times under the control of the subject's will, and they can smell or not, just as they please. If they do not desire to smell, the strongest substances held under the nose are inhaled with impumity; but if they desire to smell, they can do so with the utmost facility and correctness, and can distinguish the most delicate scents at any distance whatever, notwithstanding the phial, &c. which may contain them are closely corked and sealed. It does not matter how well they may be secured, or where they may be placed, so that the substances to be examined be such as they could name or distinguish in their waking moments."—Phreno-Magnet.

EFFECTS ON THE SENSE OF TASTE.

§ 314. Community of this sense between the operator and patient is illustrated by the latter naming correctly what was ate or drank by the former, the patients not being blindfolded. Biscuit, tea, wine, coffee, sandwiches, and brandy, were the articles employed.

§ 315. That the organs of taste "share the insensibility of the other senses," says Mr. Townshend, "I have had every reason to believe. Anna M—— could never distinguish one substance that was placed, with precaution, in her mouth from another. I have told her that cheese was very good orange, or water, wine; and she trusting to my veracity, has implicitly believed me, her faith in my assertions being uncorrected by the exercise of her usual faculties, and preponderating manifestly over these. I have tried upon her, when in sleepwaking, the wellknown experiment of placing a piece of zinc and a piece of silver, the one above, the other below, the tongue, and then bringing them suddenly in contact; but no metallic taste was ever perceived by her. The same experiment repeated in her waking state produced its usual result."

§ 316 When thirsty, the patient asks her mesmeriser to drink, and his doing so quenches her thirst.

 \S 317. In three cases the patients could not distinguish between a piece of apple and a piece of cheese when placed in their own mouths; but the moment the mesmeriser began to eat, they, seeming to eat also, could tell what he had in his mouth.—*Townshend*.

§ 318. The mesmeriser chews some ginger. The patient spits out several times, and says "my mouth burns," and then "I am eating ginger." On being awoke, he had still the taste of ginger in his mouth, and after drinking some water he asked very innocently, "Who was it put ginger into my mouth?"— *Phreno-Magnet*.

§ 319. Peppermint, cinnamon, a sugar-plum, gentian, a sourdrop, citric acid, and water, are each separately tasted by the mesmeriser, and correctly named by the patient: eyes not bandaged.—*Caldwell*.

§ 120 In one instance, ginger, sugar, salt, and pepper, are tasted by the operator, and correctly named by the mesmerisé. In another case, the operator "*asked* if we had any substance of a *decided or pungent* taste, that we could put into his mouth?" Ginger was used by him, and named by the patient.

The reporter having silently put into his own mouth a quantity of common salt from a salt-dish on the table, took firm hold of the patient's hands, and she was again asked what she had in her mouth. Her lips moved again as if in the act of tasting, and she hesitated. "I had," continues the reporter, "up to this time, kept the salt on my tongue, without any action or suction, so that it was not dissolved, or at all events had never touched the palate. The operator told me to swallow the substance which I had in my mouth. This I accordingly did, and she immediately said, 'It is salt.' Several of the other visitors tried other substances—sugar, water, ginger again—and she never failed to state, with perfect correctness, what the substance was."

§ 321. With another mesmerised patient, a bystander "took hold of the patient's hands, and put something into his mouth, known only to himself; she described it as being *hot*, and very *disagreeable*, her face at the same time assuming the expression of a person taking disagreeable medicine; she began to be sick, and was nearly vomiting. It was the end of a cigar, and the gentleman said if he had kept it much longer in his mouth he would have been sick himself."

§ 322. On another occasion the operator put some pounded alum into his mouth; the patient hesitated, and then said she tasted something *like an orange*; a cayenne lozenge was "a thing like a lozenge, hot and sweet;" an acidulated drop, "something round, a confection or sweetie;" common salt, "something wersh and watery;" strong tea, "something like aloes; something which draws the mouth together;" aloes, "it is bad, awful bad." "As regards the tea," says the reporter, "it was strong tea, and of course astringent; but the taste she described may partly perhaps have been produced by some combination of the alum (which she had previously tasted) with the tea." (!!) "As she complained of the taste of the aloes, the operator asked us if we had anything pleasant to the taste, on which I took her hand, and put into my own mouth some acid drops, which I broke and swallowed. She remarked, that 'that was pleasant' —that 'the taste was better now."

§ 323. When the patient herself drank hot tea, she said it tasted cold: on her mesmeriser drinking the remainder, she went through all the emotions of swallowing, and when he had finished, said, "It is all done now—that is warm and nice."—Lang.

§ 324. Mr. Catlow's patient James, states correctly what his operator is doing, when Mr. Catlow eats and drinks, but when Mr. Catlow eats cheese, James says that he (James) is eating apple.

EFFECTS ON THE SENSE OF HEARING.

§ 325. Mr. Townshend gives several cases where the patient was insensible to the voice of every one but the mesmeriser, until after being placed en rapport. Mademoiselle H—— was completely insulated from all sounds to which her magnetiser did not serve as conductor; but if the speaker touched the mesmeriser he was heard instantly.

§ 326. Anna M—— could not hear a watch ticking when held to her own ear, but when applied to her mesmeriser's she heard it distinctly. When, however, she took the watch into her own hand, she applied it alternately to her own ear and to the pit of the stomach, and found that she could hear the ticking only when the watch was placed in the latter situation, er else when it was held close to the forehead. When listening to her magnetiser's voice, singing, "then, and then only, she appeared to be sensible of the most trifling noises in the apartment, and was impatient of them to the highest degree, holding up her forefinger as if to enjoin silence, and uttering prolonged hushes."—Townshend.

§ 327. A lady, describing her own sensations after being mesmerised, states, "the sound of the voice in persons talking or singing appears most grating, and the sensation accompanying it so peculiar, that it cannot be described, whilst discord the most hideous from the magnetiser, is listened to delightedly as the music of the spheres."—*Phreno-Magnet*.

§ 328. In two cases the patients answered all around without their being *en rapport*. In one, the female only answered when spoken to *sotto voce*. Loud noises were unheard, but a whisper caused starting. She heard a command whispered at one end of a long string, (fifteen yards,) passed through several closed doors, the other end being applied to her ears. When applied to the pit of the stomach she heard nothing, but heard any one who *whispered* near there distinctly. On one occasion she heard best with her hand; "the *lowest whisper*, which made no impression whatever on the ear, unless when breathed into it, was readily heard when addressed with the mouth close to the hand."—*Lang*.

§ 329. If you desire that a somnambulist should not hear your voice when addressing other persons present, it is only necessary for you—the magnetiser—to express the wish to him.

§ 330. One day, when a pious young somnambulist, accustomed to a "mysterious intercourse with the spirits of heaven," was "in communication with the angels," she exclaimed all on a sudden, while tears of emotion really fell on her cheeks— "Oh! delicious music! divine harmony! The pleasure alone felt at hearing you would suffice to make one ambitious of the happiness of the elect all their life." After a time, she again ejaculated, "There! they are beginning again." Teste listened and heard "a wretched organ, which, in an adjoining street, was tearing to pieces, in the most barbarous manner, one of the songs in the opera of Guido."—*Teste*.

§ 331. Finding one of his patients deaf during the mesmeric state, Dr. Elliotson pointed his fingers just into the patient's ears, and after a short time, the youth heard; and to the question whether he was asleep, replied, "Yes;" to a second question, when he would awake if nothing were done to him, he answered, "Never."

§ 332. " The inability of some mesmeric patients to hear no voice but that of their mesmeriser," says Dr. Elliotson, " I am satisfied is the result of the patient being strongly and involuntarily impelled to listen to no other person; for I have seen them just as deaf to any knocking or other such noise made by another, while they knew this to be the case, but hearing it as soon, if they were deceived into a belief that it came from the mesmeriser. And yet I am convinced that they attempted no deception, and were conscious of no deception, but were acting quite involuntarily, and with such rapidity, that they were ignorant of the whole matter."—*Elliotson*.

§ 333. In the first stage, "the hearing is about twelve times more acute than in the natural condition. Thus, a patient who could not hear the tick of a watch beyond three feet when awake, could do so when hypnotised at a distance of thirty-five feet, and walk to it in a direct line without difficulty or hesitation."—Braid.

§ 334. But a gentleman in Salford produced a greater improvement in the power of hearing than this. His patient, deaf in the ordinary state, when hypnotised, actually heard the ticking of a watch that did not go !

EFFECTS ON THE SENSE OF SIGHT.

§ 335. Clrirvoyance, &c.—The mesmeriser held up various objects (not belonging to him) before the eyes (unbandaged) of the sleepwaker, a young lady, aged eighteen. These she declared she could not see, but whenever the mesmeriser held before her anything *which belonged to himself*, she named the object directly.

§ 336. Notwithstanding her eves were closely shut, and had even a sealed look about the lids which was very remarkable, Mdlle. M---- appeared to be very sensible to the light, and never approached the lamp without complaining of the glare. She had great reluctance to exercise clairvoyance. It appeared to be difficult and fatiguing; and when an object was held before her, she usually declared it to be too small for her to know what it was. "Twice, however, she gave singular proofs of correct vision. Some music-paper was put into her hand, and she was asked what was written on it. She replied, 'There is nothing written on it; it is music-paper.' The mesmeriser gave her his watch, and asked her the hour. After the usual reluctance and some delay, and moving of her fingers over the watchglass, in the direction of the hands, she named the hour and minute with precision." She was not blindfolded, but those present could not detect the slightest opening of the eyelids.

 \S 337. Theodore distinguished persons and different colours, told the hour by a watch, and played at dominoes correctly, with his eyes closed, but not blindfolded. He declined reading written words, " of a tolerable size," as being " too small for him to distinguish."

§ 338. Anna M- (not blindfolded) waves the things about before her forehead, or approximates her forehead to the object, before she declares what it is that she sees. She declares that she sees most distinctly, when the object is before her forehead, at the distance of a few inches. She held a watch, "so turned as that it formed an acute angle with her forehead, immediately above the eyebrow. She thus presented the watch to her forehead, first on the right side, then on the left, as if to submit it to the scrutiny of a double organ. After this, she named the exact hour and minute. The hands having been altered, she found the time with equal correctness. She could not be brought to distinguish printed or written letters, during her mesmeric sleepwaking, except on one occasion, when she read her own name, written in a large hand, and held at once before her forehead. It seemed that her new visual faculty was always in its best condition when spontaneously excited, and that any effort on her part, any over-anxiety to fulfil our requisitions, marred it altogether." At the instant of recognising each person, she always gave one or two convulsive starts, as if her forehead came in contact with some invisible thing.

§ 339. E. A- was twice mesmerised without shewing any signs of clairvoyance, but being present during an experiment upon Anna M-, and hearing from her, during her sleepwaking, that he would certainly prove a clairvoyant, on his next trial he evinced the power. His new faculty became developed gradually. At first, he found considerable difficulty in reading with his eyes closed, always complained of the smallness of the type, and could rarely be prevailed upon to look at more than two or three words at a time. Subsequently. his eyes being firmly shut, (as far as the strictest observation could determine,) but not bandaged, he was able to read any number of words, in the minutest type, with perfect ease, and to discern small and large objects, near or distant, with exactly the same facility of vision which is possessed by a waking person. "In proof of this, I may mention, that I and the members of my family have seen him, when in the mesmeric state, thread a small needle, and sew a button on his coat, and again distinguish minute letters on a seal which a gentleman shewed him, and which I could not make out myself. Whatever objects he took up to examine, he immediately carried them to his forehead. An eye-glass being given to him, he immediately applied it to his forehead, and declared that everything appeared blue to him. The glass was, in fact, blue. He distinguished the colours of eight different coloured lenses, even when his eyes were bandaged. "A powerful magnifying glass being placed before his forehead, was not perceived by him to enlarge objects, though he read a book, through the glass, with perfect ease."

§ 340. Though the power of vision was greatest in the forehead, yet, at times, and especially when he was excited, and not in any way called upon to exhibit, (for such requisitions often seemed to fetter his faculties,) he seemed to see on every side of him, as if his head were one organ of visual perception.

§ 341. The operator tested E. A — by covering the eyes with his hands in various ways, with a couple of China eyeglasses stuffed with walding, with different kinds of bandages, in such a way as appeared to render it impossible for a ray of light to reach the front of the eyes, and yet, "having passed into sleepwaking, he has immediately given proofs of perfect vision, quite as perfect, indeed, as that enjoyed by persons whose eyes are open and unbound." Two large thick towels were thrown over his head, covering him in front down to the lips. Through these he read, holding the book at an angle with his forehead, and distinguished cards with perfect accuracy. "This power, however, seemed to have its limits. The addition of a third towel greatly impeded the patient's vision, yet even thus he has distinguished cards." When not blindfolded, he named correctly two cards that were enveloped in the folds of a napkin.

§ 342. When the China eye-glasses were used without wadding, E. A — declared that they were so transparent that he could see the light very plainly through them.

§ 343. "Sometimes," says Mr. Townshend, "I have placed a card, with due precaution, in the midst of a book, which I kept open only by the interposition of a finger, holding the face of the card pressed against the leaves of the book, and thus entirely concealing it. I have then held the book upright before the patient, who has bent his forehead forward, as usual, till it was parallel to the cover of the book, and has then told the card correctly. What is singular, is, that if I withdrew my finger and quite closed the book, the experiment failed. The sleepwaker said that the reason of this was, that the vibrations of the medium, by which he pretended to perceive objects, were too much intercepted by the perfectly closed book." The sleepwaker at one time declared that he saw through the book which was held between him and the object; and, at another, that he did not see through, " but received an impression from certain rays, that did not come to his eye in direct lines, but were bent round the edges of the book." (!) He declared that the ball of the eye had no share in the production of mesmeric vision, but that the impression was made direct upon the brain.

δ 344. "He did not at all like to have objects held behind him; saying that perception by the occiput was very fatiguing, and cost him an effort which did him harm. In telling cards by means of various parts of his head, he liked to observe certain conditions, which were executed either by himself or at his discretion. His favourite mode of proceeding was to lift his own hand above his head, and to take the card from me, which he held at a certain distance from the part where I told him to exercise his perception, observing, that no one ever put athing they (he) wanted to see close to their (his) eyes. When I held the card myself, and approached it nearer than he liked, he always gave indubitable proofs of being aware of the circumstance, begging me to place the object farther off. Sometimes, when he found a difficulty in ascertaining the card, he would beg me to breathe on it, and when I had done so, he would tell it directly. At other times he would hold the card horizontally above his head; and then, without stirring the centre of the card from its place, would dip down, first one end and then the other, like the two extremities of a see-saw. This he called "Le moyen électrique." He was generally successful in telling cards in this manner, sometimes on the first operation, sometimes after two cr three repetitions of it."

§ 345. At first, he was unable to read in a perfectly dark closet, but at length he could make out whole sentences of even small print. He declared that the more complete the darkness was, the more acute his perceptive power; and, in order to thicken the obscurity, he would wrap up his head in a dressing-gown which hung in the closet.

 \S 346. The presence of a sceptical person rendered E. A tuite incapable of repeating his clairvoyant efforts. Sometimes, after having named many objects correctly, he would begin to make mistakes, and evidently to guess instead of to perceive. At other moments, he would push impatiently away from him the cards, books, &c., that were presented to him, and exclaim, "maintenant je ne puis plus." Again, when allowed to remain quiet for awhile, he would recover his clairvoyance.

§ 347. A Swiss peasant, Johann, who had been almost blind for three years, was the next *clairooyant*. Before being mesmerised "the could yet see enough to perceive any large obstacle that stood in his way," but could not read a letter of the largest print. During the mesmeric state he distinguished between different persons and the colours of different flowers, and told the letters B, M, and O, written in large printing hand, on pieces of card, and held before his closed lids. Taken to a mirror on which the light of a lamp fell strongly, he exclaimed, "Viel licht! viel licht!" (Much light! much light!)

§ 348. "There seems to be every reason to conclude that the eye in mesmeric sleepwaking is either so disordered or so paralyzed in its functions as to cease to convey impressions to the mind—in any mode, at least, that can be termed ordinary." —*Tounshend*.

§ 349. A mesmeric clairvoyant at Nottingham observed that there was no light in the room, and that she could not see. On a candle being placed in the next room she said, "Now I can see there's a lighted candle."

§ 350. A clairvoyant of Mrs. Sunter's stated that he could see the people in the next room; could see from his stomach, knees, and finger-ends; and could see the operator's inside, and how the process of digestion was going on. He thus describes it:—" The stomach presses against the gall, and a liquid comes out and mixes with the *food in the stomach*, and part of it is passing through that channel, (pointing with his finger to the part,) and part is going *along that passage to the heart.*" He could see best in *perfect darkness*.

§ 351. "J. F., on being thrown into the mesmeric trance at Liverpool, as we sat side by side, described to us, as accurately as any eye-witness could have done, what was then transacting in a particular room at Sheffield, though he had never been in

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it, not a single leading question being put to him. At Wolverhampton he described anything held behind his head as accurately as though he had observed it with his eyes; and late on Saturday evening read verbatim two letters then coming to him by post, one from London, and the other from Sheffield, which were not delivered to him till the following day at Walsall. On many occasions, when in the trance, he has described remarkable events which have occurred some time after, and also the time of their occurrence as then present to him. At Leighton Buzzard, whatever thought was silently entertained by us and by Mr. P. Wagstaff, surgeon, the same patient whilst in the trance gave utterance to, and whatever we silently purposed he executed."—Spencer Hall.

§ 352. A mesmeric clairvoyant noticed when one of the lights behind him was put out.

§ 353. "Dr. Weekes, of Sandwich, has a patient who can read most distinctly from the back of his head, and two others who can read from their finger-ends, one of which can command the power when in a natural state."

§ 354. Dr. Fahnestock requested one of his patients to keep the eyes open whilst she entered into the mesmeric sleep. "The facts elicited were as follow:—First, that she was enabled to see with either the mind or the natural eye, as she felt disposed, but could not use both at one and the same time. Secondly, when she looked with the eye it had a natural appearance, but when she looked with the mind the eye became fixed and vacant. Thirdly, she could see me, or anything else, through the wall, when she looked with the mind, but could not when she looked with the eyes. Fourthly, that she could see much better with the mind than with the eye, and whilst in that state preferred using it."—Phreno-Magnet.

§ 355. Mr. Lang's first patient. There was a good deal of light; the pupils were contracted. She said that she could not see because it was too dark. The light was extinguished, and she then saw well. Again, on a candle being brought near to her face, "she started and said, 'Oh! what is that? What a terrible darkness! * * * It is like a big black thing,' When the room was quite dark, she declared that she was 'in the light."

§ 356. The second patient, who had previously been present at the performance of the first, when the room was completely darkened, said that she was "walking in light"—that "all around her was light;" and when the light was flashed across her face, she said that a great darkness had come upon her.

§ 357. In describing a distant place—the house of the questioner—the description she gave was very nearly correct. She described the parlour of another gentleman with "perfect accuracy" She was asked to go to a certain place. She re-

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plied, "I do not know it." The mesmeriser said, "It is in —street, go and find it out." She then said she had discovered the place, and began to describe it. The description, however, was that of the bank next door to the place intended by the mesmeriser. On being further directed, she afterwards gave a tolerably correct description of the warehouse originally referred to. In describing a distant room, she mistook what was really a mirror for a picture, and considered the reflection of herself to be the object represented. On a gentleman placing his hand over the patient's head, in a position as if holding something, she said that she saw in the picture a person pouring something on a woman's head.

§ 358 On another occasion it is stated, in nothing did she go wrong, except in describing the proprietor as being in one room, when he was in another.

 δ 359. Being requested to describe a place "at a considerable" distance," she said, " there was so much darkness (light to the unmesmerised, of course) at the place she was directed to, that she saw very indistinctly." As it was quite dark, and eleven o'clock at night, the mesmeriser was surprised until he recollected the difference of time at the two places. He asked his patient what o'clock it was at the place referred to. She answered, six o'clock. On looking at the map, he found "that the difference of longitude was 75° west, which gives exactly five hours, so that eleven o'clock in Glasgow was equal to six o'clock there-just as she had stated." (!) She afterwards details correctly what a person is doing at a given time at this distant place, as proved by a letter received some months afterwards. Her clairvoyance-judging from the accuracy of her answers-was sometimes greatest at the commencement of the sitting, sometimes just the reverse, "for her answers were very unsatisfactory until she had been some hours in the sleep."-Lang.

§ 360. For six years Dr. Elliotson met with but one case, and that an unsatisfactory one, of clairvoyance. Mr. Symes was the mesmeriser. Having made a blunder in telling the time by a watch, the back of which was held before his closed eyes, the patient, on being pressed for precise information, instead of answering, "fell back in his chair fast asleep." On being roused from the deep sleep into the sleepwaking state, "he proved too exhausted to manifest again the degree of power of seeing through his eyelids and other opaque substances, and, indeed, never again exhibited it satisfactorily." The Okeys, "when they were making a great intellectual effort, or when a strong influence was exerted upon them to produce a certain phenomenon, would drop in the deepest sleep." And Dr. E. has since witnessed "this sudden depth of coma, (!) in which the patient notices nothing, times innumerable, when sleepwakers were urged to do something impossible, or told something disagreeable."

§ 361. Dr. Elliotson has at length, however, found an example of clairvoyance " of the highest kind," in a patient who " is the perfection of integrity and every other moral excellence. Her word is a fact, and her truth is not less absolute than her freedom from vanity. She dislikes to exercise her clairvoyance; and though, I have no doubt, long possessed of it, never mentioned it till I tried and urged her to exert it, nor would she ever exert it but from a desire to oblige me. nor does she, if aware of the presence of others. She will accurately describe who are in a particular room at her father's house at a particular moment, and the arrangement of the furniture, &c., a distance of above fifty miles; or she will search for and see a member of her family, and describe the place in which he or she is, and the others also present. I at length succeeded in prevailing upon her to see some others, not members of her family, or known to them or to herself, and whose names even I did not mention, but only a very few particulars about them. She has described their persons most accurately. the places in which they were, their occupations at the moment, and told what others were in the same room with them; and all this when I knew nothing of the truth at the time, and had to verify it afterwards," (? by writing to the lady's friends.) " Far more than this she would tell, and tell with perfect accuracy, and predict numerous things relating to others which have since exactly taken place. But I will not venture to add more at present. I am anything but superstitious-am indeed very sceptical of human testimony on all matters of a wonderful nature; but these points I have laboriously and rigidly looked into, and can speak positively. In exerting this power, she knits her brows, and wrinkles her forehead vertically, evidently making a great cerebral exertion. The part at which she says she sees, so to speak, clairvoyantly, is the centre of the forehead, midway between the temples, but a little lower than half-way between the root of the nose and the top of the forehead, exactly at the spot called by some cerebral physiologists, the organ of eventuality. Gall discovered an organ about this part, the function of which he termed the sense of things.

* * A remarkable peculiarity in this case is, that the perception of absent objects scarcely occurs unless I hold her hands in mine. If I hold but one hand in one of mine, the faculty is by no means so strong as if I hold one in each of mine. This I discovered accidentally. Sometimes, while distinctly seeing a person in a distant county,—her father, for instance,—she suddenly would cry out, 'Oh, papa's gone; I can't see him now.' On taking hold of her hands again, merely with the view of encouraging her, she would say, 'There now, I see

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him again.' It was some time before the real facts struck me." (It was unkind in the patient, whose mesmeric omniscience must have made her aware of the fact, not to mention it.) "But I was so often in the habit of holding her hands, one in each of mine, to encourage her to exert the power, and to increase her general mesmeric state, that at length the vanishing of the objects, when I let go her hands, and their returning on my holding her hands again, struck me; and I proved the thing fully, and made further experiments. The difference between holding one or both hands I have mentioned. But I further found that I must hold her right in my right, and her left in my left. If I hold her right in my left, or her left in my right, she sees objects double : if I hold her right in my left, and her left in my right, at the same time, objects are quadrupled; and this terrifies her exceedingly." (If it would not terrify this lady, whose "word is a fact," too much, it would be interesting to inquire what additional multiplication would result from touching toes cross-wise with her magnetiser at the same time.) "These observations and experiments I made in silence, without a single remark to her, and she was long in ignorance of them, nor did she know them, till, after satisfying myself of their truth, I mentioned them to her. She was surprised. and observed for herself, and found my observations true." (When mesmerised, she should have known either everything possible, or at least, everything her mesmeriser knew, without his telling her.) "Even the power of telling past and future events, in reference to others, is greatly increased by my holding her hands each in the corresponding one of my own. Whether from her being in a very delicate state of health or not, she exerts the power with great effort, and often requires repeated efforts in the same direction at successive sittings before she sees what I desire her to see. Any temporary increase of debility, any headache, or other distressing sensation, or the slightest uncomfortable emotion, prevents its exertion to much purpose, or altogether. Before she could discern persons who are strangers to her, many attempts for very many days were required. She then saw them more clearly every day. Sometimes she can see persons but for an instant at a time, and sometimes not more than once in this momentary manner during my visit. She seldom saw the whole of a room at once."

§ 362. Of a patient who imitated the mesmeriser's gestures, Dr. Elliotson writes, "This patient had her eyes partially open, though I never could satisfy myself that she saw." Another patient would only imitate when his eyes were open, and his mesmeriser stood before him, yet when he did imitate, he did not appear to look at his mesmeriser. Another, whose eyes are not perfectly closed during the mesmeric state, declares herself that she sees in the ordinary way.—*Elliotson*.

§ 363. When we open mechanically the eyes of a mesmeric somnambulist, he does not see. It is so easy to convince one's self of this fact, that it is not at all necessary to cite cases in its support.

§ 384. Vision through the closed eyelids and through opaque bodies is not only a real fact, but *a very frequent fact.* "There is no magnetiser who has not observed it twenty times."

§ 365. The first case adduced in proof of clairvoyance is that of Madame H----. When she is in the sleepwaking state, the magnetiser covers her head with a shawl, and speaks to her about a letter. She asks to be allowed to read it. He puts into her hand a printed paper. She remarks, "You are mistaken doctor, this is not the letter which you have received; they do not print letters." On being requested to read a single line, she grows impatient, complains of the heat, and is accordingly awoke. "The fact," says Teste, " of which this first sitting satisfied us, was, that Madame Hortense, with her eyes and face almost entirely covered with a thick woollen shawl, had been able instantly to discover that the characters traced on the paper which I had presented to her were printed, and not manuscript."(!) She, afterwards, her eyes being bandaged, tells that a given book is a book of verse; helps herself to a volume from her husband's book-case, and reads a sentence in it correctly; she plays at cards also. A stranger produces a book out of his own pocket. Madame is " in evident agitation"-she tries to read a passage, but fails. She afterwards does read a verse in a book brought by a visitor-reads the title of a book after the lights were all put out-and reads through three sheets of strong paper.

 δ 366. Before reading the words in the book brought by the visitor, Madame H—— retired with Teste into the next room, and, being all the while in the state of somnambulism, begs him to tell her the words the visitor will require her to read!

§ 367. A sentence is written on a scrap of paper, inclosed in a box, which is sealed up by Dr. Latour, and left with Madame H——. In three days, Dr. L—— calls and examines the box, finds his seals unbroken, and Madame tells him the sentence he has written. (Vide § 43.)

§ 368. One of the somnambulists *lost her lucidity* for three weeks, in consequence of the bad humour Monsieur was in one day when he magnetised her.—*Teste*.

§ 369. A young woman, aged seventeen, perfectly blind, was mesmerised by Mr. Peale. "In this condition, a goldfaced watch being presented to her, she told the time of day, though neither so promptly, nor at each trial so accurately, as I have witnessed on other occasions. Mr. Peale, covering himself with a straw bonnet, and standing behind her, at least six or eight feet from her chair, she was asked what he had on his head? Her reply to this was a disagreeable hysterical laugh. On being asked what she was laughing at, she replied, "O, it is so queer." "What is so queer "" "Mr. Peale." "Why is he queer." "O, he has a straw bonnet on his head."

 δ 370. The mesmeriser wills in silence that his sleepwaker shall see the sun, and then he asks her what she sees ? "Oh, I see the sun. It dazzles me, and makes my eyes water;" and releasing her hands from the mesmeriser's grasp, she pressed them closely to her eyes, as if to shut out the brilliancy of the light, while the tear-drops started beneath her closed eyelids, and trickled down her cheek." She then describes most poetically an eclipse of the sun; a night scene, with the moon shining; the ocean, "which she had never seen before," (she could not, therefore, have been either to London or Paris.) She next sees, and minutely and graphically describes, the Tuilleries, at Paris, its various statues; St. James's-park, London, even to a black swan on the Serpentine, which gives Dr. C---- an opportunity of introducing a little historical information upon this rara avis. A steam-ship on the water, a rainbow, and a terrific tempest, follow in succession. And all this was seen, and beautifully described, by a patient who had never been out of America, "in obedience to the mesmeriser's silent will," The case is considered by its narrator to illustrate "in a peculiarly impressive and striking manner, the beauty and sublimity of the mesmeric influence."-Caldwell.

§ 371. A "pious, solitary" man in Philadelphia is consulted by a wife, disconsolate at the prolonged absence of her husband, a sea captain. The pious one becomes self-entranced, and on recovering, informs the lady that her husband is in a certain coffee-house in London, and has been delayed by special business, which he describes. This all proves true, of course. —*Phreno-Magnet*.

§ 372. After a robbery, committed fourteen miles off, Dr. Engledue mesmerises one of his patients, and learns from her when, how, and by whom, the robbery was done, but not (at least, that he does not mention) where the stolen goods were to be found.—Zoist.

§ 373. Mr. Spurrell lays claim to having discovered "a new faculty incident to clairvoyants, which is, that after being once thrown into the mesmeric trance, when demesmerised—whatever the interval before they are again put into the sleep,—they can narrate particulars of everything that has passed in the interim, afar or near;" or, as he afterwards explains it, rather more clearly, "whatever occurred at any particular spot that I chose to direct the patient's attention to before I awoke him." For example: A. B. is directed, when mesmer-

ised, to notice what takes place in the interior of Buckingham Palace for the ensuing fortnight, and is then demesmerised. At the end of that time, A. B. recollects nothing of the matter until he has been again mesmerised, when he immediately narrates, in minute detail, all that has taken place in the palace during the time specified. The account of this most impertinent ideal intrusion on the privacy of the highest personages of the realm is, perhaps, as disgusting as anything in the book. When the mesmeric Asmodeus was at a loss to distinguish the parties at the state-ball, he mentally looked into each nobleman's pocket, and read his card !--Spurrell.

§ 374. Intuition, prevision, &c.—Miss M. R., "who possesses a very good general knowledge of anatomy," is in a state of mesmeric lucidity. Amongst other patients brought to her for examination is Mr. A. She delivers judgment on three several occasions.

1st time.—" Mr. A. Heart sound, lungs right, liver good, stomach very narrow and rather out of order, together with the bowels. Brain: some blood towards the back part, near the bottom of it."

2nd time.—" Mr. A. Stomach and bowels good, but seem to have been out of order lately. Lungs, liver, heart, kidneys, bladder, spine, all sound. Brain rather bloody, lowish down towards the back part of it."

3rd time.---" Mr. A. All right, but rather fluttered. Brain appears tinged with blood in some parts, towards the back part of the head."

On examining Mr. A., a second clairvoyant gave precisely the same opinions. "N. B." says Mr. John Potchett, the reporter—"Mr. A. has always been subject to great giddiness and stupefaction, the result of an injury on the brain when about twenty years of age; the stomach is known to be very small, and of weak digestive powers."

§ 375. Mr. Sunter narrates the following :—" A Miss S. who had for years been afflicted with an abscess of the hip-joint, had had the advice of several of the faculty, but without receiving any more than a temporary benefit. On being placed in contact with the clairvoyant, he was desired to examine her, which he did by moving his fingers over the body and limbs. He said there was a palpitation of the heart; the lungs appeared healthy, the liver good, but the stomach weak. He then discovered the abscess; described particularly its locality, its extent, and appearances; said it could be removed by the application of a poultice of hemlock and marshmallows: this was done, and in ten days she could walk as well as ever. On a second examination, he ord, ed the part to be fomented with the mallows; and now, thoug. "Ny six weeks since the first application, she is as well as ever she was in her life." There are many somewhat similar cases in the *Phreno-Magnet*.

§ 376. A patient predicts for herself swelling of the face and infiltration of the eyelids ;-both duly occur.

§ 377. Madame H. prophesies that she shall have a fright and a miscarriage ;--they both ensue.

§ 378. Miss Clary has consumption. She predicts the course of her disease. "On the 2nd and 3rd of June," says she, "I shall be sick; the 4th, I cease to see." On the 4th, she died.

§ 379. Madame B., during her mesmeric sleep, fancies, erroneously, that she has broken one of some valuable china plates which she had previously been cleaning. On being awoke, she afterwards actually *does* break a plate. "In her sleep," says Teste, "Madame B. had taken the *future* for the *past*." (!)

§ 380. Madame Teste predicts her own death. A most pathetic account of his own sufferings on the occasion is given by her husband, and magnetiser; but, after a sort of fit at the time appointed, Madame opened her eyes and spoke. She had taken a lethargy for death." (!)

§ 381. In predicting the death of a child that was dangerously ill, the somnambulist made "an error of only two days."

§ 382. Koreff, in his letter to Deleuse, states that somnambulists often deceive themselves in taking dangerous crises, or violent syncopes for death. "I own," says Teste, "that almost always the predictions of somnambulists relatively to others, have not the precision of those which concern themselves personally." A somnambulist can tell how many drops of blood there are in his heart. A woman, in a state of somnambulism, is conscious of her pregnancy from the first hour of conception; she feels whether she is or is not in a disposition to conceive; nay, she will not be pregnant for eight days, when she will tell, without ever being mistaken, the very sex of her infant."—*Teste*.

§ 383. " If the person about whom the individual magnetised is consulted, be present, the magnetiser brings them both into correspondence by contact. Is he absent, a lock of his hair is merely approximated to the hand of the magnetised individual : the latter tells what it is without looking at it, also to whom the hair belongs, where the person from whom the hair came is at the present moment; what he is doing, and with respect to his disease, she gives all the information above-mentioned (viz., advice far superior to that of physicians,) and that with as much accuracy as if a post-mortem examination of the body had been made."*

* Xavier Fontana, in 1841, quoted by Teste, in reference to what he terms "one of the most important cases which the history of magnetism now possesse."

HISTORY OF MESMERISM.

EFFECTS ON THE INTELLECTUAL FACULTIES AND MORAL FEELINGS

§ 384. Separated from the usual action of the senses, the mind appears to gain juster notions, to have quite a new sense of spiritual things, and to be lifted nearer to the fountain of all good and of all truth. The great indication of this elevated state of feeling is a *horror of falsehood*, which I have found common to *all* sleepwakers. *Sincerity* is their especial characteristic; they cannot feign or flatter; they seem to be taken out of common life, with all its heartless forms and plausible conventions. The increased sincerity which persons manifest in the mesmeric state would alone pronounce it the parent of a quickened reason. They perceive all the *irrationality of falsehood*.

§ 385. The sensibility is exalted and refined. Mdlle. M utterly insensible to poetry in her waking state; when sleepwaking she "felt all its charms." Another person is fond of music only during the mesmeric state.

§ 386. The attraction towards the mesmeriser testified by the patient is of a nature totally distinct from the promptings of passion. If compared to any love, it must be likened to selflove. Nothing can be more evident than that it is an instinct, not a passion.

§ 387. The sleepwaker's will is not merely suspended, but subdued, and actually held subject, by his mesmeriser. "He adopts, pro tempore, the likings and dislikings of his mesmeriser."

§ 388. A mesmeriser can always so strengthen the virtuous tendencies developed by his patient in sleepwaking, as to prolong them, as it were, into the waking state.

§ 389. The sleepwaker can discuss subjects, which in the waking state are far beyond the scope of his capacity, and solve questions which, at other times, are to him as an un-known tongue. Memory is extremely increased in power.

 \S 390. When the mesmeric sleep is perfect, the subsequent oblivion is so to.

§ 391. It is undoubtedly true that the mesmeriser has the power of impressing some things upon the memory of his patient, in such a manner as that the latter shall retain them, and them alone, on awaking. He can also fix the exact time of remembrance, and not until the very moment fixed upon arrives, shall the patient remember the circumstance in question.

 \S 392. If a second patient were mesmerised in the same room, the one already in the mesmeric state could indicate with exact precision the degrees of sleep through which the other patient was passing. § 393. "Nothing can be more contradictory or unsatisfying than the account which mesmerised persons render of their own mode of sensation."—*Townshend*.

 \S 394. Patients feel placid, serene, and comfortable, when mesmerised by operators of mild, benevolent, and kind dispositions, "both during the experiments and on being restored;" but operated on by persons of harsh, overbearing, or irritable tempers, and of less sympathetic feelings, shew their manifestations with less grace and energy, and not unfrequently feel sensations quite the reverse of the former; nay, to a certain extent, from the same operator, the effects are found to vary with the different states of his mind or body. Licentious company are awed on the entrance of a person of high moral character and integrity, from his sympathy affecting corresponding cords amongst the organs of *their* moral sentiments.—Mr. Patchett.

 \S 395. A lady, describing subsequently what she had experienced during the mesmeric state, confesses, that though her magnetiser could throw her into the sleep, when in another room, by the mere silent exercise of his will, yet during her somnambulism she could *not read his thoughts*.

§ 396. "When there is a disposition on the part of mesmeric patients *not* to perform an experiment, it is better to drop it at once, as they then *frequently say anything* to get rid of you; but I never yet have known them to fail in an experiment when the desire to perform it originated with themselves."—Dr. Fahnestock.

§ 397. A mesmeric patient of Dr. Tanner's, (of New York,) says, during her sleepwaking, "In five minutes I will come out of this a perfect maniac, and remain so until Wednesday morning at ten o'clock, when you must take it off, neither before nor after, but at ten exactly,—don't forget." She uses the expression "I will," on many other occasions, and always performs what she thus wills.

§ 398. In Mr. Lang's second case, the hand was raised cataleptically. The patient was asked "if she knew that her hand was raised? She answered that she did not feel it raised. On being told to put down her hand, she did so, and said she was conscious of its being put down." During her sleepwaking she ridiculed the idea of seeing when her eyes were shut, or through a wall.

§ 399. In the third case, the sleepwaker described occurrences which had taken place previously, and at a time when the patient could not have been in a mesmeric state. For example, she told of a particular lady, (of whom she had no previous knowledge,) not only how many children she had alive, but how many were dead, and whether they were boys or girls.—Vide § 373. § 400. If she had predicted, during the mesmeric state, that she should fall asleep at a certain time, she never fails to do so at the appointed hour; and it has happened that she has fallen asleep at the time fixed upon, quite unprepared, in some other apartment than the one she usually slept in. When this occurred, however, she was under no difficulty, as, *although sound asleep*, she could walk with the utmost precision to her room and go to bed. "In a similar way any arrangement made during sleep will be kept when she is awake. She will awake quite unaware of what she is to perform; but, somehow, when the hour comes, she feels impelled, in an indescribable manner, to perform what she has undertaken."

§ 401. The fourth patient does some sewing work "more correctly than if it had been done in her waking state." In the sixth case, the patient, during sleepwaking, produced harmony on a musical instrument, which "whilst awake he could not even handle properly," and could read, with his eyes bandaged, "in a better style than in his ordinary waking state." (!)

§ 402. The seventh patient has a scalded foot, but when in the mesmeric state, she stated "that her foot was not sore, and that *neither of them was scalded or burned.*" Several of these patients gave themselves new names when sleepwaking, and would then only answer to these.—Lang.

§ 403. During sleepwaking, of the various intellectual faculties and moral feelings, some become very dull, some very acute, some perverted, so that the patient may be variously eccentric, delirious, or mad; or, on the other hand, variously childish and fatuitous; and at the same time, in some points, excessively clever.

§ 404. The reason of a certain patient (a gentleman aged eighteen) "declaring that he did not feel when his hand was at first pinched, arose, not from this being the fact, but from a disturbed state of his mind. He really was always found to feel everywhere; but if anything was asked him respecting himself, he invariably answered in the negative. In genuine somnambulism very great deception has been attempted through diseased and ungovernable propensities."

§ 405. A sleepwaker predicted divers occurrences, and then said she should "now sleep for half an hour. But, in two minutes, a fit, of which she had certainly shown no foreknowledge, occurred, which broke it up."

§ 406. A sleepwaker, predicting some wonderful phenomenon to occur during his mesmeric state on a certain day, will change the time, if told that that first appointed would be inconvenient to the mesmeriser. "This has been done and the prediction been verified, the phenomenon occurring at the time requested; and yet the phenomenon has been genuine and unquestionable."—*Elliotson*. \S 407. "Madame Hortense is far—infinitely far—from having in her habitual state that facility of thought and of expression which the magnetic sleep confers on her."

 \S 408. We are cautioned against "the tricks of somnambulists and *the disposition to deceive*, even in those persons who, when awake, are most trustworthy."

§ 409. Oblivion on awaking is the characteristic trait of the magnetic sleep; but it sometimes depends on the magnetiser that this leading circumstance should not exist, and that the somnambulist should accurately remember, on awaking, all that he has done, and said, and heard, during his sleep. Let the magnetiser only wish energetically that it should be so, and let him express this wish aloud, in order that it may pass into the mind of the person magnetised, that is the whole secret."

 \S 410. "I maintain, that from the moment the state of somnambulism is perfect, all the faculties which appertain to this state are in their last degree of development."

§ 411. "Magnetise an idiot—he thinks justly. Magnetise a madman—he thinks rationally. Magnetise a dying man—he will tell you, with all his good sense, as much as there will remain strength to speak."

 δ 412. " A somnambulist, the moment that sleep delivers her up to her magnetiser, no longer sees, no longer hears, no longer acts, but through him; and though she still retains the discernment of right and wrong, she belongs, body and soul, to him, if he is base and dastardly enough to use such power. isolating successively by my will each of the instincts of a somnambulist, I have succeeded in rendering him alternately vain, lying, a gourmand, and a sensualist: whence it follows that it is possible-at least, to a certain extent-to excite, eventually, in the mind of a somnambulist, that propensity which we have reason to wish him to have. Not only is it possible to force the person magnetised to avow the thoughts occupying his or her mind, but we may even extinguish this thought in her, and substitute another; that is, in one word, we may modify at pleasure the intellectual disposition of a somnambulist, as we have said that we modified, in one of our own, the instinctive disposition. It is, unfortunately, too true that magnetism may produce, between two persons of different sexes, a profound. extreme, and insurmountable attachment."- Teste.

§ 413. "I can decidedly state, from observation, that the intellectual faculties are surprisingly increased and developed in the sleep, so much so as to lead to the opinion that there is a general rise and exaltation of the whole moral being when under the mesmeric influence." In one case, the patient in the mesmeric state, "is invested with an apparently prophetic character, and a species of divine knowledge seems to be conferred upon her." § 414. "Generally, if not always, the mesmeric state produces, on the part of the patients, such a high tone of spirituality and sense of right as to make them less than ever disposed to an acquiescence in what is wrong: the feeling produced between mesmeriser and patient is rather that which exists between two sisters, than anything else. So far from the mesmeric sleep producing a state of feeling inconsistent with what is right, it is considered by the most experienced operators that a great increase of the moral perceptions is created and brought out, and that, if the mesmeriser were capable of commanding an improper or reprehensible act, the patient would revolt from an obedience to his will with a language and in a manner even more decided and peremptory than when in a waking state."

§ 415. A socialist girl is mesmerised by a gentleman " of strong religious feelings, whose knowledge of Scripture is most profound and accurate, and whose theological tenets are somewhat peculiar. Religion is, in fact, the uppermost occupation of his mind,-and mark the effect, at once, on the socialist patient. She straightway becomes in her sleep most conversant with the Bible; she compares one text with another; she interprets the Old Testament by the New; she discovers the deepest meaning in the most abstruse chapters; she is an expositor of what she declares are the real doctrines of the Gospel." This girl is, at another time, placed en rapport with a gentleman whose studies are altogether of an astrological character, and her talk is straightway of the "stars." She is placed en rapport with a lady, who declares that her innermost thoughts are laid bare by the patient. " The patient is sympathetically united with the mind of the mesmerist."-Sandby.

§ 416. At one stage there is an extraordinary power of concentration of thought, or disposition to rapt contemplation; at another stage, the discursive or imaginative faculties are excited into full play. Patients, during nervous sleep, can be excited to manifest the passions and emotions, and certain mental functions, in a more striking manner than the same individuals are capable of in the waking condition. During hypotism, we acquire the power, through the nerves of common sensation, of rousing, any sentiment, feeling, passion, or emotion, and any mental manifestation, according to our mode of manipulating the patient.—Braid.

§ 417. Mr. Catlow considers that there is "torpor of consciousness and volition," when the patient can be rendered cataleptic. Lemon closed his eyes after having gazed for two minutes; he declared that he was *not asleep*. On being asked where his arms are, he replies, "he does not know." He returned the same answer after having raised them in obedience to a touch of his operator. When ordered, he instantly lowered them. He was considered to have been in the cataleptiform state.

§ 418. *Phreno-Magnetism.*—Of one patient, when in the mesmeric state, Dr. Elliotson remarks, "whenever I pointed to *self-esteen*, she withdrew her head from me and raised it as high as possible and frowned : if I pointed to *destructiveness*, the effect was greater; she withdrew her head violently as far as possible, and frowned : when I pointed to *benevolence*, she moved towards me and her brow relaxed : and if I pointed to *attachment* or *friendship*, she moved and bent her head as - closely as possible to me, without coming into actual contact. If I touched over any of those organs, the effect was quicker; but it was always quick. I could never affect any other cerebral organ than those four; and in my present experience these are the organs which are the most commonly mesmerisable."

 δ 419. With another patient, on touching attachment, she squeezed my hand and smiled; destructiveness, she let go my hand and frowned. If a stranger's hand were placed in her's, and attachment touched, she withdrew her hand from his and frowned : " and this is the course the excitement of attachment has taken ever since. The attachment was to me, her mesmeriser, and it made her dislike all others the more it was excited." But if benevolence was touched, she no longer repelled, but liked, a stranger. It was in this case that Dr. Elliotson discovered that mesmerising an organ on one side the head only, affected merely the corresponding side of the body. "If I place my fingers," says he, " in her right hand, and mesmerise attachment on her right side, she squeezes them and mistakes me for a dear friend; if then I mesmerise self-esteem on the left side, she still speaks to me kindly, and squeezes my fingers with the right hand as much as ever. But if I place my fingers in her left hand, she repels them and speaks scornfully to me, mistaking me for some one she dislikes." By continuing to point at violence or pride, she may be worked up into such pride as to say that "she looks upon me as dirt." (!) However she may at first refuse to sing, perseverance in mesmerising attachment will induce her at last; "but I never have succeeded by attempting to excite music."

§ 420. Dr. Elliotson has not in any patient been able to excite mesmerically more than the following five organs—viz., attachment, benevolence, destructiveness, pride, and veneration.

§ 421. Mr. Atkinson having discovered in the occipital region two new organs, one of common sensation, and one of voluntary motion, Dr. Elliotson wished to test their functions. He found that by placing his finger over common sensation—i. e., below the centre of the occiput—that his patient had perfect feeling in every part which he had previously found insensible. Pressure over the muscular organ caused the limbs of the cor-

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responding side to stiffen, and be sustained in any given position. The muscles relaxed when the cerebral organ was no longer excited.—*Elliotson*.

§ 422. A case is given in the *Phreno-Magnet*, where touching a cerebral organ of one side only magnetised the corresponding side of the body. Numerous cases in illustration of mesmero-phrenology are recorded in the same work. The first given will suffice as a specimen of the rest, and of those usually presented at public exhibitions.

§ 423. Mr. Spencer Hall magnetised his servant William by thumbing and looking intently into his eyes. The eyes closed in two minutes and a half, and Mr. Hall made passes over them, and the head, chest, &c. Slips of paper were then handed to him, and he wrote the name of each organ to be developed with chalk, on the black board behind the subject, before he operated. The first was calculation, and the mode of operation in this and every other case appeared to be merely placing the tip of one finger on one-half of the organ, (regarding each organ as having a corresponding half on the other hemisphere of the head,) and gently pressing upon it, not continuing any magnetic action the while, but repeating the demagnetising and remagnetising before each successive experiment.

Calculation alone .- The patient "seemed to be calculating."

Language conjoined, (by touching the eyelid;) a simple addition sum was heard.

Causality and language.—He said he should like to know "the cause of a wheel acting in that mechanical manner."

Self-esteem.—He arranged his dress conceitedly; attitudinised and delivered a speech on teetotalism.

Tune.—He sang.

Constructiveness.—He drew circles with one hand on the palm of the other, and said he was "squaring a model."

Philoprogenitiveness.—He rocked his chair and dandled an imaginary baby, and prattled. Tune conjoined, he sang "Little Jack Horner."

Caution .- He buttoned his pockets and coat.

Acquisitiveness.—He picked his mesmeriser's pocket of a paper.

Conscientiousness.—He restored the paper with contrition.

Firmness.—He sprang up and buttoned his coat, stamped on the floor, and with a most determined expression of features declared, "I'll stand here as long as I please, sir; therefore put that in your pocket, sir."

Imitation of the past. -He said, in evident mimicry, "I'll argufy the topic."

Benevolence.—He took a penny from his pocket and threw it down, as if to a beggar, and said, "Take that, buy some bread; I don't like to see such distress." Adhesiveness or friendship.—He clung to his mesmeriser with every silent expression of attachment.

Veneration.—He clasped his hands, "raised his head, and appeared to be in the act of adoration; and the expression of his features and attitude was beautiful, as hope was combined with veneration. To those were added language, on which he commenced a prayer; then tune, on which he sang a line or two of the psalm beginning "Great God! from whom all blessings flow;" but his voice sank to a murmur, and his operator said that "the intensity of veneration overpowered language."

§ 424. Mr. Potchett, who informs us that "partly through conducting experiments, and partly through his standing in society," he has been able to make many converts, gives the following, amongst many other illustrations, the results of numerous experiments :—

Locality.—Preparing for commencing a journey, sometimes asking if it is likely to rain, snow, &c., "Oh! I am afraid I shall get a cold with my light shoes on ; but I must go," &c.

Near the front of Ideality.—Making a shirt, washing the floor, rolling cards, and numerous other employments suited to their respective occupations, with sometimes, "Oh! give me some work. I want something to do. Give me something to do," &c.

Near the back of Ideality.—Queen Catherine's defence, with great dignity, in the style of Mrs. Siddons; Juliet's soliloquy; Elvira's address to Pizarro; &c.

Causality.—Persons enter deeply into cause and effect in reference to trade, politics, religion, &c., if they are intelligent. "I wish I was a queen; I would make better trade." "By what means?" "That is difficult to determine."

§ 425. In one of Mr. Jones's cases the following mesmericophrenological facts were elicited :—The cerebral organs were excited by being touched at different parts with the point of a black-lead pencil.

Alimentiveness.—One portion touched, the patient wanted ale; another spot, porter; a third spot, water; a fourth spot, wine.

Philoprogenitiveness and Individuality.—The *lowest* portion of individuality being touched, he would like his child to be called "some common name; let it be Jack or Tom." The *highest* portion being next excited, he said "No; he must have a big name; a respectable, long name."

Locality.—Lower portion gave the desire to travel through flat lands; higher portion, through a mountainous country.

Order.—On the *left* side; *lower* portion made the patient think his trousers *shabby* on the *left* side; *higher* portion touched, he thought them *quite smart*.

Form .- In different parts, gives a preference for a round form,

a square form, a three-square one, a long-square one, a short-square one, &c.

§ 426. Mr. Stenson discovers that, by exciting with a pencil different portions of the organ of colour, the patient sees the different colours of the prismatic spectrum one by one, exactly as they are placed in the spectrum. Different portions of form give the idea of circles, triangles, and squares, according to the spot excited.

 \S 427. On veneration and language being excited together in a deaf-and-dumb patient, he knelt down and repeated the Lord's prayer with the fingers. (!)

§ 425. "By touching the hand of a highly susceptible patient at various points, we produced manifestations of benevolence, acquisitiveness, &c., &c., quite as strong as those induced by any other means."—Spencer Hall.

§ 429. Dr. Buchanan, in impressible subjects, excites the cerebral organs without any previous mesmerisation. He finds that he can either strengthen or weaken the sight, accelerate or arrest peristaltic action, quicken or retard the pulse, and increase or diminish muscular energy, by exciting particular portions of the brain.

 δ 430. Mr. Braid for a long time tried in vain to produce phrenological manifestations during the hypnotic state, but once succeeding, no difficulty seems afterwards to have occurred. He found, moreover, that pressure over parts which had no cerebral substance directly subjacent was followed by special manifestations. Over the root of the nose, pressure excited immoderate laughter; over the chin, caused a catch in the breathing, sobbing, and sighing. "By touching both nose and chin at the same time. there was the most ludicrous combination of laughing and crying, each struggling for the mastery." Pressure over time caused a desire to write ; between time and wit, a desire to be judicious; between wit and causality, to be clever, &c. Pressure against the upper edge of the orbit, care being taken not to press against the globe of the eye, caused spectra of a bright glowing, or cheerful description; on the lower margin of the orbit, spectra of a painful or distressing character. In this patient, pressure alone would excite; in the next, pressure had no effect, friction alone would excite the organs. Here friction over the nose excited the desire for something to smell ; over the chin for something to eat. In another patient, friction over time excited the desire to waltz; over wit, the desire to walk; over veneration, to sing. In another, when benevolence was excited, the patient expressed a wish to travel. Friendship and adhesiveness being excited on one side, and destructiveness on the other, the patient with one arm and hand shielded her friend, and with the other struck a blow at an imaginary adversary. § 286.—Braid.

§ 431. The following are a few of the more remarkable new cerebral organs for which phrenology is indebted to modern mesmerism. Three pairs of organs of marvellousness; one pair, of faith ; one, of human credence-all very necessary to the science ; one pair, for ancient events; one, for recent events; one, for seeing old places; one, for seeing new places; method; regularity; filial love; love of pets, as distinguished from philoprogenitiveness; calorification; frigorification; industry; aquativeness (swimming?); sarcasm; suspicion; generalization; invention ; organs relating to architecture ; waterfalls ; meteors ; statuary; caverns; the heavens; the earth; stones; the ocean; landscapes; the sense of the beautiful; confidence; adoration; obedience; velocity; riding; walking; climbing; descending; sailing; ærostation; evolution; convolution; writing; drawing; cogitativeness; tragedy; comedy; loquarity; excavativeness; mendicity; weeping; laughter; diving; pulling; pushing; lifting; dropping; leverage; retrogressive motion; shooting; spearing; crouching; springing; striking; slinging; prevision; insanity; childishness; manliness; patriotism; somnolence; disease; health; buffoonery; sight; intoxication; murder; suicide; baseness, or licentious intrigue; felony; mortality; immortality; sublimity; desire to wander; falsehood; antipathy; and desire to get married. In confirmation of the existence of each of these organs, with many more such, "facts" are to be found in the Phreno-Magnet and Magnet.

§ 432. Instinct of time. "The appreciation of time displayed by persons in the mesmeric state is remarkable." Anna M—— did not know the time when her mesmesisation commenced; but when in her sleepwaking state, on being asked the hour, says it is ten o'clock: "the cathedral bell strikes ten five seconds after." . . . "I used to remark that, when this sleepwaker was asked the time, she did not reply so correctly as above; but when, as was often the case, she spontaneously called out the hour, she never erred. The least degree of effort, on her part, seemed to spoil the instinct.—Townshend."

§ 433. Instinct of remedies. Mr. Townshend gives three cases to illustrate this power. 1. A poultice is prescribed for a sore throat; 2. A blister for a pain in the side; 3. A course of waters, and baths, and particular diet for hypochondriasis. In the last case, the prescriber was also the patient. These mesmeric prescriptions were all serviceable.

EFFECTS OF MESMERISM AS A REMEDIAL AGENT.

§ 434. Amongst the diseases which are reported to have been cured by mesmerism, occur the following :--Obstinate hernia; bronchocele, of eleven years standing; stammering, of seventeen years duration.-Phreno-Magnet. § 435. Asphyxia in an infant; various kinds of palsy; chlorosis; occult cancer; gout; sciatica; headaches; rheumatism, convulsions; epilepsy; madness; fistulæ and ulcers; chronic deafness.

§ 436. In the last case of deafness, which is given as the most complete and conclusive, the degree of amendment was—even according to the report—equivocal, and a wetting is said to have brought on " a *new* (2) loss of hearing."

§ 437. Teste arrives at the following conclusions :--

"1. That magnetism succeeds chiefly in asthenic diseases —that is, in those whose predominant character is a general debility, such as chlorosis, amenorrhæa in consequence of anæmia, scrofula, commencing phthisis, mesenteric disease, white swelling, ædema, passive dropsies.

- "2. In all the neuroses, such as epilepsy, chorea, hysteria, hemicrania, convulsions, spasms, &c.
- " 3. In partial neuralgiæ, as sciatica, &c.
- "4. In changes of the fluids, accompanied or not by abnormal productions, such as rheumatism, gout, &c.— *Teste*.

§ 438. In a chronic case, Dr. Elliotson has known it necessary to practise mesmerism for two years. He records the following cures by means of mesmerism :—

Insanity; four cases—viz.

- 1. Periodical and furious delirium supervening on repeated attacks of rheumatism affecting the head. Time, about nine months.
- 2. Low, muttering, moody delirium, following violent delirium. Time, less than a month.
- 3. Melancholy and nervousness. Time, three weeks.
- 4. Distraction, and tendency to injure herself—(she had, at one time, to take ten and a half grains of muriate of morphia every six hours, for a day or two, before she slept.) (!) Time, nearly two months.

§ 430. Eight cases of St. Vitus's dance are next narrated. In some the mesmerisation was only once performed; in most, frequently repeated. None of the usual more striking mesmeric effects were produced, but all the cases were cured.

§ 440. Palsy.

- Incomplete paraplegia of lower extremities, chorea, marked debility, in a girl aged twelve. Time, four months.
- 2. Palsy, with epilepsy, sore head, and costiveness, in a youth, aged thirteen. Time, three months.
- 3. Intermittent palsy. A woman, aged thirty-three, had been affected with palsy (of motion) of the right side for five years. The palsy was intermittent, commencing

during sleep, "with a severe fit and pain in the head," and usually lasted for five days out of every week. The headache and tenderness of the spine were for a time augmented. Time of cure, between two and three months.

- 4. Palsy of left arm, both legs and neck, with exquisite tenderness of the neck, in a girl, aged twelve. Time, three months.
- 5. Loss of voice in a lady, aged thirty. Time, a week. (She was chlorotic, and over chlorosis Dr. Elliotson considers that mesmerism has no control.) (§ 437.)

§ 441. Deafness and dumbness.—Thomas Russen, aged fifteen, attack brought on by fright. Time, seven weeks. (§159.)

§ 442. Epilepsy in a gentleman, aged sixteen. Time, five months. Epileptic hysteria, with lockjaw and contraction of one leg, in a woman, aged twenty-five. Time, four months. Most violent hysterical convulsions, and delirium, with paroxysms of ecstasy and sleepwaking, &c., in a girl, aged sixteen. Fits cured in four months; sleepwaking in two years and a half, but mesmerism omitted during much of the time. Extraordinary fits of jumping and clapping of hands for several weeks, every spring and autumn ; patient conscious during the attack. The woman was mesmerised, when the attacks came on, for a year and a half. Hysterical epilepsy in a lady, aged She predicted the time of cure, which occurred in sixteen. four months. Epilepsy in a youth, aged nineteen. Time, four months. Epilepsy in a young woman, aged sixteen. Benefited very soon, but the mesmerism discontinued, and fits returned in three weeks; "has been mesmerised, more or less, ever since April, 1842, and has now (July, 1844) been perfectly free from her disease for nearly a year and a half."

§ 443. Intense hiccup, much benefited in a month, but mesmerisation continued subsequently. One day she sprained and bruised her ankle, but after being mesmerised her ankle was perfectly free from pain for ten minutes, and afterwards none the worse; and on taking off her stocking at night, the discoloration had vanished.—Elliotson.

§ 444. Delirium from grief (more like intoxication) cured in a few hours; sleep induced. Pains of legs and loins removed in a few minutes without sleep. Chronic rheumatism, of seven weeks standing, cured in *three hours*. Sciatica, of some months standing, cured by five mesmerisations. Nervous contraction of the arm, of several years standing, cured. Enlargement of the parotid glands in three sittings. Incipient toosillitis, by six mesmerisations. A knee, "painful, red, and swollen," by one; redness and pain both disappeared during the mesmerisation. Rheumatism, in thirty-four days. Acute rheumatism in a little boy, in eighteen days. Lumbago, in two sittings. Chlorisis, in about seven weeks, (turpentine enemata &c. were used at first, and iron subsequently, yet of course it was the mesmerising that cured 'her !) Tic douloureux, in about a month. Nervous affection of the breast, from suckling, in a month. Headache, instantly. Inflammation of the knee from an injury, at two mesmerisations. Inflamed eyelids, at two sittings. Melancholy, in eight days. Hour-glass contraction, removal of placenta; woman unconscious, being in the mesmerised state. She had been mesmerised before.—Mr. Tubbs, surgeon; in the Zoist.

§ 445. Affection of the heart, of eleven years standing. Affection of the nervous system, and general debility of twelve months standing; hysteric fits; violent pain on left side, and general weakness; rheumatic pains; nervous affection of three years standing; melancholy of twelve months standing; case of apparent consumption; deafness of two years standing; and a case of wound of the leg.—Mr. Brindley, a professional mesmeriser, not a medical man; in the Zoist.

§ 446. Nervous affection, with tendency to fainting, and epilepsy.—*Earl Stanhope*.

§ 447. Loss of voice in a lady.-Captain Anderson.

 \S 448. Toothache; headache; rheumatic pains; "and pains occasioned by contusions, burns, and any inflammation." Disease of the knee and severe rheumatic fever.—*Mr. Thompson*, not medical.

§ 449. Palpitations of the heart, pains in the head, and disease of one kidney.—Mr. Baldock, store-receiver.

 δ 450. Mr. Braid considers that hypnotism will rapidly cure many functional disorders most intractable, or altogether incurable by ordinary remedies, and also many nervous complaints. He narrates seven cases of weakness of sight improved; a case of opacity over more than half the cornea cured ; three cases of congenital deafness and dumbness benefited, one in which the patient was made to "hear, speak, and sing." "I have scarcely met with a case of congenital deaf mute," says Mr. Braid, "where I have not succeeded in making the patient hear in some degree." The next is the case of a man being made able to sing in tune who could not do so before; a case of loss of smell cured ; three cases of tic douloureux cured ; fourteen cases of partial palsy ameliorated or cured, (including cases in which there was an apoplectic tendency.) Eight cases of chronic rheumatism cured ; two of acute rheumatism ; the first case cured by hypnotism and vinum colchici; the second, by hypnotism and appropriate remedies. Two cases of irregular muscular action ; one of contraction of the muscles of the lower extremity; five of nervous headache; two of spinal irritation; four of epilepsy; one of lateral spinal curvature; three of pain in the heart and palpitation; one of palpitation, dyspnœa,

dropsy, and leucorrhœa, cured. One case of valvular disease of the heart relieved. One of inveterate eczema and impetigo, with nervousness, cured in a few days. (!) One of impetigo cured in a week. Three cases of "permanent contraction, or tonic spasm" of different parts, cured.

EFFECTS OF MESMERISM ON BRUTES.

§ 451. The animals magnetised by Dr. Wilson were cats, dogs, goats, pigs, horses, calves, a lioness, leopards, and elephants; turkeys, geese, ducks, fowls, and macaws; a dozen small fish—roach, dace, gudgeons, and loach. The magnetic operation consisted in making passes with the hands.

 δ 452. The time required to induce sleep was very variable. With cats and dogs, the shortest time mentioned is five minutes, usually ten minutes or a guarter of an hour, occasionally an hour. If the animal was sleepy beforehand, the passes took effect almost immediately, (dog Vick, p. 20;) if excited and quarrelsome, the time required was longer than usual, (cat Fuzzy, p. 20;) whilst at large, the dog Vick and cat Fuzzy, "both of which had generally before been very-soon affected, resisted the passes for about an hour," but on being both put together under a gauze dish-cover, they were very soon sent to sleep. When chained, the dog Mungo only yawned and looked stupid, and snatched at the operator's hand several times, "but net viciously." On being put under a cage, during the passes, Mungo yawned twice, fell asleep in half an hour, and continued sleeping for an hour. With the pigs, an hour and three-quarters, with the goat, half an hour, were required.

§ 453. The effects produced on cats and dogs were, sleep in almost every instance; convulsive twitchings during the sleep in six dogs; plaintive whining and moaning, as if from dreaming, in three. The immediate effects during the passes, before sleep ensued, were, in dogs, restlessness, playfulness, yawning, stretching, and in four, trembling. In a little red spaniel, twitching convulsive motions of the neck, fore and hind legs, "followed in succession as the passes were made from the head over all the body, and when the operator ceased moving his hand, and held it steadily at a short distance from it, (the dog,) the trembling of its head and limbs became general. At intervals its eyes closed, and it seemed to be asleep; still the passes convulsed its limbs, but less strongly."

§ 454. In cats, furiousness, irritability, quarrelsomeness, and in one, constant licking of the body, ensued. The goat was put to sleep, but "only slightly." In the horse : yawning, heaviness of the eyes, twinkling of the eyelids at first, but eyes kept steadily open towards the last; licking of the hind leg. In the calf; restlessness, deep, lengthened breathing, and rubbing of the head against the legs of the operator. In pigs: plaintive, shrill squeaking, sweating about the ears and neck, and in patches over the body, " and the other excretions were also as much affected, and at each pass, spasmodic convulsions of the ear, snout, and the whole body, were strongly developed." The lioness stopped eating, and grasped the joint between her jaws, and retained it in her mouth, without once relaxing her hold, for full twenty minutes; she ceased growling, and her eyes closed at times for short intervals. On leopards, no effects were produced. The elephants appeared fidgetty, restless, and angry. On one occasion, an elephant was sent to sleep in five minutes, though previous attempts, continued for an hour, had only made him appear fidgetty and irritable.

§ 455. In ducks, the passes induced restlessness, struggling, and endeavours to escape; the wings "made convulsive twitchings as the hand moved over them." After magnetising the ducks for half an hour, "one or two became apparently drowsy, . . . one or two yawned at different times;" when acted upon for a longer time, "they all became very agitated," rubbing and biting themselves all over. In geese, tremors: "the neck quivered obedient to the passes." In turkeys, restlessness. In macaws, restlessness, making a great noise, and trembling all over. In fowls, (in a cage,) at first, noise and restlessness; the birds then fell asleep, were upright and motionless; then allowed the body to be touched and stroked without moving, and by degrees, awoke. "It was about their roosting time."

§ 456. Fish.—Passes induced them to come to the top of the water, and put their noses out. After stroking the back of one, and then placing the finger against its mouth, "it followed the finger, as it described a circle, round and round for at least a dozen times."*—Dr. Wilson.

§ 457. As it would be rather difficult to persuade brutes to intentionally deceive by presenting mesmeric phenomena merely to please their mesmeriser, facts elicited from experiments upon them are least exceptionable. But what single instance of undoubted magnetic action have we in all this? That the constant repetition of passes should be viewed by an animal with perfect unconcern was scarcely to be expected. Ignorant of the intention of the operator, the animal would feel amusement, alarm, or anger, according to the degree of intelligence, its domestication, its disposition, and its habits. Foiled in its attempt to avoid the passes, it would become enraged and

^{* &}quot;It happened to me one day," says Teste, "to magnetise a cat for an entire hour. I sweated large drops of sweat at it; but at length I fancied that I had succeeded, when the noise of a dish suddenly dissipated my illusion, by making the villanous beast, who feigned to be asleep on them, fly from off my knees."

furious, or terrified and trembling; or, tired of attending to processes it could not comprehend, it would at length seek in repose the escape denied to its efforts. There is not an effect stated by Dr. Wilson to have been caused by the magnetising that we do not find equally occasioned in animals in a variety of ways. Thus, if a cat or dog be placed on the hearth-rug before a warm fire, and spoken to coaxingly, it will probably in a short time fall asleep. Tickle a cat behind the ears, and the same result will follow. That the sleep induced by Dr. Wilson was nothing but common sleep is very evident ; its duration was usually short, and frequently the slightest cause was sufficient to awaken. A tom-cat that had been often magnetised, after receiving the passes might be pulled about, lifted up by the nape of the neck, and have its ears tickled with a pen, and would remain motionless the while: "the cat was then said to be in a state of . catalepsy." Any tame cat, when teased, either becomes savage and excited, or-what is quite as common, if experience has told it that there is no escape-stupid, motionless, and, to all appearance, half-dead. The animals in which convulsive twitchings occurred, judging from the general description, were suffering from fear. Frighten a horse, and it will sweat; a cat, and other excretions than the perspiratory will be excited. Anything that is quite strange to an animal, that it cannot understand, especially if, at the same time, its natural mode of shewing displeasure and resistance prove of no avail, will produce alarm. And what can we imagine more mysterious to a dog, a horse, or a pig, or more affronting to a leopard, a lion, or an elephant, than for a dignified man gravely to paw the air before it for an hour or more? The beast would think it meant as a solemn mockery. For a dog to convulsively twitch in his sleep is very common, and such an occurrence would be more likely to happen during the somewhat disordered state of the nervous system attending sleep induced under unusual circumstances. There is no uniformity in the effects produced. Some of the animals appeared to like the passes, others disliked them; some were soothed and calmed, others irritated and excited; some were rendered playful, others alarmed. Nor is there less discrepancy in the results of different performances of the same kind of experiment by the same operator upon the same animal. On two out of four attempts, some of the fish appeared to a certain extent affected; but it is to be remarked that the fish which followed the finger of the mesmeriser had been gently stroked along the back, and seems to have followed the movement of the finger as if for the purpose of keeping its body in contact with it, rather than on any other account. That gentle stroking gives an agreeable sensation to certain, if not to all, fish, has long been practically known to the trout-tickler.

HISTORY OF MESMERISM.

The most curious effect of Dr. Wilson's mesmerising is that on the puppy, *twelve hours' old*, which, during the passes, opened its eyes and saw!

THEORIES OF THE ANIMAL MAGNETISTS.

§ 458. These are all modifications of two principal speculations, analogous to the two theories of light-the theory of emanation, and that of undulatory ether. The broad principles of both are clearly stated in the works of the alchemists. Pomponatius asserts that, by the force of his will, a man may give out an emanation from himself, and so direct it as to affect his fellow men, and even the very elements. He considers that this magnetic force proceeds from the action of the mind upon the blood and the spirits. Van Helmont is equally explicit in his description of what he termed the "magnale magnum," an ethereal fluid pervading all space, and permeating all bodies; capable, when set in motion by the will, of acting with great energy and at great distances. He seems to refer physical attraction to the occult influence of this magnetic agency, and believes that the power of setting the magnetic medium in action may be communicated by man to inanimate bodies.

§ 459. Mesmer adopted the latter of these theories, with such slight variation as served to invest his doctrines with the appearance of originality. He at first considered the universal fluid to be electricity, but afterwards renounced that opinion. In the following twenty-seven propositions, he has left us a condensed summary of his extravagant and visionary doctrines. (Dated 1779.)

1. There exists a natural influence between celestial bodies, the earth, and living beings.

2. A fluid universally diffused and filling every void, rare beyond all comparison, and in its nature fitted to receive, propagate, and communicate all the impulsions of motion, is the medium of that influence.

3. This reciprocal action is obedient to certain mechanical laws at present unknown.

4. There results from this action certain alternate effects, which may be considered as a flux and reflux.

5. This flux and reflux are more or less general, more or less particular, more or less compourd, according to the nature of the causes which determine them.

6. It is by this operation (the most universal that we see in nature) that the celestial bodies, the earth and their constituent parts, mutually affect each other.

7. The properties of matter and of organized bodies depend upon this operation.

8. The animal body experiences the alternative effects of

this agent, and it is by insinuating itself into the substance of the nerves that it immediately affects them.

9. There are manifested, particularly in the human body, certain properties analagous to those of the magnet; there may be distinguished certain poles equally different and opposite, which may be connected together, changed, destroyed, and reenforced. The phenomenon of *inclination* is to be observed.

10. The property of the animal body which renders it susceptible of the influence of celestial bodies, and of a reciprocal action with those which surround it, manifested by its anology with the magnet, was the reason for naming it Animal Magnetism.

11. The action and the virtue of animal magnetism thus characterized, may be communicated to other animate and inanimate bodies; the one and the other, however, being more or less susceptible.

12. This action and this virtue can be re-enforced and propagated by the same body.

13. We observe, by experience, the efflux of a matter, of which the subtility penetrates all bodies, apparently without loss of its activity.

14. Its action extends to a great distance, without assistance from any intermediate object.

15. It is augmented and reflected by mirrors, like light.

16. It is communicated, propagated, and augmented, by sound.

17. This magnetic virtue can be accumulated, concentrated, and transported.

18. Animated bodies are not *equally* susceptible; and there are some, though rare, which have a property so opposite that their presence destroys all the effects of magnetism in other bodies.

19. This opposite virtue likewise penetrates all bodies; it can equally be communicated, propagated, accumulated, concentrated, transported; reflected by mirrors and propagated by sound: This constitutes not merely a negative, but a *positive and opposite power*.

20. The magnet, whether natural or artificial, is likewise, with other bodies, susceptible of animal magnetism, and also of the opposite power, without, in either case, undergoing any alteration in its action upon iron or the needle, which proves that the principle of animal *is essentially different* from that of mineral magnetism.

21. This system will furnish new elucidations of the nature of fire and of light, of the theory of attraction, of the flux and reflux of the magnet and of electricity.

22. It will explain that the magnet and electricity only have, with respect to diseases, properties common to many other agents

in nature, and if some useful effects have resulted from their employment, these are due to animal magnetism.

23. We see from facts that this principle, employed according to certain established practical rules, can cure diseases of the nerves immediately, and others mediately.

24. With its aid the physician is enlightened as to the use of remedies; he assists their action, and excites and directs salutary crises, so as to render them under his command.

25. In communicating my method, I will shew, by a new theory of diseases, the universal utility of the principle which I oppose to them.

26. With this knowledge, the physician will judge with certainty as to the origin, the nature, and the progress of diseases, even the most complicated; he will prevent their increase, and arrive at a cure without ever exposing the patient to dangerous or disagreeable consequences, such as occur from age, temperament, and sex. Females, even during pregnancy and childbirth, possess the same advantage.

27. Finally, this doctrine places the physician in a state to judge correctly of the degree of health of each individual, and to preserve him from the diseases to which he may be exposed : the art of healing will thus arrive at its utmost perfection.*

§ 460. The German animal magnetists, who agree in the existence of the universal medium, differ as to the relative importance of the earth and celestial bodies in regulating its operations. Whilst others, retaining the theory of influence, consider that the magnetic force is in reality the nervous energy, or fluid, thrown off from its original possessor in obedience to certain acts of volition alone, or of volition and muscular action combined; transmitted through space, and taken in by, and producing especial effects upon, any animated being duly prepared for its reception.

§ 461. Others, again, revivifying the old doctrine of the great soul of nature, † admit the ethereal agent as not only the

* Historie Academique, p. 15. † "The Anima Mundi is the fountain or seat of all second causes, being as it were the eye of God, or medium between God and all created things." -[Sibly's Key to the Occult Sciences. "Now seeing that the soul is the essential form, intelligible and incor-

ruptible, and is the first mover of the body, and is moved of itself, but that the body, or matter, is of itself unable and unfit for motion, and does very much degenerate from the soul, it appears that there is need of a more excellent medium. Now such a medium is conceived to be the spirit of the world, or that which some call a quintessence, because it is not from the four elements, but a certain first thing, having its being above and beside them. There is, therefore, such a kind of medium required to be by which celestial souls may be joined to gross bodies, and bestow upon them wonderful gifts. This spirit is, in the same manner, in the body of the world, as our spirit is in our bodies ; for as the powers of our soul are communicated to the members of the body by the medium of medium of conveying magnetic motion, but consider that it constitutes, when in the living body, the medium of connection between soul and body; the agency through which the former acts upon the latter, and upon external objects.

§ 462. In accordance with this view, clairvoyance is explained by supposing the patient to have an excess of magnetic fluid, "whose subtility, traversing the sides of the cranium, irradiates the surrounding objects, and occasions the wonderful phenomena of lucidity. . . . On awakening, the somnambulist remembers nothing, because every thing has taken place out of his brain, since we have seen that the fluid goes in search of the objects."*

§ 463. Exaltation of intellect and intuition, during magnetic sleepwaking, are referred to the greater elevation and perspicacity of the soul when divested of the body, which is "rather an hindrance to it." "When the soul is separated from the body, it is wherever it thinks to be; for as space is only its mode of thinking, but does not exist except in idea, it is always at the place which it represents to itself, if it may be there."—Jung-Stilling.

§ 464. Prevision too. "Time being also, in fact, a mere mode of thinking, and not *existing in reality*, the departed soul may be susceptible of future things."[†]

§ 465. The usual, almost universal, mode of framing a mesmeric theory, appears to have been to imagine some favourite explanation, or rather, supposed explanation, and then very philosophically to test this by experiment. Experiments *never fail* to substantiate the previous conception. How can they, when the *will of the theorist* is the main spring of the

of the spirit; so also the virtue of the soul of the world is diffused, throughout all things, by the medium of the universal spirit; for there is nothing to be found in the whole world that hath not a spark of the virtue thereof. Now this spirit is received into things more or less, by the rays of the stars, so far as things are disposed, or made fit recipients of it. By this spirit, therefore, every occult property is conveyed into herbs, stones, metals, and animals, through the sun, moon, planets, and through stars higher that the planets."--[The Magus, or Celestial Intelligencer.

* Colquhoun, in Isis Revelata.

† Jung-stilling, quoted in ibid. This style of explanation of a puzzling subject is rather ancient. The following is a specimen from another source :-- "The poison of the plague is subdued by the poison of the toad, not by an action primarily destructive, but by a secondary action; as the pestilent idea of hared or terror extinguishes the ferment, by whose mediation the poison of the plague is the product of the image of the terrified archeus established in a fermental, putrified odour and mumial air, this coupling ferments the appropriate mean, and ismdediately the subject of the poison is taken away. Therefore the opposition of the plague."—[The Magus, or Celestial Intelligencer. Very clear and asinfactory !

phenomena he elicits, both according to mesmerism, and, according to common sense, if it be not paradoxical to refer anything at the same time to principles so opposite? Having obtained the facts, mere induction is alone required to establish the inference. We have thus rationales and so-styled theories as numerous as the mesmeric "facts" upon which they are based, quite as contradictory, and almost as absurd.

§466. For example, one correspondent of the "Phreno-Magnet" believes that the mesmeriser *abstracts from*, instead of *adding to*, the normal amount of magnetic fluid possessed by his patient. (§ 174.) It is superfluous to remark that *his* experiments prove the correctness of this view. Another is of opinion that we are forced by the facts of mesmero-phrenology to adopt one of these three suppositions—" That the cerebral organs are on the *outside* of the skull, or that there is a nervous connexion between the outside of the head and the corresponding part within, *directly* through the skull, or that there is a subtle fluid diffused through the whole substance of the encephalon, subject to laws similar to those of other fluids."

§ 467. Mr. Townshend enters very fully into the question of the mesmeric medium, and, unlike the majority, condescends to argue according to the rules of ordinary reasoning. His work is remarkable for the correctness of the general principles of philosophy laid down, and for the attempt —the only one—to account for mesmeric phenomena in accordance with them.* His inferences, from his own experiments, may be condensed into the following aphorisms:—

1. There exists throughout nature a pervading medium, elastic and vibratory, which may or may not be, under different modifications, the source of the phenomena of the imponderable agents generally, and possibly is, in reality, electricity.

2. This ether permeates the brain in common with all other matter.

3. Every thought moves the brain in its own appropriate manner, or, to suit the phrenologist, every thought proceeds from a certain special movement of cerebral matter.

4. This mental motion gives an impulse to the mesmeric ether with in the brain, which is communicated to the mesmeric ether external to the body of the person originating it.

5. Mesmerised persons, having their susceptibility extremely exalted, are cognisant of the motions of this mesmeric medium, though in their ordinary state, they would not be affected by them.

6. Every thought having its special cerebral movement, the motions created by the thoughts of other persons being trans-

* The only attempt by a mesmerist. Mr. Catlow does not come under that head.

ferred through the brain and through the mesmeric medium to the sensorium of a mesmerised person, are to him intelligible signs of thought; a language which, though new to him at first, he, by a gradual process of association, gives meaning to and learns to comprehend.

7. The nervous agency, or medium of sensation and motion, is identical with this mesmeric medium.

8. Sensation is fundamentally an internal process of the mind, to the production of which the *organs* of the senses are not essential; similar ultimate motions of the nerves, however produced, being above requisite to excite similar sensations.

9. The mind can obtain information in two ways,—passively, as when it receives notice of what is going on through the senses in the ordinary way; actively where it takes notice through any of the nerves in the mesmeric way. In the latter case, "the common process of sensation seems reversed; for the nerve appears to conduct the sentient power to the superficies, where it takes, as it were, the information it seeks, instead of, as usual, conducting the impulsion to the brain."

§ 468. In support of these opinions, we find, amongst other assertions, the following :—We gain no perception of form or distance by the eye. We learn from it absolutely no more than relates to light and colour. The picture on the retina is not essential to vision. Motion of the optic nerve is alone essential, and there may still be that during the mesmeric slumber, when a picture on the retina is impossible.

§ 469. Magendie's experiments, shewing that integrity of the fifth nerve is essential to sight, hearing, and smell, tend to prove that these several senses are not necessarily dependent for their manifestation on their respective organs of sense.

§ 470. The conduction of sound "by another way than through the external ear"—viz., through the mouth, when the ears are stopped up—is a proof that correct information may be conveyed to the mind otherwise than by the usual inlets of sense.

§ 471. The two Okeys, during their mesmeric sleepwaking, were able to attend to all that was passing on every side of them, and yet experienced nothing from a galvanic shock, which produced "a very severe effect on Sir William Molesworth and others," *proving* (!) that there was *no conduction* towards the brain but only *from it*; or, "in other words, they were able to use their nervous system actively, while incapable of being influenced by it passively."

§ 472. Mr. Braid considers that all the phenomena of hypnotism are produced, irrespective of any external agency, by the patient himself willing by an act of volition to fix his "mental and visual eye" according to certain rules laid down. That the somnolency thus induced differs altogether from natural sleep. That much of the excitement, and many of the phenomena developed, are "attributable to the altered state of the circulation in the brain and spinal cord, and especially to the greater determination of blood to them, and all other parts not compressed by rigid muscles, arising from the difficulty, during the cataleptiform state, of the blood being propelled, in due proportion, through the rigid extremities." He conjectures that the tonic contractility of muscle depends on the ganglionic system, which is also inordinately stimulated under the hypnotic state, its force becoming "predominant, instead of being as in the ordinary condition, only subordinate."

§ 473. Mr. Catlow contends that the somnolency from mesmeric or hypnotic operations, of what kind soever, is only common sleep, modified by the circumstances under which it is artificially induced. All his experiments, he states, "tend to shew that all that is necessary to induce sleep is the complete isolation of the attention; and that this is a voluntary act, though different individuals are, in various degrees, disposed to it, variously able to accomplish it, and some, nay all, in some circumstances, entirely unable to avoid it." To produce the mesmeric sleep, there needs no sensation at all, but simply the concentration of the mind. "The result is not necessarily dependent upon the imagination, but on the isolation of mind upon a single idea; and this is the element of every experiment, however varied."

δ 474. Mr. Catlow finds that during spontaneous natural sleep, as well as during that artificially induced, the mind may be caused to act in correspondence with certain suggestions, without awaking the person - in other words, whilst the person is still unconscious of what is passing around him: that, after having associated a certain impression with a certain mental act, the act will afterwards follow whenever the impression is repeated. "Touch the conventional locality of one of the cerebral organs, or any other part of the head or body, and whisper a suggestion of the dream or action that is to be excited. Having thus excited one dream or action, excite others in succession, continuing, while whispering, to touch the part selected for each association. The patient may thus, with more or less facility, varying from the instantaneous influence of a single word to the necessity of repeated gentle persuasion, be made to kneel down, repeat the Lord's prayer, or any other known or suggested form of words, shake hands, fight, or do anything that is congenial to his habits and feelings in the waking state, and to his actual position and susceptibility while asleep.

§ 475. On this principle, all the wonders of phreno-magnetism are accounted for. By suggesting, during the waking condition, by means of writing on the phrenological bust which the patient studied, Mr. Catlow mesmerically proved that the organ of alimentiveness consisted of five subordinate organs—viz., eating, drinking, smoking, snuffing, and chewing.

GENERAL REMARKS.

 \S 476. The first duty of one who attempts to review a subject put forth as scientific, is, to examine it as a whole; to ascertain the genuineness of its facts; to estimate their value; and to consider whether the conclusions arrived at are clearly and justly deducible from the premises laid down.

 δ 477. Amongst the general remarks which the mesmerists unsparingly scatter in support of their doctrines, a few only require notice. Sceptics in mesmerism are accused of not yielding to evidence. There is evidence in plenty; but of what kind? If the facts were devoid of all that could excite suspicion and maintain doubt, presented so frequently as to become familiar, invested with the uniformity of nature's facts, and, like these, in perfect unison with each other, we should no longer consider them incredible, or hard to be understood. Reason finds no difficulty in admitting what it is satisfied cannot justly be called in question. Let us have facts that cannot by possibility be spurious, that cannot be referred to the action of any previously known influence, or, if they can, requiring a new mode of action of that influence, and, whatever their strangeness, we are bound to believe them, and must either admit the existence of a new agent, or grant additional power to an old one.

 δ 478. The most superficial observer cannot fail to be struck with the harmony of nature, and the uniformity of its actions. When a new discovery not merely fails to accord, but absolutely clashes, with old and established facts, there is a strong presumption of an error in observation. That presumption amounts to certainty, if, on every successive trial, a different result is obtained. Facts cannot contradict facts. No new fact is ever found to oppose an old one, and the complete agreement of every real discovery with all that was fully established before, is a characteristic of truth as indisputable, and evidence of design as striking, as the exact adaptation of means to ends. The perfect and undeviating uniformity of nature's operations is the sole foundation of all knowledge. But for this, analogy could be no guide, experience yield no instruction, and reasoning end only in doubt and uncertainty. To ensure perfect similarity of all the circumstances in any case, we must necessarily possess a thorough knowledge of them. The impossibility of obtaining this complete acquaintance with all the circumstances which may modify the actions of a living being, is the great source of the uncertain and inexact conclusions with which physiologists are obliged, on many points, to rest satisfied. But this uncertainty has its limits : water seldom kills; prussic acid seldom fails to do so, whatever the constitution.

§ 479. Most of the mesmeric facts not only do not accord with, but they directly contravene, other and well-proved facts. If they be true, our previously gained knowledge must be false. Hence they have none of the characteristic harmony. Mesmeric experiments, performed under circumstances so similar, that if the effects were the result of a physical agent acting, as it must, according to fixed and immutable laws, they could not materially differ, are found to lead to any and every imaginable result. We do not find that heat, light, or electricity, *cæteris paribus*, will excite convulsions at one time; produce deep sleep, with insensibility, at another; with insensibility of some, and greatly heightened sensibility of other parts, at a third; with transposition of a function from its appropriate organ, to another totally different, at a fourth. Mesmeric facts have no uniformity.

§ 480. Nature does not withhold her facts until man wants them to support some favourite theory. In the hands of Mesmer, the mesmeric influence produces excitement and convulsions; in those of Puysegur, sleep and somnambulism. Touching the head during this somnambulism elicits no cerebral manifestation (*vide* note to § 41) until the science of phrenomagnetism is discovered; when lo! nature, improved by education, with more than her usual bounty rewards every fresh inquirer by disclosing a new cerebral organ.

\$ 481. It is constantly asserted, on the discovery of imposture, or the occurrence of failure in a mesmeric experiment, that a thousand negative instances can detract nothing from the force of a single positive one. But are these cases of failure mere negative facts? It is true that they afford nothing to substantiate the views of the mesmerists, but in proving that the marvels of mesmerism may be feigned, and that in the majority of cases, when minutely and cautiously investigated, they have been found to be so, they are sufficiently positive. What should we think of a professor of legerdemain, who, on every expression of doubt of his deceptions being in reality what they appeared, indignantly exclaimed against being charged with imposture again, and declared that all the tricks we could see through were but negative facts, and therefore ought not to diminish in the slightest degree our faith in the genuineness of those that were yet beyond our penetration !

§ 482. Again, a circumstance may be true to a certain extent, and, in so far, $bon\hat{a}$ fide a fact, and yet not to a sufficient extent to support the conclusions desired. Thus, a clairvoyant may reply to her mesmeriser alone, and pay no attention to bystanders. This proves that she can hear the one, but is no proof of her deafness to the others. She may betray no sign of hearing when a pistol is discharged close to her ear; but this does not prove that she cannot hear. That she appears to be deaf is a fact which no one can deny; that she really does not hear is only an inference, justifiable or not, according to circumstances. By the mesmerists, the facts and their own inferences are perpetually confounded. The sceptic who disputes the inference is accused of denying the fact; and as that, as far as it goes, is sometimes evident enough, his disbelief is unjustly deemed unreasonable.

 δ 483. We are told that we cannot set limits to the possible; that we have no right to disbelieve only because we cannot understand; and hence that the presumed impossibility of many of the alleged mesmeric facts, and the unintelligibility of more, are no reasons for doubting their genuineness. If we are to use the word impossibility at all, it must have a definite and limited meaning, and its conventional signification is simply to express the highest degree of improbability. It is not literally impossible that a stone should spontaneously ascend through the air and vanish in the sky, but as it never does so, and as its doing so would be contrary to all experience, and to the laws of gravity as exemplified in a thousand other instances. it is usual and quite convenient to designate such an occurrence an impossibility. And as to the intelligibility of things, explanation in reality is nothing more than a reference of the particular fact in question, to others more familiar from their commonness, and a pointing out of their mutual resemblance; in other words, the referring of individual instances to general laws. But how much after all explanation, do we actually comprehend? Facts, great, minute, numerous, and well-arranged, mutually supporting each other, and leading us, from analogy, to anticipate and seek for more, to conjecture what these may be, to ascertain what they are-facts are the sum and substance of all knowledge. For a fact to be unintelligible, therefore, is for a fact so to differ from all others with which we are acquainted as to be incapable of being classed with any of them. But let such facts be repeated until they become familiar, and let analogous facts, also, be constantly presented, and we cease to deem them incomprehensible; we trace out some general point in which they all agree, which is never absent; and by expressing this general fact, we gain a new law of nature. Thenceforth, to refer any of the series to this law is the explanation of it; but what, in truth, have we learned? Not really to understand anything more of the secret of the production of what at first so much excited our curiosity, but more of the facts themselves and of all their attendant circumstances. Theorists may blunder, observers may mistake, but facts cannot err. And it is and must be on the facts, and

not on their presumed explanation, however ridiculous that may be, that the disbeliever refuses his credence to mesmerism.

 δ 484. Still we cannot agree that "the strangeness and absolute novelty of facts, attested by more than one mind, is rather a presumption of their truth than the contrary, as there would be something more familiar in any devices or conceptions of men."* On the contrary, it is a humiliating truth that the majority will accept on testimony, and themselves attest, what they would hesitate to credit on observation, and believe at secondhand, marvels, in direct proportion as these oppose reason and outrage common sense. Every page in the annals of superstition exemplifies it; every successful imposture on a grand scale proves it; and that the proneness to easy faith in the strange and the new is not extinct in the present day, let homeopathy, the cold-water cure, galvanic rings, the Estaticas, Addoloratas, and Mary Jobsons, declare. When any means lead to a result which we did not anticipate, not only is our astonishment great in proportion to the confidence with which a different result was expected, but the credulous person is apt to admit easily in proportion to the extent of his astonishment.

§ 485. Common opinion is an earnest of truth only when the subject is of such general agreement is one which, in its nature, is open to very general observation.

§ 486. To disbelieve the statements of the mesmerists is, we are told, to suppose " a host of moral impossibilities, rather than admit a plain new fact." As if to question the accuracy of observation and soundness of judgment were the same thing as to impugn the veracity of a witness! But, under any view, wherein lies the moral impossibility? Artfulness and deception on the one hand, and credulity on the other, are not so rare that their co-existence in any given instance must be deemed a moral impossibility.

§ 487. "The far-fetched calumnies and offensive assumptions with which it is the regular practice of a large number of the faculty to assail every case of cure or relief by mesmerism, looked very much as if they were in conflict with powerful truth, and as if they knew it." The authoress of "How to Observe Men and Manners" does the faculty too much honour in assuming that a large number of its members have ever attempted to conflict with their cures; and to the few who form exceptions, the somewhat strong expressions above do not apply, and, perhaps, are merely intended as literary flourishes. Knowing the true value of cases published in a popular form, seeing no greater reason for implicitly believing one than another of the numberless vaunted infallible modes of cure, and convinced that to credit all would be tantamount to believing

* Miss Martineau's first letter.

statements diametrically opposite, medical men incredulously require more than mere assertion. Not content with the expressed conviction of this or that non-professional, they choose rather to incur the cutting satire of the hygeists and the mesmerists, than to forfeit all claim to be considered a reasoning profession. Equally absurd is the common taunt against medical men, that their opposition to animal magnetism is selfish and interested.* In the most degrading point of view, were all true that the magnetists affirm, it would obviously be to the advantage of the physician to adopt the practice, to exchange doubt for certainty, anxiety for unconcern.

 δ 488. It is argued, that we ought not to doubt assertions of facts, however marvellous, made by persons so respectable and so well-informed as are many who authenticate the wonders of mesmerism, and that what so many believe can hardly be devoid of truth. But the most egregious of all follies have been the follies of the wise ; and the most extreme of all fallacies have been the most generally believed. So far from the allegiance of the many being a surety for truth, it is often easier to deceive a multitude than a single shrewd observer by himself. Each-trusting to the foresight and penetration of those around-depends less upon himself, and, sympathizing with his fellows, usually manifests the feeling by which the rest are actuated. Hence, with the multitude, the contagious effect of mirth and sorrow, courage and fear; hence the power of eloquence to incite or restrain. For ages every one believed in witchcraft : who believes in it now ? Since modern chemistry has proved the impossibility of changing any one of the elementary bodies into another, do we consider alchemy less a delusion because formerly all acknowledged its truth? For centuries not a philosopher but wasted his life in vain search after the philosopher's stone : not a rich scoundrel who wished to account for his ill-gotten wealth, but asserted that he had discovered it; not a needy monarch or potentate, but when he could, caught and imprisoned any alchemist of celebrity, with the intention of exacting from his power of transmutation an enormous ransom. To witchcraft and alchemy might be added many other doctrines, each in its turn believed as extensively, supported as respectably, and influencing the minds of its followers as greatly, as animal magnetism; and each in its turn exposed, proved fallacious, and consigned for a time to oblivion. But if the respectability of its supporters ought not to do more than attract attention to a subject, the non-adherence of those best fitted and most likely to investigate carefully and judge correctly is always some argument against the probability of truth. Animal magnetism has now been long

* See Isis Revelata, passim.

enough before the public, has excited sufficient attention, to have made converts amongst the most scientific and profound. Yet, bearing as it does, according to its advocates, on physi-ology, medicine, and physics, we look in vain, amongst its adherents, for the best names in each of these branches of knowledge. Do we find Müller or Sharpey ; Herschel, Wheatstone or Faraday; Chambers, Watson, or Latham? There cannot be a more striking illustration of the occasional liability of a man of talent to permit his mind to go astray, than the circumstance, that the very men who will reject a religious doctrine which requires only a reasonable faith, are often the most eager to admit, and the most zealous to support, a pseudo-scientific theory on evidence which, if the subject were commonplace, they would be the first to condemn. The one is generally acknowledged-there would be no singularity in believing it; the other is not proved-there is notoriety in defending it; it is ridiculed-there is something of moral martyrdom in voluntarily sharing the same fate. A vain affectation of singularity, and a morbid love of notoriety, are influential agents on the conduct of their possessor, and will often make him cheat his reason to adopt what ministers to them.

§ 459. Since Galileo and Harvey met not only with contempt and ridicule, but persecution, for divulging truths, if one now introduce a doctrine only preposterous enough to excite ridicule, he at once concludes that he, for sooth, must be a Galileo or a Harvey! Alike contemned, he must have done something equal in merit! If his lucubrations are despised, it is because they are not yet understood, and because he, like the persecuted philosophers of old, lives in advance of his generation !

§ 490. Evidence presented to our senses, it is said, cannot readily be mistaken. But if our senses rarely deceive us, the inferences we deduce from the impressions they convey are often erroneous. It is possible that a favourite idea may so influence the mind that we are sometimes constrained to believe that sensations are made through the medium of the senses, though none of the natural causes of such sensations are really operating. How else can we account for much that is stated to have been felt, seen, and heard, by authors whose veracity may be as unimpeachable as certain of their statements are incredible ?*

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^{*} Thus, to give specimens, ancient and modern. Strabo informs us that the inhabitants of Spain *heard* the hissing noise made by the sun as he sank into the western waves. Mrs. Frat *heard* a congenital deaf-mute talk after Mrs. de Loutherbourg had looked benignly upon her. The learned author of the Magus asserts that he has frequently killed toads by merely "gazing furiously at them for a quarter of an hour." A celebrated phrenologist, and a man undoubtedly of strong mind, saw a little girl whose brain at the organs of self-esteem and love of approbation was

§ 491. It is a custom, more remarkable for its vulgarity than its propriety, with those who wish to establish views that obviously stand in need of every kind of support, to attempt to enlist religious feelings in their favour. They assert that the evidence of design in nature receives some important addition from their discoveries, or that the wisdom of the Allwise is clearly manifest in the arrangement they have disclosed, or discover that any other than their own belief is inconsistent with divine beneficence. If there be anything more injurious to a cause than its injudicious advocacy, it is to attempt to maintain it by mere conjectures, and more than doubtful facts. Were it possible to question the established truths, such superfluous and futile attempts to sustain them would most conduce to the doubt. A Jesuit, Father Bougeant, published a theory as being necessary "for God's vindication and man's justification." This important theory was simply a cutting of the Gordian knot as to the intellectuality of brutes, by affirming that all beasts are animated by evil spirits. "Do we love beasts for their own sakes?" he asks. "No! As they are altogether strangers to human society, they can have no other appointment but that of being useful and amusing; and what care we whether it be a devil or any other creature that amuses us? The thought of it, far from shocking, pleases me mightily. I with gratitude admire the goodness of the Creator who gave me so many little devils to serve and amuse me. If I am told that these poor devils are doomed to suffer eternal tortures. I admire God's decrees, but I have no manner of share in that dreadful sentence; I leave the execution of it to the Sovereign Judge; and notwithstanding this, I live with my little devils as I do with a multitude of people, of whom religion informs me that a great number shall be d-d." This is an extreme instance, and it is by no means supposed that anything recently written by the mesmerists is so openly profane, but there is much of which the tendency is certainly to lessen the seriousness of serious subjects.

 \S 492. We are told that we might as well deny Christianity because there are so many different sects, as doubt the truth of mesmerism because the believers of the doctrine do not all

covered only by integument : he placed his hand on the part, and led the conversation so as to pique the child's self-esteem, when motion was distinetly felt. " When she was requested to do some arithmetical lesson, to set in action her intellect, the brain at self-esteem ceased to move. She was praised for her success, when the organ of love of approbation, hitherto quiescent, sensibly moved; again, the child's attention was directed to something distinct from herself, and once more the organs of self-esteem and love of approbation reposed." One, for whose opinion I have the highest respect, mentioned in conversation that he always very jealously suspected experiments that proved things too micelw agree as to what mesmerism consists of. There is this difference between the two: religious sects are agreed as to the premises, but differ in the inferences they deduce; the mesmerists contradict each other as to the premises, as well as disagree as to the inferences. To render the cases parallel, mesmeric facts should be considered established by common consent, the only disagreement being as to their interpretation, which is really a matter of very secondary importance.

§ 493. It is affirmed that the facts of the mesmerists are denied merely on the assumption of personal imposture, which, in the majority of cases, has never been proved. In the majority of all cases of dextrous and successful imposture, the deception is never proved, but it would better express the truth to say that the so-called facts of mesmerism are not received because of the internal evidence of improbability which they carry, and because of the many attendant circumstances which would favour deception. Nature never assumes the garb of Art; and if the more marvellous facts really were what they appeared, it would be surprising that all the conditions under which they are generally presented are precisely those best adapted for allowing and concealing imposture.

REMARKS ON THE THEORIES AND FACTS OF THE MESMERISTS.

 δ 494. A theory is of little value unless it is founded on induction from a considerable number of facts. Allowing the correctness of all the mesmeric facts, how are they explained by the mesmeric doctrines? Granting the existence of the universal fluid, or ether, or medium of some kind; granting that this medium can be set in motion by the action of the mesmeriser's brain or mind, (467,) what directs the movement thus originated? If the soul of the sleepwaker be sent along this medium, (§ 463,) what conducts it to the exact spot, causes it to see the exact object required ? The medium acts in straight lines, like light, (§ 459,) but the sleepwaker sees in any and every direction. His mind fetches the information it seeks, $(\delta 462;)$ it must therefore leave the body and travel. What remains behind to dictate the replies? The mesmeric somnambulist has an instinctive knowledge of medicine, of time, and of future events. All knowledge is the result either of reasoning or of divine revelation. There can be no reasoning where there are no facts to reason upon. The somnambulist, ignorant of medicine, of the lapse of time, and of what has yet to happen, has no data, therefore he can gain no knowledge on these points from reasoning. If he obtain knowledge at all, then, it must be in a supernatural way. Hence a miracle is necessitated in every case of successful and complete clairvoyance Since the "miraculous case of Mary Jobson" has occurred so

recently, we cannot deny that it may be so, but the proof rests with the assertors. Without movement, the mesmeric medium could not convey intelligence, and how can a movement in the medium be occasioned by what has yet to occur. When the liberated soul of the sleepwaker flits across the Atlantic, and passes through obstacles innumerable, what stops it in its flight to enable it to note the various objects the mesmeriser may wish? (§ 370.) Does his soul likewise take a transatlantic trip? What conveys back instantaneously to the sleepwaker's body the information gained by the absent spirit whilst still pursuing its exploratory tour ? Does the erratic mind itself run to and fro along the mesmeric lines ? or has it a power of multiplying itself ad infinitum ? or has it ubiquity ? or does it cause, as it were, a vibration at one end, and thus telegraph the news to the other ? If the medium fills all space, and proceeds to and from the sun, moon, and stars, how is it that astronomy has derived no great accession to its facts from the exercise of mesmeric clairvoyance? When a mesmerised letter or object is sent to a distance, (δ 179,) why does the mesmeric movement in the medium never produce any effect until the party addressed has received the mandate to sleep, since the mesmeriser must have already exercised his will, and therefore have set the medium in motion? As the mind can travel mesmerically with such extreme celerity, why does it sometimes require days for it to discern the object desired ? and, as it sees most objects with such exactness, why is its vision of others equally obvious, occasionally so indistinct and transitory? If the mind has its capabilities so much augmented by its temporary freedom from its corporeal habitation, why does it frequently perceive correctly to a certain extent only? If it possesses such extreme lucidity, how can it err at all ? These remarks appear highly absurd, but they are such as naturally flow from the stated principles of mesmerism, and perhaps their absurdity is not disproportionate to that of their subject.

§ 495. The word "soul" is used by the mesmerists with great freedom and laxity of signification. Do they wish to account for the *fact* of a sleepwaker seeing what is going on a hundred miles off,—he sees by means of his soul! Does he foresee what shall happen next year,—he predicts by means of his soul! Having thus *explained* their incredibilia by referring them all to the operation of the soul, they gravely exclaim —Have we not here *new proof* of the distinct existence of the immortal spirit? Granting, what has never been shown, that if the soul *could* be temporarily set free from its bodily tenement, that would clearly account for all the wonders of mesmerism, is it probable, is it in accordance with anything else in the government of the universe, that any creature should possess the power to separate and reunite at pleasure soul and body ?

§ 496. Mr. Colquhoun quotes with approbation M. Chardel's new theory of physics. According to this, the cause of life and of motion is the same as that of light, heat, and electricity. There are two physical elements, the terrestrial and the solar,-matter and motion. "Matter is that which constitutes the consistence of bodies. The rays of the sun unite with matter, and are the sole and ever-active principle of motion. It is they which constitute the life of beings; for life is the cause of organic motion in vegetables and animals. The motion of light is not the result of an impulsion. but of the motility inherent in itself, for it is the elementary motion, and all impulsions depend upon it more or less immediately. Let any one examine the nature of the solar rays, and he will be convinced that they are motion in themselves, and that heat is nothing else than the agitation they produce in bodies. The solar rays are the elementary motion. Light, heat, magnetism, electricity, galvanism, electro-magnetism, &c., result from the combination of the elementary motion with matter. Muscular contractility and excitability are phenomena of elasticity produced by the vital element in animals, which form it by individualizing motion. It is always an internal power, generated by the union of the solar rays with matter; for life is nothing else than this ; everywhere by combining they confer upon compound bodies their appropriate action. This is the secret of nature." And a very simple secret it would be, could we only understand it. Motion is known to us only as a condition of matter, and we cannot realize the idea of motion in the abstract, as a separate entity, unconnected with matter. That the solar rays possess motion is evident; that they may cause motion in matter is certain; but that they are "motion in themselves" is-or seems to be-nonsense. Granting that light, heat, electricity, galvanism, and magnetism, may be different modes of action of the same agent i. e., different kinds of motion, of either common matter, or of the more refined ether which philosophers have assumed to exist; still there is no sound argument in favour of this physical agent being identical with the vital principle. Analogy, as regards subtilty of cause, extent of operation, and importance of effect, there may be, but identity has not been rendered in the slightest degree probable. And why limit the resources of Providence by attempting to reduce all the phenomena of nature to the action of a single second cause-"the one grand agent," thus making them to square with that ideal simplicity and oneness which constitute at present the standard of perfection ? Could we prove the existence of this "grand agent," should we be at all nearer a disclosure of the secret mode of nature's operations? Could we

understand how this one agent was itself endued primarily with motion, so as secondarily to excite the action of matter in its varied forms, any more than we now comprehend how matter itself is endowed with its several properties, physical and vital ? Struggle as we may to escape it, we must believe something that we cannot understand, to start with; a mind without rational faith will have irrational faith. Without belief of any kind, the mind would be a lever without a fulcrum.

δ 497. Chardel's mode of reasoning, supported though it is by a quotation from the "Novum Organon," is a relapse into the style which that work did so much to destroy. Mr. Colquhoun makes no application of the theory, to which he seems completely to assent, but its bearing on animal magnetism is evident. If there be but one universal agent for life, scul, mind, electricity, galvanism, magnetism, and heat, then any mode of calling one of these into action might affect any or all of the others. As we know that the processes of the mesmeriser must affect the electricity and the heat of both operator and patient,* and therefore must act upon one common agent, they might reasonably be supposed to possess some power over other manifestations of this agent-soul and mind and life. Mesmerism may fairly be allowed all the support it can gain from an hypothesis so romantic and visionary. Until the dependence of all the powerful agencies of nature upon a single common cause is clearly established, it remains an objection to the "universal" theory, that all the arguments, or rather assertions used, will apply equally well to any of them : thus, light, heat, electricity, and magnetism, have already had their day. Voltaire did not think it impossible "that the elementary fire may be a being apart which animates nature, and possesses the intermediate step between the body and some other being we are unaccuainted with."+

§ 498. Taking them just as they are presented, the facts of mesmerism will not support the theory, nor will the theory elucidate the facts. What are the facts?

§ 499. Mere assertions, the facts on which they are founded being withheld, can be admitted only in so far as they are probable, and can never serve as grounds for belief in what is extremely improbable. Still less can much importance be attached to assertions to which other assertions are opposed by the advocates of the same general doctrines: they nullify each other. Nor are isolated facts much more valuable as the basis of a law

* A series of accurate experiments on the extent to which the electricity of the body is effected by mesmeric procedure would give us needful information. The experiments hitherto made can hardly be deemed sufficient. (§ 173, 174, 175.)

† Isis Revelata, vol. ii. p. 352.

of nature; but they are often peculiarly so in overturning a false hypothesis, since a single irreconcilable fact will suffice to invalidate any presumed general principle.

§ 500. Although the gross inconsistencies of the facts stated by the different authors to have been actually observed by them require mere perusal for their detection, and although the greater number of the facts themselves, like all the works in support of mesmerism which I have happened to meet with, carry their own refutation with them, still it may be desirable to direct attention to a few of the most striking peculiarities in the evidence.

§ 501. From the meagre statistical facts supplied, we find that somnambulism occurred in fifty-three out of a hundred and forty-six—i. e., in about one-third. Hence, there should be no difficulty in furnishing us with abundance of examples of real mesmeric sleepwaking and its attendant phenomena. Yet itinerant mesmerisers do not find it easy, and personal experience teaches others who make the attempt with sufficient caution that they are not of the privileged. (§ 135.)

§ 502. To render a person susceptible of the mesmeric influence, he must possess a "certain degree of intelligence," (§ 136;) yet to arrive at the maximum of mesmeric lucidity, experience has proved that we should select "the most ignorant and common individuals," (§ 142.) The strong, the resolute, and healthy, are as easily mesmerised as the sick and feeble-minded, (§ 137;) yet the most eligible men are those who most resemble women in the weakness and delicacy of their organization, (§ 139.) Even the slightest illness lessens susceptibility, (§ 137;) yet sick persons are the most susceptible, (§ 138.) Males are as susceptible as females, (§ 137;) yet women are incomparably more susceptible than men, (§ 139.) Such are the recorded facts by which we are to be guided in selecting patients for the study of mesmerism !

§ 503. The mesmeriser must possess a superior state of health, muscular or mental power over his patient, (§ 144;) yet a small weak girl mesmerises a jumping woman, (§ 145.) What a superabundance of the requisites must he possess who can impart enough to a tree to mesmerise hundreds!

§ 504. The will of the mesmeriser is everything, (§ 146, 148;) the will of the mesmeriser is nothing, (§ 158.)

§ 505. With respect to the mode of mesmerising, the greater the muscular action of the operator, the greater the effect, (§ 176;) yet the movements should be easy and gentle, (§ 177.)* A mesmerised elm had great power without making any mus-

* "N'employez aucune force musculaire pour diriger l'action du magnétisme. Mettez dans vos mouvemens de l'aisance et de la souplesse."— [Histoire Critiq., tom. i. p. 107. - cular effort, (§ 66.) The kind of passes is important, (§ 179;) yet any process will succeed if the patient only thinks it will, (§ 160, 178.) To mesmerise, breathe upon the patient, (§ 179, 187:) to demesmerise, do the same (§ 213, 215;) to excite a dormant organ, breathe over it, (§ 186, 216 ;) to quiet it, do the same, $(\delta 214.)$ Laughing gas will mesmerise; a larger dose will remove this effect, (§ 172.) Spitting on a bit of paper invests it with great mesmeric power, (§ 164;) M. Chenevix found the paper by itself sufficient, (§ 121.) Touching and pointing, or darting the fingers at a part, will mesmerise, (§ 182, 193.) and demesmerise, (§ 209, 214.) Gloves impede the mesmeric influence, (§ 186;) stone walls do not, (§ 194.) Mesmeric power lessens with distance, (§ 186;) Mr. Townshend must have been highly charged with it when he mesmerised Anna ----- a quarter of a mile off, (§ 147.) The fluid will not pass through silk, (§ 77;)-yet a silk handkerchief offers no impediment, (§ 189.) Glass does obstruct the passage of the fluid (§ 147, 459,) and it does not, (§ 185.) The electrical state of the patient has great influence over the production of mesmeric phenomena, when either patient or operator has a penchant for the electrical theory, (§ 174;) no influence if either objects to this view, (§ 173.) Waving a handkerchief in a certain direction will mesmerise ; in another, will demesmerise, $(\delta 192.)$ The greater the number of persons through whom the mesmeric influence passes, the greater its force, (§ 176;) so that if a mesmerist, in a large assembly, thought proper to affect a number in succession, what a tremendous amount the last recipient would have to sustain ! Or, if the occult power does not require the exercise of the will, what a potent reservoir of mesmerised water must a large public bath become towards the close of a July day! One, who believed in the power of the will, mesmerised Thomas Russen "by will merely," (§ 159;) Thomas had previously been a patient of Dr. Elliotson, who, denying the influence of the will, never produced any effect by his will alone. A piece of copper and a mineral magnet produced peculiar mesmeric effects, (§ 162;) yet the former removes all mesmeric power from mesmerised water, and the latter all from the mesmeriser, (§ 170.) Handling or breathing on a foreign body invests it with mesmeric power, (§ 164,) and yet either process will occasionally prevent the foreign body from producing any mesmeric effect, (§ 163.) A piece of gold placed on the patient's hand produced no effect when handled by the person who had mesmerised the patient, but after being handled by any other person it produced extreme distress, (§ 167.) Mesmerised gold applied to the forehead, caused extreme pain and a bright yellow flash of light; but a mesmerised gold watch placed in the hand had no effect, (§ 163, 166.) Any foreign body produces rigidity ; gold, silver,

iron, zinc, copper, German silver, or any metal touched by gold, ivory, or glass, *produce* effects which, for the most part, gold, silver, and nickel will *remove*, (§ 164, 166.)

§ 506. All mesmerised patients will in time awaken of themselves, (§ 209;) yet "the mesmeric sleepwaker cannot awake without the mesmeriser's aid," (§ 199.) The mesmerised patient is entirely in the power of his mesmeriser; he cannot of himself throw off his bonds, (§ 199;) yet he can of his own accord will to make for himself demesmerising passes, and thus awaken at pleasure, (§ 201;) or without any passes he can awaken himself when he thinks proper, (§ 202.)

§ 507. Would evidence such as this be deemed sufficient to prove the existence of a special power possessed by different bodies in any question of physics? Do we find the phenomena of electricity, or light, or heat, manifested alike under causes entirely opposite and circumstances perfectly different, and manifested differently where the causes are similar and the circumstances agree? A charge of galvanism is not found to remove in any person the effects which a previous charge had A hot fire does not first warm and then cool us. produced. Were there really any such thing as the mesmeric power, it would be influenced in the same, or, at least, in a somewhat similar way, by similar acts under similar conditions. The "facts" prove that similar acts under similar conditions produce results perfectly dissimilar. Hence, either there can be no mesmeric medium of any kind, or else, assuming its existence, its laws of action are not merely totally unlike those of every other known agent-ponderable and imponderable-but diametrically opposed to them.

§ 508. The mesmeric sleepwaker knows nothing of the effects produced by his mesmeriser, (§ 390;) yet he can sometimes relate afterwards all that occurred during his séance, (§ 273.) A little deeper, and he is lucid, and knows every thing ; can answer questions to his mesmeriser, or to any one clse, (§ 328.) Some must gain this depth with great rapidity, since the first intimation of their being even asleep is given by their mentioning their own conviction that this is the case, (§ 219.) On the other hand, such is human perversity, a few, especially on the first trial, cannot be made to believe that they have been sent to sleep at all! (§ 230.) Even if they have not, still they may have presented the mesmeric phenomenon of vigilance, (§ 223.) In any less sublime science, this vigilance would look very like a loop-hole of escape prepared against an emergency in argument. (Vide § 19, 459, for another loophole.)

§ 509. Some patients are attracted by their mesmeriser only, (§ 239;) others, more complaisant, will follow any of the bystanders, (§ 242.) Even a glance will suffice to attract a susceptible patient, (§ 244.) Strangely enough, as the patient is mesmerically deaf, words are occasionally more potent tractors even than passes, (§ 251.) Should the coma be so deep as to prevent the patient from obeying any of these signs whilst his eyes are closed, he (mesmerically blind all the while) first looks, though he may not appear to see, (§ 362,) and then imitates the gestures required, (§ 249.) If required to do anything disagreeable or difficult, mesmeric lucidity takes affront, and the patient falls into a very deep sleep, (§ 360.)

§ 510. Mesmeric force is in proportion to the size of the mesmerising body, (§ 132, 145;) yet one finger will attract the patient just as well as the whole of the mesmeriser's hand, (§ 256.)

 \S 511. Any sort of passes will cause muscular rigidity, and the same sort continued will remove this again, (\S 277.)

§ 512. Mesmerism is reflected from mirrors like light, (§ 459;) but, unlike the straight rays of light, it can bend round an intervening body, without losing anything of its force, (§ 343.) It required only a few seconds for this purpose in Dr. Wilson's case, (§ 268.) Any agent which acts in straight lines, like light and heat, has its power diminished with the square of the distance from its source. Some authors seem to imply that the mesmeric agent observes this law, (§ 186.) If it does not, it has no analogy with light and heat, which do; if it does, how can it act just as strongly at a distance of three miles as when its source is nearer to its destined recipient?

§ 513. An interesting and zealous mesmerisé, anxious to ascertain for himself whether he could feel pain, when sleepwaking, bit his own hand until blood came, (§ 289.) As he felt nothing, and of course could gain no assistance from his other senses fast locked in mesmeric sleep, it is difficult to divine how he managed to guide his hand to his mouth.

§ 514. Mesmeric facts have little respect for anatomy. Thus, when half only of the brain is mesmerised, the corresponding, not, as in palsy, the opposite, half of the body is affected, (§ 419.) In depriving parts of their sensibility, the nerves seem to have very little share in the matter. The gums are insensible, whilst the inside o the cheeks and lips are quite sensible, notwithstanding the same nerve of sensation supplies all, (§ 295.) A line of demarcation under the lower jaw cuts through the ramifications of the sensory nerves, without the slightest regard to their function, (§ 295.)

 \S 515. The alleged effects of mesmerism on the senses are reducible to heightened sensation, diminished sensation, perverted sensation, transposed sensation, and community of sensation between patient and operator.

§ 516. We have illustrations of each of these, wonderful enough, if we take for granted the assumed unconsciousness and insensibility of the mesmerised patient in every respect, but with regard to the one sense operated on ; less marvellous, if we suppose it possible for the mesmerise to be alive to all that is passing around. What proof of community of feeling is there if the patient can see the injury done to his mesmeriser. or, when blindfolded, if he has consciousness and can hear, or failing to hear, at least can suspect what is going on? Of community of smell, provided the patient himself can smell as well as his mesmeriser? Of communiny of hearing, if the patient can hear? Or of taste, if sight, smell, and hearing, or any of these, are left to give information? The examples adduced by the mesmerists are valueless, unless it can be proved that in every instance the patient was unconscious, and unable, therefore, to derive knowledge from his senses in the ordinary way. Dr. Fahnestock was perhaps not incorrect when he stated that mesmeric patients could smell or not, just as they pleased; and the remark might be applied to all the other senses.

§ 517. The effects on the senses have usually been deemed the criteria of the existence of real mesmeric somnambulism; but declining a test that would make success the only measure of the influence, it will be preferable to take for granted that every patient was in the state assumed by the mesmeriser. If it be argued that, although truly sleepwaking, a patient might not in a given case be affected to a sufficient degree to manifest all the phenomena of mesmeric somnambulism, then, we ask, until the order in which these phenomena occur has been defined, what proof that he was sufficiently affected to present any—that he was a somnambulist at all ?

§ 518. When it is desired to prove that the patient cannot hear, he is usually deaf enough; when it is wished to prove insensibility of the surface, he will bear pain without injury, but he generally forgets that he ought also to be deaf; he hears and answers questions. And notwithstanding the insensibility of feeling, a patient deep enough to be clairvoyant will complain that he finds the effort of seeing through the back of his head very fatiguing, (§ 344.)

§ 519. With respect to transposition of the senses : common sensibility is universal; hearing and smell, from the universality of the medium through which they are affected, are virtually, though not literally so; and taste is so much modified and assisted by smell, that it would be difficult, without intentionally preventing all aid from that sense, to obtain any evidence of transposed sensation. Vision offers us the readiest and least doubful means for testing the existence of extreme sensibility, transposition, or community of sensation. And it is not more on account of the most marvellous of all the statements of the mesmerists having reference to this sense, that clairvoy-

ance has justly been considered the touchstone of mesmerism. If all that refers to the eye is false, there is nothing worthy of argument in what has been adduced with respect to the other senses; and if clairvoyance be true, we may admit all the rest. Clairvoyance is so highly improbable, that no reasonable person could admit it to be true on grounds that were in the slightest degree open to suspicion. Is there a single instance of success , where to suspect would be impossible, to doubt, unreasonable ? Mr. Townshend's case of E. A. is perhaps as strong as any. It is affirmed that he read a letter, previously unseen by him, in a perfectly dark closet, and that, in order to increase his perspicacity, he intentionally muffled his head in a dressing-gown. We cannot deny this, and we are constrained to believe that the narrator thinks it genuine; but it seems strange that the addition of more than a certain number of towels, on another occasion, should quite prevent his seeing, (§ 341;) that the presence of a sceptic should destroy his lucidity, (§ 346;) that to read a book, it must, to a certain extent, be open, (§ 343;) that to see distinctly with his forehead, the object must not be held too close to the forehead, (§ 344;) and in cases of difficulty his electric method is very like an ingeniously devised mode of gaining an opportunity for an unobserved peep, (§ 344.) His frontal vision through coloured lenses, however, is an experimentum crusis, $(\S 339.)$ He saw things blue when he applied a blue lens to his forehead. But he saw things not larger when he looked with his forehead through a magnifying-glass. Colour being the result of a certain impression made by luminous rays on the retina, if light could be so conveyed as to produce the sensation of colour, it could be so conveyed as to give the notion of size; the magnifying-glass should have enlarged the objects. If, as Mr. Townshend contends, the eve had nothing to do with the phenomenon, how can we account for the blue colour? If the eye was the percipient organ, how account for t e non-enlargement? The size of bodies, their relative position and distance, are judged by us from the visual angle made by the rays of light in entering the eye, or rather, I believe, from the situation at which the luminous rays impinge on the retina, with reference to the centre of acute vision.* The eye is constructed with express regard, and is essential, to the performance of this function. In clairvoyance, either the patient does use the eye, in which case the rectilinear passage of light-the basis of optics-is a fallacy; or the opacity of bodies no obstacle to the passage of luminous rays, which experience contradicts; or else he sees objects, distinguishes size, and measures distance, without the use of

* See Essays on Strabismus, in Medical Gazette, for 1842, p. 743.

the eye, in which case all that was before established in the physiology of vision must be wrong.

§ 520. The ideal figures and colours of spectral illusions, the distinctness of an imaginary scene, and the vividness of mere mental visions, do not in the least prove that the eye is a useful help, but not an organ in all cases essential to sight; that the optic nerve and brain can of themselves distinguish objects. Without the eye, we see only what we think, not what exists before us. A blind man who thinks intently of an absent friend, pictures him to himself in his mind's eye; but he could not see that his friend had got a new coat on if that friend stood before him.

§ 521. It has been remarked, that we know not how much common sensation through the fifth nerve has to do with vision. Probably not; but we know how little. Magendie's experiments (§ 469) have long been divested of the importance he assigned to them. Besides, during mesmeric somnambulism sufficiently deep to render visual sensibility impossible, common sensibility would surely be abolished.

 δ 522. If a slight degree of somnambulism be sufficient for the development of clairvoyance, we ought to be able to see that state at pleasure in any mesmerised sleepwaker. If, on the other hand, a high degree be requisite, then, when clairvoyance is present, the more ordinary effect of mesmerisminsensibility of the various organs of sense-must surely have been produced. What says the evidence? The clairvovant converses with her operator exclusively, (unless she forgets her part for the moment and errs,) or with any bystander, according, it would seem, to the theory favoured by the individual mesmerising. Hence she gives the ordinary signs of hearing, thinking, and speaking. She feels heat, and, if she fancies it proper to do so, calls it cold, (§ 290;) hence there is common sensibility. When a good opportunity offered, some clairvoyants have been noticed to assist mesmeric by ordinary vision ; some at least, therefore, can see in the common way.

§ 523. The facts adduced to prove that the patient smells only what the mesmeriser does, generally prove that the mesmerized patient can smell an oderiferous substance like any one else; hence we have the sense of smell retained. Judging the facts in the ordinary way, nature asserts that the clairvoyant has the perfect use of his five senses. The mesmerists, for the most part, declare that he has not. Yet we occasionally have an admission that the thoughts and acts of the clairvoyant proceeded from inferences obtained through the senses in the ordinary way, (§ 330.) Indeed, somnambulists themselves will sometimes describe the sensations experienced by them during their sleepwaking, forgetting that they ought to have been all the time mesmerically insensible. (§ 327.) § 524. By one clairvoyant, light is perceived, and is disagreeable; another cannot see unless there is light, (§ 349;) a third, when there is much light, declares she cannot see because it is too dark, (§ 355;) and a fourth, who (curious coincidence !) had witnessed the clairvoyance of the third, likewise averred that a great darkness had come upon her when light was flashed across her face. (§ 356.)

§ 525. Theodore is clairvoyant, and tells the hour by a watch, yet finds written words " of a tolerable size too small for him to distinguish," (§ 337.) Curious lucidity, that is overpowered by such a shadow of a shade of difference as that of the size of letters, and of the figures on a watch face! Anna M—appeared to subject the object to the scrutiny of a double or gan, (§ 338.) and as Mr. T—appears to be rather near-sighted, (§ 339.) perhaps this was not merely appearance. Her two or three preparatory convulsive starts (§ 338.) are analogous to " Le moyen electrique," and were probably for the same purpose. Like E. A.—(§ 344.) and like every waking person, she could discern an object better if distant a few inches from the forehead than when close to it—a fact explicable enough in reference to ordinary sight, but mysterious as relating to clairvoyance.

§ 526. A clairvoyant is requested to send her mind to a certain house, not particularized, but thought of by the operator, (§ 357.) She gives a correct description of the one next door —i. e., one not thought of by the mesmeriser. Now as the will of the operator could not originate this mesmeric movement of the patient's mind, and as the patient had not been told by any one the exact house required, what caused the blunder? The patient undoubtedly misunderstood the questions, and thinking a certain place to be the one intended, described that the mesmeric movement thus originating in the will of the patient, not of the operator, and that will itself arising from ordinary exercise of reason on insufficient grounds.

§ 527. Another clairvoyant describes everything correctly, except that she states the proprietor of the place to be in a certain room, though in reality he is not, (§ 358.) If she saw at all what was in that room, how came she to see what was not there?

 \S 528. Mr. Peale's case proves merely that the rustling of a straw bonnet may be heard by a blind mesmeric clairvoyant, (\S 369.)

⁵ § 529. The facts under the heads of intuition and prevision require only to be perused, for their condemnation. To the medical man, their absolute irreconcilableness with anatomy, physiology, and pathology, are additional and convincing proofs of the extent to which a mesmerist must carry his credulity, and keep down his reason. Their being put forth for our belief is a strong argument against allowing any more credit to other facts of mesmerism than their intrinsic merits demand. Because a man is known to be subject to giddiness, intuition discovers fringes of blood at the bottom of his brain ! An abscess of the hip-joint, that had existed for four years, is seen by mesmeric intuition, and a cure promised (prevision) and effected in *ten days*, by—a poultice of hemlock and marshmallows !

 δ 530. The intellect is wonderfully augmented in power. and the moral man in spirituality, by mesmerism : the patient has a horror of falsehood. The attraction towards the mesmeriser is a refined instinct, not a passion. In a word, the mesmerised patient becomes almost angelic, (§ 384.) Yet, says the same authority, "nothing can be more unsatisfactory than the account which mesmerised persons give of their own mode of sensation." How is this? So intelligent, it cannot be from want of knowledge ! So veracious, it cannot be from a wish to deceive! On the other hand, we are warned against the tricks and deceptions of genuine mesmeric somnambulists. and informed that a mesmerised patient, so far from always possessing "a high tone of spirituality and sense of right," $(\delta 414,)$ belongs body and soul to the mesmeriser for the time being, and can, at his behest, be rendered as little angelic as possible, (§ 412.) Which statement-not, be it remembered, of opinion, but of observed facts-are we to credit? Both are probably mere specimens of that nonsense of which, as Addison observes, "If it affirms anything, you cannot lay hold of it; or, if it denies, you cannot confute it."

§ 531. Of the many instances in which mesmerism travesties nature, phreno-magnetism is the most striking. If a patient really was deprived of consciousness and of volition during his mesmeric sleepwaking, as is asserted, and his mental faculties really could be called forth singly or in combination, at pleasure, by any means whatever, would not nature present us with true manifestations of each kind; quite unmixed when one faculty only was excited; accurately combined when several were roused? Let any mesmerist say whether, in one instance, the manifestation has accorded with the truth, simplicity, and certainty of nature. Has it not been either decidedly wrong, or an unnatural manifestation under the circumstances, or a jumble together of the action of several faculties where one only was called for ? The various examples, discoveries, and theories of phreno-magnetism are worthy of each other and of their subject, but the spirit of Gall would scarcely delight in this new and parasitic ally of phrenology.

§ 532. Examining phreno-magnetism as if it were true, a few questions arise on the moment. As every organ has its

negative or opposing organ next to it, what need of any opposing organ in another part of the brain ?-e. g., destructiveness, when the negative of benevolence must be very similar. Of what use are general organs, as sublimity and beauty, when every single object is said to have a special organ to observe it! As there is an organ of consciousness, how can any of the others be roused by itself; since unless consciousness is excited, the others ought not to be conscious of the application of any stimulus? As the organs are so very numerous and closely packed, how does so large a surface as the point of a finger excite but one organ at once? As the mesmeric influence is so penetrating, and acts at so great a distance, how is it prevented from passing right through the first organ and affecting others? As there is a special organ for attitudinising, why does each organ, when excited, give the appropriate attitude-attitudinising and the organ of muscular motion being unexcited? When hearing alone is awoke, how does the patient understand any question so as to answer correctly, notwithstanding the organ of the faculty to which the question refers is still in mesmeric unconsciousness? As we appreciate things by the ideas which they excite, and as every different object excites a distinct idea, if there be an organ for every separate object, there must be a special cerebral organ for every idea. Why not assert that there are separate muscular organs for playing on the piano and playing on the fiddle, for singing and speaking, blowing the clarionet, and winding the French horn? Certain of these cerebral organs must become needless as, in the march of improvement, certain objects of attention cease to be. On the other hand, new organs should spring up as new inventions demand them. The organ for stage-coach travelling should be replaced by one for railway transit! If there be an organ for every idea, every one should possess a complete stock for every possible idea on every possible subject. How useless such a supply to some !--- how superfluous some of these organs to all ! "Chameleon spirit - imperishable, glorious, and immortal HUMBUG! Hail!"*

§ 533. No assertions of the mesmerists have contributed so much to stagger popular disbelief as the alleged cures of complaints ordinarily difficult of cure. With a medical man, on the contrary, no other evidence in the abstract has less weight. Knowing the many questions involved in reasoning on the real power of any remedial agent, the extensive knowledge, practised and accurate observation, and cautious reasoning required, he has less faith at his disposal than those who see in an effect indubitable evidence of the efficacy of the favourite one—it may be the least, possibly, of many influential causes. Were

* The King's Own. (Marryat.)

assertions and vaunting of cures any measure of the truth, there would not be a single incurable, nor a single not easily curable, disease. Frequent bleedings; beef-steaks and porter; tar-vapour; oxygen; iodine; common salt; St. John-Long's frictions: naphtha; and other remedies innumerable, have been stated to have the power of curing consumption ; yet the bills of mortality show no corresponding diminution in the average number of deaths from that fell scourge. Is it owing to ignorance, apathy, or petty jealousy, preventing medical men from availing themselves of the means pointed out, or is it due to the futility of the means ? Experience so constantly proves the latter, that few are disposed to accept any new remedy on mere assertion, but require that repeated and authentic trials by competent judges shall have proved its efficacy. From the intricacy of the questions preventing exactness and certainty in forming conclusions, many others consider themselves quite as competent as members of the profession to decide upon medical questions,-the very difficulty of the subject thus serving as a cloak for the ignorance of the inquirer. Except in the most plain and unmistakable cases,-and these are but few,-the statements of non-professional persons in support of remedies are of not the slightest value; for where minute observation is required, testimony is important in proportion to the acquaintance of the witness with the subject on which he testifies.

§ 534. Mr. Tubbs, surgeon, cures chlorosis by mesmerism and iron, (§ 444.) Dr. Elliotson states, that over chlorosis mesmerism has no control, (§ 440–45.) whilst Teste places it first in the catalogue of those diseases in which magnetism chiefly succeeds, (§ 437)!

§ 535. Dr. Elliotson's cases, from the minuteness with which they are narrated, and the undoubted professional attainments of their narrator, and, more than all, from the internal evidence of ingenuousness which they bear, furnish us with almost the only facts worthy of notice under this head; and notwithstanding the considerable length of time required in most of them, we must admit that some severe anomalous nervous affections recovered, after mesmeric manipulations, which, in all probability, would have remained unaltered, or possibly might have gone worse, had no means of any kind been employed. Had Dr. Elliotson stated that he himself had cured cataract, or cancer, or bronchocele, or confirmed structural disease of any kind, (ascertained beyond doubt to be such,) his cases could scarcely have ranked higher than those of other mesmeric authorities. But he affirms nothing on the remedial power of mesmerism, so incredible; and although we may (as I myself do) differ with him toto calo in judgment upon observed facts,

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yet when those facts are such as chiefly require acute medical observation, we must receive and value them as far as they go.

§ 536. Can such a degree of insensibility to pain be produced by mesmeric processes, as shall remove that natural source of dread of surgical operations? Without more than allusion to the question whether the entire absence of pain would be desirable for the ultimate welfare of the patient, in all surgical operations,* since in depression from severe injury the pain of an operation is sometimes the surest mode of exciting the powers of life, or, as Mr. Abernethy said, " sometimes the knife is the best stimulus," we may admit that, in most cases, it would be highly desirable to obtund the sensibility of the patient, and this has often been tried by giving narcotics, and by bleeding to faintness. We have only two means of ascertaining insensibility to pain : the assertion of the patient, and the absence of the signs by which nature expres-sively betokens suffering. That these do not always coincide is proved by the following case, for which I am indebted to Mr. Dunn, of Manchester. † A girl, who had been once or twice mesmerised, was affected with whitlow, requiring an incision to be made through the palmar surface of the affected finger. Every surgeon will admit, that no operation, great or small, is attended, for the instant, with more acute pain than lancing this highly-sensitive part when inflamed from sub-thecal abscess. The girl was mesmerised, the arm stretched out, and the incision made. Her face had an expression of great pain. large drops of perspiration burst out on her forehead; there was a feeble ejaculation, but the arm stirred not. Mesmeric passes were continued for some minutes more, and then the girl was roused. She assured Mr. Dunn that she was ignorant of what had occurred, and had felt no pain. The girl was previously acquainted with the alleged effects of mesmerism in producing insensibility, but she had no assignable motive for deception. Which of the two are we to believe, nature, or the patient?

> * "Quoth Hudibras, the thing called pain Is (as the learned stoics maintain) Not bad, simplicitér, nor gcod, But merely as 'tis understood."

I am also indebted to the same gentleman, who on many occasions has ably exposed mesmerism, for the following instance of the force of imagination :—An unturored lad, who had, however, learnt that a mesmerised object ought to stiffen his muscles, was told by Mr. Dunn to lay hold of a stethoscope ; the thick end, he was informed, was mesmerised, the other not. The boy grasped the thick end. He was requested to put the instrument down again. He said he could not—his arm was rigid. Demesmerised, he was desired to take hold of the small end of the stethoscope. This, however, he could lose again at pleasure. The instrument had never been touched that day except by this boy himself! § 537. To those familiar with surgical operations—who know the great difference in the firmness of patients, how some will bear the severest pain with unflinching fortitude, and almost with composure, whilst others exercise no control whatever over their feelings—there has yet been offered no satisfactory proof that mesmerism can effect, in this respect, what its advocates affirm.

§ 538. There is one point which has hardly received the consideration it merits, in reference to this question—viz., the degree in which sensation is modified by the state of mind of the patient. One who determines to behave with great firmness hashis mind wrapped up in this determination, and abstracted from the impressions conveyed by the injured nerves ; sensation, in consequence, is less. He therefore not merely conceals his suffering better, but he has less suffering to conceal. Conversely, a fearful, timid patient, dreading every touch, concentrates his attention on the suffering part, his brain is sesible to the slightest impression; the really great impressions made are perceived to their utmost; sensation is most acute, and becomes not only what the patient will not, but what he cannot, conceal.

THE PROBABLE AND THE POSSIBLE IN MESMERISM.

 δ 539. The existence of so much that is spurious does not prove that all that has been given to the world under the name of mesmerism is necessarily false, however difficult it may be to discover the truth amidst the heap of exaggeration and misinterpretation in which it lies concealed. No subject, perhaps, can long maintain its ground in claiming general attention, without enlisting in its ranks indisputable facts of some kind. These facts may prove to be old and well known; they may not justify, in the slightest degree, the inferences which have been drawn from them; they may admit of much more rational explanation than the one afforded; still they lend plausibility to the argument, and being themselves beyond dispute, confer something of the semblance of truth on the more exceptionable data with which they are allied. Thus. judicial astrology contained some truths; alchemy far more; but these truths are not to be found in the general principles of the supposed sciences which called them forth.

§ 540. Since every writer in support of animal magnetism asserts with equal confidence what we consider the probable and the impossible, there is considerable difficulty in admitting from the same authority what really may prove to have been uncoloured facts. On this account, it is impossible, at present, to feel satisfied of the entire truth of any of these so-called facts. Still several of them are probable, others less probable would not disagree with established truths, whilst the most marvellous could hardly be received on any testimony, and certainly have no claim to consideration on that at present furnished.

§ 541. Passing by what are styled the higher phenomena clairvoyance, intuition, prevision, increased intellectuality, and moral rectitude—as far above the flights of reason and almost of fancy, what are the mesmeric phenomena about which there is less than the usual discrepancy of statement? Quietude, a sleep-like state, increased sensibility, diminished sensibility, traction, rigidity of muscles, and unconsciousness on the part of the patient on being demesmerised. Without vouching from my own knowledge for the possibility of artificially inducing these states at pleasure, for the sake of argument, I may assume their truth.

 δ 542. Is there any part of the living system susceptible to agents so different, capable of producing effects so various, as those alleged, influencing and influenced by all other parts; in brief, capable of being affected by anything and everything, and capable of producing any and every kind of action which the living body can perform? Nothing less than this would serve to account for even the probable effects of mesmerism. If we can find analogues to many of the best accredited mesmeric phenomena amongst the acknowledged effects of the mind on the body, and can refer the remainder, without any violation of known facts, to the ascertained laws of action of the nervous system, what reason have we to assume a new agent, to exchange a power of which we know something for one of which we know nothing, especially when the assumption of the latter in no respect lessens difficulty? But the mesmeric medium includes as component parts both mind and nervous energy, and connects these with the external world. Be it so. As the mind and nervous energy are all that we require to account for what is likely to be true, it is of little importance whether we consider them as first or second in the order of causation; as the agents themselves, or merely as the essential media through which another power is always and solely manifested. And to term this imagined power mesmeric, or Utopian, or by any other name, is inconvenient only so far as it is not conventional, and to assume its existence is injurious only because, explaining nothing, it is superfluous, and, cloaking ignorance, it misleads. The mesmerist who really believes his own doctrines may contend that, as the universal medium includes both mind and the nervous principle, every mental and nervous action must be mesmeric; in which position, the only deficiency is the entire absence of proofs ; or, if he considers the mesmeric influence to be something distinct from mental and nervous energy, and acting independently of them, he allows nothing to their power. Or if, as

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already hinted, the mesmeric principle is supposed to set these other influences in action, then the only addition to our knowledge is, that certain manœuvres will affect the brain and nervous system, and that these manœuvres are conjectured to produce their effect by virtue of an occult power termed mesmerism. It is obvious, as regards this last case, that since the occult power is merely assumed to explain the results, and the results may be occasioned in a thousand different ways, the mesmeric power must be capable of being exercised in any way, and under all circumstances. By granting this, and indeed every other postulate required, the mesmerists hold a position as impregnable as unreasonable.

§ 543. Although every reader of modern physiology will find the following subjects much better, as well as more fully, treated elsewhere,* yet, to avoid obscurity, the sketch I am about to give seems necessary.

& 544. Gentle and prolonged sensations, that are not in their nature disagreeable, have a calming and soothing influence. and tend to induce repose, as surely as sudden, violent, and painful sensations excite and arouse. Hence, the power of subdued, monotonous noises, of dim twilight, and, to a certain extent, of warmth, in producing drowsiness. Whilst the mind is actively employed, this result will not ensue. Still, if these gentle sensations be-as most gentle sensations are-in themselves pleasant, inasmuch as they cause the attention to be directed to them, and in so far to be abstracted from any matter requiring deep thought, they may, after a time, affect one on whom at first they made no impression. The same holds good with respect to animals. By gently rubbing a domesticated cat's head before a warm fire, sleep very speedily comes on; but take a strange cat, and under the same circumstances, in other respects, sleep will not ensue. The warmth is the same; the process of rubbing is the same; the magnetic fluid imparted (!) the same; but the brain of the recipient is different. The strange cat is alarmed, has its attention excited, and therefore feels nothing from the usually soothing means employed. This leads to a question of great interest-the influence of attention upon sensation.

§ 545. It is no mean argument in support of the unity of the mind and its independence in some degree of the organs through which it acts, that concentration of the mind on the impressions conveyed from one organ prevents our noticing those made upon another, and that wrapt contemplation will cause us to neglect the impressions brought from any or all of the

[•] I would especially refer to the last edition of Dr. Carpenter's "Human Physiology," as containing the most scientific views presented in the simplest dress. See particularly the foot note, p. 243.

senses. If this be so, it follows, that under certain states of the mind, and consequently under certain conditions of the brain, impressions which, in ordinary circumstances, would be attended to, are not perceived, and may act on our senses—i. e., on the organs of our senses, without our consciousness, and therefore without their ever becoming sensations. It is true, that in the examples with which we are familiar, as in common reverie, the impressions made and unnoticed are seldom very strong, but if they are merely so strong that we should perceive them at all under other circumstances, they serve to establish the fact that abstraction of attention will in some cases prevent the perception of impressions which would usually have caused sensations.

 δ 546. When the attention is earnestly and forcibly directed to any organ, the changes which occur in that organ,-i, e., the impressions made upon it-are more clearly perceived; in other words, the sensations which result are much more intense. Sensation is the consciousness, or the perception by the mind, of a certain condition of the brain which has been induced by an impression made upon and conveyed by some sensory nerve. Where the mind is otherwise engaged, it may neglect this change, though the impression was really made upon, and conducted by, the nerve, and duly excited its natural change of condition in the brain. Yet the mind being unconscious, there is, strictly speaking, no sensation. When the iris obeys the light in a child blind from chronic hydrocephalus, but still in perfect possession of its mental faculties, we have the chain complete, except consciousness, and, therefore, except sensation. The impression is made on the eye, conveyed by the nerve of sight, and produces an effect on the brain as manifested by the alteration in the size of the pupil.* This proves that the change made in the brain by the sensory nerve is not all that is requisite for sensation; there must be, in addition. the mind's perception of such cerebral change. Here we know that the mind cannot perceive on account of disease, but we have illustrations daily where no disease exists; for instance, when much interested, we forget the hour of meals, or perhaps fail to hear the clock strike; yet the stomach makes its appeal, causes that change in the brain which ordinarily would give rise to the sensation of hunger; and the sound of the

^{*} This statement assumes,—first, that the excitor nerve of the iris is not the fifth, as some imagine, but exclusively the optic; and secondly, and consequently, that no reflex action takes place merely through the lenticular ganglion, but always requires conduction to the brain. I have for some time been attempting to prove these dicta by comparative anatomy, experiments, and pathology, and thence to infer, or to conjecture from analogy, what other parts of the ganglionic system, besides the lenticular ganglion, may not do, if not what they may do.

clock makes its impression on the nerve, but excites not the sensation of hearing. Observe an intent listener, how he prevents any diminution of sensation from his mind being in part otherwise employed: his eyes half-closed, his breath half-suspended, for the moment his whole mind is concentrated upon the sounds he wishes to catch. He hears them better, not so much from the sounds thus making a stronger impression, though, from the ear being better prepared than usual, that is to some extent the case,—but chiefly from his mind attending better to the change going on in his brain. Hence, acuteness of sensation is in direct proportion to the attention given to the impressions made.

§ 547. It is generally thought that the action of the brain conductors-sensory nerves, is centripetal only; in which case their conducting power could undergo no alteration from the effect of mental attention on the brain. There are many facts. however, both in health and disease, which should cause hesitation in reasoning, as if this proposition were firmly established. Dr. Carpenter mentions the effect on the whole system of sudden and great shock, and it is a striking instance. The part played by the nerves of sensation in inflammation, and over the bloodvessels under other circumstances, is not made out, and conjectures might be hazarded without extravagance that would qualify the generally received opinion. Be this as it may, any alteration of conducting power in the nerves resulting from the action of the mind on the brain, would confirm the remark that abstraction of mind lessens, whilst attention to an impression increases, the acuteness of the sensation.

§ 548. The apparent muscular movements are either excited and controlled solely by the will, or occasioned by mental emotion, when they are to some, but to a very variable extent, under the command of the will; or else reflex, from an impression made upon excitor nerves, when they are quite involuntary. All three may be attended by consciousness. When a man is eating, he is conscious of the reflex movement of swallowing; when laughing, of the emotional movement of his respiratory muscles; and of the movements which he wills to perform, he is of course conscious. But to what extent is this consciousness concerned ? To a reflex movement it is not necessary-an unconscious apoplectic will swallow food. In emotional and voluntary movements, we must suppose the mind to be awake ; a man, by nature, would hardly laugh at a joke he was unconscious of, nor a woman sob from sorrow she did not feel. But though there must be some consciousness to allow of the existence of emotion, there may not be enough to allow of a complete knowledge of all the changes which attend that emotion. The effects of anger, grief, or fear, on the muscles of expression, for example, are unnoticed by the one who

presents them. Physiology already renders it probable that as the reflex movements are acknowledged to have their special nervous centre, so also the emotional and voluntary movements have each a distinct one; all three, however, being as intimately related by the anatomical connexion of their organs, as by the usual consent of their action. The phenomena of dreaming prove that the mind can be partially, without being completely conscious; can attend to one or several, without perceiving all, of the impressions that may be made. In other words, one part of the brain may sleep, whilst another is awake. A person who talks in his sleep exemplifies voluntary muscular movement; if he laughs or weeps, too, he adds emotional movement; yet he is certainly not fully conscious-not conscious at all, in the ordinary acceptation of the word. His brain, or his mind, is cognizant of the ideas which occupy him, and to that extent he may be said to be partly conscious. but he is not aware of what is going on around him. By acting cautiously on a particular sense, we may sometimes succeed in suggesting ideas, and thus waking part of the brain, without arousing the person, (§ 474.) This has been proved experimentally with respect to common sensation, as when pinching a sleeping person will cause movement and an expression of uneasiness; and also with respect to hearing, as in the case, given by Dr. Abercrombie, of a military man, who seems to have had a very unmartial dread of warfare. His brother officers were in the habit of whispering alarming sentences to him whilst asleep, and could thus produce a most ludicrous and involuntary manifestation of terror on the part of their sleeping and unwitting victim. But, hitherto, it has not been proved that a person can artificially be made to see, whilst, in all other respects, asleep. Many facts regarding somnambulism,-I do not mean mesmeric somnambulism-however, render it probable that vision may be effected to some extent without perfect wakefulness. We may conclude that reflex movements may occur without any consciousness whatever: emotional and voluntary movements, with so slight an amount of consciousness, that the person who presents them need not necessarily be wholly awake, and will, probably, on awaking, have no recollection of their occurrence.

§ 549. A reflex movement may be defined to be any muscular act that results from exciting a nerve leading to a nervous centre, (an afferent nerve,) without the intervention of the will. Emotional movement is muscular action resulting from some emotion of the mind, and though considerably under the control of the will, it may be manifested, not only without any intention, but in defiance of all attempts at concealment. It is, therefore, not merely essentially independent of volition, but in some cases, it is able to overpower the will. Voluntary movements are likewise occasionally performed with an effort of will so slight as not to be remarked at the time, still less to be remembered afterwards. This is best exemplified by the force of habit. Many mechanical acts are at last performed without consciousness at the time of any exercise of volition, though at first they required the closest attention. An expert pianist, for instance, will play a well-known air correctly, and almost any one can whistle a tune in time, whilst the thoughts are completely engaged on something quite different. In other words, by force of habit, an act which could not originally be performed without difficulty, becomes so very easy that the attention required for its performance is too slight to be noticed if the mind is otherwise engrossed.

§ 550. These three kinds of movement may simulate each other, inasmuch as they are executed by the same sets of muscles. Thus, a man may will to imitate the act of laughing or crying, or he may will to excite the emotion of joy or sorrow in his mind to such a degree that the emotional act resulting He may also, but to a less extent, call reflex will be real. movements into action : he may sneeze, for instance, or swallow, at pleasure, but his will acts only indirectly, by causing voluntary muscles to apply the stimulus to the excitor nerves. To enable a person to sneeze at will, he must draw in cold air to stimulate his nostrils: to swallow, he must voluntarily place saliva at the back of the mouth to stimulate the excitors of deglutition. Still, directly or indirectly, any one may present at pleasure movements which naturally may also occur without any exercise of volition. There is, therefore, no reason to deny that any outward muscular movement, whether voluntary, emotional, or reflex, may take place without of necessity involving such entire consciousness as would lead the person to comprehend what was going on, or to recollect it afterwards.

§ 551. Rigidity of a limb is simply cramp of its muscles. Cramp is usually a reflex, persistent (tonic) contraction, as convulsions are usually reflex, momentary, and recurring (clonic) contractions of voluntary muscles acting for the time Both ordinarily arise from some irritation of involuntarily. internal excitor nerves: cramp of the sole of the foot, or calf of the leg, from disordered digestive organs, and infantile convulsions from teething, or crowing inspiration from irritation of the bowels, are familiar examples. Lockjaw is merely an exaggerated cramp arising from irritation of external excitor nerves, as when it proceeds from a lacerated wound of highlysensitive parts-as the fingers or thumb. Convulsions rarely occur from external irritation, chiefly perhaps because outward is less common than inward irritation; but they occasionally do so, as when an infant dies convulsed from some trifling surgical operation. Hence, muscular rigidity, whether more or less persistent, or occurring in paroxysms, may proceed from excitement of any excitor nerves.

§ 552. In these remarks no attempt is made to define the word "will." It is one of many, easy to understand, but difficult to explain. So also the immateriality of the mind is taken for granted, not from any fear that materialism would or could in any way militate against religion-when the reason is satisfied of the credibility of revelation, religion becomes a matter of rational faith in divine assurances, and is far above the reach of questions in physiology-but because it is as easy to conceive an immaterial mind acting through organs and modified in its manifestations by them, how we cannot comprehend, as it is to assume that the phenomena of mind have no other cause, no prior antecedent, than the action of the brain, though how the one can cause the other we know not. Matter is only known to be such by its characteristics. There is nothing in physics analogous to the operation of one mind upon another. A word prompted through one brain shall produce intense emotional excitement in another brain; or again, a word shall restore tranquility. The mode of action is just as incomprehensible, whichever view of the nature of the mind we espouse, therefore we gain nothing, even of facility in reasoning, by assuming the doctrine of ultra-materialism. But we gain much that must logically follow most pernicious in its bearing, alike irreconcilable with Divine goodness, and impiously insulting to Divine wisdom, openly sanctioning unchecked indulgence of the worst impulses of our nature, subversive of all moral restraint, and, if carried out to the full but legitimate extent, calculated in reality to lower men to brutes, and in idea to lower Deity to man. The new-fangled doctrine of necessity, (see The Zoist, passim,) by which man's acts, good or bad, are referred solely to his organization, and by which he is made an irresponsible being, loses sight of the freedom of the will, and like its foster-brother, termed-lucus a non lucendo-Socialism, contains the essence of its blasphemy in the following words, which may be seen cut in stone in some socialist meeting-halls :-- "Man's acts are the result of his organization. His organs are made for and not by him. Therefore, the responsibility of his actions rests with his Maker." The Supreme responsible! The doctrine of necessity, I assert, can lead to nothing short of this, and it may be well to show its great viciousness and utter unreasonableness.

§ 553. All the reasons assigned in favour of ultra-materialism would equally prove, if so applied, that the varied hues of the solar spectrum had no other cause than the glass prism by which the luminous ray is refracted. The mind is feeble when the brain is imperfect, strong when this is mature, and

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again weakened as the body sinks to decrepitude. The colours are dull when the prism is imperfect; bright, as this is clear and well-made; and again dull as, by use, the glass get rubbed and worse for wear. Destroy the brain,-the mind is gone. Break the prism,-the spectrum vanishes. Hence, as the mind is never manifested without the brain, varies with every variation in the condition of the brain, it must be caused solely by the brain. To render this logic, we must do more than assume that the brain is of itself alone sufficient to produce mental phenomena: this, from its nature, is not open to proof. We know-for this can be proved-that the spectral tints depend upon the prism, vary with its variation, cease with its destruction ; but we know, also, that the prism must be supplied with a ray of light, or no spectrum can be formed. The luminous ray alone cannot make the spectrum, without some material agent for its refraction, nor can the prism without the light surface. In like manner we assume that the animating power is one thing, and the action of the brain another. though both are essential to the manifestation of mind.* How a materialist can be a mesmerist, and account for clairvovance by assuming the temporary dissociation of mind and matter, whilst another believer considers the fact (!) a strong argument for the immateriality of the mind, would astonish those unaccustomed to the writings of the mesmerists.

§ 554. Taking it, then, as an ultimate fact, that the mind acts by and through the brain, and also acts differently by means of different parts of the brain, it follows that the mind governs the action of the brain to a great extent, can set this or that part to work, so to speak, at will, and can of itself, through its cerebral organs, induce any and every phenomenon which physiology refers to the brain. To examine the influence of the mind on the body is, therefore, merely to ascertain the power of the brain over different parts of the living sys-Whatever effect on other parts the brain has the power tem. of producing may result from the influence of the mind, which, by affecting the brain, is thus an anterior link in the chain. The mind itself may originate the action, or it may be, in the first instance, itself affected by external agencies. A delicate lady passes a disgusting object; being earnestly engaged in thought or conversation, she sees but does not notice it-i. e., the impression is made on the eye, and conducted to the brain, but not attended to. But let her mind be unoccupied at the time -she attends to the visual impression ; ideas of disgust arise

> "Grant that corporeal is the human mind, It must have parts in infinitum joined; And each of these must will, perceive, design, And draw confus'dly in a different line."-JENYNS

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in her mind, (emotion;) she shudders, and her heart throbs, (emotional movement;) she feels nausea, and perhaps swimming in the head, (emotional sensation.) This is all indirectly under the control of the will. The lady might instantly and forcibly remove her mind from the object, and then the results would not ensue; but if she dwells upon the disagreeable sensations, the effects will follow, however unwilling she may be.

δ 555. What is this imagination, ask some of the mesmerists. to which so much is referred by our opponents? It might be sufficient to reply that it is what, by other mesmerists,* is deemed of itself able to produce, by its effect on the body, real and visible bleeding holes in the hands of its votaries! Embracing the suggestions, willed or spontaneous, of all the mental faculties, implied in every thought, influencing every voluntary act, the end to which the real tends, the source from which the ideal springs,-what is imagination? In reference to mesmerism, we may define it to be the conception of what does not actually exist, or at least of what does not exist to the extent supposed, and the firm conviction that this conception arises from reality. Hence, as the same attention which renders actual impressions more perceptible, and actual sensations more vivid, (§ 546.) is equally potent in its effect on the ideas, which arise spontaneously, without any external cause, it is common for the mind to dwell on its own internal suggestions-the offspring of memory, modified, it may be, by erroneous opinion,-until it believes them to have been occasioned by some outward agency, which in reality never operated at all. The mind in this way, is often its own dupe. The essence of erring imagination is hasty conclusion from insufficient data. Thus, when a man, in the obscurity of night, bewildered by his fears, mistakes his own dressing-gown for a living person, or for an angel, and fancies that he sees a vision. he has some grounds, but very insufficient ones, for the inference he draws; yet he will oftentimes as firmly believe the dictates of this perverted reason as he would the most clear and self-evident deductions of his deliberate judgment.

* "In regard to the appearance of the stigmata and the small wounds on the head of the Addolorata, Dr. Ellitotson and Mr. Atkinson both are of opinion that they might be the effect of strong imagination and habitual contemplation upon a highly-diseased frame : if that view be trop fort for some readers, I can say, on the other hand, in spite of Lord Shrewsbury's assertion, that as 'a piece of deception, it is physically impossible;' that I would have engaged, repeatedly, to have made the very same marks upon the head and hand of Anne Vials without any consciousness on her part. All mesmerisers will confirm this declaration; at the same time I see no reason to charge the Tyrolese priests with any arifice of the kind. The involuntary effect of imagination, after a preconceived idea, is so strong with some sickly sleep-waking females, that through the bare impression of the mind, nature might throw out the external phenomenon." -[Sandby, op. cit, p. 201.

§ 556. But the effects of the mind on the body are not merely imaginary, though the mental condition in which they at first originated may have been nothing more. Sudden fright has caused death; sudden joy has done the same; and mental emotions less extreme have produced, and do constantly produce every conceivable effect upon the body. The well-authenticated proofs of this on record would fill a volume. Weeping from grief, biliousness from melancholy, perspiration from fear, are common examples of the power of the mind over secretion; blushing, and a feeling of heat from shame, paleness and sense of coldness from terror, throbbing of the heart and vertigo from rage, prove the same influence over circulation and sensation. And "mental emotions of some strength and endurance have a manifest influence on the energy of the strictly voluntary contractions all over the body; some, such as anger, hope, joy, increasing the muscular vigour, while others, such as grief, fear, or, more correctly, despair, diminish it. There are examples of persons long paralytic, who have recovered the power over their limbs suddenly, when under the influence of violent emotions, and there are many instances of great, although temporary, increase of muscular strength, from the influence of military ardour, and still more of religious enthusiasm or fanaticism." I make no apology for adding the following lengthy quotation from the same beautiful chapter of Dr. Alison : "Such emotions as act permanently, and without violent agitation-e.g., the emotion of pleasure that attends any occupation which interests and occupies the mind; the emotion of hope, from the prospect of lasting enjoyment, or of returning health; the emotion of benevolence, which attends the conferring, or that of gratitude, which follows the receiving, of benefits; even the excitement produced by a certain degree of the feeling of indignation; when of sufficient intensity and duration, and especially when strongly contrasted with the previous state of the mind-have a decided effect on the circulation, which is chiefly observed throughout the capillary system. They cause a slight but permanent glow on the countenance, which contrasts with the paleness of grief; they quicken the flow of fluids through, or the secretion on, the conjunctiva and cornea, and give brilliancy to the eye; they perhaps elevate slightly the temperature of the surface, and certainly cause it to be less easily depressed by cold. According to the observations of Sanctorius, and of Bryan Robinson, they increase the insensible perspiration by the skin; and according to Dr. Prout, they increase the quan-Lity of carbonic acid thrown off at the lungs; they promote the secretions, as is obvious from their influence in increasing the power of digestion, and securing the regular evacuation of the bowels; and favour nutrition, as appears from their being generally found in connexion with increasing bulk of the body; they have a well-ascertained effect in protecting the body against the influence, not only of cold, but of malaria and contagion, therefore against all the most powerful causes of acute disease; they manifestly accelerate the convalescence from acute diseases, and are found very beneficial in various chronic diseases, in which debility is a prominent symptom. In these last instances the effect of these emotions is to counteract causes which evidently weaken, and to assist other means, particularly the use of nourishing food, and agreeable sensations of warmth, or moderate alternations of temperature, which strengthen the body. The effect of these emotions is therefore gently and permanently, and often most beneficially, exciting or tonic, on the circulation ; and it is most distinctly observed in the vital actions that take place in the capillary system of vessels,-the heart's action being little affected in most of these cases,-while in many other instances, both from mental and physical causes, the heart is manifestly excited without any of these good effects."*

§ 557. We may conclude that there are many diseases which arise through the mind, still more which are kept up by the influence of the mind on the body; many which may be removed by acting on the mind, and through the mind on the system; and none over which the state of mind does not exert some influence.

§ 558. Assuming that the preceding remarks contain nothing more than any physiologist without mesmerism would have predicated, let us examine how many of the alleged facts of mesmerism, conceding their truth, may be explained by reference to them. All the more probable facts—viz., quietude, repose, sleep; heightened or diminished sensibility; muscular acts of various kinds, and muscular rigidity, without consciousness; convulsions; and effects curative or injurious, according to circumstances, in every affection in which the functional disorder of the nervous system plays an important part, might be the results anticipated from any mode of calling into operation the various tendencies referred to. It is obvious that clairvoyance and its allied powers are not elucidated by any of these admitted physiological facts.

^{*} The reader who takes as much interest as myself in this part of the subject will find information in the following works, in addition to Alison's Physiology, from which the two last extracts are made :--lasi Revelata; Abercrombie on the Brain; Abercrombie on the Intellectual Faculties; Darwin's Zoonoma; Mason Good's Study of Medicine; Brown's Lectures on the Mind; Holland's Medical Notes and Reflections; and Hecker's Epidemics, by Dr. Babington. The distribution of the lachrymal branch of the fifth nerve, and that of minute filaments from the cerebro-spina nerves to the coats of the arteries of the extremities, countenances the conjecture of an occasional, if not of a constant, centrifugal action of the nerves of sensation, (§ 568.)

CONCLUSION.

§ 559. When Lafontaine was in Manchester, I allowed him to attempt to mesmerise me. Like others, I was placed in a low, easy chair, my magnetiser sitting before me on a high stool, with his back towards a large chandelier, the glare from which was thus thrown directly on my face. Fixing an intent look on my eyes, which I was not to move, Lafontaine placed his thumbs against mine, his fingers resting gently on the backs of my hands, and his knees and feet being in contact with my own. At first, I gave myself up entirely, in mind and body, to Lafontaine, obeyed his directions implicitly, and desired to do everything to favour his success. After a time, the constrained position in which I sat began to fatigue me; the constant tickling of hands and knees made those parts tingle; sight became disordered, objects appearing too large, indistinct, or ceasing to be visible; my eyes felt dry and tight, and I had a strong inclination to relieve them by winking or closing the eyelids. My head became rather mazy, and I could not concentrate my thoughts as at first. I felt that I should, in some measure, lose consciousness, if this continued. Having expected all this, and predetermined at first to give way, and afterwards to try whether, by an effort of will, I could throw off the strange feelings. I abstracted my attention from what was going on, and at the same time I relieved my eyes, not by closing them, but by altering the axis of vision. Lafontaine now released my thumbs, and made a quivering motion with his fingers before my eyes, following their axis, however I might vary it. But as I could move my eyeballs quicker than he his fingers, he did not succeed in again rivetting my attention. Meanwhile I rubbed my thumbs against my fingers, and my knees against each other, and thus destroyed the peculiar tickling sensations there. Presently, Lafontaine desisted and pointing to my eyes with a shrug of disapprobation, ejaculated, "Les yeux !" At the solicitation of some medical friends, he made a second attempt in a few minutes, but with similar result.

§ 560. Had I omitted to alter my fixed gaze, the result would have been different. My tired eyes and eyelids would have found relief by closure; my brain bewildered by the variety of strange sensations conveyed from eyes and limbs, my mind confused by all the circumstances, I should have had swimming in the head, and probably the sensation one experiences so commonly on looking down from a great height, or on gazing earnestly at a rapidly revolving object, and then more or less unconsciousness. Now if these effects were produced in consequence of some special mesmeric influence conveyed from Lafontaine's body into mine, why should this influence exert its peculiar power only when admitted through the pupils of the

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eyes, and be resisted when such entrance was prevented. Surely the opaque parts of the eyeball could not offer any obstacle to an agent which finds no impediment in the side of a house, or in several miles of atmospheric air !

§ 561. I was afterwards operated on by a potent mesmeriser under less exciting circumstances and did my utmost to have the state of somnambulism induced. I usually felt very comfortable indeed in about ten minutes, the effects on the skin of the gentle wafts of air from the passes being very agreeable. I closed my eyes and moved my limbs wherever I thought my mesmeriser wished; tried to have catalepsy of them induced, but always in vain, as I could move them at pleasure. I was perfectly conscious, heard all that was said, and did not rouse myself from my pleasant day-dream until my mesmeriser grew tired, or until I heard him declare to my father (a medical man) that " the mesmeric sleep was passing into ordinary slumber"!

§ 562. I am aware that this negative influence on myself does not disprove the mesmeric effects stated to have been produced on others, but it may serve to show how easily the imagination might have converted a simple into a mesmeric agency.

§ 563. Whatever may be the genuine effects producible by mesmeric processes, I am perfectly convinced, that in the great majority of cases at public exhibitions, in which they were confidently stated to be manifested, there was deception, either intentional or unintentional.

§ 564. I have been present and have taken notes of all the proceedings at many exhibitions on mesmerism and its varieties, and have been forced to the conclusion, that it would be more charitable than reasonable to suppose that the actors themselves, in many instances, believed anything to be genuine but their own imposture.

§ 565. Deception, however, may exist to a great extent without implying wilful deceit. Medical men, who are in the constant habit of carefully weighing the evidence of individuals in reference to their own states, know better than others how frequently a person's testimony as to what occurs to himself is not trustworthy. With every intention to be accurate and truthful, the patient often states what he believes to be true, but what is not to be implicitly relied on as a guide in practice.

§ 566. Hypnotism does not allow of the action of any nervous fluid, or other agency furnished by a second person, but ascribes all its phenomena "to an impression made upon the nervous centres by the physical and psychical condition of the patient."*

*Neuryphology, p. 31, et seq. When the famous Dr. Dee, in the sixteenth century, stared at his crystal until he saw a vision of angels, he found that *he must concentrate his whole attention on the crystal*, or, like "spirits from the vasty deep," the angels would not come when he did call. Have we not here the first type of hypotism ?

Ordinary sleep is not attended by stupor, palsy, or muscular movements. Hypnotism sometimes is. In sleep we have no phrenological manifestations; in hypnotism these have been educed. By common sleep we cannot make the deaf hear; by hypnotism, it is said, we may. But when a person is not fast asleep, but voluntarily, though he believes otherwise, in a half-sleeping, half-waking state, with his eyes closed, the imagination has full play. A credulous person will believe that he hears better, (§ 334,) and state it confidently; yet his statement is not a proof of the fact. The hypnotists allow, that unless there is a fixation of the mental eve-i. e., an entire giving up of the mind to the hypnotising process, they fail to induce the hypnotic phenomena: thus, the mental eye is essential. But a blind man, or a man with his eves closed or bandaged, who will only think of some dull subject without intermission, may become hypnotised. Hence the corporeal eye is not essential. It follows, that as the mind without interfering with the body further than to prevent any causes of disturbance from interfering with the mind, is quite sufficient to produce hypnotism, that state is sometimes produced entirely through the mind; and that as hypnotism can never be induced where the mind is not more or less affected, hypnotism is never produced solely by any induced physical condition of the body. And if the body be primarily affected, only inasmuch as a certain small part of it is wearied by prolonged action-though when a person hypnotises himself in one minute, the body can scarcely be said to have anything whatever to do with the effect -as we know by experience that this corporeal condition alone cannot lead to such wonderful effects as those asserted, to what must these be referred ? In the first instance, solely and exclusively to the other elementary condition laid down-the state of the mind. We know by experience that all imaginable wonders may be performed under an excited and perverted imagination. We know that the body may then be secondarily affected to an almost incredible extent. We know by experience that reason is no longer trustworthy; that a man first deceives himself, and then others, with respect to the causes of sensations and actions which, as they depend on imagination, are at first themselves imaginary. Hence, the firm conviction of one, however respectable and desirous to speak the truth, who has given himself up to be hypnotised with perfect faith and excited imagination, cannot always be admitted as unquestionable proof of the real origin of what he experienced

§ 567. Instances are commonly given in which we are told the imagination could exercise no influence. But how can we prevent the mind from taking part in any mode of acting through the senses! If a mesmeriser would affect a man in the midst of a crowd, who was expecting no mesmeric influence to be exerted, and could ascertain nothing to excite his suspicion through the medium of his senses, we should see no effect from the imagination, and it may be doubted whether we should have much more from the mesmerism. In a large town, a subject of sufficient notoriety to demand a public lecture for its elucidation, can seldom be unknown to any who attend. And if previously acquainted with the effects which are said to be produced, the patient fully participates in the confidence with which the lecturer expects their production. His imagination is excited; his expectation raised: the first feeling of fatigue is mistaken for the first effect of the occult influence; faith becomes unbounded; the confident belief that certain actions will inevitably ensue, leads to their performance; half, and only half conscious, the patient obeys the presumed will of his magnetiser, and dems himself the while a passive agent impelled by some power as irresistible as it is wonderful!

§ 568. In order to ascertain how far the usual effects would ensue where the imagination, in a great measure, lay dormant. it seemed desirable to select persons who had never heard of mesmerism, knew nothing of phrenology, and if they did know what imagination meant, were at least not prone to indulge in its pleasures or suffer from its pains. Such persons are as common in our rural districts as they are rare amongst the more intelligent artizans of towns. Upon such I have made numerous experiments, carefully avoiding everything that would occasion alarm or in any way strongly excite imagination. In many instances, nothing like the stated mesmeric or hypnotic effects would ensue; the patient at length, in spite of remonstrance. relieving his eyes by moving them about and winking, thus breaking the spell. But after being thus foiled for an hour or two, I have caused sleepiness in a few minutes by bringing the mind into play by requesting a continuance of the experiment, and giving a serious and earnest assurance that sleep would be sure to ensue in a few minutes more. In many cases in which there was before this intimation no apparent chance of such an occurrence, this has happened. Occasionally this, too, failed. I tried it with a rather timid little boy, aged nine years, who gazed at me for a long time without winking or moving the axis of his eyes. At length, irritated by the exposure, his eyes filled with tears; still he gazed on, occasionally weeping, for an hour. I then told him that he would be certain to fall asleep in five minutes more; he gazed on for another half hour, but was just as watchful (§ 223) as ever. Of course, I had not sufficient of the occult principle to affect him mesmerically, but hypnotism ought to have done it.

§ 569. When a patient has been once thrown asleep, thenceforth he knows what will happen, and in succeeding experiments the results do happen in a far shorter period. He now

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lets his eyelids drop on the first sensation of fatigue, and fancies himself asleep whilst not unconscious and his will not inactive. In this state (the magnetic somnambulism of itinerant lecturers) he will hold out an arm or leg, a finger or a hand, will sometimes bear pinching without shrinking; if his magnetiser beckon, he will follow, and the rest. On being aroused, he will declare that he has been unconscious of all that has occurred. A stout young rustic, full-grown, whom I had failed to hypnotise, after a trial of an hour and a half on a previous occasion, on being assured that sleep would be certain to ensue in ten minutes, within that time closed his eyes and breathed sonorously. He moved his hands the way he thought I wished, put one up to his right eve to allay some slight uneasiness there. and then settled himself comfortably in his chair. I now gently raised his evelids, which had not been closed for more than three minutes. On this he supposed it was intended that he should awake, and accordingly he got up. At first, he said he thought he had slept; and after some deliberation, he became quite sure that he had ' He expected sleep with perfect faith, and he believed that it came. Had he expected the occurrence of any of the mesmeric wonders with equal faith, no doubt they would have been performed, to the best of his ability, with equal certainty. Had such a patient been acquainted with what mesmerism is said to produce, or had he been at a public lecture on mesmerism and heard all that its advocates usually assert and declare with confidence to be true, and then witnessed the usual phenomena of cataleptic rigidity and insensibility to pain, and following the leader, and singing when asked, and dancing to music, and the rest, in a subject prepared for the occasion, doubtless he would afterwards himself have presented similar phenomena, though probably in less perfection; and he would not merely assert to others, but himself believe, that he was scarcely conscious, or not conscious at all, whilst he did all this performance, and that he had done it from some indescribable occult influence which he could not resist.

§ 570. It is a curious fact in the philosophy of the mind, how prohe we are to voluntarily deceive ourselves, and then firmly to believe in the self-created deception, as if it were a truth not to be doubted. This is of daily occurrence where the conclusion arrived at is desired from ministering to our pleasure, interest, or importance. Here, however, are cogent reasons for cherishing the self-deception until it becomes a matter of faith; but when no such reasons can be assigned, it is quite enough that what demands our belief is marvellous, for it to be received with eagerness; quite sufficient that a man persuade himself what he has experienced must have happened without his volition, for him to feel satisfied that it was quite beyond his control. Often, however, a person does not himself believe what he wishes others to credit. So it usually is with the originators of popular delusions; but amongst their numerous followers many really feel convinced of the truth of the doctrines they profess.

§ 571. That gentle passes, touches, and friction, should so act on the nerves of feeling as to produce a quieting and composing reffect, and, if continued, a degree of somnolency, and perhaps ultimately perfect sleep, is not surprising to one who has experienced the soothing influence of gentle rubbing of the palms, or of brushing or combing the hair. That this state may stop short of deep sleep, and that during the imperfect slumber general consciousness may be gone, and yet different parts of the nervous system be still susceptible of acting in answer to impressions made, is probable; and that acts of various kinds might in this way be called forth without rousing the patient to such general consciousness as would be necessary to enable him to recollect afterwards what had taken place, has nothing unreasonable in it. Hence, when a feeling allied to pleasure is excited by the gentle wafts of attracting mesmeric passes, (\S 548,) we can understand how an emotional movement may respond, and the head or limb follow the direction of these wafts, (mesmeric traction,) without enough of general consciousnes for the patient to be aware of what is going on. So, too, muscles may become rigid by reflex movement from irritation of the sensitive nerves: or convulsions may be excited in the same way. (\$ 551.)

 δ 572. By unconsciously directing his mind to the part on which the mesmeriser is operating, the patient, without being aware of it at the time, may materially heighten sensibility there, whilst the corresponding abstraction of mind lessens it elsewhere, (\S 547.) As we know not all the laws of sensation, we cannot limit the effects upon sensation of any agent which certainly acts on and through the sensitive nerves. Consequently, what in a slight degree can diminish sensibility, may, when acting more forcibly, for anything we know, temporarily abolish it. Judging from experience, such a result is highly improbable, and therefore it must be proved a great deal better than it is at present before we can assent to it, vet still there is nothing in such a result that would be in discordance with previous facts. On the contrary, in certain morbid states of the nervous system, we know that common sensibility is for the time r moved; and should what the mesmerists assert on this head ultimately prove true, it will simply be a new fact,-not like most of the mesmeric facts,-both new and irreconcilable with others.

§ 573. The evidence in support of so much in mesmerism would have been sufficient, had it been presented without admixture with so large a proportion of what is calculated to throw doubt upon the whole. A work on the Natural History of Sleep is still a desideratum, and if properly executed, it would include all that is probable in mesmerism; as it is, we want unexceptionable evidence.

§ 574. Should the probable facts of mesmerism prove to be the only real ones, will they support the inferences of the mesmerists? By no means. Capable of being induced by methods, and under circumstances entirely different, they cannot depend upon any special physical agent being given or withdrawn. They resolve themselves into phenomena of the nervous system, called forth by any means whatever, animate or inanimate, that can act to a sufficient extent upon that system.

§ 575. We cannot doubt that mesmerism may have effected many cures surprising enough to the patients and their friends. What vaunted and accredited remedy or plan of treatment does not? Its efficacy, in this respect, no more proves the reality of any occult influence being communicated, than it proves the presence of such influence in a homeopathic billionth of flour of brimstone, in a holy well, or a Malvern spring. There can be no doubt that in all chronic diseases, abstraction of the mind. from perpetually dwelling on the disorder, a firm hope of recovery, and a complete faith in the value of the means employed. will conduce very greatly to obtaining the desired result. The nature of the means is of less importance. Every remedy or plan that gains the confidence of the public is successful in its day: but no sooner is that day gone by, than the remedy loses its efficacy-the talisman of cure is broken. The cases which make and maintain the reputation of quacks of all ranks, both within and without the pale of the profession, are chiefly the dyspeptic, the bilious, the hypochondriacal. In these the disorder consists quite as much in a deranged nervous system, as in any actual disease of a given organ. And knowing how much the whole nervous system is under the influence of the mind -how languid when the mind is depressed; how brisk when the mind is elated-can we wonder that to exchange despondency, want of confidence, and constantly looking inwards upon self, for hope, implicit faith, and attention, maintained by novelty, should occasionally produce the happiest effects on the health? A medical man of eminence will often cure his patients much more rapidly, by precisely the same means, than another of inferior note. With the former, his reputation acts upon the mind, whilst his remedies act upon the body. The mode by which mesmerism has chiefly performed its cures, reminds us of the weapon-salvers; the action on the mind is the judicious attention to the wound; the pawing, thumbing, tickling, and gazing, are the salving of the weapon.

§ 576. Besides its moral influence, however, in which I be-

lieve its asserted remedial power principally consists, if by mesmeric procedure we can induce refreshing sleep and modify sensibility, there can be no question but by these, added to its effect on the mind, much good may sometimes have been done. Has mesmerism any peculiar advantages over other and less equivocal and less mystical modes of producing these advantages ? Proofs are yet wanting that it is superior to more ordinary methods of influencing the mind and the body—methods more congenial to the habits of the profession, and generally to the taste of the patient.

§ 577. Without supposing or desiring that any importance will be attached to my mere opinions, yet, to prevent misapprehension, I here briefly recapitulate what are at present my own views on mesmerism. Of the alleged results of mesmeric processes, I believe there are

Proved-Quietude; composure; sleep.

- Probable, but requiring confirmation—Traction; muscular rigidity; convulsions; heightened sensibility; diminished sensibility; double consciousness.
- **Possible**, but not very probable—Insensibility to severe pain, for a given length of time, at pleasure.
- Impossible, as far as anything can be so—Clairvoyance; intuition; prevision; community of thought; involuntary and complete subjection of mind to the mesmeriser.
- And, lastly, I believe that we have not a shadow of evidence in support of the existence of any new agency, whether designated mesmeric, magnetic, occult, or by any other name.

In concluding this survey of mesmerism, the writer trusts that his readers have been as little as possible wearied with the details, and impatient of the truisms, contained in the foregoing pages. The details were indispensable to furnish accurate data; and inferences when opposed to, are best refuted by, truths so trite as to appear self-evident and superfluous. Common truths are the basis of common sense; and common sense will best refute the mesmerism of the mesmerists. Had an abler writer taken the trouble to lay bare the facts and the principles of mesmerism, to expose the emptiness of the former, the absurdity of the latter, and the incongruity of both, the present attempt had never appeared. Independently of every other effect, the inquiry is calculated to impress upon the minds of the members of the profession the truth that—

> "Our reason was not vainly lent! Nor is a slave but by its own consent."-DRYDEN.

FINIS.